



## Conseil de sécurité

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### Lettre datée du 26 janvier 2018, adressée au Président du Conseil de sécurité par le Groupe d'experts sur le Yémen dont le mandat a été défini dans la résolution [2342 \(2017\)](#) du Conseil

Les membres du Groupe d'experts sur le Yémen ont l'honneur de vous faire tenir ci-joint le rapport final qu'ils ont établi en application du paragraphe 6 de la résolution [2342 \(2017\)](#).

Ce rapport a été soumis le 9 janvier 2018 au Comité du Conseil de sécurité créé par la résolution [2140 \(2014\)](#), qui l'a examiné le 23 janvier 2018.

Nous vous serions reconnaissants de bien vouloir porter le texte de la présente lettre et du rapport à l'attention des membres du Conseil de sécurité et de le faire distribuer comme document du Conseil.

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dont le mandat a été défini dans la résolution [2342 \(2017\)](#)

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## Rapport final du Groupe d'experts sur le Yémen

### Résumé

Après bientôt trois années de conflit, il n'existe plus au Yémen d'État à proprement parler. Le pays est divisé en mini-États qui s'opposent sans qu'aucune des parties ne dispose de l'appui politique ou de la force nécessaire pour réunifier le pays ou s'imposer par les armes.

Au nord, les houthistes s'emploient à consolider leur emprise sur Sanaa et une bonne partie des hauts plateaux après avoir mené dans la ville une bataille de rue qui a duré cinq jours et abouti à l'exécution de l'ancien Président Ali Abdullah Saleh (YEi.003), qui fut un temps leur allié. Dans les jours et les semaines qui ont suivi, les houthistes ont en grande partie éliminé ou récupéré ce qui restait du réseau pro-Saleh dans le pays.

Au sud, le Gouvernement du Président Abd Rabbuh Mansur Hadi s'est trouvé affaibli par la défection de plusieurs gouverneurs qui ont rejoint le Conseil de transition du Sud, récemment créé et partisan de l'indépendance du sud du Yémen. Il a par ailleurs été mis en difficulté par les forces supplétives qui, armées et financées par les États membres de la coalition dirigée par l'Arabie saoudite, poursuivent leurs objectifs propres sur le terrain. La dynamique du conflit est rendue encore plus complexe par les agissements d'Al-Qaïda dans la péninsule arabique (AQPA) et de l'État islamique d'Iraq et du Levant (EIL [Da'esh]), qui s'attaquent aussi bien aux houthistes qu'au Gouvernement et aux forces de la coalition emmenée par l'Arabie saoudite.

L'éclatement de l'alliance entre houthistes et pro-Saleh a donné à la coalition et aux forces loyales au Gouvernement une occasion de regagner du terrain, mais la situation ne saurait durer ni suffire à amener la fin du conflit.

Le lancement de missiles balistiques à courte portée contre l'Arabie saoudite, d'abord par les forces houthistes et pro-Saleh puis, une fois leur rupture consommée, par les seules forces houthistes, a marqué un tournant dans ce conflit local dont la portée pourrait devenir régionale.

Le Groupe d'experts a identifié des débris de missiles, de l'équipement militaire nécessaire à leur lancement et des véhicules aériens téléguidés militaires d'origine iranienne qui ont été introduits au Yémen après la mise en place de l'embargo ciblé sur les armes. Il constate donc que la République islamique d'Iran agit en violation du paragraphe 14 de la résolution [2216 \(2015\)](#) du Conseil de sécurité, n'ayant pas pris les mesures nécessaires pour empêcher la fourniture, la vente et le transfert directs ou indirects, à l'ancienne alliance des houthistes et pro-Saleh, de missiles balistiques à courte portée Borkan-2H, de citernes de stockage de diergols liquides pour missiles et de véhicules aériens téléguidés Ababil-T (Qasef-1).

Les houthistes ont également posé dans la mer Rouge des mines marines improvisées, faisant ainsi peser sur le transport commercial et les voies de communication maritimes des risques qui pourraient durer 6 à 10 ans et menaçant les importations vers le Yémen et l'entrée de l'aide humanitaire dans le pays par les ports de la mer Rouge.

Le système financier du Yémen s'est disloqué. Deux banques centrales se font concurrence, l'une au nord sous le contrôle des forces houthistes et l'une au sud sous l'autorité du Gouvernement, mais aucune ne fonctionne à pleine capacité. Le Gouvernement est incapable de recouvrer des recettes tandis que les houthistes

collectent des impôts, extorquent des fonds aux entreprises et saisissent des biens au motif du soutien à l'effort de guerre.

Le pays est en défaut de liquidité. Les salaires ne sont plus que rarement versés à la population, qui n'a souvent plus les moyens de se procurer des médicaments, du carburant et de la nourriture, trop coûteux lorsqu'ils sont même disponibles. On voit surgir des profiteurs de guerre et le marché noir est près de prendre le pas sur le marché formel.

Malgré le décès d'Ali Abdullah Saleh, il est probable que Khaled Ali Abdullah Saleh continuera d'administrer la fortune de la famille au nom d'Ahmed Ali Abdullah Saleh (YEi.005). Rien ne permet à l'heure actuelle de savoir s'il utilisera cette fortune pour faciliter la commission d'actes qui menaceraient la paix, la sécurité ou la stabilité du Yémen.

En 2017, toutes les parties au conflit se sont livrées à des violations généralisées du droit international humanitaire et du droit international des droits de l'homme. Les frappes aériennes de la coalition dirigée par l'Arabie saoudite et l'utilisation sans discernement d'engins explosifs par les forces houthistes et pro-Saleh ont touché de manière disproportionnée la population et les infrastructures civiles pendant la majeure partie de 2017. Selon le Groupe d'expert, rien n'indique que l'une quelconque des parties ait pris les mesures qui s'imposaient pour limiter les conséquences désastreuses de ces attaques pour la population civile.

Le délitement rapide de l'état de droit touche l'ensemble des territoires du pays, quelle que soit l'autorité qui les contrôle. Le Gouvernement yéménite, les Émirats arabes unis et les forces houthistes et pro-Saleh se sont tous rendus responsables d'arrestations et de détentions arbitraires, de disparitions forcées et d'actes de torture. Les houthistes ont procédé à des exécutions sommaires, placé des personnes en détention pour des motifs purement politiques ou économiques et systématiquement détruit les maisons de quiconque était perçu par eux comme un ennemi. Ils ont aussi régulièrement entravé l'acheminement et la distribution de l'aide humanitaire.

À la suite du lancement d'un missile contre Riyad, le 4 novembre 2017, la coalition emmenée par l'Arabie saoudite a ordonné la fermeture de toutes les voies d'accès terrestres, maritimes et aériennes au Yémen. Les points d'entrée administrés par le Gouvernement ont été rouverts rapidement, tandis que ceux qui étaient contrôlés par les houthistes, par exemple Hodeïda, sont restés fermés pendant des semaines. Il s'agissait de fait d'une tentative d'utilisation de la menace de la famine comme arme de guerre.

Les retards et le caractère imprévisible du régime actuel d'inspection des ports de la mer Rouge ont créé des obstacles et des risques économiques supplémentaires pour les entreprises de transport et d'importation qui approvisionnent le Yémen. Il est indispensable de renforcer la confiance que porte la coalition dirigée par l'Arabie saoudite à la procédure d'inspection organisée sous l'égide des Nations Unies si l'on souhaite augmenter le flux des produits essentiels et de l'aide humanitaire qui entrent dans le pays par les ports de la mer Rouge.

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## Rapport final du Groupe d'experts sur le Yémen

### I. Introduction

#### A. Mandat et introduction

1. Par sa résolution 2342 (2017), le Conseil de sécurité a reconduit les mesures de sanction concernant le Yémen et prorogé le mandat du Groupe d'experts sur le Yémen jusqu'au 28 mars 2018. Le Groupe est chargé de s'acquitter des tâches suivantes :

a) Aider le Comité du Conseil de sécurité créé en application de la résolution 2140 (2014) à s'acquitter de son mandat, défini dans les résolutions 2140 (2014) et 2216 (2015), notamment en lui fournissant à tout moment des informations pouvant servir à désigner éventuellement par la suite des personnes et entités qui se livreraient à des actes menaçant la paix, la sécurité ou la stabilité du Yémen, tels que définis au paragraphe 18 de la résolution 2140 (2014) et au paragraphe 19 de la résolution 2216 (2015) ;

b) Réunir, examiner et analyser toutes informations provenant des États, d'organismes des Nations Unies compétents, d'organisations régionales et d'autres parties intéressées concernant l'application des mesures de sanction et de l'embargo ciblé sur les armes, en particulier les mesures qui portent sur des faits entravant la transition politique ;

c) Présenter au Comité un bilan à mi-parcours le 28 juillet 2017 au plus tard et remettre au Conseil de sécurité, après concertation avec le Comité, un rapport final le 28 janvier 2018 au plus tard ;

d) Aider le Comité à préciser et à actualiser les informations concernant la liste des personnes visées par des mesures de sanction, notamment en fournissant des renseignements concernant leur identité et d'autres renseignements pouvant servir à établir le résumé des motifs présidant à leur inscription sur la liste, qui est mis à la disposition du public ;

e) Coopérer avec les autres groupes d'experts compétents créés par le Conseil de sécurité, notamment l'Équipe d'appui analytique et de surveillance des sanctions créée par la résolution 1526 (2004) du Conseil de sécurité<sup>1</sup>.

2. Le 1<sup>er</sup> août 2017, le Groupe d'experts a présenté un bilan à mi-parcours au Comité<sup>2</sup>, conformément au paragraphe 6 de la résolution 2342 (2017). Des informations supplémentaires sur le blocage des flux commerciaux maritimes dans les ports yéménites de la mer Rouge contrôlés par les forces houthistes et pro-Saleh<sup>3</sup> ont été soumises à la Commission le 31 mars 2017 et deux exposés sur une montée des tensions liée au lancement d'un missile contre Riyad le 4 novembre 2017 lui ont été présentés le 10 et le 24 novembre 2017.

3. Le présent rapport couvre la période allant du 1<sup>er</sup> janvier au 31 décembre 2017. Le Groupe d'experts a par ailleurs continué d'enquêter sur des questions qui étaient restées en suspens dans son précédent rapport, daté du 31 janvier 2017 (S/2017/81).

<sup>1</sup> Équipe de surveillance créée par la résolution 1526 (2004) et dont le mandat a été prorogé par la résolution 2253 (2015).

<sup>2</sup> Le bilan à mi-parcours et les autres exposés présentés au Comité et aux membres du Conseil de sécurité sont confidentiels. Ils sont consignés dans les archives du Secrétariat de l'Organisation.

<sup>3</sup> Dans le présent rapport, on entend par « forces houthistes et pro-Saleh » les unités armées placées sous l'autorité de l'alliance jusqu'à la dissolution de cette dernière, le 1<sup>er</sup> décembre 2017.

## B. Méthodologie

4. Le Groupe d'experts a mené ses enquêtes conformément au paragraphe 11 de la résolution 2342 (2017), qui renvoie aux meilleures pratiques et méthodes recommandées dans le rapport du Groupe de travail informel du Conseil de sécurité sur les questions générales relatives aux sanctions (S/2006/997). Il a veillé en particulier à respecter les normes relatives à la transparence et aux sources, aux preuves littérales, à la corroboration des allégations par des sources indépendantes et vérifiables, ainsi qu'au droit de réponse de ses interlocuteurs<sup>4</sup>. Il a mené ses enquêtes de manière transparente, objective, impartiale et indépendante et fondé ses conclusions sur un ensemble d'éléments de preuve vérifiables.

5. Pour ses enquêtes, le Groupe d'experts s'est servi d'images-satellite du Yémen fournies à l'ONU par des prestataires privés, d'informations tirées de bases de données commerciales sur le trafic maritime et aérien et d'enregistrements de données de téléphonie mobile. Les déclarations publiques faites par des représentants des autorités sur les médias officiels ont été considérées comme corroborant des faits, sauf indications contradictoires. Le Groupe d'experts a été aussi transparent que possible mais, dans les cas où en dévoilant ses sources il les aurait exposées ou aurait exposé autrui à des risques inacceptables, il a préféré ne pas donner d'éléments d'identification dans le présent rapport et verser les preuves correspondantes dans les archives de l'ONU.

6. Le Groupe d'experts a passé en revue les médias sociaux, mais aucune information obtenue par cette voie n'a été retenue comme preuve à moins d'être corroborée par plusieurs sources indépendantes ou techniques, notamment des témoins, de manière à répondre aux critères les plus stricts possible en matière de preuve.

7. L'orthographe des toponymes du Yémen est souvent fonction de l'origine ethnique de la source et de la qualité de la translittération. Le Groupe a adopté une démarche cohérente dans le présent rapport et repris, pour les noms propres et les principaux toponymes, l'orthographe retenue dans de précédents documents de l'Organisation en respectant les conventions du Système de référence terminologique de l'ONU (UNTERM). Les dates du calendrier islamique figurant dans les documents mis à disposition par les États Membres ont été converties en dates du calendrier grégorien.

## C. Programme de travail

8. Pour ses enquêtes, le Groupe d'experts s'est rendu dans les pays suivants : Arabie saoudite, Belgique, Djibouti, Égypte, Émirats arabes unis, Espagne, États-Unis d'Amérique, Éthiopie, France, Israël, Italie, Jordanie, Oman, Pays-Bas, Qatar, République islamique d'Iran, Royaume-Uni de Grande-Bretagne et d'Irlande du Nord, Suède, Turquie et Yémen. Il a par deux fois demandé à effectuer des visites officielles dans des zones du Yémen se trouvant sous le contrôle du Gouvernement légitime (Mareb et Moukalla), mais dans chacun de ces deux cas, les réponses du Gouvernement légitime et de l'Arabie saoudite ont été reçues trop tard pour que les procédures de l'Organisation en matière d'autorisation de voyage et de sécurité puissent être menées à bien.

9. Le Groupe d'experts a également demandé en trois occasions distinctes la permission de se rendre dans des territoires contrôlés par l'alliance des houthistes et

<sup>4</sup> On trouvera à l'annexe 1 des informations supplémentaires sur les méthodes suivies par le Groupe et sur le droit de réponse de ses interlocuteurs.

des pro-Saleh (à Sanaa et Taëz). Les autorités en place à Sanaa ont d'abord approuvé la première visite, avant de se dédire 24 heures plus tard. Elles n'ont pas répondu aux deux autres demandes qui leur ont été soumises par la suite, ayant informé le Groupe d'experts qu'elles ne souhaitaient pas coopérer avec lui<sup>5</sup>.

10. Le Gouvernement d'Oman a initialement autorisé le Groupe à se rendre à Mazyunah, point de passage de la frontière avec le Yémen, mais a annulé la visite juste avant le départ du Groupe vers le Sultanat.

## **D. Coopération avec les organisations et les parties prenantes**

### **1. Organismes des Nations Unies**

11. Le Groupe d'experts tient à souligner la grande qualité de la collaboration qu'il entretient avec le Bureau de l'Envoyé spécial du Secrétaire général pour le Yémen et avec les coordonnateurs résidents des États voisins où il s'est rendu. L'équipe de pays des Nations Unies et les organismes des Nations Unies dotés d'un mandat régional continuent d'appuyer ses travaux. Il est en contact régulier avec les représentants de l'équipe de pays des Nations Unies à Sanaa et dans la région, avec lesquels il échange des informations générales et spécialisées.

12. En application du paragraphe 7 de la résolution 2342 (2017), le Groupe d'experts a continué de coopérer étroitement avec l'Équipe d'appui analytique et de surveillance des sanctions du Conseil de sécurité concernant l'État islamique d'Iraq et du Levant [EIIL (Daech)], Al-Qaida, les Taliban et les personnes et entités qui leur sont associées<sup>6</sup>, le Groupe de contrôle pour la Somalie et l'Érythrée<sup>7</sup> et le personnel du Secrétariat de l'ONU chargé de l'application de la résolution 2231 (2015).

### **2. Échanges avec les États Membres**

13. Le Groupe d'experts a envoyé 192 lettres à des États Membres et à des entités pour leur demander des informations sur des questions relevant de son mandat. Il tient à souligner que ces demandes ne signifient pas nécessairement que les gouvernements ou que les individus ou entités de ces États ont violé le régime de sanctions. Il note toutefois qu'à ce jour 25 % des demandes d'information qu'il a adressées aux États Membres sont restées sans suite. Au moment de l'établissement du présent rapport, il attendait des réponses des pays suivants : Arabie saoudite, Australie, Émirats arabes unis, Fédération de Russie, France, Îles Marshall, Oman, République islamique d'Iran, Royaume-Uni, Serbie, Togo et Yémen. Le ministère des affaires étrangères à Sanaa et plusieurs autres entités n'ont pas encore répondu non plus. On trouvera à l'annexe 3 un résumé de la correspondance échangée pendant la période considérée.

### **3. Gouvernement yéménite**

14. Le Groupe d'experts a rencontré le Premier Ministre yéménite, Ahmed Bin Dagher, ainsi que d'autres représentants du Gouvernement légitime à Aden, en mars 2017<sup>8</sup>. Quoiqu'ils aient exprimé leur plein appui au Groupe, ce dernier n'a pas obtenu d'eux des données d'information suffisamment probantes.

<sup>5</sup> Lettre adressée au Groupe d'experts le 23 mars 2017.

<sup>6</sup> Créée par la résolution 1526 (2004) et dont le mandat a été prorogé par la résolution 2253 (2015).

<sup>7</sup> Créé par les résolutions 751 (1992) et 1907 (2009) et dont le mandat a récemment été prorogé par la résolution 2317 (2016).

<sup>8</sup> Afin d'éviter toute confusion entre le Gouvernement du Yémen et les autorités ou fonctions relevant de l'alliance des houthistes et pro-Saleh, et en vue de distinguer les uns des autres dans la version anglaise du présent rapport, le Groupe a choisi d'utiliser les majuscules en tête des noms de ministères et de fonctions liés au Gouvernement légitime. S'il a été décidé de faire de même



#### 4. Alliance des houthistes et pro-Saleh

15. Le Groupe d'experts a maintenu des contacts téléphoniques avec des représentants du mouvement Ansarallah et les responsables du Congrès populaire général. Il en a également rencontré certains à l'occasion des visites qu'il a effectuées dans les pays de la région.

## II. Actes menaçant la paix, la sécurité et la stabilité du Yémen

16. Au paragraphe 18 de sa résolution 2140 (2014), le Conseil de sécurité a établi que le fait d'entraver ou de compromettre la réussite de la transition politique prévue dans l'Initiative du Conseil de coopération du Golfe et l'Accord sur le mécanisme de mise en œuvre menaçait la paix, la sécurité et la stabilité du Yémen et pouvait constituer un critère de désignation par le Comité.

### A. Mise en cause de l'autorité du Gouvernement légitime

17. L'autorité du Gouvernement légitime du Yémen s'est érodée à un point tel qu'il n'est pas sûr qu'il parvienne un jour à réunifier le pays. Le Groupe d'experts fonde cette évaluation sur les quatre éléments suivants : a) l'incapacité du Président Hadi à gouverner depuis l'étranger ; b) la création d'un « Conseil de transition du Sud », dont l'objectif déclaré est d'obtenir l'indépendance du sud du pays ; c) le maintien des houthistes à Sanaa et dans une grande partie du nord du pays ; d) la multiplication d'opérations menées de manière indépendante par des forces supplétives rémunérées et armées par des membres de la coalition dirigée par l'Arabie saoudite.

18. Le Président Hadi est resté hors des frontières du Yémen pendant la majeure partie de 2017<sup>9</sup>. Plusieurs gouverneurs de province ont démissionné ou ont été démis de leurs fonctions par le Président<sup>10</sup>, notamment Nayif Salim Saleh al-Qaysi (QDi.402)<sup>11</sup>, alors en poste à Beïda, inscrit le 22 février 2017 sur la liste relative aux sanctions de l'ONU en raison de l'appui qu'il avait fourni à la branche yéménite du groupe Al-Qaida<sup>12</sup>. Le fait que le Gouvernement légitime n'ait pas été à même de verser les salaires des fonctionnaires, des militaires et d'autres employés de son administration a sapé son autorité et réduit l'appui dont il bénéficiait de la part de la population.

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dans la version française, ce choix peut n'être pas pertinent pour l'ensemble des langues de travail de l'Organisation. On notera par exemple « le Ministre de la défense » et « le Ministère de la défense » (du Gouvernement légitime), quand les équivalents dans l'administration houthistes se liront « le ministère des affaires étrangères à Sanaa » et « le ministre des affaires étrangères à Sanaa ». Les indications de rang et de fonctions militaires seront écrites suivant la même convention. Par exemple : « Général » et « général », « 35<sup>e</sup> Brigade blindée » et « 62<sup>e</sup> brigade mécanisée » etc.

<sup>9</sup> La dernière visite du Président Hadi au Yémen dont il a été publiquement fait état a eu lieu en février 2017.

<sup>10</sup> On trouvera à l'annexe 4 une liste des gouverneurs en poste restés fidèles au Gouvernement légitime.

<sup>11</sup> On trouvera à l'annexe 5 des informations sur le réseau de Nayif al-Qaysi.

<sup>12</sup> Al-Qaysi a été démis de ses fonctions le 23 juillet 2017.

## 1. Conseil de transition du Sud

19. Le 11 mai 2017, le Général de division Aydarus al-Zubaydi, ancien gouverneur d'Aden, a annoncé la création d'un Conseil de transition du Sud<sup>13</sup>, ayant pour objectif déclaré d'obtenir l'indépendance du sud du pays<sup>14</sup>. Le 30 novembre 2017, le Conseil de transition a publié les noms des 303 membres d'une « Assemblée nationale »<sup>15</sup>.

20. Tout au long de 2017, le Conseil de transition et son objectif d'indépendance pour le sud du pays ont gagné en popularité auprès de la population, des forces armées yéménites et des forces agissant pour le compte d'autres acteurs. De nombreuses photographies témoignent de la présence, lors de rassemblements organisés par le Conseil, de membres en uniformes des forces « Ceinture de sécurité » brandissant des drapeaux de l'ancienne République démocratique populaire du Yémen. Le Groupe d'experts a également constaté que des membres des Forces d'élite du Hadramout arboraient le symbole et le drapeau de l'ancien État du sud aux postes de contrôle dont ils avaient la charge.

## 2. Alliance des houthistes et des pro-Saleh

21. Jusqu'à son effondrement, début décembre 2017, l'alliance des houthistes et des pro-Saleh a continué de prendre, par l'intermédiaire de son conseil politique suprême conjoint, des mesures relevant exclusivement de l'autorité du Gouvernement légitime<sup>16</sup>. Les houthistes contrôlent unilatéralement l'ensemble des institutions publiques des territoires passés sous leur domination. Leur pouvoir ne fera que s'ancre plus profondément aussi longtemps qu'ils resteront en place<sup>17</sup>.

## B. Entraves à la cessation des hostilités et à la reprise du processus politique

22. Aucun progrès réel vers un règlement pacifique n'a été fait en 2017. Le processus politique est dans l'impasse, l'ensemble des parties au conflit étant toujours convaincues qu'elles parviendront à obtenir une victoire militaire qui leur épargnerait la nécessité de trouver un compromis politique.

23. Depuis l'attaque du 25 mai 2017 contre son convoi à Sanaa<sup>18</sup>, l'Envoyé spécial du Secrétaire général pour le Yémen, Ismail Ould Cheik Ahmed, s'est vu interdire

<sup>13</sup> Informations figurant dans le rapport confidentiel à mi-parcours présenté en 2017 par le Groupe d'experts (par. 9 et 10). On trouvera à l'annexe 7 une liste des dirigeants du Conseil de transition du Sud.

<sup>14</sup> Le Yémen du Sud a été indépendant de 1967 à la réunification, en 1990.

<sup>15</sup> Elle s'est réunie pour la première fois à Aden le 23 décembre 2017. M. Ahmed bin Breik et le Dr. Anis Youssef Ali Luqman ont respectivement été élus à sa Présidence et à sa Vice-Présidence. La répartition des sièges entre les différentes provinces est la suivante : Hadramout, 100 ; Aden, 62 ; Chaboua, 37, Lahj : 36 ; Abiyan : 31 ; Mahra : 24 ; Daleh : 10 ; Socotra : 3. Le site Web du Conseil de transition du Sud est disponible aux adresses suivantes : en arabe :

<http://www.southerntransitionalcouncil.net/> ; et en anglais :

<http://en.southerntransitionalcouncil.net/> (Sauf indication contraire, tous les hyperliens figurant dans le présent rapport étaient valides au 29 décembre 2017.). Le Conseil a ouvert des permanences locales dans chacune des huit provinces. On trouvera à l'annexe 7 les noms des directeurs de ces permanences.

<sup>16</sup> Voir S/2017/81, par. 20.

<sup>17</sup> Les houthistes ont pris le contrôle des villes suivantes : Amran, Dhamar, Hajja, Ibb, Mahouït, Reïma, Saada et Sanaa. Les provinces de Beïda, Hodeïda, Jaouf, Mareb et Taëz font l'objet d'une lutte de pouvoir. On trouvera une liste des gouverneurs houthistes à l'annexe 8.

<sup>18</sup> Voir <https://www.reuters.com/article/us-yemen-security-un/u-n-wants-investigation-into-attack-on-yemen-envoys-convoy-idUSKBN18L18I>.

l'entrée de la ville<sup>19</sup>. Les houthistes l'ont banni de facto en refusant toutes les propositions qu'il leur a faites par la suite.

24. Les houthistes considèrent qu'ils n'ont qu'à survivre jusqu'à l'abandon des hostilités par la coalition dirigée par l'Arabie saoudite pour « gagner » la guerre, ce qui explique leur faible volonté de négocier. La coalition, quant à elle, doit globalement choisir l'une des quatre options suivantes : a) cesser unilatéralement les hostilités et laisser le pouvoir aux houthistes ; b) organiser une offensive terrestre d'ampleur sans garantie de succès et avec la certitude de subir des pertes ; c) poursuivre les frappes aériennes en espérant qu'elles changent la donne, en dépit du fait qu'après 33 mois de frappes, on estime qu'il ne reste plus qu'un très faible nombre de cibles crédibles ; d) tenter de réactiver le réseau de Saleh dans le cadre d'une coalition anti-houthiste. Les lignes de front peuvent évoluer légèrement dans les mois à venir du fait de l'éclatement de l'alliance des houthistes et des pro-Saleh, mais de l'avis du Groupe d'experts, aucune des parties n'est en mesure de remporter une véritable victoire militaire.

25. La situation est d'autant plus complexe que ce ne sont pas les responsables de la stratégie politique des parties au conflit qui en supportent le plus lourdement les conséquences, mais bien la population civile yéménite. Les dirigeants houthistes sont, dans une large mesure, à l'abri des attaques comme de la pénurie de nourriture, de carburant et d'eau. Les membres de la coalition recourent à des frappes aériennes ne présentant pour eux que des risques moindres et ils ne disposent que d'un nombre restreint de troupes au sol, ce qui limite les retombées politiques auxquelles ils pourraient devoir faire face au niveau national.

#### **Effondrement de l'alliance des houthistes et des pro-Saleh et décès de Saleh**

26. Les tensions entre les houthistes et Ali Abdullah Saleh (YEi.003) se sont ravivées en août 2017<sup>20</sup>, puis le 29 novembre 2017, lorsque des partisans armés des premiers et du second se sont affrontés dans la mosquée al-Saleh de Sanaa et ses environs. Cette échauffourée a été à l'origine d'une guerre de rue qui s'est prolongée pendant cinq jours et a abouti à l'effondrement de l'alliance puis au décès d'Ali Abdullah Saleh.

27. Quoique Saleh ait d'abord semblé avoir pris le dessus à Sanaa, les houthistes ont rapidement repris plusieurs installations militaires et envoyé des renforts dans la ville, tout en isolant leur opposant de ses alliés militaires et tribaux. Abdullah Yahya al-Hakim (YEi.002) et Mohammed Ali al-Houthi, chef du comité révolutionnaire houthiste, ont joué à cet égard un rôle de premier plan en contactant les tribus des alentours de Sanaa pour les convaincre de ne pas soutenir Ali Abdullah Saleh. Le Groupe est d'avis que Mohammed Ali al-Houthi remplit les critères de désignation, étant donné son implication dans l'organisation de ces événements qui constituent une menace pour la paix, la stabilité et la sécurité du Yémen.

28. Le 2 décembre 2017, Ali Abdullah Saleh a tendu la main à la coalition dirigée par l'Arabie saoudite, promettant l'ouverture d'une nouvelle page dans leurs relations

<sup>19</sup> Voir <https://www.reuters.com/article/us-yemen-security-un/houthis-ban-u-n-special-envoy-from-yemen-for-alleged-bias-idUSKBN18W2D0>.

<sup>20</sup> En août 2017, Abdulmalik al-Houthi et Ali Abdullah Saleh se sont renvoyés des critiques par discours interposés en amont des célébrations publiques marquant le trente-cinquième anniversaire du Congrès populaire général. Le 26 août 2017, Khaled Ahmed Zayd al-Radhi, l'un des principaux partisans de Saleh, responsable des relations extérieures du Congrès populaire général et directeur du groupe Vulcan, a été tué lors d'un affrontement avec les houthistes à Sanaa. Le 12 septembre 2017, Abdulmalik al-Houthi et Ali Abdullah Saleh se sont rencontrés lors d'un face à face destiné à apaiser les tensions. On trouvera à l'annexe 9 un compte rendu des événements qui ont contribué à la montée des tensions entre les alliés.

et appelant ses partisans à prendre les armes<sup>21</sup>. Privés du soutien de chefs tribaux et de généraux clés qui n'avaient pas la volonté ou les moyens de les secourir, Saleh<sup>22</sup> et ses hommes ont été submergés et tués à Sanaa au matin du 4 décembre 2017.

Figure I

**Mohammed Ali al-Houthi et Abdullah Yahya Al Hakim à Sanaa  
(Décembre 2017)<sup>a</sup>**



<sup>a</sup> Vidéo communiquée par des sources confidentielles : Mohammed Ali al-Houthi (à gauche) et Abdullah Yahya Al Hakim (à droite).

29. Selon de nombreuses indications, Tariq Muhammad Abdullah Saleh<sup>23</sup>, commandant militaire et neveu d'Ali Abdullah Saleh, aurait également été tué dans les combats. Le Groupe d'experts s'emploie à corroborer les faits de manière indépendante. Il a pu confirmer le décès d'Arif al-Zuka, secrétaire général du Congrès populaire général et principal conseiller politique d'Ali Abdullah Saleh. Les houthistes ont également fait plusieurs prisonniers parmi les membres de la famille Saleh<sup>24</sup>. De l'avis du Groupe, certains d'entre eux ont été blessés dans les combats et les houthistes les retiennent pour les utiliser comme moyen de pression si d'aventure

<sup>21</sup> Le Groupe d'experts note que pendant les faits, la coalition n'a conduit de frappes aériennes que contre des cibles houthistes situées non loin des positions des partisans armés de Saleh. S'il était avéré que cela relevait d'une tentative de protéger Ali Abdullah Saleh équivalent à la fourniture d'un appui à un individu visé par des sanctions, cela constituerait une violation du paragraphe 14 de la résolution 2216 (2015). Le Groupe d'experts poursuit son enquête sur cette affaire.

<sup>22</sup> Sur la base de l'examen d'images du corps de Saleh, le Groupe croit comprendre que ce dernier a été exécuté à bout portant d'une balle tirée du côté gauche à l'arrière de la tête. Les houthistes ont chargé le corps dans un véhicule tout terrain et l'ont transporté hors de Sanaa pour le mettre en scène dans un faux scénario d'embuscade, l'objectif étant de faire croire qu'il avait été tué alors qu'il essayait de s'enfuir. Le Groupe estime qu'il s'agit là d'une nouvelle tentative de décrédibiliser Ali Abdullah Saleh, dans le cadre d'une stratégie appliquée à cet effet par les houthistes pendant le mois de décembre 2017.

<sup>23</sup> Tareq Saleh était le commandant de la garde particulière de Saleh et se trouvait de fait à la tête de sa Garde républicaine.

<sup>24</sup> Le Groupe a pu établir que Salah et Midyan, deux des six fils de Saleh, avaient été capturés, de même que l'un de ses neveux, Muhammad Muhammad Abdullah Saleh, figure militaire importante et Superviseur principal du Vulcan Group (voir <http://www.vulcanyemen.com/owners.htm>). Le Groupe pense également que les houthistes retiennent le fils aîné de Tariq Saleh, Afash, et celui de Yahya Muhammad Abdullah Saleh, Kenan. On trouvera aux annexes confidentielles 10 et 11 la liste des fils et des neveux d'Ali Abdullah Saleh. La liste de ses filles et de ses gendres figure à l'annexe confidentielle 12.

Ahmed Ali Abdullah Saleh (YEi.005) ou Khaled Ali Abdullah Saleh tentaient de réactiver le réseau de Saleh.

30. Dans les jours qui ont suivi, les houthistes ont cherché à éliminer ou à récupérer les éléments restants du réseau de Saleh tout en asseyant leur emprise sur Sanaa et la plupart des territoires du nord du pays. Ils ont exécuté les principaux responsables militaires appartenant, comme Saleh, à la tribu Sanhan<sup>25</sup>, arrêté les membres les plus en vue du Congrès populaire général<sup>26</sup> et intimidé les autres<sup>27</sup>, dispersé les manifestations par la force<sup>28</sup>, enlevé les enfants de familles influentes liées à Saleh<sup>29</sup>, détruit le domicile de ses partisans et imposé une censure stricte en bloquant l'accès aux réseaux sociaux et à la plupart des sites Internet. Les houthistes ont également annoncé le changement de nom de la mosquée al-Saleh et dit avoir trouvé chez l'ancien Président de l'or, de l'argent et de l'argent liquide en grandes quantités qu'ils allaient déposer à la banque centrale<sup>30</sup>. Le Groupe d'experts s'attend à ce que leur tentative de consolider leur pouvoir se traduise par une répression de plus en plus sévère.

## C. Sécurité et tendances régionales

### 1. Tendances régionales

31. Le 5 juin 2017, le Qatar a été exclu de la coalition dirigée par l'Arabie saoudite et a engagé le retrait de ses troupes le 7 juin 2017, ce qui n'a eu que de faibles incidences sur le plan militaire. Les tensions entre le Qatar et les membres de la coalition se sont toutefois répercutées sur la situation au Yémen, où la coalition et ses forces supplétives ont pris pour cible le Parti El-Islah, allié perçu de l'émirat<sup>31</sup>.

### 2. Zones sous contrôle des forces alliées au Gouvernement légitime du Yémen

32. Quoique le Gouvernement légitime maintienne une présence armée dans les huit provinces du Sud (Abiyan, Aden, Hadramout, Lahj, Mahra, Chaboua et Socotra), sa capacité à gouverner et à faire respecter son autorité est remise en cause par un certain nombre d'autres acteurs, parmi lesquels Al-Quaida dans la péninsule arabique (AQPA), l'EIIL, les opposants tribaux, le Conseil de transition du Sud récemment

<sup>25</sup> Le 5 décembre 2017, les houthistes ont exécuté les généraux de division Mahdi Maqawlah, Abdullah al-Dhabaan (commandant de la 35<sup>e</sup> brigade blindée et ancien commandant de l'axe de Taëz) et Murad al-Awbali (commandant de la 62<sup>e</sup> brigade mécanisée).

<sup>26</sup> On trouvera à l'annexe 13 la liste des membres du Congrès populaire général détenus par les houthistes.

<sup>27</sup> Après la mort de Saleh, la chaîne de télévision houthiste al-Masirah a diffusé des images d'une réunion du Congrès populaire général à Amran, au cours de laquelle certains ont prêté allégeance aux autorités et se sont dissociés du défunt. De l'avis du Groupe d'experts, c'est là pour les houthistes une manière d'indiquer qu'ils ne s'en prendront qu'aux partisans de Saleh et non à tous les membres du Congrès populaire général. ([http://www.almasirah.net/gallery/preview.php?file\\_id=10509#.WihdwAa5gRg.twitter](http://www.almasirah.net/gallery/preview.php?file_id=10509#.WihdwAa5gRg.twitter)).

<sup>28</sup> Le 6 décembre 2017, les houthistes ont tiré des coups de feu pour disperser une manifestation de femmes exigeant qu'on leur remette le corps de Saleh afin qu'il soit inhumé.

<sup>29</sup> Des hommes armés affiliés aux houthistes ont investi le domicile de Ruqayah al-Hijjri, sœur de l'une des épouses de Saleh (voir annexe confidentielle 14), et arrêté au moins l'un de ses enfants (<http://www.almadaronline.com/article/95978>).

<sup>30</sup> Les photographies utilisées par les houthistes à l'appui de leur déclaration proviennent d'une banque d'images et n'ont pas été prises au Yémen (voir <http://www.saba.ye/ar/news481198.htm>).

<sup>31</sup> Le 11 octobre 2017, à Aden, les forces de sécurité agissant sur ordre de Shallal Ali Shaye, responsable de la sécurité, ont pris d'assaut un bâtiment du Parti El-Islah et arrêté 10 personnes (voir <https://www.reuters.com/article/us-yemen-security/yemen-islamist-party-members-arrested-ratcheting-up-tensions-idUSKBN1CG1J1>).

formé et les forces supplétives de la coalition dirigée par l'Arabie saoudite. Des forces armées restées loyales au Président Hadi sont également présentes à Taëz et Mareb.

33. Les forces « Ceinture de sécurité » (voir annexe 6 pour une présentation de leur commandement et de leur structure) sont un pilier essentiel de la stratégie de sécurité pour le Yémen des forces des Émirats arabes unis déployées dans le sud du pays. Cette approche continue d'exclure les institutions publiques telles que le Bureau de la sûreté nationale et l'Organisation de sécurité politique, ce qui contribue à fragiliser et à limiter les moyens du Gouvernement légitime en matière de renseignement et de sécurité.

### 3. Interventions des forces de la coalition dirigée par l'Arabie saoudite

34. La coalition dirigée par l'Arabie saoudite continue de dispenser un appui financier, politique, militaire et logistique aux forces armées yéménites et à un certain nombre de groupes armés agissant pour son compte. Les principales lignes de front pour les forces saoudiennes se trouvent à Mareb et Meïdi, tandis que les forces émiriennes se concentrent sur Aden, Abiyan, Hadramout, Lahj, Mahra, Mokha et Chaboua.

35. Le 7 décembre 2017, les forces de résistance du sud soutenues par la coalition et dirigées par le général de brigade Abdul Salam al-Shehi ont pris le contrôle du camp Abou Moussa el-Achaari, situé en périphérie de Khokha, puis avancé vers le nord en direction de la ville d'Hodeïda<sup>32</sup>. Dans le cadre de cette opération, des éléments sudistes commandés par Haïtham Qassem Taher ont lancé une offensive militaire dans la province d'Hodeïda où ils n'ont rencontré qu'une faible résistance de la part des houthistes déployés au nord de la ville de Mokha, au bord de la mer Rouge.

36. Les Émirats arabes unis continuent de renforcer le soutien qu'ils apportent aux forces supplétives opérant dans le sud, en particulier aux forces « Ceinture de sécurité » à Abiyan, Aden et Lahj ainsi qu'aux Forces d'élite du Hadramout et de Chaboua (voir par. 55 à 58). Ils administrent également à Khamoussa et Riyan, près de Moukalla, des centres de formation militaire accueillant un certain nombre de conseillers et de formateurs militaires étrangers sollicités à l'appui des Forces d'élite<sup>33</sup>.

## D. La « question du Sud »

37. Considérant la durée du conflit, l'absence d'avancées militaires et les divisions qui se sont fait jour, le Groupe d'experts estime que la sécession du Yémen du Sud n'est plus une hypothèse improbable. La capacité du Gouvernement à administrer et à gérer les huit provinces du Sud qu'il assure contrôler s'est largement amoindrie en 2017. La situation à Aden et Mahra illustre parfaitement les circonstances qui alimentent le risque de sécession.

### 1. Aden

38. Les conditions de sécurité se sont considérablement détériorées dans la province en 2017. L'EIIL a orchestré plusieurs attentats-suicides à grande échelle et revendiqué un certain nombre d'assassinats (voir par. 74). Plusieurs assassinats de nature politique ont également été perpétrés mais n'ont été revendiqués ni par AQPA ni par

<sup>32</sup> Voir <http://adengad.net/news/291513/>.

<sup>33</sup> Informations recueillies par le Groupe d'experts lors de ses visites au Yémen et dans le cadre d'entretiens avec des sources confidentielles.

l'EIIL. Le 18 octobre 2017, l'imam de la mosquée Sahaba d'Aden, Fahd al-Yunisi, a ainsi été assassiné par un tireur dont l'identité n'a pas encore été établie<sup>34</sup>.

39. Le Gouvernement légitime s'est trouvé à maintes reprises incapable de verser le salaire des fonctionnaires et semble ne pas pouvoir assurer aux habitants de la ville l'accès aux services de base, notamment à l'électricité. Le gouverneur d'Aden, Abd al-Aziz al-Muflahi, a démissionné de ses fonctions le 16 novembre 2017 pour protester contre le non versement des salaires par le Gouvernement<sup>35</sup>. Le Groupe d'experts a observé, à Aden et dans d'autres villes du Sud, des panneaux mettant violemment en cause le Premier Ministre bin Daghir et le Gouvernement légitime pour leur inaptitude à répondre aux besoins de la population yéménite<sup>36</sup>. Les autorités locales semblent ne rien entreprendre pour répondre à cette campagne antigouvernementale.

## 2. Mahra

40. Dans la province de Mahra, à l'est du pays, les tensions sont avivées par le déploiement de forces militaires supplémentaires destinées à lutter contre la contrebande<sup>37</sup>. Le 15 novembre 2017, la 123<sup>e</sup> Brigade d'infanterie du Général de brigade Abdullah Mansour Ali est venue remplacer à Mahra la 137<sup>e</sup> Brigade mécanisée. Près de deux semaines plus tard, le 27 novembre 2017, le Président Hadi a nommé Rajih Said Bakrit au poste de gouverneur de Mahra en lieu et place de Mohammed Abdullah Kudah, précédent titulaire de cette fonction<sup>38</sup>. Ce dernier se trouve toujours à Mahra, sous la protection d'éléments armés appartenant à sa tribu et d'autres responsables dont les intérêts rejoignent les siens<sup>39</sup>. La tribu Qoudaa, dont l'ancien gouverneur est originaire, contrôle l'accès à la côte, à l'est du port de Gheïda, à Jaroub et à Zaghar, près de la frontière avec Oman.

## E. Zones contestées et risques de fragmentation

41. La situation à Beïda et Taëz confirme que le Yémen risque véritablement de se fragmenter.

### 1. Beïda

42. Située sur l'ancienne frontière entre le nord et le sud du pays, Beïda est une ville importante et, notamment, hautement stratégique au nord de laquelle s'étend la région de Beïhan. Cette dernière revêt une importance particulière car elle est l'une des principales routes du trafic depuis le sud du pays vers Sanaa, et permet de rejoindre Mareb et la côte de la mer d'Arabie. Les houthistes sont surtout présents à Radaa, tandis qu'AQPA semble être actif près de Dhahab et alentour, dans les environs de Soumaa et, au sud, dans la zone de Zaher. L'EIIL opère depuis une petite enclave de

<sup>34</sup> Voir <http://adengad.net/news/283179/>. Le Groupe d'experts a recensé au Yémen d'autres assassinats, perpétrés pour des motifs politiques, qui n'ont été revendiqués ni par AQPA ni par l'EIIL.

<sup>35</sup> Nommé en avril 2017, après que le Président Hadi a démis Aydarus al-Zubaydi de cette fonction, Al-Muflahi s'est également emporté contre le Premier Ministre bin Daghir, accusé d'empiéter sur ses fonctions de gouverneur.

<sup>36</sup> Voir <https://twitter.com/goldensla/status/926022844307378178>.

<sup>37</sup> Le projet de création de Forces d'élite de Mahra, sur le modèle de celles du Hadramout et de Chaboua, semble avoir été ajourné.

<sup>38</sup> Voir <http://adengad.net/news/289730/>: Kudah a été nommé Ministre d'État et a siégé au Conseil des Ministres du Président Hadi.

<sup>39</sup> On trouvera à l'annexe 15 la liste des principaux responsables de la province de Mahra. On trouvera à l'annexe 16 une liste de personnes dont l'affiliation à AQPA est avérée et qui opèrent dans la province.

Qeïfa, et des éléments des forces de résistance soutenues par la coalition sont confinés à l'extrémité sud-ouest de la zone, à Humaiqan, dans la ville de Beïda et près de Moukeïras (voir carte à l'annexe 17)<sup>40</sup>.

## 2. Taëz

43. Comme indiqué aux paragraphes 28 à 33 du bilan confidentiel à mi-parcours du Groupe d'experts, Taëz reste le théâtre de vives tensions et d'une véritable tragédie humanitaire. Au cours de l'année écoulée, c'est dans cette ville qu'ont eu lieu les combats les plus soutenus. Elle est toujours assiégée par les forces houthistes. On a observé un pic de tension entre les forces de résistance locales, les milices salafistes et les forces armées yéménites en octobre 2017, après que les États-Unis, l'Arabie saoudite et le Conseil de coopération du Golfe ont décidé d'imposer des sanctions à Abu al-Abbas, l'un des principaux responsables salafistes<sup>41</sup>. Comme les houthistes à Sanaa, Abu al-Abbas contrôle toujours une partie de la ville et exerce des prérogatives qui relèvent exclusivement de l'autorité du Gouvernement légitime<sup>42</sup>. Avant le 25 octobre 2017, il bénéficiait d'un appui non négligeable de la part des Émirats arabes unis. Le Groupe cherche à savoir si cet appui lui a été conservé depuis.

44. Non contentes de rivaliser avec les forces du Gouvernement qu'elles combattent parfois, les diverses milices salafistes<sup>43</sup> qui se sont constituées au cours des presque trois années que dure le conflit s'opposent aussi entre elles. Leur concurrence s'est faite d'autant plus âpre en conséquence des sanctions contre Abu al-Abbas. Les milices voient la prise de Taëz comme un jeu à somme nulle et certains petits groupes, voyant al-Abbas affaibli, ont cherché à en profiter pour gagner du terrain. Le soutien que ces groupes reçoivent de l'extérieur est proportionnel au territoire urbain qu'ils contrôlent.

45. Il est possible que les sanctions visant Abu al-Abbas aient également poussé les forces houthistes et pro-Saleh à intensifier leurs attaques contre les forces de la résistance à Taëz et dans ses environs. La population civile a essuyé des pertes lors de plusieurs attaques aériennes menées sur Taëz par la coalition dirigée par l'Arabie saoudite, qui aurait visé les forces houthistes et pro-Saleh. L'une des frappes a touché des éléments de la 22<sup>e</sup> Brigade blindée, loyale au Président Hadi, dans les environs d'al-Arous, dans la montagne Saber<sup>44</sup>. Les cas de ce type ont altéré la relation entre les forces locales et leurs alliés de la coalition, ce qui a permis aux forces houthistes et pro-Saleh de mobiliser leurs forces pour tirer parti de la situation et gagner du terrain sur plusieurs lignes de front à Taëz.

46. AQPA et l'EIIL sont toujours actifs à Taëz mais les deux groupes font face à des défections et à des dissensions (voir par. 66).

## F. Sûreté maritime

47. En 2017, les atteintes à la sécurité menaçant les voies de communication maritime stratégiques et les points d'accès aux ports de la mer Rouge ont cru en nombre et en gravité. Ces actes mettent en péril l'acheminement de l'aide humanitaire

<sup>40</sup> Ces éléments des forces de résistance sont liés à l'ancien gouverneur de Beïda, Nayif al-Qaysi (QDi.402), et à Abd al-Wahhab al-Humayqani (voir annexes 5 et 18).

<sup>41</sup> Les États-Unis et la coalition dirigée par l'Arabie saoudite ont imposé des sanctions à Abu al-Abbas le 25 octobre 2017. On trouvera à l'annexe 19 une liste de ses associés notoires.

<sup>42</sup> Avant d'être visé par des sanctions, le Vice-Président Ali Muhsin al-Ahmar avait essayé sans succès d'intégrer Abu al-Abbas et ses miliciens aux forces armées yéménites.

<sup>43</sup> Les milices opérant à Taëz sont notamment la brigade al-Sa'lik et les groupes commandés par Hashem al-Sanani, Saud Mayub, Hareth al-Izzy et Abu Saduq.

<sup>44</sup> Voir <http://www.middleeasteye.net/news/saudi-forces-accused-deliberately-targeting-allies-yemens-Ta'izz-179331116>.



par voie maritime au Yémen et s'inscrivent donc en violation du paragraphe 19 de la résolution 2216 (2015). On observera sur la figure II le nombre et la répartition des atteintes à la sécurité maritime perpétrées dans la région en 2017, dont notamment celles-ci :

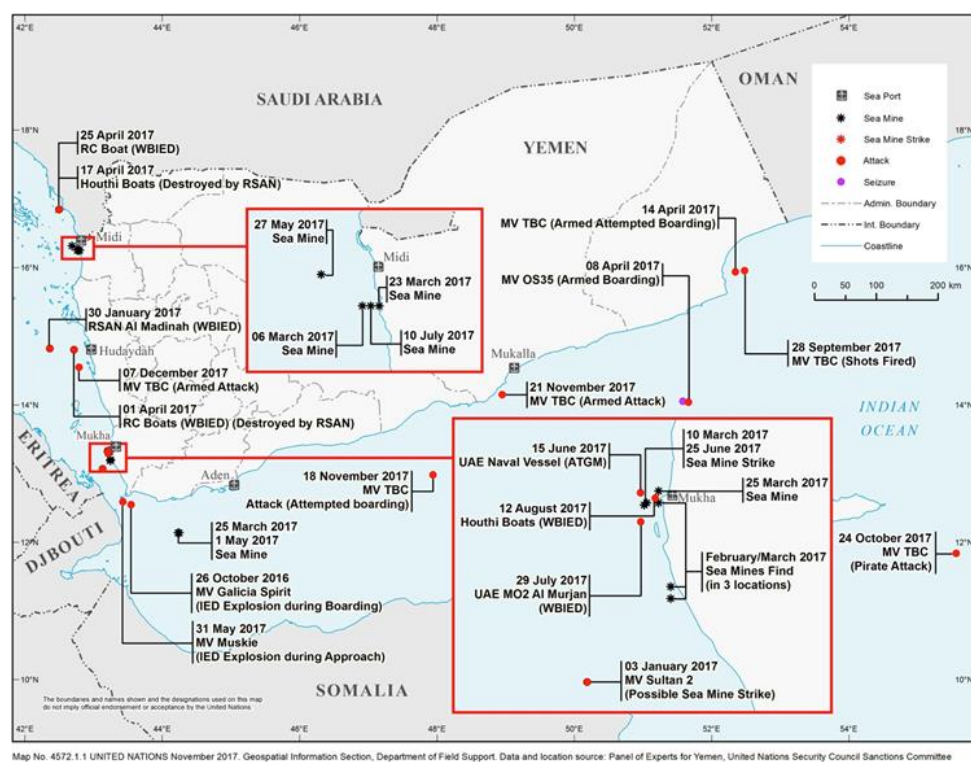
a) Des attaques au missile ou à l'explosif menées contre les vaisseaux de la coalition dirigée par l'Arabie saoudite et contre les ports de la mer Rouge, se caractérisant parfois par le recours à de nouvelles méthodes telles que : i) l'utilisation d'esquifs téléguidés chargés d'explosifs (dispositif explosif aquatique improvisé) ; ii) l'usage de missiles antichars guidés depuis la terre ferme ;

b) Une tentative d'attaque menée contre le pétrolier *Muskie*, battant pavillon des Îles Marshall, suivant un mode opératoire très proche de celui qui avait été utilisé contre le vaisseau espagnol *Galicja Spirit*<sup>45</sup> ;

c) Une attaque à l'hélicoptère armé lancée le 16 mars 2017 par un individu non encore identifié contre un vaisseau civil à bord duquel se trouvaient des migrants, ayant entraîné la mort d'au moins 42 personnes ;

d) Le recours à des mines navales, y compris improvisées (voir par. 110 à 114).

Figure II  
Atteintes à la sécurité maritime : 2017



48. Les stratégies décrites dans la quatrième édition des Meilleures pratiques de gestion pour la protection contre les pirates basés en Somalie<sup>46</sup> publiées à l'intention

<sup>45</sup> Il a été question de l'attaque contre le *Galicja Spirit* dans le précédent rapport final du Groupe d'experts (S/2017/81, par. 37 et 38 et annexe 14). Le Groupe a fait état de l'attaque contre le *Muskie* dans le bilan confidentiel à mi-parcours qu'il a présenté en 2017.

<sup>46</sup> Voir [www.mschoa.org/docs/public-documents/bmp4-low-res\\_sept\\_5\\_2011.pdf?sfvrsn=0](http://www.mschoa.org/docs/public-documents/bmp4-low-res_sept_5_2011.pdf?sfvrsn=0) (en anglais). Ces meilleures pratiques, quoiqu'elles s'attachent principalement à la piraterie basée en Somalie, peuvent aussi être appliquées par les vaisseaux qui naviguent dans la mer Rouge

des professionnels du secteur permettront aux équipages de se prémunir, du moins en partie, contre les tentatives d'abordage par de petits groupes de militants armés ou des pirates, mais seront inutiles face à des attaques utilisant des dispositifs explosifs aquatiques improvisés, des missiles antinavires<sup>47</sup>, des missiles antichars guidés depuis la rive ou des mines navales.

### III. Groupes armés et unités militaires

49. En application du paragraphe 17 de la résolution 2140 (2014) du Conseil de sécurité, dont les dispositions ont été réaffirmées dans les résolutions 2216 (2015), 2266 (2016) et 2342 (2017), le Groupe d'experts continue d'enquêter sur les individus et entités associés aux groupes armés qui se livreraient ou apporteraient un appui à des actes qui menacent la paix, la sécurité ou la stabilité du Yémen.

#### A. Gouvernement yéménite et coalition menée par l'Arabie Saoudite regroupant des forces régulières

50. Des troupes placées sous le contrôle officiel du Président Hadi arborent régulièrement le drapeau d'un Yémen du Sud indépendant. À plusieurs reprises, elles ont appelé l'ancien Gouverneur d'Aden et actuel chef du Conseil de transition du Sud, Aydarus al-Zubaydi, leur « Président »<sup>48</sup>. Le Groupe d'experts estime que le Président Hadi n'assure plus un commandement et un contrôle effectifs sur l'armée et les forces de sécurité agissant au nom du Gouvernement légitime du Yémen<sup>49</sup>. Le Président Hadi a essayé d'enrayer la poursuite de l'érosion de son pouvoir en déployant de nouvelles unités militaires, en particulier la 5<sup>e</sup> Brigade de la Garde présidentielle basée à Taëz, qui n'est pas sans rappeler les Brigades de la Garde républicaine auxquelles l'ancien Président Ali Abdullah Saleh faisait appel pour préserver son pouvoir<sup>50</sup>.

51. Les unités militaires régulières, telles que la 103<sup>e</sup> Brigade d'infanterie d'Abiyan<sup>51</sup>, dépendent entièrement ou presque des salaires et des équipements alloués par le Gouvernement yéménite légitime. Elles sont sous-équipées et souvent payées en retard ou ne reçoivent qu'une partie de leur salaire seulement. Aux problèmes rencontrés par cette brigade s'ajoute le fait que son camp d'Abiyan se trouve sur la ligne de front et qu'il est souvent la cible d'attaques perpétrées par AQPA<sup>52</sup>. En septembre, des soldats de la 103<sup>e</sup> Brigade d'infanterie, n'ayant reçu qu'une partie de leur salaire seulement, ont bloqué une route principale à Abiyan pour marquer leur mécontentement.

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pour se prémunir des pirates basés au Yémen. Le titre de l'ouvrage est hérité de sa première édition « Meilleures pratiques de gestion pour la protection contre les pirates basés en Somalie »).

<sup>47</sup> Voir S/2017/81 par. 35 et 36 et annexe 13.

<sup>48</sup> Le 25 octobre 2017, sur leur compte Twitter officiel, les Forces d'élite du Hadramout ont indiqué qu'Aydarus al-Zubaydi était leur « rais », c'est-à-dire leur « président » (voir <https://twitter.com/NokhbaHadramout/status/923209607174152192>).

<sup>49</sup> On trouvera à l'annexe 20 la liste des circonscriptions militaires du Yémen et de leurs commandants.

<sup>50</sup> Constituée le 17 novembre 2017 et dirigée par le Général de brigade Adnan Ruzaiq, un combattant salafiste de la tribu Al Qamush de Chaboua, qui est arrivé à Taëz en 2015 accompagné de 160 combattants. Avant cela, Ruzaiq était entré en conflit avec les forces « Ceinture de sécurité », qui avaient lancé une attaque contre son domicile à Aden en janvier 2017 – autre exemple du morcellement des forces armées contrôlées par le Gouvernement légitime. On trouvera à l'annexe 21 la liste des Brigades de la Garde présidentielle.

<sup>51</sup> Fin juillet 2017, la Brigade a été transférée de sa base d'Aden à Abiyan.

<sup>52</sup> Le 8 août 2017, un kamikaze d'AQPA, Arif Adil Hassan Habib, a lancé une attaque contre le camp de cette brigade, tuant 12 soldats et en blessant 28 autres.

52. La situation est légèrement différente à Mareb, où le Vice-Président Ali Muhsin al-Ahmar<sup>53</sup> a passé beaucoup de temps sur les fronts de Sirouah et de Nehm. Les troupes stationnées dans cette région sont mieux payées et mieux équipées, conséquence directe du soutien et de l'encadrement qu'il leur offre.

53. Les unités de sécurité yéménites les plus efficaces sont toutefois les forces supplétives créées et appuyées par les États membres de la coalition menée par l'Arabie saoudite, qui agissent également pour le compte de ces États membres au Yémen.

## **B. Forces supplétives de la coalition menée par l'Arabie saoudite**

54. Le Groupe d'experts estime que les forces supplétives financées et armées par les États membres de la coalition menée par l'Arabie saoudite constituent une menace pour la paix, la sécurité et la stabilité du Yémen. À moins qu'elles ne soient de nouveau placées sous le commandement et le contrôle directs des autorités yéménites et que l'ensemble de leurs salaires et équipements ne leur soient alloués via des structures étatiques yéménites, ces forces feront plus pour aggraver la fragmentation du pays que pour assurer sa cohésion.

### **1. Forces « Ceinture de sécurité »**

55. Les forces « Ceinture de sécurité », créées en mars 2016<sup>54</sup>, relèvent en théorie du Ministère de l'intérieur. Toutefois, dans la pratique, elles sont formées, ravitaillées et financées par les Émirats arabes unis et mènent leurs activités en dehors du cadre de commandement et de contrôle militaire yéménite. Constituées à l'origine d'environ 10 000 soldats, ces forces en comptent désormais plus de 15 000 et œuvrent dans les provinces d'Aden, d'Abiyan et de Lahj<sup>55</sup>.

56. Les forces « Ceinture de sécurité » ont parfois livré bataille contre les unités militaires yéménites fidèles au Président Hadi<sup>56</sup> et ont également été impliquées dans un certain nombre de violations du droit international humanitaire et du droit international des droits de l'homme (voir par. 166 ci-dessous)<sup>57</sup>. Elles sont en outre parmi les plus investies dans la lutte contre AQPA et l'EIL au Yémen, en particulier depuis août 2017 (voir par. 38 ci-dessus).

<sup>53</sup> Ali Muhsin al-Ahmar, un proche de l'ancien Président Ali Abdullah Saleh qui lui a tourné le dos en 2011, est l'un des chefs militaires les plus puissants de l'histoire contemporaine du Yémen ; il bénéficie toujours d'un soutien solide au sein de l'appareil militaire yéménite.

<sup>54</sup> Dès septembre 2015, le Gouverneur d'Aden de l'époque, Nayif Bakri, avait mentionné l'existence de forces dirigées par l'Arabie saoudite et les Émirats arabes unis qui formaient une « ceinture de sécurité » dans le sud du pays (voir <https://sputniknews.com/middleeast/201509051026642155/>).

<sup>55</sup> On trouvera à l'annexe 6 une présentation générale de la structure de commandement.

<sup>56</sup> Le Groupe d'experts a recensé une série d'affrontements entre les deux parties. Le 16 septembre 2017, par exemple, la Garde présidentielle de Hadi a refusé de remettre aux forces de sécurité appuyées par les Émirats arabes unis un poste de contrôle militaire situé à Arich, sur la route reliant Aden à Abiyan (voir <https://www.reuters.com/article/us-yemen-security-clash/gunfight-erupts-in-southern-yemen-one-civilian-killed-witnesses-idUSKCN1BR0M4>).

<sup>57</sup> Des éléments affiliés aux forces « Ceinture de sécurité » ont également été impliqués dans la détention extrajudiciaire de civils à Aden (voir l'annexe 22).

## 2. « Forces d'élite »

57. Début 2016, le Émirats arabes unis ont créé et financé les Forces d'élite du Hadramout, en prévision d'une attaque planifiée contre Moukalla<sup>58</sup>. À l'instar des forces « Ceinture de sécurité », les Forces d'élite du Hadramout sont mieux payées que leurs homologues servant dans l'armée d'active yéménite et œuvrent en dehors du cadre de commandement et de contrôle de l'armée yéménite.

58. Fin 2016, les Émirats arabes unis ont également formé et financé, selon les mêmes modalités, les Forces d'élite de Chaboua. Comme les Forces d'élite du Hadramout, elles sont composées de combattants locaux qui mènent leurs opérations en dehors du cadre de commandement et de contrôle militaire yéménite<sup>59</sup>. Le Groupe d'experts estime que ces forces comptent actuellement entre 3 000 et 4 000 combattants<sup>60</sup>. Bien qu'elles aient activement combattu AQPA et l'EIL au Yémen, il les considère comme des forces supplétives qui sapent l'autorité du Gouvernement légitime.

## C. Forces houthistes

59. Sur le plan militaire, les houthistes sont une milice tribale<sup>61</sup> qui s'est associée à une armée formée professionnellement, composée de membres des anciennes forces armées yéménites<sup>62</sup>. Lorsque les houthistes ont pris le contrôle de Sanaa fin 2014, ils avaient besoin de l'expérience politique et militaire que leur offrait le réseau d'Ali Abdullah Saleh (voir par. 43 à 45 ci-dessus). Fin 2017, cela a cessé d'être le cas. Au cours de l'année écoulée, les houthistes ont progressivement démis de leurs fonctions à des postes clefs des partisans de Saleh et les ont remplacés par leurs propres sympathisants. Cela a débouché sur une guerre de rue de cinq jours qui s'est déroulée à Sanaa entre fin novembre et début décembre 2017 et qui s'est soldée par la mort d'Ali Abdullah Saleh (voir par. 29 ci-dessus).

60. Des soldats restés fidèles au réseau d'Ali Abdullah Saleh feront probablement défection. Toutefois, le Groupe ne pense pas qu'ils seront suffisamment nombreux ou bien organisés pour ébranler l'emprise qu'ont les houthistes sur Sanaa et la majeure partie du nord, du moins dans un futur proche. Au lendemain de la mort d'Ali Abdullah Saleh, les houthistes se sont empressés d'écraser ou de rallier à eux ce qu'il restait de son réseau. Dans le même temps, ils ont assis leur domination en prenant une série de mesures restrictives brutales et en procédant à des arrestations et à des exécutions (voir par. 29 ci-dessus).

<sup>58</sup> Ce qui a motivé la création des Forces d'élite du Hadramout était la volonté de donner un visage local à l'opération visant à reprendre la ville de Moukalla des mains d'AQPA en avril 2016 (voir S/2017/81, par. 51).

<sup>59</sup> Le Groupe d'experts a recensé une série d'affrontements qui ont eu lieu en octobre 2017 entre les Forces d'élite de Chaboua et la 23<sup>e</sup> Brigade mécanisée, fidèle au Vice-Président Ali Muhsin al-Ahmar.

<sup>60</sup> On trouvera à l'annexe 23 une présentation de la structure de commandement des Forces d'élite de Chaboua.

<sup>61</sup> On trouvera à l'annexe 24 la liste des principaux responsables militaires et de la sécurité houthistes et, à l'annexe 25, celle des principales personnalités politiques houthistes.

<sup>62</sup> Les milices houthistes se sont battues la majeure partie de ces 13 dernières années. Elles ont d'abord participé aux six guerres successives qui ont été menées, entre 2004 et 2010, contre ce qui était alors le Gouvernement du Président Saleh. Depuis mars 2015, elles combattent la coalition menée par l'Arabie saoudite. Suite à la prise de contrôle de Sanaa par les houthistes début 2015, l'armée yéménite s'est fragmentée ; certains de ses officiers supérieurs ont rejoint les houthistes, d'autres sont restés fidèles à l'ancien Président Saleh et d'autres ont pris le parti du Président Hadi.

61. Le 4 novembre 2017, les houthistes ont tiré un missile balistique à courte portée sur Riyad (voir par. 82 ci-dessous). L'Arabie saoudite a riposté deux jours plus tard, notamment en publiant une liste de 40 houthistes recherchés, avec à la clef des récompenses considérables pour toute information qui mènerait à leur arrestation ou à leur exécution<sup>63</sup>.

62. La dissolution de leur alliance avec les pro-Saleh pourrait conduire les houthistes à chercher des alliés par-delà les frontières pour compenser cette perte d'alliés au niveau national. Selon le Groupe d'experts, il est en effet probable que la guerre s'« internationalise » plus encore. Plus les houthistes seront isolés, plus ils chercheront à faire cause commune avec les pays qui s'emploient à combattre les États membres de la coalition menée par l'Arabie saoudite. Le Groupe d'experts a connaissance d'articles de presse dans lesquels il est rapporté que la République islamique d'Iran aurait envoyé des « conseillers » auprès des houthistes, et a ouvert une enquête à ce sujet<sup>64</sup>.

63. Bien que les houthistes continuent de recruter de nouveaux combattants, y compris des enfants (voir par. 185 et 186 ci-dessous), ce mouvement est avant tout une organisation familiale<sup>65</sup>, ce qui signifie que d'entre ses commandants, ceux qui suscitent le plus la confiance sont ceux qui ont un lien de parenté avec le dirigeant, Abdulmalik al-Houthi (YEi.004)<sup>66</sup>. C'est pourquoi en avril 2017, lorsqu'en toute apparence, la coalition menée par l'Arabie saoudite était en train de fomenter une attaque contre Hodeïda, les houthistes ont nommé Yusif Ahsan Isma'il al-Madani<sup>67</sup> commandant du 5<sup>e</sup> district militaire de Hodeïda<sup>68</sup>. Ils ont pris une initiative semblable plus tard en 2017, lorsqu'ils ont transféré Abd al-Khaliq al-Houthi (YEi.001) du front de Meïdi au front Nehm près de Sanaa, pour mieux protéger la capitale.

#### D. Le réseau d'Ali Abdullah Saleh

64. Le Groupe d'experts ne pense pas qu'Ahmed Ali Abdullah Saleh, Khaled Ali Abdullah Saleh ou tout autre individu soit à lui seul capable de reconstituer le réseau d'Ali Abdullah Saleh. Les soldats de la garde républicaine et de la garde particulière doivent à présent faire un choix : s'allier avec les forces du Gouvernement légitime et la coalition menée par l'Arabie saoudite, qu'ils ont combattus pendant la majeure partie des trois dernières années, ou rejoindre les houthistes, qui ont exécuté Ali Abdullah Saleh et de hauts responsables militaires en décembre 2017. Le fait que les soldats de la garde républicaine aient été envoyés, en petits groupes, sur différents fronts complique toute tentative de mener une action de résistance de grande

<sup>63</sup> Le Gouvernement de l'ancien Président Ali Abdullah Saleh a publié un avis de recherche semblable en 2009, qui visait 55 houthistes. On trouvera à l'annexe 26 la liste publiée par l'Arabie saoudite.

<sup>64</sup> Le 6 décembre 2017, dans sa réponse à une lettre du Groupe d'experts datée du 28 novembre 2017, la République islamique d'Iran a déclaré que le pays n'avait aucune présence militaire au Yémen mais disposait d'une représentation diplomatique à Sanaa, qui dispensait une « aide consultative » dans le but d'appuyer la recherche d'une issue politique à la crise actuelle.

<sup>65</sup> Son premier dirigeant était Husayn Badr al-Din al-Houthi. Lorsqu'il a été tué en 2004, la direction du mouvement a été confiée à son père, Badr al-Din al-Houthi, et ensuite à son demi-frère et chef actuel, Abdulmalik al-Houthi. On trouvera à l'annexe 27 l'arbre généalogique de la famille Houthi.

<sup>66</sup> Cela vaut également au niveau politique. Ainsi, le chef du conseil politique suprême, Saleh al-Samad, est proche d'Abdulmalik al-Houthi et a étudié à la fois sous la direction de Husayn Badr al-Din al-Houthi et de son père, Badr al-Din al-Houthi.

<sup>67</sup> Al-Madani est un proche de la famille Houthi par alliance. C'était l'un des commandants auxquels Husayn Badr al-Din al-Houthi avait le plus confiance lors de la première insurrection houthiste de 2004. Il a ensuite épousé une des filles de Husayn.

<sup>68</sup> On trouvera à l'annexe 28 la liste des commandants de districts militaires houthistes.

envergure contre les houthistes. C'est également en raison de cette modalité de répartition que le 3 décembre 2017, lorsqu'il avait besoin d'eux, Saleh n'a pas pu compter, au pied levé, sur nombre de soldats qui lui étaient fidèles.

65. Les houthistes s'étant rendus responsables d'exécutions extrajudiciaires et de détentions massives après la mort d'Ali Abdullah Saleh (voir par. 29 ci-dessus), on peut s'attendre à ce que le pays soit pris dans une spirale de meurtres par vengeance susceptible de durer des années. En 2004 par exemple, des soldats de Saleh ont tué Husayn Badr al-Din al-Houthi, le premier dirigeant du mouvement houthiste. Treize ans plus tard, lorsque les forces houthistes ont tué Ali Abdullah Saleh, elles ont déclaré que la mort de Husayn avait ainsi été vengée<sup>69</sup>. Au lendemain de la mort de Saleh, lors d'une apparition télévisée, Abdulmalik al-Houthi arborait le poignard de Husayn, ce qui montrait clairement qu'il considérait que la mort de son frère avait été vengée. La famille et les partisans de Saleh chercheront sûrement à prendre à leur tour leur revanche contre les houthistes. La principale différence, toutefois, est que Husayn Badr al-Din al-Houthi dirigeait un mouvement, tandis qu'Ali Abdullah Saleh était à la tête d'un réseau.

## E. Al-Qaida dans la péninsule arabique

66. En 2017, AQPA a mené en moyenne un peu plus d'une attaque tous les deux jours<sup>70</sup>. Elles se divisaient en cinq grandes catégories : a) les attentats-suicide<sup>71</sup> ; b) les attaques au mortier ; c) les assassinats<sup>72</sup> ; d) les attaques à l'engin explosif improvisé et e) les offensives de petite envergure. Ces attaques ont été menées, pour la plupart, dans les trois provinces ci-après : Beïda, Abiyan et Hadramout<sup>73</sup>.

67. Au Yémen, AQPA mène une guerre sur plusieurs fronts, et ce contre trois ennemis : a) les houthistes ; b) les États-Unis et l'Occident et c) le Gouvernement yéménite et les forces de la coalition menée par l'Arabie saoudite<sup>74</sup>, son objectif final étant de conquérir et de régner sur des pans du territoire<sup>75</sup>. Sur le plan international, il continue de poursuivre les deux objectifs suivants : lancer des attaques contre des

<sup>69</sup> On peut entendre les slogans qu'ils scandent dans la vidéo montrant des combattants houthistes en train de placer le corps de Saleh à l'arrière d'un pick-up.

<sup>70</sup> Plus de 200 attaques ont été revendiquées par AQPA en 2017, ce qui correspond approximativement au nombre d'attaques qu'elle a revendiquées en 2016.

<sup>71</sup> On trouvera à l'annexe 29 une liste des attentats-suicide (engins explosifs improvisés portés par des individus ou attaques-suicide à la voiture piégée) perpétrés par AQPA.

<sup>72</sup> Lors de leurs tentatives d'assassinat, les membres d'AQPA ont généralement recours à des engins explosifs improvisés. Le Groupe d'experts établit une différence entre les attentats à l'engin explosif improvisé et les assassinats. Par exemple, le 3 octobre 2017 à Moukalla, AQPA a placé un engin explosif improvisé sous le véhicule d'Arif Said Abdullah al-Muhammadi, un enquêteur de la police judiciaire. Il a survécu à l'attentat.

<sup>73</sup> Bien qu'AQPA ait également mené des activités et perpétré des attaques à Chaboua, Mareb, Lahj et Aden, la grande majorité de ses attaques ont visé les trois provinces énumérées au paragraphe 66. En outre, plus de la moitié des attaques qu'il a revendiquées en 2017 ont eu lieu à Beïda.

<sup>74</sup> L'explication la plus claire de cette démarche a été formulée en mars 2017, à l'occasion d'un entretien avec le dirigeant d'AQPA, Qasim al-Rimi (QDi.282), qui est paru le 29 avril 2017 (voir [https://azelin.files.wordpress.com/2017/05/al-qacc84\\_idah-in-the-arabian-peninsula-22interview-with-qacc84sim-al-raymicc8422-en.pdf](https://azelin.files.wordpress.com/2017/05/al-qacc84_idah-in-the-arabian-peninsula-22interview-with-qacc84sim-al-raymicc8422-en.pdf)).

<sup>75</sup> Au Yémen, AQPA a occupé et administré des pans de territoire de 2011 à 2012 et de 2015 à 2016. À chaque fois, il s'est attiré l'inimitié de la population locale et a préféré battre en retraite plutôt que rester se battre.

cibles occidentales depuis sa base au Yémen et encourager ou inciter des personnes vivant en Occident à commettre des attentats terroristes<sup>76</sup>.

68. Le Groupe d'experts estime qu'AQPA est toujours fort capable de mener ou d'encourager autrui à mener des attaques contre des cibles internationales<sup>77</sup>, mais il croit également qu'à l'heure actuelle l'organisation est plus vulnérable qu'elle ne l'a été depuis des années. Il fonde son appréciation sur les quatre facteurs ci-après : a) l'augmentation spectaculaire du nombre de frappes aériennes et de drones déclenchées par les États-Unis ; b) l'offensive terrestre prolongée menée par les forces yéménites et internationales ; c) l'arrestation de plusieurs personnalités d'AQPA de moyenne et de faible notoriété et d) les dissensions internes entre les membres de cette organisation<sup>78</sup>.

69. En 2017, les États-Unis ont multiplié leurs frappes aériennes et de drones au Yémen, qui sont passées de 30 en 2016 à plus de 120 en 2017<sup>79</sup>. Ils ont également déclaré que trois provinces du Yémen étaient des « zones d'hostilités actives », ce qui habilite des fonctionnaires de rang relativement peu élevé à autoriser des frappes<sup>80</sup>.

70. En août 2017, des troupes yéménites soutenues par les Émirats arabes unis ont lancé, avec l'aide de conseillers envoyés par les Émirats et les États-Unis, une offensive terrestre contre des cibles d'AQPA à Chaboua, Hadramout et dans certaines zones d'Abiyan<sup>81</sup>. Cette offensive, qui a gagné de l'ampleur, s'est poursuivie jusqu'à fin 2017 et a entraîné la mort ou l'arrestation de plusieurs membres d'AQPA de rang peu élevé ou intermédiaire<sup>82</sup>. Malgré cela, le noyau dur d'AQPA au Yémen demeure intact<sup>83</sup>.

<sup>76</sup> Le 7 mai 2017, al-Rimi a diffusé un message vidéo sous le titre « A Lone Mujahid or an Army by Itself », dans lequel il encourageait les personnes vivant en Occident à commettre des attentats (voir <http://jihadology.net/2017/05/07/new-video-message-from-al-qaidah-in-the-arabian-peninsulas-shaykh-qasim-al-raymi-an-inspire-address-1-a-lone-mujahid-or-an-army-by-itself/>). Le 13 août 2017, AQPA a sorti « Train Derail Operations », le 17<sup>e</sup> numéro de son magazine en langue anglaise *Inspire*. Il s'agit du premier numéro de ce magazine publié depuis novembre 2016.

<sup>77</sup> Le Groupe d'experts continue d'enquêter sur l'utilisation faite par AQPA des fonds acquis lorsqu'il administrait Moukalla en 2015 et début 2016.

<sup>78</sup> Le Groupe d'experts estime que nombre de ces opérations, en particulier les frappes aériennes et de drones, peuvent avoir un effet préjudiciable sur le long terme, en éliminant un terroriste par jour mais en en faisant apparaître deux nouveaux le lendemain, en particulier lorsque les dommages collatéraux de ces attaques sont des civils qui trouvent la mort.

<sup>79</sup> En 2017, les États-Unis ont conduit de multiples opérations terrestres et lancé plus de 120 frappes, qui visaient pour l'essentiel AQPA (voir <http://www.centcom.mil/MEDIA/PRESS-RELEASES/Press-Release-View/Article/1401383/update-on-recent-counterterrorism-strikes-in-yemen/>).

<sup>80</sup> Voir <https://www.nytimes.com/2017/03/12/us/politics/trump-loosen-counterterrorism-rules.html>. Dans les « zones d'hostilités actives », les forces américaines ont toute latitude pour procéder à des frappes sans l'accord formel de la Maison Blanche, ce qui peut expliquer, au moins en partie, l'augmentation du nombre de frappes.

<sup>81</sup> Le 29 janvier 2017, les États-Unis ont lancé une attaque contre ce qu'ils soupçonnaient être une cible AQPA à Beïda, causant la mort d'un soldat américain. Un deuxième soldat américain, le Sergent-chef Emil Rivera-Lopez, a été tué lors d'un accident d'hélicoptère survenu « au large de la côte yéménite » le 25 août 2017. Les États-Unis ont nié que Rivera-Lopez, qui faisait partie d'une unité de soutien aux opérations spéciales, prenait part à une mission de combat (voir <http://www.centcom.mil/MEDIA/PRESS-RELEASES/Press-Release-View/Article/1298631/dod-declares-dustwun-soldier-deceased/>).

<sup>82</sup> Ceux qui ont été arrêtés ou tués étaient pour la plupart des membres d'AQPA de rang peu élevé ou intermédiaire. Le 31 octobre 2017 par exemple, les forces « Ceinture de sécurité » ont mené à Abiyan une attaque surprise contre un de ses camps et ont arrêté plusieurs personnes, notamment Muhammad al-'Awdah, un ancien garde du corps d'Oussama ben Laden (voir <http://www.almasdaronline.com/article/95157>).

<sup>83</sup> On trouvera à l'annexe 30 une liste des membres d'ACQPA présentant un intérêt pour le Groupe d'experts.

71. Le 17 août 2017, AQPA a publié une déclaration dans laquelle elle sommat les tribus d'Abiyan de ne pas rejoindre les forces dirigées par les Émirats arabes unis et les forces agissant pour leur compte, telles que les forces « Ceinture de sécurité ». Cinq jours plus tard, le 22 août 2017, il a adressé une déclaration similaire aux tribus de la province de Chaboua<sup>84</sup>, les enjoignant de ne pas s'allier aux Forces d'élite de Chaboua. Ces deux déclarations montrent combien AQPA est à la merci des politiques tribales. Celle-ci recrute en effet ses membres parmi les tribus et, plus important encore, sa survie dépend des pactes de non-agression qu'elle conclut avec elles. Si les tribus du Yémen se retournaient contre AQPA, l'organisation ne s'en remettrait pas.

72. Le 17 septembre 2017, AQPA a sorti le huitième volet d'une série de films, lequel s'intitulait « Repousser l'agression ». Pour la première fois, il portait plus sur le rôle des Émirats arabes unis au Yémen que sur les houthistes<sup>85</sup>. Cet angle médiatique reflète la position qui est celle d'AQPA sur le champ de bataille. Au cours du premier semestre de 2017, plus des deux tiers de ses attaques étaient dirigées contre des cibles houthistes. Depuis août, cette tendance s'est inversée et AQPA cible à présent davantage les troupes soutenues par les Émirats arabes unis qu'elle ne vise les houthistes. Les pressions exercées sur AQPA par la communauté internationale se sont accrues le 25 octobre 2017, lorsque le Centre de lutte contre le financement du terrorisme<sup>86</sup>, nouvellement créé, a annoncé sa décision de sanctionner 11 ressortissants et deux organisations yéménites en raison des liens qu'ils entretenaient avec AQPA et l'EIIL<sup>87</sup>.

73. En raison de ces pressions accrues et des combats qu'elle mène sur tant de fronts à la fois, il a en outre été difficile pour AQPA de continuer de garantir l'unité de l'organisation sur l'ensemble du territoire. Signe des dissensions existant au sein de l'organisation, AQPA a publié en octobre 2017 une déclaration dans laquelle il indiquait que le tribunal religieux de Taëz n'était plus sous son contrôle. En outre, nombre des communiqués de presse qu'il a publiés ces derniers mois évoquaient la nécessité de survivre face à « l'adversité » et malgré les « revers » essuyés. Toutefois, la branche d'AQPA au Yémen avait déjà subi des revers par le passé, en particulier en 2004 et 2005, lorsqu'elle avait pratiquement été anéantie. Elle a depuis réussi à renaître de ses cendres. Le Groupe d'experts estime que plus le conflit actuel durera au Yémen, plus AQPA attirera de nouvelles recrues.

## F. État islamique d'Iraq et du Levant

74. Le groupe ayant prêté allégeance à l'EIIL au Yémen est bien plus petit qu'AQPA, mais il est toujours en mesure de mener des attaques coordonnées de grande envergure<sup>88</sup>. Comme AQPA, l'EIIL œuvre surtout dans les provinces

<sup>84</sup> On trouvera à l'annexe 31 une description des liens qu'entretient AQPA avec les tribus du Yémen.

<sup>85</sup> Voir <http://jihadology.net/2017/09/17/new-video-message-from-al-qaidah-in-the-arabian-peninsula-repulsion-of-aggression-8/>.

<sup>86</sup> Le Centre de lutte contre le financement du terrorisme a été créé en mai 2017, lors d'une visite du Président des États-Unis, Donald Trump, en Arabie saoudite. Les États-Unis et l'Arabie saoudite en sont les co-présidents, et les autres États qui en sont membres sont Bahreïn, les Émirats arabes unis, le Koweït, Oman et le Qatar (voir <https://www.treasury.gov/press-center/press-releases/Pages/sm0092.aspx>).

<sup>87</sup> Les noms des personnes affiliées à AQPA contre lesquels les pays membres du Centre de lutte contre le financement du terrorisme ont émis des sanctions sont énumérés à l'adresse ci-après : <https://www.treasury.gov/press-center/press-releases/Pages/sm0187.aspx>. Parmi ces personnes figurait l'ancien Gouverneur de Beïda, Nayif al-Qaysi (QDi.402), qui a été remplacé le 23 juillet 2017. Des sanctions ont également été émises contre Abu al-Abbas, un dirigeant salafiste de Taëz qui avait reçu des fonds et l'appui des Émirats arabes unis (voir par. 45 ci-dessus).

<sup>88</sup> Le 5 novembre 2017, l'EIIL a mené une attaque contre un bâtiment de la brigade criminelle d'Aden : un kamikaze a foncé contre le portail au volant de son véhicule et s'est précipité dans



méridionale et centrale du Yémen, en particulier à Beïda, Abiyan et Aden<sup>89</sup>. De fait, certaines zones de Beïda, où AQPA menait des opérations en 2016 et début 2017, sont désormais les fronts de combat de l'EIIL, ce qui a poussé certains à croire que les deux organisations travaillaient ensemble. Toutefois, le groupe d'experts n'a trouvé aucun élément indiquant qu'ils collaboraient ou coordonnaient leurs attaques. Les preuves recueillies suggèrent, tout au plus, qu'AQPA et l'EIIL ont conclu un pacte de non-agression tacite en s'appuyant sur la lutte contre leurs ennemis communs, à savoir les houthistes<sup>90</sup>, les forces de sécurité liées au Gouvernement légitime et la coalition menée par l'Arabie saoudite.

75. Le 16 octobre 2017, les États-Unis ont lancé leurs premières frappes directes contre l'EIIL au Yémen, touchant deux camps à Beïda<sup>91</sup>. Moins de deux semaines plus tard, le 25 octobre, les États-Unis, l'Arabie saoudite et les autres pays affiliés au Centre de lutte contre le financement du terrorisme ont émis des sanctions contre cinq individus en raison des liens qu'ils entretenaient avec l'EIIL au Yémen<sup>92</sup>. Depuis lors, les États-Unis ont lancé plusieurs autres frappes aériennes et de drones contre l'EIIL. Jusqu'à présent, elles ont toutes visées Beïda<sup>93</sup>.

76. En plus de subir des pressions accrues de la part de l'aviation, l'EIIL a pâti de l'effondrement de son « califat » en Iraq et dans la République arabe syrienne. Le Groupe d'experts n'a toujours pas pu constater un quelconque afflux de combattants de l'EIIL au Yémen. L'inverse semblerait plutôt se produire : selon toute apparence, des combattants de l'EIIL de grade inférieur seraient en train de rejoindre les rangs d'AQPA<sup>94</sup>. Le Groupe d'experts continue de mener son enquête, en vue de déterminer si cette situation est liée à un manque de financements extérieurs entrant au Yémen ou à d'autres facteurs.

#### IV. Armes et application de l'embargo sur les armes

77. Conformément aux paragraphes 14 à 17 de la résolution 2216 (2015) du Conseil de sécurité, le Groupe d'experts continue de mener diverses activités de surveillance et d'enquête afin de déterminer s'il y a eu des violations de l'embargo ciblé sur les armes tenant à la fourniture, la vente et le transfert directs ou indirects d'armes au profit des personnes et entités désignées par le Comité et le Conseil.

78. Les différentes formes que prennent les chaînes d'approvisionnement en armes et en munitions au profit des personnes et entités désignées par le Comité et le Conseil

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le bâtiment accompagné de trois individus munis de ceintures explosives. L'EIIL a ensuite déclaré que l'attaque avait fait 69 morts, et a indiqué que les quatre combattants venaient des provinces de Hadramout, d'Ibb, de Taëz et de Chaboua.

<sup>89</sup> L'EIIL a globalement mené trois types d'attaques au Yémen : des attentats-suicide, des assassinats au corps à corps et des attaques au mortier.

<sup>90</sup> À l'instar d'AQPA, l'EIIL classe ses ennemis selon une hiérarchie, les houthistes chiites arrivant en tête de liste. En août 2017, le groupe a publié les photos d'un commandant houthiste qui avait été crucifié par des membres du groupe. On a établi qu'il s'agissait d'Abu Murtada al-Muhatawari.

<sup>91</sup> Voir <http://www.centcom.mil/MEDIA/PRESS-RELEASES/Press-Release-View/Article/1344652/us-forces-conduct-strike-against-isis-training-camps-in-yemen/>. Les deux camps ont été nommés d'après deux dirigeants de l'EIIL décédés : Abu Bilal al-Harbi et Abu Muhammad al-Adnani. Le 9 octobre 2015, une semaine avant les frappes américaines, l'EIIL avait publié des photos d'entraînements qui y avaient eu lieu.

<sup>92</sup> Voir <https://www.treasury.gov/press-center/press-releases/Pages/sm0187.aspx>. On trouvera à l'annexe 32 une liste des membres de l'EIIL qui présentent un intérêt pour le Groupe d'experts.

<sup>93</sup> Les États-Unis ont par exemple lancé trois attaques successives de drones contre Beïda les 10, 11 et 12 novembre 2017, qui ont fait cinq morts.

<sup>94</sup> Les États-Unis estiment toutefois que l'EIIL au Yémen a « doublé de volume au cours de l'année écoulée » (voir <http://www.centcom.mil/MEDIA/PRESS-RELEASES/Press-Release-View/Article/1401383/update-on-recent-counterterrorism-strikes-in-yemen/>).

de sécurité ainsi qu'à celles agissant pour le compte ou sur les ordres de celles-ci sont toujours les mêmes que celles que le Groupe d'experts a décrites le 31 janvier 2017<sup>95</sup>. Aucune saisie d'armes ou de munitions opérée en mer n'a été signalée en 2017 et l'on n'a recensé que de faibles saisies de matériel connexe sur le principal itinéraire terrestre de ravitaillement en provenance de l'est du Yémen<sup>96</sup>.

79. Le Groupe d'experts a relevé de solides indices indiquant que du matériel d'armement fabriqué en République islamique d'Iran ou en provenance de ce pays avait été acheminé au Yémen après l'établissement de l'embargo ciblé sur les armes le 14 avril 2015, notamment du matériel technique pour missiles balistiques à courte portée (voir par. 86 à 96) et des véhicules aériens téléguidés (par. 98 à 105).

## **A. Campagne terrestre de tirs de missiles menée par l'alliance entre houthistes et pro-Saleh**

### **1. Vue d'ensemble**

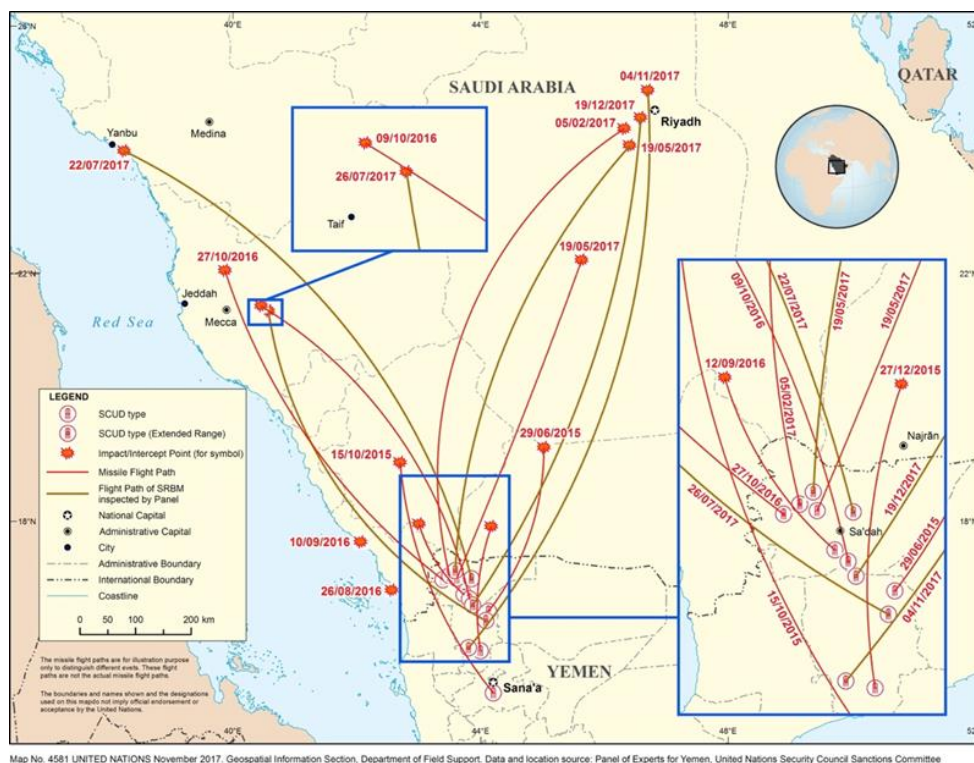
80. En 2017, l'alliance entre houthistes et pro-Saleh a poursuivi sa campagne terrestre stratégique de tirs de missiles contre l'Arabie saoudite, mais en a réduit l'intensité (à 64 % du niveau de 2016). L'alliance dispose toujours manifestement des moyens de frapper l'Arabie saoudite à l'aide de missiles balistiques mobiles à courte portée ou de roquettes non guidées<sup>97</sup>. D'un point de vue stratégique, cela lui permet : a) de mettre en évidence la vulnérabilité de l'Arabie saoudite face à une telle menace et de l'obliger à prendre des mesures défensives excessivement coûteuses pour s'en prémunir ; b) de montrer que la population civile saoudienne n'est pas à l'abri d'attaques de ce type ; c) de démentir les propos de la coalition dirigée par l'Arabie saoudite, qui avait assuré avoir anéanti les stocks de missiles en 2015, et d'entamer ainsi la crédibilité des informations qu'elle diffuse dans les médias ; d) de prouver que les forces houthistes et pro-Saleh sont à même de menacer directement l'Arabie saoudite. On trouvera à l'annexe 34 du présent rapport un tableau récapitulatif des missiles balistiques à courte portée et des roquettes non guidées dont le tir a été signalé ou confirmé. La figure III illustre uniquement les tirs de missiles balistiques à courte portée.

<sup>95</sup> Voir S/2017/81, par. 60 et tableau 1.

<sup>96</sup> Voir annexe 33.

<sup>97</sup> Les roquettes non guidées en question sont des missiles sol-air S-75 Dvina improvisés, désignés par les houthistes sous le nom de missiles « Qaher-1 » (voir S/2017/81, par. 81 et annexe 42).

Figure III  
Tirs de missiles balistiques à courte portée : 2015-2017



81. D'un point de vue militaire, les missiles balistiques ont un impact stratégique limité, en raison de leur faible nombre, de leur manque de précision inhérent et de la taille relativement modeste de l'ogive qui renferme l'explosif brisant (moins de 600 à 950 kg).

## 2. Montée des tensions au niveau régional

82. Le 4 novembre 2017, à 20 h 7 (heure locale) environ, les restes d'un missile balistique à courte portée sont tombés dans le périmètre de l'aéroport international du Roi Khaled à Riyad<sup>98</sup>. Cette attaque<sup>99</sup> conduite par l'alliance entre houthistes et pro-Saleh a immédiatement fait flamber les tensions dans la région et poussé la coalition emmenée par l'Arabie saoudite à fermer temporairement l'ensemble des routes terrestres, maritimes et aériennes vers le Yémen, à partir du 6 novembre 2017.

83. Le Groupe d'experts a effectué une mission à Riyad du 17 au 21 novembre 2017, afin d'examiner les restes des missiles balistiques à courte portée tirés contre l'Arabie saoudite par les forces houthistes et pro-Saleh les 19 mai, 22 juillet, 26 juillet et 4 novembre 2017. Il a de nouveau séjourné en Arabie saoudite du 24 au 26 décembre

<sup>98</sup> Il a d'abord été rapporté que le missile en question avait été intercepté par un missile sol-air MIM-104 Patriot avant de pouvoir atteindre sa cible. D'après les preuves physiques qu'il a pu examiner, le Groupe d'experts peut simplement dire que l'ensemble moteur-fusée du dispositif a effectivement pu être intercepté. Le réservoir de propergol, conçu pour se séparer du reste du dispositif, ne portait pas les traces d'explosion qu'aurait laissées la tête d'un missile intercepteur. On pouvait également observer un cratère au point d'impact (aéroport international du Roi Khaled).

<sup>99</sup> Deux attaques au missile balistique à courte portée avaient déjà été lancées sur la région de Riyad le 5 février (Muzahimiyah) et le 19 mai 2017 (province de Riyad).

2017 pour procéder à l'examen d'autres débris de missiles balistiques tirés sur Riyad le 19 décembre 2017. Les constatations et les conclusions du Groupe d'experts figurent plus loin dans le présent rapport (par. 88 à 92).

### 3. Missiles balistiques à courte portée dont disposent les forces houthistes et pro-Saleh

84. Il est avéré que le commandement de la défense antimissile yéménite en place avant le début du conflit disposait en 2004 d'au moins 18 missiles SS-1 Scud-B et qu'il s'était également procuré 90 missiles Hwasong-6 (de type Scud-C) pendant la première décennie des années 2000<sup>100</sup>. Début 2015, au milieu des hostilités, les 5<sup>e</sup> et 6<sup>e</sup> brigades de missiles se sont jointes aux forces houthistes et pro-Saleh.

85. Les premières frappes aériennes de la coalition dirigée par l'Arabie saoudite n'ont pas anéanti les stocks de missiles balistiques à courte portée. Le premier tir confirmé<sup>101</sup> de missile de type Scud-C<sup>102</sup> contre l'Arabie saoudite a eu lieu le 29 juin 2015, et l'attaque de ce type la plus récente probablement le 26 juillet 2017<sup>103</sup>. Les attaques à la roquette Qaher-1 non guidées, telles que le Groupe les a décrites dans son rapport daté du 31 janvier 2017,<sup>104</sup> se sont poursuivies tout au long de l'année, le dernier tir confirmé ayant été enregistré le 27 mars 2017<sup>105</sup>.

## B. Variantes à portée allongée de missiles balistiques à courte portée

### 1. Aperçu général

86. Pendant la période considérée, on a recensé et confirmé quatre tirs de missiles balistiques à courte portée ayant parcouru une distance largement supérieure à ce que l'on pouvait raisonnablement attendre du type de missiles dont disposait l'alliance entre houthistes et pro-Saleh. Le premier missile a été tiré le 19 mai 2017 (voir tableau 1)<sup>106</sup>.

<sup>100</sup> Notamment d'après : a) les bases de données du groupe Jane's consacrées à l'équipement et aux technologies militaires (Jane's Defence Equipment and Technology Intelligence) ; b) un rapport des Services de recherche du Congrès des États-Unis (United States Congressional Research Services) (voir <http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA521480>). Douze missiles de type Scud ont été découverts le 10 décembre 2002 dans un vaisseau qui se rendait au Yémen, mais après avoir été retenu un temps, ce dernier a pu livrer sa cargaison puisqu'aucun motif juridique n'en justifiait la saisie à l'époque.

<sup>101</sup> Lettre datée du 4 octobre 2017, adressée au Groupe d'experts par l'Arabie saoudite.

<sup>102</sup> Il s'agissait soit d'un Scud-B amélioré de niveau Scud-C soit d'un Hwasong-6 fourni par la République populaire démocratique de Corée.

<sup>103</sup> Confirmé par le Groupe d'experts sur la base de l'examen de photographies de la tête militaire, de type bombe à sous-munition, assemblée sur un missile balistique Scud-C à courte portée.

<sup>104</sup> Voir S/2017/81 par. 81 à 84 et annexe 42.

<sup>105</sup> Deux autres tirs de missiles potentiellement de type Qaher-1 ont été signalés le 7 et le 27 août 2017 mais n'ont pas été confirmés.

<sup>106</sup> Les médias ont rapporté qu'un missile balistique à courte portée s'était écrasé dans la province de Riyad le 5 février 2017, mais les faits n'ont pas été confirmés. S'ils devaient l'être, il s'agirait du premier tir confirmé d'une variante à portée allongée d'un missile à courte portée depuis le Yémen.

Tableau 1  
**Variants à portée allongée de missiles balistiques à courte portée, tirés par l'alliance entre houthistes et pro-Saleh en 2017 (tirs confirmés)<sup>a</sup>**

<i>Date</i>	<i>Faits constatés</i>	<i>Portée (km)</i>	<i>Observations</i>
19 mai	Impacts dans la province de Riyad	965	Premier tir confirmé
22 juillet	Impacts à Yanbo, à l'ouest de Médine	900+	Environ 2 mois après le tir précédent
4 novembre	Tir d'un missile en direction de Riyad	1 043 <sup>b</sup>	Environ 3 mois après le précédent tir
19 décembre	Tir d'un missile en direction de Riyad	915	Diffusion d'une vidéo du tir par les houthistes le 19 décembre 2017 <sup>c</sup> Probablement intercepté en vol

<sup>a</sup> *Source* : Lettre datée du 4 octobre 2017 adressée par un État Membre (au sujet des deux premiers tirs).

<sup>b</sup> Considérant qu'il est possible que le missile ait parcouru plus de 1 000 km, il pourrait être désigné plus précisément comme un missile balistique à moyenne portée. Le Groupe continuera toutefois d'y faire référence comme à un missile balistique de courte portée, puisque c'est sa catégorie d'origine et que l'engin n'a pas dépassé de beaucoup sa portée théorique. La portée indiquée dans le tableau a été définie sur la base du rapport généré par le système Patriot de défense anti-aérienne lorsqu'il a ciblé la menace. Selon les estimations issues des systèmes d'alerte rapide conjoints, le tir a été effectué à un degré de longitude nord de plus et aurait donc eu une portée de 937 km.

<sup>c</sup> Voir <https://mobile.almasdarnews.com/article/video-footage-houthis-long-range-missile-launch-saudi-arabia/>.

87. Un porte-parole militaire des houthistes, le général de division Sharaf Luqman, a reconnu pour la première fois le 30 mars 2017 que des spécialistes yéménites s'employaient à réparer et à modifier les missiles endommagés par les frappes aériennes<sup>107</sup>. Le Groupe d'experts n'exclut pas non plus que des spécialistes étrangers puissent fournir des conseils techniques en matière de missiles au Yémen<sup>108</sup>, ou que des membres compétents des forces houthistes et pro-Saleh aient pu se former dans un pays tiers. Il est presque certain que les forces houthistes ne disposent pas des compétences de conception ou de génie requises pour produire un nouveau type de missile balistique à courte portée.

## 2. Analyse technique et constatations

88. Le Groupe d'experts a d'abord examiné les différents moyens qui auraient pu permettre d'allonger la portée des missiles de type Scud-C qu'on savait être en possession des forces houthistes et pro-Saleh. Il a conclu qu'il n'était pas possible de les alléger suffisamment ou d'en augmenter assez la puissance pour faire passer leur portée de 600 kilomètres, le maximum théorique, à plus de 1 000 kilomètres.

89. On a observé en 2016 des tirs de missiles balistiques à courte portée qui dépassaient les 670 kilomètres, ce qui semble indiquer qu'un programme de réduction du poids des engins de type Scud-C a été mis en place en 2016 (voir annexe 35) et a permis d'allonger modérément leur portée, à savoir d'environ 11,75 %. Cette hypothèse est également étayée par le fait que des bouteilles d'air comprimé de conception américaine constituées de matériau composite ont été utilisées en lieu et place des bouteilles standard en acier<sup>109</sup>. Les houthistes donnent à ce type de missiles le nom de « Borkan-2 ».

<sup>107</sup> Voir [sputniknews.com/middleeast/201703301052137016-yeminiis-repair-soviet-missiles/](https://sputniknews.com/middleeast/201703301052137016-yeminiis-repair-soviet-missiles/).

<sup>108</sup> Voir <https://english.alarabiya.net/en/features/2018/01/01/Who-are-the-Iranian-Revolutionary-Guard-officers-leading-Houthis-in-Yemen-.html>.

<sup>109</sup> Le fabricant n'a pas pu tracer ces composants, les bouteilles en question étant produites à très grande échelle.

90. Sur la base de l'examen des débris des variantes à portée allongée des missiles balistiques à courte portée, tirées le 22 juillet et le 4 novembre sur Riyad, le Groupe d'experts a formulé les constatations suivantes :

a) Nombre des particularités de conception interne<sup>110</sup> et des caractéristiques externes<sup>111</sup> des restes de missiles examinés ainsi que leurs dimensions correspondent à celles du missile Qiam-1, de conception et de fabrication iraniennes. Il est donc quasi certain qu'ils ont été produits par le même fabricant. La figure IV illustre la position des principaux composants examinés par le Groupe d'experts par rapport à la structure d'un Qiam-1. La figure V représente un missile de type Scud-C et la figure VI présente, à titre de comparaison, un schéma de la variante à portée allongée du missile balistique à courte portée, examinée par le Groupe d'experts ;

Figure IV

**Principaux composants du missile et comparaison de leur position avec celle des composants d'un missile balistique à courte portée Qiam-1<sup>a</sup>**

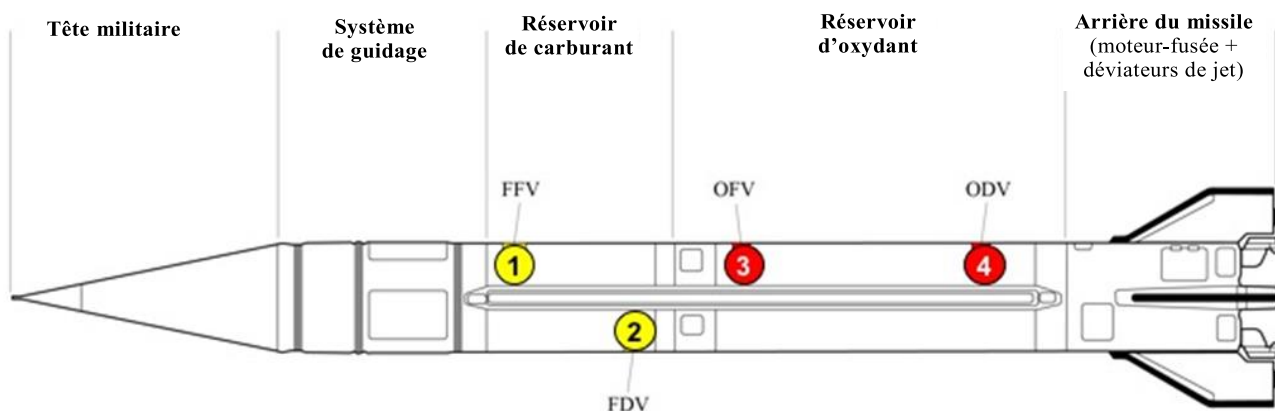


<sup>a</sup> Photographie de la variante à portée allongée du missile balistique à courte portée prise par le Groupe d'experts à Riyad les 19 et 20 novembre 2017 (la photographie du Qiam-1 a été tirée de la source suivante : <http://3.bp.blogspot.com/-qsK7VV6oZfc/Tq1ET0NyVdI/AAAAAAAAADo/NGlhWpeJTsw/s1600/Qiam-1.jpg>).

<sup>110</sup> Par exemple, la position inversée des réservoirs de carburant et d'oxydant dans le corps du missile. Dans les systèmes de missiles balistiques à courte portée connus, on ne retrouve cette configuration que dans les Scud-A, un modèle obsolète, et les Qiam-1 iraniens. Les autres particularités de conception de la variante à portée allongée du missile balistique à courte portée sont notamment : a) les bouteilles d'air comprimées en matériau composite ; b) un système de guidage amélioré.

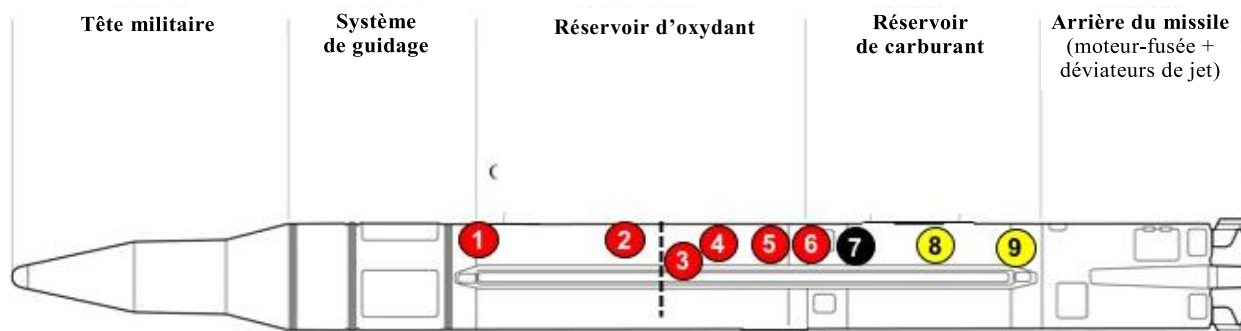
<sup>111</sup> Par exemple : a) le choix d'une cellule principalement faite d'aluminium ; b) l'absence d'ailerons à l'arrière du missile. Les variantes du Scud-C sont équipées d'ailerons, contrairement au Qiam-1.

Figure V  
 Vue en coupe des principaux composants d'un missile Scud-C<sup>a</sup>



<sup>a</sup> Schéma établi par le Groupe d'experts (le schéma n'est pas à l'échelle). Afin de mettre les vannes en évidence, elles y ont été représentées à une échelle plus grande que le reste du missile (voir annexe 36, appendice C, fig. C.36.1).

Figure VI  
 Vue en coupe des principaux composants de la variante à portée allongée d'un missile balistique à courte portée<sup>a</sup>



<sup>a</sup> Voir annexe 36, appendice C, fig. C.36.2.

b) La portée opérationnelle standard d'un missile Qiam-1 s'établit entre 750 kilomètres et 800 kilomètres, contre plus de 1 000 kilomètres pour le missile examiné. Le Groupe d'experts conclut qu'il ne s'agit pas d'un missile balistique Qiam-1 à courte portée mais d'un modèle dérivé conçu par les fabricants du Qiam-1 pour être plus léger et atteindre ainsi une portée allongée à plus de 1 000 kilomètres<sup>112</sup> ;

c) La qualité inégale de l'assemblage et des soudures qu'a observée le Groupe d'experts révèle que les composants de l'engin ont été transférés sous forme de système modulaire<sup>113</sup> et que les ingénieurs des forces de l'alliance entre houthistes

<sup>112</sup> La portée du missile Shabab-3 de conception et de fabrication iraniennes s'établissant à 1 300 km, le modèle dérivé dont il est question n'a sans doute pas été conçu pour combler une quelconque lacune dans la portée de la batterie de missiles balistiques de la République islamique d'Iran.

<sup>113</sup> Ce système modulaire comprend : a) la tête militaire ; b) un système de guidage ; c) un réservoir de carburant ; d) un réservoir d'oxydant ; e) une partie arrière (moteur-fusée, vérins et pompes).

et pro-Saleh ont dû assembler les missiles et en tester eux-mêmes les fonctionnalités avant de pouvoir les déployer et les utiliser ;

d) Sur les restes du missile tiré le 4 novembre 2017, trois logements de déviateurs de jet étaient marqués d'un symbole (voir figure VII) ressemblant fortement au logo du groupe Shahid Bagheri Industries<sup>114</sup>, basé en République islamique d'Iran (voir fig. VIII). Une demande de traçage a été adressée aux autorités iraniennes<sup>115</sup> ;

Figure VII

**Image améliorée du logo de Shahid Bagheri Industries sur le logement d'une aube de déviation de jet<sup>a</sup>**



<sup>a</sup> Photographie prise par le Groupe d'experts.

Figure VIII

**Logo de Shahid Bagheri Industries affiché sur un commerce<sup>a</sup>**



<sup>a</sup> Source : <http://www.sns.co.ir/?p=327>.

e) Les houthistes et pro-Saleh se sont dotés d'une technologie balistique à portée étendue, plus sophistiquée que celle des missiles balistiques à courte portée Scud-C et Hwasong-6 que l'on savait en leur possession en janvier 2015. Ils appellent ce missile le « Borkan-2H » et le Groupe d'experts a choisi de retenir cette dénomination ;

f) Il est très probable que les composants du Borkan-2H aient été acheminés vers le territoire contrôlé par l'alliance entre houthistes et pro-Saleh par le principal itinéraire terrestre de ravitaillement, après avoir été livrés par bateau dans les ports de la région de Nichtoun et Gheïda, dans la province de Mahra<sup>116</sup>. S'il est peu probable qu'ils aient pu être cachés dans des vaisseaux ayant déchargé dans les ports de la mer Rouge, l'hypothèse d'un tel acheminement ne saurait cependant être entièrement exclue ;

g) L'emploi du Borkan-2H contre des cibles civiles en Arabie saoudite constitue une violation du droit international humanitaire (voir par. 179 et annexe 64) ;

<sup>114</sup> Peut-être connu également sous le nom de Shahid Bakeri Industries, ce groupe est une filiale de l'Organisation iranienne des industries aérospatiales.

<sup>115</sup> Cette demande a été formulée dans les lettres datées du 9 et du 12 décembre 2017 adressées par le Groupe d'experts aux autorités iraniennes.

<sup>116</sup> Le Groupe d'experts note que la 123<sup>e</sup> brigade d'infanterie a été redéployée à Gheïda et qu'un nouveau gouverneur, Rajih Said Bakarit, a été nommé à Mahra le 27 novembre 2017 dans le cadre de la stratégie visant à renforcer la sécurité le long du principal itinéraire de ravitaillement.



h) Le Groupe d'experts ne dispose à l'heure actuelle d'aucun élément de preuve concernant l'identité du fournisseur de missiles ou d'un quelconque intermédiaire<sup>117</sup> ;

i) La République islamique d'Iran n'a pas fourni au Groupe d'experts des informations concernant le passage dans d'autres mains des composants nécessaires à la fabrication de variantes à portée allongée des missiles balistiques à courte portée et agit ainsi en violation du paragraphe 14 de la résolution 2216 (2015), n'ayant pas pris les mesures nécessaires pour empêcher la fourniture, la vente et le transfert directs ou indirects de cette technologie aux forces houthistes et pro-Saleh, dirigées par des individus visés par des sanctions<sup>118</sup>.

91. Les observations formulées par le Groupe d'experts et une analyse technique complète à l'appui des constatations qui précèdent figurent à l'annexe 36.

### 3. Affaire connexe : citernes de stockage d'oxydant pour missiles balistiques à courte portée à propergol liquide

92. En janvier 2017, un envoi d'équipements à usage industriel a été saisi par un État membre de la coalition menée par l'Arabie saoudite, près de Mareb, le long du principal itinéraire de ravitaillement depuis la province de Mahra. Parmi les éléments saisis, deux citernes de stockage de produits chimiques dangereux étaient de conception, de configuration et de taille presque identiques à celles des citernes d'oxydant utilisées pour les missiles de type Scud ou d'autres systèmes de missiles balistiques à courte portée (voir fig. IX et X pour comparaison).

Figure IX

Citernes de stockage d'oxydant saisies près de Mareb<sup>a</sup>



<sup>a</sup> Source confidentielle.

Figure X

Citernes de stockage d'oxydant pour Scud<sup>a</sup>



<sup>a</sup> Entreposées à la base de défense aérienne de Ghariyan (Libye, 2017). Source confidentielle.

<sup>117</sup> Le Groupe d'experts a adressé à l'État Membre d'origine du fabricant, le 26 novembre, le 11 décembre et le 14 décembre 2017, des demandes de traçage concernant le Borkan-2H.

<sup>118</sup> Le Groupe d'experts a adressé une lettre au Gouvernement de la République islamique d'Iran, le 15 décembre 2017, pour l'informer de ses constatations, en le priant de nouveau de lui communiquer toute information dont il disposerait concernant un changement de mains de ces composants. Il s'est ensuite rendu en République islamique d'Iran, du 15 au 17 janvier 2018, en vue d'approfondir les discussions. On trouvera à l'appendice E de l'annexe 36 la réponse adressée au Groupe d'experts par la République islamique d'Iran.

93. Quoique la plupart des autres éléments saisis relèvent de l'équipement standard utilisé pour le traitement des produits chimiques ou alimentaires, on a pu observer sur certains articles des modifications artisanales telles que des raccords de soudure inhabituels (tuyaux et brides) et d'autres particularités de conception improvisées, révélatrices d'une volonté d'adapter ces articles à une utilisation autre que celle pour laquelle ils avaient été conçus initialement. Le Groupe d'experts constate que cet équipement peut être utilisé à des fins militaires pour le retraitement de l'acide nitrique fumant rouge inhibé, l'oxydant que l'on retrouve dans le propergol liquide des missiles balistiques à courte portée.

94. Les demandes de traçage envoyées par le Groupe d'experts ont permis d'établir ce qui suit : a) deux composants avaient été fabriqués en République islamique d'Iran ; b) trois composants avaient été fournis à la République islamique d'Iran par des fabricants étrangers et l'un de ces composants, qui avait été payé via un compte bancaire européen, portait une étiquette libellée en farsi<sup>119</sup>.

95. Le Groupe d'experts ne dispose à l'heure actuelle d'aucun élément de preuve concernant l'identité du fournisseur ou d'un quelconque intermédiaire<sup>120</sup> ;

96. La République islamique d'Iran n'a fourni au Groupe d'experts aucune information concernant le passage dans d'autres mains de citernes de stockage de diergol liquide, ni expliqué la présence de composants de fabrication iranienne et agit ainsi en violation du paragraphe 14 de la résolution 2216 (2015), n'ayant pas pris les mesures nécessaires pour empêcher la fourniture, la vente et le transfert directs ou indirects de matériel militaire aux fins de l'utilisation de variantes à portée allongée de missiles balistiques à courte portée aux forces houthistes et pro-Saleh, dirigées par des individus visés par des sanctions<sup>121</sup>.

### C. Utilisation par les houthistes de véhicules aériens téléguidés

97. En 2017, les forces de l'alliance entre houthistes et pro-Saleh ont continué d'utiliser ponctuellement des véhicules aériens téléguidés de petite et moyenne taille à des fins de renseignement, de surveillance, d'acquisition d'objectifs et de reconnaissance<sup>122</sup> et des véhicules aériens téléguidés de taille moyenne pour conduire des attaques à l'explosif<sup>123</sup>. Les petits engins téléguidés fonctionnent tous sur la base de systèmes disponibles dans le commerce, tel que celui du X-8 Skywalker, qui peut être utilisé à des fins militaires de surveillance et de planification d'objectifs.

#### 1. Véhicules aériens téléguidés Qasef-1

98. Le 27 novembre 2016, un camion immatriculé à Doubaï (Doubaï/13933) a été intercepté au poste de contrôle d'al-Milh, près de Mareb, alors qu'il transportait les composants d'au moins six véhicules aériens téléguidés Qasef-1 complets et des composants destinés à 24 autres véhicules<sup>124</sup>. Les forces des Émirats arabes unis ont

<sup>119</sup> Voir analyse complète à l'annexe 36, appendice A.

<sup>120</sup> Le Groupe d'experts a adressé une demande de traçage à l'État Membre concerné le 11 décembre 2017.

<sup>121</sup> Voir note 118.

<sup>122</sup> Il en a été fait état pour la première fois dans le bilan confidentiel à mi-parcours présenté par le Groupe d'experts en 2017.

<sup>123</sup> On trouvera à l'annexe 37 une liste des attaques à l'explosif perpétrées contre les forces des Émirats arabes unis.

<sup>124</sup> Informations communiquées par un État Membre dans une correspondance, comprenant notamment les numéros de série de plusieurs Qasef-1 : 22-122-33, 22-122-34, 22-122-38, 22-1721-39, 22-1721-X, 22,1721-0 et 22-1722-9.

également retrouvé des pièces de véhicules aériens téléguidés qui s'étaient écrasés à Mareb le 19 septembre 2016<sup>125</sup> et à Aden le 16 novembre 2016<sup>126</sup>.

99. Le Groupe d'experts constate que la conception, les dimensions et les capacités du Qasef-1 de taille moyenne sont pratiquement identiques à celles de l'Ababil-T<sup>127</sup>, produit par l'entreprise Iran Aircraft Manufacturing Industries<sup>128</sup>. On trouvera à l'annexe 38 une analyse du Qasef-1 UAV.

100. Le Groupe d'experts a pu établir qu'au moins deux composants du système avaient été fournis à la République islamique d'Iran après la mise en place de l'embargo ciblé sur les armes le 14 avril 2015. Le paiement de l'un de ces composants est passé par un tiers et par un compte bancaire intermédiaire ouvert dans un troisième pays, ce qui témoigne d'une tentative délibérée de masquer la destination finale des composants susmentionnés.

101. Le Groupe d'experts constate que, compte tenu, d'une part, de la conception des véhicules aériens téléguidés et, d'autre part, du traçage des composants, le matériel nécessaire à l'assemblage des Qasef-1 provenait de la République islamique d'Iran.

## 2. Véhicules aériens téléguidés « Rased »

102. Les véhicules aériens téléguidés désignés sous le nom de « Rased » (« le géomètre ») par les forces de l'alliance houthistes et pro-Saleh sont presque certainement des Skywalker X-8 (voir annexe 39).

## 3. Violations de l'embargo

103. Le Groupe d'experts considère que les véhicules aériens téléguidés conçus à des fins de renseignement, de surveillance, d'acquisition d'objectifs, de reconnaissance ou d'attaque, livrés à des entités agissant au nom de personnes ou d'entités désignées par le Conseil de sécurité relèvent du « matériel militaire » visé au paragraphe 14 de la résolution 2216 (2015).

104. La République islamique d'Iran n'a fourni au Groupe d'experts aucune information concernant le passage dans d'autres mains du Qasef-1 ou de ses composants<sup>129</sup> et agit ainsi en violation du paragraphe 14 de la résolution 2216 (2015), n'ayant pas pris les mesures nécessaires pour empêcher la fourniture, la vente et le transfert directs ou indirects de matériel militaire connexe aux forces houthistes et pro-Saleh, dirigées par des individus visés par des sanctions.

105. Le Groupe d'experts estime que, compte tenu du potentiel considérable qu'ils recèlent en matière de surveillance et de reconnaissance militaires et du fait qu'ils peuvent facilement être transformés en drones d'attaque, les véhicules aériens téléguidés disponibles dans le commerce devraient également être considérés comme du « matériel militaire » au sens du paragraphe 14 de la résolution 2216 (2015), lorsqu'ils sont utilisés à des fins militaires.

<sup>125</sup> Lettre d'un État Membre faisant référence au Qasef-1 correspondant au numéro de série 22-1728.

<sup>126</sup> Qasef-1 n° 22-122-39.

<sup>127</sup> Banque de données du groupe Jane's (voir [www.janes.com](http://www.janes.com)).

<sup>128</sup> Iran Aircraft Manufacturing Industries est une filiale de l'Iran Aircraft Industries Organization, entreprise publique iranienne qui fait partie du conglomérat des industries de la défense.

<sup>129</sup> Lettre datée du 19 décembre 2017 adressée à la République islamique d'Iran par le Groupe d'experts.

## D. Dispositifs explosifs aquatiques improvisés

106. Les houthistes sont parvenus à utiliser des dispositifs explosifs aquatiques improvisés à au moins deux reprises : a) lors d'une attaque contre une frégate de la marine royale saoudienne ; b) dans le port de Moka. Le Groupe d'experts note que les Émirats arabes unis ont communiqué aux États-Unis et à une entreprise privée spécialisée dans la recherche sur le commerce des armes des informations concernant la saisie de dispositifs explosifs de ce type.

107. Si le Groupe d'experts a pu consulter des images de ces dispositifs explosifs aquatiques improvisés ainsi qu'une analyse que leur a consacrée une tierce partie, le présent rapport n'offre à ce sujet ni analyse ni constatations, dans la mesure où les informations soumises au Groupe ne répondaient pas aux critères de transparence et de vérifiabilité définis aux paragraphes 21 et 22 des meilleures pratiques et méthodes recommandées dans le rapport du Groupe de travail informel du Conseil de sécurité sur les questions générales relatives aux sanctions (S/2006/997).

108. Le Groupe d'experts constate que les Émirats arabes unis, en ne lui donnant pas un libre accès aux documents et lieux pertinents pour l'exécution de son mandat, ont agi en violation du paragraphe 8 de la résolution 2342 (2017) du Conseil de sécurité. Il constate également que les Émirats arabes unis ont agi en violation du paragraphe 17 de la résolution 2216 (2015) du Conseil de sécurité en ne présentant pas au Comité, par écrit et sans délai, un rapport concernant la saisie précitée et un second rapport écrit dans les 30 jours qui l'ont suivie.

109. Le Groupe d'experts n'est donc pas en mesure de confirmer de manière indépendante que des dispositifs explosifs aquatiques improvisés ont été acheminés au Yémen après la mise en place de l'embargo ciblé sur les armes le 14 avril 2015 (voir résolution 2216 (2015), par. 14) et poursuit ses enquêtes.

## E. Mines marines

110. Le Groupe d'experts a recensé de nouveaux cas d'utilisation de mines marines en 2017. On en trouvera à l'annexe 40 du présent rapport un récapitulatif chronologique.

### 1. Mines marines « de fond » fabriquées en République islamique d'Iran

111. Les Émirats arabes unis ont signalé au Groupe d'experts la découverte d'au moins trois mines marines dans le port de Moka<sup>130</sup>. La forme et la taille de ces dernières (voir fig. XI) correspondent à celles d'un modèle de mine de fond de fabrication iranienne (voir fig. XII) repéré pour la première fois lors d'une foire d'armement organisée en Iran en octobre 2015.

<sup>130</sup> Il en a été fait état pour la première fois au paragraphe 61 du bilan confidentiel à mi-parcours présenté par le Groupe d'experts en 2017.

Figure XI  
Mine marine récupérée à Moka (2017)

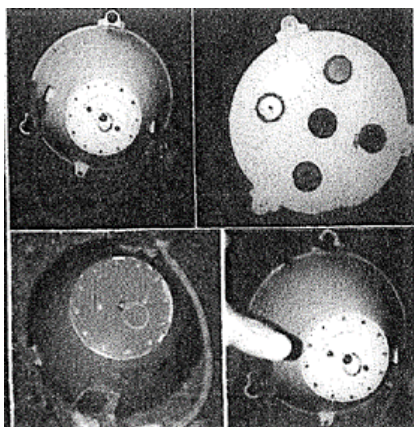


Figure XII  
Mine marine présentée à la foire d'armement iranienne (2015)



112. Le Groupe d'experts a adressé par écrit à l'Iran une demande de clarifications sur la classification et les modalités d'exportation du modèle de mine représenté sur la figure XII, mais n'a pas encore reçu de réponse.

## 2. Utilisation de mines marines improvisées par l'alliance entre houthistes et pro-Saleh

113. Le Groupe d'experts a enquêté sur les cas avérés d'utilisation de mines marines improvisées<sup>131</sup> par l'alliance entre houthistes et pro-Saleh<sup>132</sup>. Une mine a été recouvrée à Meïdi le 23 mars 2017 (voir fig. XIII) et deux autres, de conception proche mais pas identique, près de l'île Thwaq<sup>133</sup> (voir fig. XIV) aux environs du 27 mai 2017. La découverte de mines près de l'île Thwaq, qui est inhabitée, prouve que les houthistes ont déployé des dispositifs de ce type dans la mer Rouge. Puisqu'une douzaine de mines improvisées ont été repérées dans un espace de stockage situé sur une partie de côte contrôlée par les houthistes, en novembre 2016<sup>134</sup>, il est très probable que plus de trois mines improvisées aient été déployées et fassent peser un risque sur les voies de communication maritimes de la mer Rouge. Ces mines représenteront un danger jusqu'au terme de la durée de vie de leur source d'alimentation, qui varie en fonction du type de pile AA utilisé mais pourrait être de 6 à 10 ans.

<sup>131</sup> Information communiquée dans une lettre datée du 13 septembre 2017 adressée au Comité.

<sup>132</sup> Il en a été fait état initialement aux paragraphes 63 et 64 du bilan confidentiel à mi-parcours présenté par le Groupe d'experts en 2017.

<sup>133</sup> Coordonnées : 16° 18' 42.61" N, 42° 41' 10.77" E.

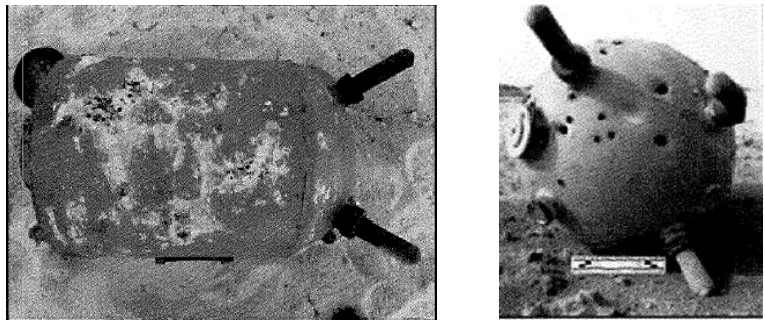
<sup>134</sup> Source confidentielle.

Figure XIII  
Mine marine improvisée recouverte  
près de Meïdi (23 mars 2017)<sup>a</sup>



<sup>a</sup> Voir [www.youtube.com/watch?v=6H04M4Vpif8&feature=youtu.be](https://www.youtube.com/watch?v=6H04M4Vpif8&feature=youtu.be)

Figure XIV  
Mines marines improvisées recouvertes dans les eaux de l'île  
Thwaq (mai 2017)<sup>a</sup>



<sup>a</sup> Photographie communiquée par un État Membre et confirmée par le Groupe d'experts.

Le Groupe d'experts n'utilise généralement pas d'informations ayant pour source unique un réseau social ; il a toutefois choisi de présenter cette image, dans la mesure où elle correspond pratiquement en tous points aux déclarations d'un témoin oculaire dont l'identité reste confidentielle.

114. Ces mines devaient fonctionner comme des mines à orin mais, en raison de problèmes de conception, elles ne s'amarrent pas comme elles le devraient ou peuvent se détacher de leur point de fixation. Les mines récupérées près de l'île Thwaq administrent la preuve que certaines sont d'ores et déjà des mines dérivantes. On trouvera à l'annexe 41 une analyse technique de ces dispositifs et des risques qu'ils présentent.

## F. Missiles antichar guidés

115. Dans son rapport daté du 31 janvier 2017<sup>135</sup>, le Groupe d'experts a fait état de la saisie et de l'utilisation sur le terrain de missiles antichars guidés aux caractéristiques extrêmement proches de celles du missile Dehlaviyeh, de fabrication iranienne. Le Groupe d'experts ne disposait pas alors d'informations émanant de sources librement accessibles, permettant de confirmer qu'il s'agissait effectivement de missiles de ce type.

116. Le Groupe d'experts a pu comparer le marquage et les caractéristiques de conception des missiles 9M133 Kornet et Dehlaviyeh saisis par le vaisseau français *La Provence* le 20 mars 2016<sup>136</sup>. Ses observations, qui figurent à l'annexe 42 du présent rapport, constitueront des éléments de référence par excellence<sup>137</sup> pour de futurs travaux d'enquête et d'identification.

## G. Marché noir

### 1. Munitions d'armes légères

117. Le Groupe d'experts a continué de suivre le cours des munitions d'armes légères sur le marché noir. Si les prix ont commencé à augmenter (+20 % en 2017), comme on le voit à l'annexe 43, celui d'une cartouche de calibre 7,62 mm x 39 mm, par exemple, est toujours largement inférieur sur le marché d'Aden (0,94 dollars des États-Unis) à son niveau d'avant le conflit. Il en ressort clairement que toutes les

<sup>135</sup> S/2017/81 par. 76 et 77 et annexe 37.

<sup>136</sup> Voir S/2017/924, annexe 7.2.

<sup>137</sup> Voir également <https://www.ihs.com/products/janes-weapons-ammunition.html>.

parties au conflit peuvent se procurer facilement des munitions d'armes légères sans avoir besoin, pour l'heure, de recourir à des sources extérieures de ravitaillement.

## 2. Certificats d'utilisateur final douteux

118. Le Groupe d'experts s'est procuré<sup>138</sup> des copies d'un certain nombre de certificats d'utilisateur final émis par les autorités de l'alliance houthistes et pro-Saleh en vue de faciliter l'acquisition d'armes et de munitions en provenance des pays suivants : Bulgarie, Chine, Philippines, République islamique d'Iran, Serbie et Slovaquie (voir annexe 44). Le Groupe a contacté ces États Membres ; la Bulgarie, la Chine, les Philippines et la Slovaquie ont confirmé que ces certificats d'utilisateur final ne leur avaient pas été présentés dans le cadre de contrats d'acquisition d'armes.

119. Au regard de son dossier d'immatriculation, l'entreprise autorisée à négocier les contrats d'armement précités, Al Fosal Trading (connue également sous le nom de « Fusal ») est dirigée par Adeeb Fares Mohamed Mana'a, fils de Fares Mohammed Hassan Mana'a (SOi.008), un trafiquant d'armes connu désigné sur la Liste relative aux sanctions<sup>139</sup>. Fares Mana'a occupe actuellement un poste de ministre d'état auprès du gouvernement basé à Sanaa<sup>140</sup>.

120. Les certificats en question sont datés du 6 juillet 2015, soit trois mois après la prise de Sanaa par l'alliance entre houthistes et pro-Saleh. Comme indiqué par le Groupe d'experts dans son rapport daté du 31 janvier 2017, l'alliance détenait alors jusqu'à 68 % des stocks d'armes nationaux<sup>141</sup>. Il est donc peu probable qu'elle ait eu besoin de chercher des moyens de se procurer des armes légères ou de petit calibre et les munitions correspondantes visées par les certificats. En revanche, il est fort possible que Fares Mohammed Hassan Mana'a ait saisi l'occasion de faire jouer ses contacts dans l'administration nouvellement mise en place par l'alliance, en vue d'obtenir les documents qui lui permettraient d'acquérir des armes à revendre au niveau régional.

121. Comme précédemment indiqué par le Groupe d'experts<sup>142</sup>, Fares Mana'a comme Adeeb Mana'a ont été impliqués dans une autre affaire de trafic d'armes au niveau régional entre 2013 et 2015. Étant donné le rôle de Fares Mohammed Hassan Mana'a dans l'entreprise autorisée à négocier les contrats et ses liens connus avec les houthistes, toute transaction régionale pour laquelle ces certificats d'utilisateurs finals seraient utilisés bénéficierait financièrement à des individus visés par des sanctions et s'inscrirait en violation du paragraphe 14 de la résolution 2216 (2015).

## H. Accroître l'efficacité de l'embargo ciblé sur les armes

122. L'utilisation par les houthistes de technologies complexes telles que celle de la variante à portée allongée des missiles balistiques à courte portée démontre que des envois bien préparés d'armes non explosives et de matériel connexe peuvent déjouer les mesures imposées en matière d'inspection et d'application de l'embargo ciblé<sup>143</sup>. Seuls le Gouvernement yéménite et la coalition dirigée par l'Arabie saoudite sont en

<sup>138</sup> Source confidentielle.

<sup>139</sup> Inscrit sur la liste le 12 avril 2010 en application des dispositions du paragraphe 8 de la résolution 1844 (2008) par le Comité du Conseil de sécurité, comme suite aux résolutions 751 (1992) et 1907 (2009) sur la Somalie et l'Érythrée.

<sup>140</sup> Nommé le 28 novembre 2015.

<sup>141</sup> Voir S/2017/81, par. 78 et annexe 39.

<sup>142</sup> Ibid., par. 80 et annexe 41.

<sup>143</sup> Comme le Groupe d'experts l'a noté dans son bilan confidentiel à mi-parcours, la coalition a saisi à Mareb, en 2016, des composants de véhicules aériens téléguidés militaires utilisés par les forces houthistes et pro-Saleh, ce qui tend à confirmer la vulnérabilité du système en place.

mesure d'améliorer les mesures d'interdiction, de sorte qu'elles couvrent l'itinéraire terrestre au départ de Mahra.

123. Le Groupe d'experts a examiné les moyens d'accroître le taux d'inspections réalisées dans le cadre du mécanisme de vérification et d'inspection des Nations Unies, en vue de renforcer la confiance que prête la coalition à ce dispositif. Une présence permanente du personnel du mécanisme de vérification et d'inspection des Nations Unies au port d'Hodeïda permettrait : a) d'assurer à la coalition que le passage de chargements illégaux serait plus difficile ; b) de décourager, le cas échéant, toute tentative de trafic illicite. Le déploiement d'un navire d'appui à l'entrée du port d'Hodeïda, sous les auspices des Nations Unies, permettrait de contourner les difficultés posées par une présence côtière permanente. Ce navire devrait être équipé de systèmes de surveillance et d'armes propres à garantir sa sécurité et devrait pouvoir déposer les inspecteurs du mécanisme à quai, selon que de besoin. À terre, des éléments armés de la marine de guerre ou du vaisseau hôte pourraient assurer aux inspecteurs une protection rapprochée, et la sûreté portuaire serait confiée à des entreprises privées agréées par l'administration houthiste dans le cadre d'un mémorandum d'accord. Ces dispositions réduiraient considérablement les risques que courent les inspecteurs et élimineraient les contraintes de logistique et de sécurité liées à une présence côtière permanente, tout en assurant une présence neutre d'inspection et de surveillance lors du déchargement des vaisseaux commerciaux. Le navire pourrait également servir de centre de formation pour le renforcement des capacités d'une équipe neutre de garde-côtes yéménites composée de membres des deux parties.

## V. Contexte économique et aperçu de la situation financière

124. En application de son mandat, le Groupe d'experts a examiné le contexte économique dans lequel les personnes désignées au titre des résolutions [2140 \(2014\)](#) et [2216 \(2015\)](#), ainsi que leurs réseaux, ont continué de mener des opérations en violation des sanctions qui leur ont été imposées. Il s'est intéressé, en particulier, aux flux financiers, aux transferts de richesses et à la mise en place de nouvelles sociétés écran pour financer des opérations militaires compromettant la paix, la sécurité ou la stabilité du Yémen.

125. Le Groupe d'experts constate qu'en 2017 le Gouvernement légitime, les autorités locales, l'alliance entre houthistes et pro-Saleh et d'autres milices ont continué de percevoir des recettes « publiques » dans leurs zones respectives, en échange d'une offre limitée de services publics. Par leurs agissements, ils ont sapé les fondements de l'économie formelle et créé un problème de liquidité, augmentant la probabilité de voir s'effondrer le système financier et bancaire yéménite. Ils ont ainsi créé des conditions propices au blanchiment d'argent, qui constitue un obstacle supplémentaire à un relèvement et à une transition politique pacifiques. En raison du conflit qui perdure, on assiste au Yémen à l'émergence de nouveaux profiteurs de guerre, qui prennent peu à peu la place des entreprises locales basées de longue date à Sanaa et Taëz. Cela ne manquera pas de faire apparaître de nouvelles difficultés ainsi que de nouveaux fauteurs de troubles.



## A. Mainmise des houthistes et de leurs affiliés sur les ressources économiques de l'État

### 1. Recettes puisées par les houthistes dans les avoirs publics

126. Dans les zones qu'ils tiennent, les houthistes continuent d'exercer un contrôle direct sur la majeure partie de l'économie nationale par l'intermédiaire des ministres et des responsables qui leur sont affiliés ou des députés et comités révolutionnaires qui font office de superviseurs au sein de leurs structures.

127. Le Groupe d'experts a examiné les recettes non fiscales du dernier budget de l'État disponible (2011) afin de déterminer la valeur des fonds que pourraient potentiellement exploiter les houthistes. Ces recettes avoisinent les 2 818 milliards de rials (11,3 milliards de dollars)<sup>144</sup>, dont 407 milliards (soit 1,62 milliard de dollars) au minimum pourraient être à leur disposition (voir annexe 45).

128. Les sociétés de télécommunications sont la principale source de revenus des houthistes à Sanaa<sup>145</sup>. Le 21 août 2017, le Ministre des télécommunications basé à Sanaa, Julaidan Mahmood Julaidan<sup>146</sup>, affilié au Congrès populaire général, a indiqué lors d'une conférence de presse que, depuis qu'il avait pris ses fonctions au ministère le 1<sup>er</sup> décembre 2016, c'est-à-dire il y avait 20 mois, les sociétés de téléphonie mobile avaient transféré 98 milliards de rials (264,8 millions de dollars) aux houthistes<sup>147</sup>. Cette somme, que les houthistes ne contestent pas, équivaut à 159 millions de dollars par an.

129. La vente de tabac est la deuxième grande source de revenus pour les houthistes. Kamaran Industry and Investment a par exemple déclaré que sa facture fiscale et de droits de douane s'élevait à 23,9 milliards de rials (64,7 millions de dollars)<sup>148</sup>. Celle des deux autres producteurs de tabac se chiffrait, selon le Groupe d'experts, à un montant équivalent<sup>149</sup>.

130. Afin d'accroître leurs recettes douanières, les houthistes ont commencé à imposer des droits de douane supplémentaires sur les produits de base importés transitant par les zones contrôlées par le Gouvernement légitime (voir annexe 46).

131. Le 28 mai 2016, Mohamed Ali Al-Houthi a nommé Yahya Mohamed Abdullah al-Osta responsable par intérim de la direction des douanes du Yémen, basée à Sanaa<sup>150</sup>. Depuis, il a supervisé la mise en place de mécanismes illégaux permettant

<sup>144</sup> Depuis le 15 août 2017, le taux officiel est fixé par la Banque centrale du Yémen à 1 dollar pour 250 rials yéménites à Sanaa et le taux fluctuant à environ 1 dollar pour 370 rials, le taux du marché à cette date. Ce taux n'a cessé d'augmenter depuis lors et a atteint, le 31 décembre 2017, 400 rials pour 1 dollar. Lorsqu'il a examiné la situation économique à Sanaa, le Groupe d'experts s'est basé sur le taux officiel de 250 rials pour 1 dollar ou le taux du marché de 370 rials pour 1 dollar, en arrondissant les chiffres au cent mille le plus proche.

<sup>145</sup> Quatre sociétés de télécommunications sont en service au Yémen, à savoir : a) mobile (publique) ; b) Y Telecom (contrôlée par l'État) ; c) Sabafon (rattachée à Hamed Al Ahmar) et d) MTN (qui, de notoriété publique, est rattachée à Shaher Abdulhaq, bien que le Groupe d'experts ait appris qu'il a probablement transféré ses parts à MTN Afrique du Sud en échange d'actions dans cette société.

<sup>146</sup> Il aurait été tué par les houthistes après le 4 décembre 2017.

<sup>147</sup> Al-Yemen Alyoum, chaîne de télévision affiliée au Congrès populaire général, 21 août 2017 (voir <https://www.youtube.com/watch?v=RlsXBIGWvhk>).

<sup>148</sup> Voir [http://www.kamaran.com/english/research\\_and\\_development.php](http://www.kamaran.com/english/research_and_development.php).

<sup>149</sup> Trois sociétés associées à des marques telles que Pall Mall et Rothmans ont la mainmise sur la vente de tabac au Yémen. Kamaran United Industries Company, qui appartient à HSA Group, est l'une d'entre elles. Pour chaque paquet vendu, l'État perçoit 90 % du prix de vente, en plus de 18 rials couvrant des frais divers.

<sup>150</sup> Mohamed Abdullah al-Osta était un employé de rang intermédiaire qui exerçait les fonctions | de conseiller juridique au Ministère des finances.

de percevoir des droits de douane à l'intention d'entités et d'individus agissant pour le compte et sous le contrôle d'Abdulmalik Al-Houthi.

132. Le 4 avril 2017, le Ministère des finances, basé à Sanaa, a installé de nouveaux postes de douane permanents aux points de contrôle d'Amran et de Dhamar<sup>151</sup> afin d'exploiter la circulation routière, qui s'est densifiée en raison d'une baisse de la circulation via la route portuaire de Hodeïda.

## 2. Carburant issu du marché noir

133. Le Groupe d'experts constate que la distribution de carburant et de produits pétroliers reste l'une des principales sources de revenu des houthistes. Le 28 juin 2015, les houthistes ont mis fin au monopole que détenait la Yemen Petroleum Company sur l'importation et la distribution des produits pétroliers<sup>152</sup>. Ils ont organisé un appel d'offres privé aux fins de la distribution, qui leur permet de contrôler à présent le secteur en faisant appel, pour l'essentiel, à des distributeurs du marché noir qui leur sont affiliés.

134. Il ressort des données dont disposait le Groupe d'experts entre mai 2016 et juillet 2017, lorsque le taux de change officiel était de 250 rials pour 1 dollar, que les recettes réalisées par les houthistes grâce à la vente, sur le marché noir, de produits pétroliers depuis les ports de Hodeïda et de Ras Issa sur la Mer-Rouge<sup>153</sup> pourraient s'élever à 318 milliards de rials (1,27 milliard de dollars)<sup>154</sup> (voir annexe 47)<sup>155</sup>.

135. Le Groupe d'experts a noté qu'à ce jour 61 entreprises ont sollicité, via le mécanisme de vérification et d'inspection des Nations Unies, une autorisation d'entrée pour 234 navires-citernes<sup>156</sup> ; 173 d'entre eux ont reçu l'autorisation de livrer du carburant<sup>157</sup>. On trouvera la liste des réceptionnaires à l'annexe confidentielle 48. Le Groupe d'experts a observé que seules 11 entreprises avaient continué d'importer du carburant au Yémen entre 2016 et 2017, tandis que 12 entreprises auraient cessé de le faire après le 1<sup>er</sup> mars 2017 et que 11 nouvelles entreprises ont fait surface depuis cette date. Il en ressort que les houthistes ont mis en place une stratégie visant à contrôler les importations de pétrole, comme en attestent les éléments ci-après :

a) Seul Alhuthaily Group, qui opérait déjà dans l'industrie pétrolière, a maintenu le niveau de ses activités (voir la figure XV, axe des destinataires n° 22 ; on trouvera de plus amples informations à ce sujet à l'annexe 48, appendice 2)<sup>158</sup> ;

b) La compagnie maritime Al Falak – à laquelle faisaient appel les frères Tawfiq Mathar – qui, à l'époque Saleh, importait du carburant au Yémen à l'intention

<sup>151</sup> Décision 138 de 2017 (voir [http://customs.gov.ye/news\\_show\\_ar.php?id=132](http://customs.gov.ye/news_show_ar.php?id=132)).

<sup>152</sup> Les revenus liés à la distribution de carburant au Yémen ont toujours inclus les recettes générées par la contrebande dans la région. Au Yémen, le carburant n'était pas imposé mais subventionné, arbitrage qui faisait de la contrebande de carburant dans la Corne de l'Afrique une opération rentable. Les houthistes ont pris Sanaa en prétextant qu'ils allaient supprimer les subventions aux combustibles imposées par le Gouvernement de l'ancien Premier Ministre Mohammed Basindawa. À l'heure actuelle, l'importation de carburant n'est ni imposée ni subventionnée.

<sup>153</sup> Fermés depuis juin 2017.

<sup>154</sup> Taux, fixé par la Banque centrale de Yémen, de 1 dollar pour 250 rials.

<sup>155</sup> Données recueillies sur la base : a) des registres du mécanisme de vérification et d'inspection des Nations Unies sur le carburant livré depuis mai 2016 ; b) de la valeur marchande associée, au Yémen, à la livraison, au transport et au stockage de carburant et c) d'autres taxes dont la valeur a été confirmée auprès de commerçants et de sources au Yémen.

<sup>156</sup> Voir [https://www.vimye.org/docs/GoY\\_Announcement\\_of\\_UNVIM\\_Launch.pdf](https://www.vimye.org/docs/GoY_Announcement_of_UNVIM_Launch.pdf).

<sup>157</sup> Au 30 novembre 2017, 2 358 953 tonnes de produits pétroliers avaient été livrées.

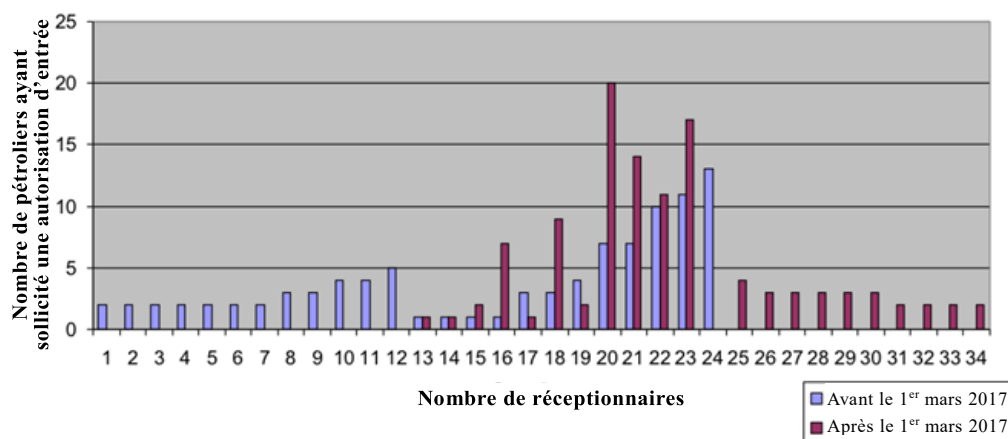
<sup>158</sup> ATICO Trading and Company, enregistré au Yémen, est un exploitant de longue date dans le secteur pétrolier (voir <http://www.alhuthaily.com/index.php/contact>).

de la Yemen Petroleum Company, a cessé d'utiliser les ports yéménites situés le long de la Mer-Rouge.

c) Tous les importateurs de pétrole qui exercent actuellement des activités sont affiliés aux houthistes.

Figure XV

### Changements de réceptionnaires de carburant entre 2016 et 2017



136. Le Groupe d'experts continue de surveiller la situation afin de déterminer si la perte d'espace qui touche les hommes d'affaires de l'ère pré-houthiste est une conséquence du conflit ou si elle résulte d'une volonté de remplacer ces opérateurs par ceux que les Yéménites appellent les hommes d'affaires de la « génération 2017 » (en référence aux partenaires commerciaux des houthistes au Yémen). Le Groupe d'experts enquête sur le changement de propriété effective du Vulcan Group, qui était le plus gros fournisseur du Ministère yéménite de la défense à l'époque de Saleh<sup>159</sup>.

### 3. Risque de pillage et de trafic d'antiquités et de biens culturels

137. Le Groupe d'experts a examiné les risques de contrebande d'antiquités et de biens culturels provenant de zones de conflit au Yémen aux fins de leur revente à l'étranger (voir annexe 49).

138. Bien que toujours en cours, la procédure relative à la saisie en Suisse, entre 2009 et 2010, d'objets provenant du Qatar et des Émirats arabes unis<sup>160</sup> pourrait aider le Groupe d'experts à répertorier les méthodes et les réseaux de contrebande. Même si ces objets sont sortis du Yémen avant l'adoption de sanctions, le Groupe enquête sur cette affaire puisque, durant la présidence de Saleh, ils ont été exportés illégalement, en violation de la loi yéménite sur les antiquités n° 21/1994<sup>161</sup>, l'enquête pourrait permettre aussi de retrouver la trace d'autres biens appartenant à la famille Saleh. On estime la valeur marchande des objets à plus de 1,5 million de dollars.

139. Étant donné qu'il n'existe aucun répertoire officiel du patrimoine culturel yéménite, il est très difficile d'établir quelles antiquités exportées et vendues à

<sup>159</sup> Voir <http://vulcanyemen.com/>. Le Groupe d'experts détient des éléments qui prouvent que le propriétaire, Khalid Ahmed Alradi, était partie prenante à des contrats antérieurs. Il a été tué par les houthistes, le 26 août 2017, parce que partisan de Saleh.

<sup>160</sup> Voir <http://ge.ch/justice/vestiges-archeologiques-le-ministere-public-confisque-des-objets-provenant-de-palmyre-en-syrie-du-ye>.

<sup>161</sup> Modifiée par la loi n° 8/1997 du 17 février 1997.

l'étranger à des fins lucratives ont été interceptées. Le Groupe d'experts a vu sur les sites de médias officiels appartenant à des groupes à Lahj, Sanaa et Taëz des images montrant des objets de grande valeur abandonnés faute de mécanismes de protection. À ce propos, la chaîne de télévision al Masirah a récemment montré des images du domicile de Tawfiq Saleh Abdulla Saleh, l'ancien président de Kamaran Industry and Investment <sup>162</sup>.

## B. Problèmes liés à la masse monétaire

### 1. Liquidité du marché yéménite et de la Banque centrale du Yémen

140. Dans la partie du territoire contrôlée par les houthistes, une structure financière organisée autour d'une banque centrale et comportant des banques privées et des institutions financières est toujours en service <sup>163</sup>.

141. En 2017, le Gouvernement légitime a réussi à imprimer 600 milliards de rials (1,6 milliard de dollars) <sup>164</sup>, aux fins suivantes : a) constituer une réserve pour relancer le versement des salaires ; b) améliorer la circulation d'argent liquide sur l'ensemble du territoire, la masse monétaire M1 <sup>165</sup> étant épuisée ; et c) remplacer les billets de banque abîmés. Aucun de ces objectifs n'a été atteint à ce jour <sup>166</sup>.

142. Les houthistes ont essayé de régler le problème de liquidités par divers moyens, qui ont tous échoué jusqu'à présent. Il s'agit notamment de ce qui suit :

a) Le détournement d'un système de bons d'alimentation par un dénommé « Abu Nabil al-Qaramani », qui agit avec l'aval des houthistes et pour leur profit financier (voir annexe 52).

b) Une tentative d'utiliser des billets à ordre de 5 000 rials imprimés hors du Yémen a été déjouée le 25 mai 2017 lors de la perquisition d'un camion transportant des billets à ordre d'une valeur de 35 milliards de rials (140 millions de dollars) dans la région de Jaouf, contrôlée par le Gouvernement. Ces titres n'ont pas été utilisés jusqu'à présent dans le cadre de transactions (voir annexe 53).

143. Le Groupe d'experts a demandé que l'on procède à l'analyse scientifique d'un billet à ordre de 5 000 rials yéménites de sorte que l'identité des auteurs de la contrefaçon, ainsi que des entités et personnes extérieures qui les aident puisse être établie.

144. Le Groupe d'experts a noté que, le 20 novembre 2017, le Bureau du contrôle des avoirs étrangers relevant du Département du trésor des États-Unis a accusé un réseau iranien et *ForEnt Technik GmbH* <sup>167</sup>, une entreprise iranienne basée à Francfort,

<sup>162</sup> Voir <http://www.yafa-news.net/archives/263955> et [http://almasirah.net/gallery/preview.php?file\\_id=10481#.Wiifxroebms.whatsapp](http://almasirah.net/gallery/preview.php?file_id=10481#.Wiifxroebms.whatsapp) (minute 15,36).

<sup>163</sup> Les 18 banques autorisées à mener leurs activités au Yémen ont leur siège à Sanaa, à l'exception de la Banque nationale du Yémen, connue sous le nom d'Al Ahli Bank, dont le siège est à Aden (voir annexe 50).

<sup>164</sup> L'impression a été assurée par la société de capitaux GOZNAK (voir <http://goznak.ru/en/>).

<sup>165</sup> M1 est un indicateur qui permet de mesurer les composantes les plus liquides de la masse monétaire. Il recouvre les liquidités et les éléments d'actif pouvant être rapidement convertis en monnaie.

<sup>166</sup> D'après un rapport publié en 2014 par la Banque centrale du Yémen, la masse monétaire M0 du pays est estimée à 1 129,5 milliards de rials. Au dire d'un responsable de la banque, cela pourrait représenter 50 % de la masse monétaire M1 (information communiquée au Groupe d'experts lors de sa réunion à Riyad, en juin 2017). Les billets de banque datant de plus de six ans risquent d'être déchirés et impropres à toute transaction. On trouvera à l'annexe 51 des informations relatives à l'impression annuelle des billets de banque.

<sup>167</sup> Voir <http://forent-tech.com/index.html>.

d'avoir joué un rôle dans l'impression des billets de banque yéménites contrefaits évoqués plus haut<sup>168</sup>. Le Groupe d'experts continue d'enquêter sur cette affaire.

## 2. Trafic transfrontalier de fonds et d'or

145. Le Groupe d'experts a enquêté sur trois cas de trafic d'actifs financiers au profit de l'alliance entre les houthistes et les pro-Saleh agissant pour le compte d'individus inscrits sur la Liste (voir tableau 2).

Tableau 2

### Saisies d'actifs financiers à Mahra (2017)

(Les valeurs sont indiquées en millions de dollars des États-Unis)

<i>Date</i>	<i>Lieu</i>	<i>Itinéraire</i>	<i>Trafiquants</i>	<i>Objet saisi</i>	<i>Valeur</i>
9 mai	Shehen, Mahra	Du Yémen aux Émirats arabes unis	Yéménites	Billets de banque 7 lingots d'or	3,42 <sup>169</sup>
17 juillet	Shehen, Mahra	Du Yémen aux Émirats arabes unis	Yéménites vivant aux Émirats arabes unis	7 174 700 rials saoudiens	1,91
27 juillet	Shehen, Mahra	Du Yémen aux Émirats arabes unis	Citoyens des Émirats arabes unis	700 000 rials saoudiens 42 lingots d'or	0,19

146. Ces exemples permettent de mesurer l'étendue des activités de contrebande dans la province de Mahra (voir annexe 54).

## C. Répercussions financières du conflit sur l'importation de denrées alimentaires

147. Les restrictions à l'importation imposées par les parties au conflit ont fait peser sur les importateurs des coûts financiers supplémentaires non négligeables. De nombreux fournisseurs et transporteurs ne sont plus disposés à prendre le risque de conclure des transactions avec des importateurs yéménites.

### 1. Problèmes de change concernant les devises fortes

148. Le principal problème qui se pose tient au fait que les devises fortes sont à présent principalement échangées via les circuits de l'économie souterraine, avec tous les risques de corruption et de blanchiment d'argent que cela comporte. En outre, les transferts de devises réalisés depuis l'étranger par les travailleurs yéménites et la diaspora s'effectuaient, pour l'essentiel, en riyals saoudiens. Avant le conflit, tous les rials saoudiens excédentaires accumulés par les banques et les bureaux de change yéménites étaient transférés par avion au Bahreïn, où ils étaient échangés contre des dollars des États-Unis et convertis en lettres de crédit.

### 2. Problèmes liés à l'importation de biens

149. La situation au Yémen aurait été bien pire si les perspectives en matière de commerce international des produits alimentaires n'avaient pas été favorables aux importateurs. Le coût actuel des denrées alimentaires et les frais d'expédition restent relativement bas si on les compare à ceux pratiqués avant le conflit (voir l'exemple donné dans le tableau 3), bien que s'y ajoutent des frais de transport supplémentaires

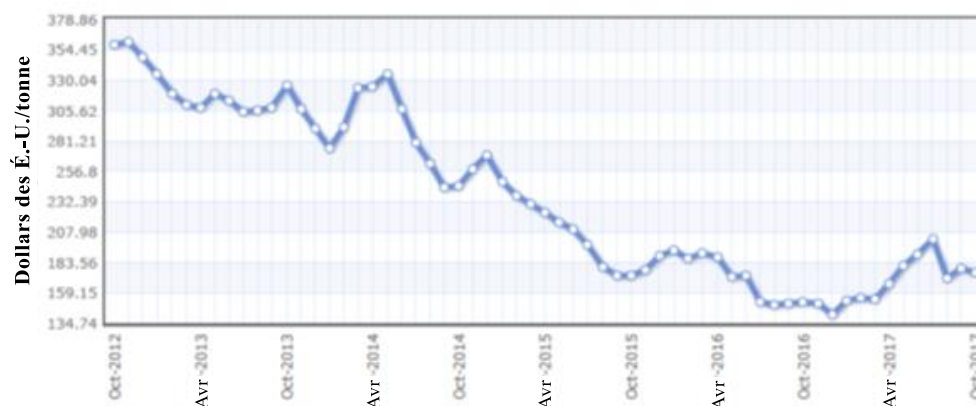
<sup>168</sup> Voir <https://www.treasury.gov/press-center/press-releases/Pages/sm0219.aspx>.

<sup>169</sup> Lorsque des informations manquent ou n'ont pas été vérifiées par le Groupe d'experts, il a été décidé de laisser les champs concernés libres dans les tableaux plutôt que d'y faire figurer des mentions telles que « inconnu » ou « à confirmer ».

lors du passage par les ports yéménites, dernière étape du voyage, en raison des retards en mer et des surestaries dans les ports<sup>170</sup>.

Tableau 3  
**Prix du blé (n° 1, blé dur rouge d'hiver) (2012-2017)**

(Dollars É.-U./tonne)



<sup>a</sup> Source : Département de l'agriculture des États-Unis, nouvelles concernant le marché (voir <http://www.indexmundi.com/commodities/?commodity=wheat&months=60>).

150. Les retards, les détournements et les saisies de cargaisons auxquels procède la coalition menée par l'Arabie saoudite lors de ses inspections sur les navires commerciaux, ont fait subir aux propriétaires de ces navires et aux commerçants d'importantes pertes financières. Ces retards, qui peuvent coûter aux propriétaires et aux chargeurs jusqu'à 30 000 dollars par jour, ont progressivement miné leur crédibilité auprès de leurs partenaires commerciaux internationaux (fournisseurs, assureurs et transporteurs). On trouvera à l'annexe confidentielle 55 de plus amples informations sur l'étude de cas relative à la confiscation, le 4 avril 2017, du navire marchand *Androussa*, un bateau-citerne battant pavillon libérien qui se dirigeait vers Ras Issa. Le 25 décembre 2017, le Groupe d'experts s'est rendu à Yanbo pour inspecter ce navire, accompagné de représentants de l'État saoudien. Des conduits en acier leur ont été montrés à proximité d'un atelier qui semblait suspect aux représentants mais qui, selon le Groupe d'experts, était certainement destiné à assurer l'entretien du navire. L'Arabie saoudite n'a pas encore soumis un rapport d'inspection qui, en vertu du paragraphe 17 de la résolution 2216 (2015), doit être communiqué dans un délai de 30 jours<sup>171</sup>. Cette affaire témoigne des pertes subies par les négociants et les sociétés de transports maritimes qui mènent des activités au Yémen<sup>172</sup>. Un

<sup>170</sup> Ministère houthiste des transports et du commerce (voir <http://www.moit.gov.ye/moit/sites/default/files/%20%D8%A7%D9%84%D8%AB%D8%A7%D9%84%D8%AB%D9%85%D9%86%D8%A3%D9%83%D8%AA%D9%88%D8%A8%D8%B1.pdf>).

<sup>171</sup> Le 12 mai 2017, le mécanisme de vérification et d'inspection des Nations Unies a présenté un rapport de suivi sur l'inspection menée à Djedda entre le 8 et le 16 avril 2017 et sur les inspections qui ont ensuite été effectuées dans le port de Yanbo entre le 17 avril et le 11 mai 2017. Les auteurs du rapport ont conclu qu'aucun article interdit n'avait été trouvé à bord du navire, mais que l'équipe d'inspection avait découvert une série d'incohérences, d'irrégularités et de fausses déclarations, ainsi que des traces d'explosifs brisants dans les ballasts 3, 4 et 6.

<sup>172</sup> Le navire-citerne et sa cargaison de 41 500 tonnes de gazole, d'une valeur de plus de 23 millions de dollars, ont été officiellement confisqués le 14 septembre 2017 (voir <https://www.uqn.gov.sa/articles/1507838892820964500/>).

commerçant a vu trois de ses livraisons de marchandises annulées pour le restant de 2017 en raison des risques posés par le conflit (figure XVI).

Figure XVI

**Extrait d'une lettre d'annulation reçue par un importateur**

Ref : Your next three (3) grain shipments of 50,000 mts 10pct each ex [REDACTED] and [REDACTED] to Saleef , Yemen.

=====

This is to inform you that despite we have tried our best to secure tonnage for your shipments ex [REDACTED] for second half November and first half December, as well as for your shipment ex [REDACTED] for mid December dates onwards to Saleef, Yemen, up to now we have not been able to do so for a number of reasons out of which the most important are the reluctance of owners to trade into a High War Risk Area on the one hand and especially - on the other - during the present conjuncture which finds both the ports of Saleef and Hodeidah to be closed, due to the well known political situation which creates uncertainty and insecurity not only to the majority of all prudent owners but also to their underwriters responsible for Extra War Risk Cover.

<sup>a</sup> Source confidentielle : importateur

## VI. Gel des avoirs

151. Conformément au mandat établi au paragraphe 11 et à l'alinéa b) du paragraphe 21 de la résolution 2140 (2014) et prorogé au paragraphe 5 de la résolution 2342 (2017), le Groupe d'experts a continué de réunir, d'examiner et d'analyser toutes les informations concernant l'application par les États Membres des mesures relatives au gel des avoirs. Il a continué de s'intéresser aux cinq personnes inscrites sur la Liste et de chercher à identifier les autres personnes ou entités pouvant agir pour leur compte ou sur leurs ordres, ainsi que les entités en leur possession ou sous leur contrôle, et à enquêter sur celles-ci.

152. Depuis le décès d'Ali Abdullah Saleh, les fonds laissés par lui en héritage ne sont plus du ressort du Groupe d'experts, à moins : a) qu'ils soient mis à la disposition d'Ahmed Ali Abdullah Saleh ou de tout autre individu agissant pour son compte, y compris Khaled Ali Abdullah Saleh ou b) que les combattants houthistes, agissant pour le compte des trois houthistes inscrits sur la Liste, saisissent les avoirs de Saleh. Le Groupe d'experts a adressé des lettres aux autorités yéménites et à Ahmed Ali Abdullah Saleh, leur demandant de fournir des documents officiels attestant de la mort d'Ali Abdullah Saleh, afin que le Comité puisse mettre à jour la Liste. Le Groupe d'experts a rencontré Ahmed Ali Abdullah Saleh à Abou Dhabi le 27 décembre 2017. Celui-ci a déclaré qu'il n'avait pas encore reçu d'informations dignes de foi quant à l'endroit où son père était enterré, que des membres de sa famille étaient toujours détenus par les houthistes au Yémen et que certains avaient été dépouillés par ce groupe. Il s'est plaint de son inscription sur la Liste, qu'il considère comme injuste dans la mesure où il estime n'avoir jamais participé à un acte qui menaçait la paix, la sécurité ou la stabilité du Yémen.

153. Le tableau ci-après présente les montants estimatifs des avoirs détenus par les membres de la famille Saleh inscrits sur la Liste et par les entités agissant pour leur compte dont le Groupe d'experts a pu retrouver la trace.

Tableau 4

**Montant estimatif des actifs appartenant à la famille Saleh répondant aux critères influençant la décision de geler les avoirs<sup>a</sup>**

(En millions de dollars des États-Unis)

<i>Pays</i>	<i>Montants décelés</i>	<i>Montants gelés</i>	<i>Statut</i>	<i>Observations</i>
France	11 350 000		À confirmer	2 appartements appartenant à Ahmed Ali Abdullah Saleh
Malaisie		780 000	Gelés	Détenus par Ahmed Ali Abdullah Saleh (solde en 2016)
Pays-Bas		À confirmer	Gelés	Agissant pour le compte d'Ahmed Ali Abdullah Saleh (l'actif se trouve en France)
Oman		25 818 000	Gelés	Transférés par Ahmed Ali Abdullah Saleh depuis un compte au Yémen en 2012
Singapour		460 000		Titres détenus par Ahmed Ali Abdullah Saleh
Suisse		4 431 000	Gelés	Détenus par Ali Abdullah Saleh
Émirats arabes unis		166 000	Gelés	Détenus par Ahmed Ali Abdullah Saleh
Émirats arabes unis	55 000 000		À confirmer	Détenus par Ali Abdullah Saleh et transférés en juin 2011
Émirats arabes unis	51 720 000		À confirmer	Transférés en 2014 par Trice Bloom Ltd. et Towkay Ltd. depuis Bank of New York Mellon Corporation par un virement initial de 71 493 448
Émirats arabes unis	33 472 000			Transférés par PACT Trust, Ali Abdullah Saleh (octobre 2014)
Émirats arabes unis	58 140 000			Transférés par Wildhorse Investments, Ali Abdullah Saleh (octobre 2014)
Émirats arabes unis	3 024 000			Transférés par Ansan Wikfs Investments Limited, une entreprise appartenant à Shaher Abdulhak
				<b>Valeur totale des avoirs se trouvant aux Émirats arabes unis : 198 332 000</b>
Royaume-Uni		3 700 000	Gelés	Détenus par Ahmed Ali Abdullah Saleh. Le Groupe d'experts a eu accès à cette information via le Forum de la société civile pour le recouvrement des avoirs, notifié par les autorités du Royaume-Uni <sup>a</sup> . Ces avoirs ont été placés dans une banque enregistrée au Royaume-Uni, mais sur un compte situé dans un autre pays européen.
États-Unis d'Amérique	90 000 000 <sup>b</sup>	À déterminer		Transférés entre août 2013 et décembre 2014 à des banques aux Émirats arabes unis depuis ou via des banques aux États-Unis pour le compte de Khaled Ali Abdullah Saleh
<b>Sous-totaux</b>	<b>191 036 000</b>	<b>35 355 000</b>		
<b>Total général</b>	<b>226 391 000</b>			

<sup>a</sup> Fonds gérés par Khaled Ali Abdullah Saleh.

<sup>b</sup> Une partie de cette somme a été placée dans des fonds aux Émirats arabes unis. Une fois les coordonnées bancaires confirmées, les États-Unis et les Émirats arabes unis pourront procéder au rapprochement des fonds.



154. Le Groupe d'experts enquête sur les avoirs que les houthistes ont saisis pour leur propre compte. Le 23 décembre 2017, le « comité pour la localisation et la saisie d'avoirs détenus par des traîtres » a donné à la Banque centrale du Yémen l'ordre de saisir l'ensemble des comptes bancaires appartenant à 1 223 individus (voir annexe 56).

155. Le Groupe d'experts a communiqué à cinq États Membres des informations sur les comptes bancaires et les transferts de comptes liés à des personnes inscrites sur la Liste et attend leur réponse. Le manque d'informations concernant les avoirs qui ont déjà été gelés l'empêche de retrouver la trace d'autres actifs financiers de cet ordre. En 2017, aucune information relative au gel d'avoirs n'avait été communiquée au Comité ou au Groupe d'experts. Cette même année, le Comité a reçu notification d'une intention de débloquer des avoirs.

### **Khaled Ali Abdullah Saleh**

156. Dans son rapport daté du 31 janvier 2017<sup>173</sup>, le Groupe d'experts a établi que Khaled Ali Abdullah Saleh<sup>174</sup> était un bailleur de fonds agissant pour le compte ou sur ordre de son père, Ali Abdullah Saleh, et de son frère, Ahmed Ali Abdullah Saleh. Le Groupe d'experts enquête sur les fonds que Khaled Ali Abdullah Saleh pourrait mettre à disposition de personnes inscrites sur la Liste en s'appuyant sur des virements et des investissements d'une valeur de 20,9 millions de dollars réalisés par Raydan Investments Limited aux Émirats arabes unis (voir annexe 57).

157. Le Groupe d'experts a reçu un relevé bancaire lié à une carte de crédit (4XXXXXXXXXX3455) appartenant à Khaled Ali Abdullah Saleh, qui était en possession de deux passeports d'un État Membre. Les relevés bancaires permettent de confirmer qu'il s'est rendu fin 2016 et début 2017 à Munich (Allemagne), Budapest, Prague, Vienne et Zurich (Suisse). Le Groupe d'experts a noté qu'il a sollicité les services de Keyana Management Consulting, basé à Munich<sup>175</sup>. Cette carte avait également été reliée à un compte PayPal, qui lui aurait servi à acheter des armes et des équipements spécialisés, proscrits au titre de l'embargo ciblé sur les armes imposé au Yémen le 26 décembre 2016 (<http://www.nashq.com/>) et le 18 janvier 2017 (<https://www.dmhq-shop.de/>). Khaled Ali Abdullah Saleh continue de gérer les avoirs de la famille Saleh en veillant à contourner les mesures de sanction liées au gel des avoirs et à l'embargo ciblé sur les armes.

## **VII. Interdiction de voyager**

158. En application du paragraphe 15 de la résolution 2140 (2014), le Groupe d'experts poursuit ses activités de surveillance et d'enquête afin de déterminer si les personnes désignées par le Comité et le Conseil de sécurité ont enfreint l'interdiction de voyager. Aucune violation n'a été constatée.

## **VIII. Violations du droit international humanitaire et du droit international des droits de l'homme**

159. Au paragraphe 9 de sa résolution 2140 (2014), le Conseil de sécurité a exhorté toutes les parties à s'acquitter des obligations que leur impose le droit international, y compris le droit international humanitaire et le droit des droits de l'homme

<sup>173</sup> S/2017/81, sect. VI, par. 42-44.

<sup>174</sup> Né le 2 août 1987.

<sup>175</sup> Voir <http://www.keyana-consulting.com/> : l'entreprise, basée à Munich, offre des services d'investissements financiers.

applicables. Aux paragraphes 17, 18 et 21 de cette résolution, ainsi qu'au paragraphe 19 de sa résolution 2216 (2015), le Conseil a précisé en outre les responsabilités du Groupe d'experts s'agissant des enquêtes sur les violations du droit international humanitaire et du droit international des droits de l'homme, les violations des droits de l'homme et en particulier les entraves à l'acheminement de l'aide humanitaire.

## A. Actes attribués à la coalition dirigée par l'Arabie saoudite

### 1. Frappes aériennes

160. Pendant la période considérée, le Groupe d'experts a enquêté sur 10 frappes aériennes ayant fait 157 morts et 135 blessés dont au moins 85 étaient des enfants<sup>176</sup>. Ces frappes ont également détruit cinq bâtiments résidentiels, deux vaisseaux commerciaux, un marché, un motel et un local des forces du Gouvernement yéménite (voir tableau 5). On trouvera à l'annexe 58 des études de cas détaillées des quatre premières frappes comprenant une évaluation du respect du droit international humanitaire.

Tableau 5  
Frappes aériennes (2017)

<i>Appendice de l'annexe 58</i>	<i>Date</i>	<i>Lieu</i>	<i>Faits et cible</i>	<i>Type de munitions ou d'explosifs</i>	<i>Victimes civiles</i>
A	16 mars	Mer Rouge	Bateau de migrants	Munitions d'armes légères	42 morts 34 blessés
B	25 août	Sanaa	Bâtiment résidentiel	Bombe aérienne brisante	16 morts 17 blessés
C	2 septembre	Hajja	Bâtiment résidentiel	Bombe aérienne brisante	3 morts 13 blessés
D	1 <sup>er</sup> novembre	Saada	Marché de nuit	Bombe aérienne brisante équipée d'un système de guidage Paveway	31 morts 26 blessés
E	9 juin	Sanaa	Bâtiment résidentiel	Bombe aérienne brisante Mark 82 ou 84 équipée d'un système de guidage Paveway	4 morts 8 blessés
F	4 août	Saada	Bâtiment résidentiel	Bombe aérienne brisante Mark 82	9 morts 3 blessés
G	23 août	Arhab	Motel	Bombe aérienne brisante Mark 82 ou 84 équipée d'un système de guidage Paveway	33 morts 25 blessés
H	16 septembre	Mareb	Véhicule	Bombe aérienne brisante ou missile air-sol	12 morts
I	10 novembre	Saada	Bâtiment résidentiel	Bombe aérienne brisante Mark 82 ou 84 équipée d'un système de guidage Paveway	4 morts 4 blessés
J	14 novembre	Taëz	Forces gouvernementales	Bombe aérienne brisante Mark 82 ou 84 équipée d'un système de guidage Paveway	3 morts 5 blessés

<sup>176</sup> Ces cas et les autres dont il est question dans la présente section ont été sélectionnés dans la mesure où les éléments de preuve disponibles répondaient aux critères définis à l'appendice B de l'annexe 1.

161. En ce qui concerne les dix cas sur lesquels il a enquêté, le Groupe d'experts constaté ce qui suit :

a) L'utilisation d'armes à guidage de précision atteste assez bien du fait que les frappes aériennes ont touché les cibles prévues ;

b) Dans tous les cas examinés, rien n'indique que les civils qui se trouvaient dans la structure touchée ou à proximité aient perdu leur statut de civil et, de ce fait, la protection contre les attaques qui leur est reconnue *prima facie* ;

c) Même si, dans certains des cas figurant dans le tableau 5, les cibles visées par la coalition dirigée par l'Arabie saoudite étaient des objectifs militaires légitimes, il est hautement improbable que ces attaques aient été menées conformément aux exigences de proportionnalité et de précaution imposées par le droit international humanitaire ;

d) Les conséquences de ces frappes sur les personnes et les infrastructures civiles révèlent que les mesures de précaution, si tant est qu'elles aient été prises, étaient largement insuffisantes et inefficaces.

162. Concernant les cas pris individuellement, le Groupe d'experts a constaté ce qui suit :

a) Si l'on exclut le cas A, la coalition dirigée par l'Arabie saoudite était la seule entité militaire capable de conduire ces frappes aériennes. Dans le cas A, il est très peu probable que l'attaque ait pu être menée par une entité autre qu'un État membre de la coalition ;

b) À l'exception des cas B et D, la coalition dirigée par l'Arabie Saoudite n'a pas reconnu avoir joué un rôle dans les attaques ni officiellement précisé l'objectif militaire qu'elle cherchait à atteindre. En ce qui concerne les cas B et D, le Groupe d'experts ne peut souscrire aux justifications fournies par la coalition (voir annexe 58)<sup>177</sup> ;

c) Si tant est qu'au regard des objectifs visés, la coalition dirigée par l'Arabie saoudite ait pris des dispositions destinées à réduire le nombre de victimes parmi les enfants, ces mesures s'avèrent inefficaces, sachant notamment que les frappes continuent de viser des bâtiments résidentiels<sup>178</sup>.

163. Tout au long de 2017, le Groupe d'experts a demandé à la coalition menée par l'Arabie saoudite de lui fournir des justificatifs concernant les dommages collatéraux causés aux personnes et aux infrastructures civiles et recensés par le Groupe. Les informations qu'il a reçues en réponse n'étaient pas vérifiables. Pour ce qui est des frappes aériennes signalées dans le tableau 5, les enquêtes indépendantes menées par le Groupe d'experts n'ont pas permis de mettre en évidence la présence de cibles de haute valeur qui auraient justifié les dommages collatéraux occasionnés sur les sites visés. Dans un autre cas, alors que la coalition avait déclaré avoir tué une cible de haute valeur lors d'une frappe visant ce qui était supposé être un camp d'entraînement mais s'est avéré être une école, l'Équipe d'évaluation conjointe a démenti que l'établissement d'enseignement ait été touché par une frappe de la coalition (voir annexe 59).

164. Le Groupe d'experts a également relevé deux cas (voir tableau 6) dans lesquels l'Équipe d'évaluation conjointe avait estimé que la coalition menée par l'Arabie saoudite n'avait pas effectué de frappes aériennes, alors que l'enquête indépendante du Groupe avait clairement établi que des frappes avaient eu lieu. Le Groupe a conclu

<sup>177</sup> Déclaration du porte-parole officiel de la coalition dirigée par l'Arabie saoudite.

<sup>178</sup> Voir S/2017/821, par. 200 pour de plus amples informations sur les mesures qui auraient été prises par la coalition en vue de réduire le nombre de victimes parmi les enfants.

que la seule entité à même de mener ces attaques était la coalition dirigée par l'Arabie saoudite (on trouvera de plus amples informations sur ce sujet à l'annexe 60).

Tableau 6  
**Constatations de l'Équipe d'évaluation conjointe et conclusions du Groupe d'experts**

<i>Date</i>	<i>Faits constatés</i>	<i>Équipe d'évaluation conjointe</i>	<i>Conclusions du Groupe d'experts</i>
9 août 2016	Usine de produits alimentaires à Sanaa	La coalition dirigée par l'Arabie saoudite n'a pas mené de frappe aérienne sur ce site	Utilisation d'une bombe aérienne brisante La responsabilité de la coalition dirigée par l'Arabie saoudite est établie.
24 septembre 2016	Complexe résidentiel à Ibb	La coalition dirigée par l'Arabie saoudite n'a pas mené de frappe aérienne sur ce site	Bombe aérienne brisante Mark 82 équipée d'un système de guidage Paveway. La responsabilité de la coalition dirigée par l'Arabie saoudite est établie.

165. Les personnes responsables de l'organisation, de l'autorisation ou de l'exécution de frappes aériennes touchant de manière disproportionnée des civils et des infrastructures civiles sont susceptibles de tomber sous le coup des critères de désignation énoncés aux paragraphes 17 et 18 de la résolution 2140 (2014). Le Groupe d'experts poursuit son enquête sur cette affaire.

## 2. Opérations terrestres : personnes détenues par les Émirats arabes unis

166. En 2017, le Groupe d'experts a enquêté sur les cas de 12 personnes privées de liberté, placées en détention dans les locaux de la base des Émirats arabes unis à Boureïqa, à l'aéroport de Riyan et dans le port de Balhaf (voir annexe confidentielle 61 et annexe 62). Ses constatations sont les suivantes :

- a) Les forces des Émirats arabes unis présentes au Yémen retenaient des personnes dans trois lieux de détention situés sur le territoire yéménite mais administrés et supervisés exclusivement par les Émirats arabes unis ;
- b) Le Gouvernement yéménite n'avait aucune autorité sur les personnes détenues dans les bases administrées par les Émirats arabes unis ;
- c) Les forces des Émirats arabes unis ont participé à des opérations d'interpellation conjointes avec les Forces d'élite du Hadramout et de Chaboua ou les ont supervisées ;
- d) Les forces des Émirats arabes unis ont régulièrement collaboré avec les forces de sécurité yéménites aux fins du transfert de détenus ;
- e) Les forces des Émirats arabes unis se sont rendues responsables des faits suivants : i) des actes de torture (notamment passages à tabac, électrocution, suspension forcée, emprisonnement dans une cellule métallique (la cage) placée au soleil) ; ii) des mauvais traitements ; iii) le refus d'administrer des soins médicaux en temps voulu ; iv) à le non-respect des garanties d'une procédure régulière ; v) des disparitions forcées de détenus, qui contreviennent au droit international humanitaire et au droit international des droits de l'homme<sup>179</sup>.

<sup>179</sup> On trouvera à l'annexe 62 une évaluation de la situation d'un point de vue juridique. Les informations communiquées par les détenus ont été vérifiées à partir de certificats médicaux, de

167. Le Groupe d'experts estime qu'au 1<sup>er</sup> novembre 2017 plus de 200 personnes étaient détenues par les forces des Émirats arabes unis au Yémen<sup>180</sup>.

168. Le Groupe d'experts a demandé, sans succès, que les Émirats arabes unis ou le Yémen lui précisent le fondement juridique justifiant qu'une puissance étrangère, à savoir les Émirats arabes unis, soit autorisée à procéder à l'arrestation et au placement en détention de personnes sur le territoire yéménite. Les représentants des Émirats arabes unis ont répondu par un démenti, affirmant que le pays ne supervisait ni n'administrerait aucun lieu de détention au Yémen<sup>181</sup>.

169. La fréquence et le caractère systématique des arrestations arbitraires, des actes de privation de liberté et des disparitions forcées orchestrées par les Émirats arabes unis au Yémen sont symptomatiques d'un comportement qui s'inscrit clairement en porte-à-faux avec les obligations incombant aux Émirats arabes unis au titre du droit international humanitaire et du droit international des droits de l'homme. Parallèlement, le refus de reconnaître la responsabilité des Émirats arabes unis dans ces arrestations et détentions arbitraires favorise l'impunité des auteurs de ces violations, qu'ils appartiennent aux forces émiriennes ou à leurs supplétifs yéménites, les protège et leur permet de continuer à agir sans redouter aucune conséquence.

170. La collaboration entre les Émirats arabes unis et les forces de sécurité du Gouvernement yéménites permet aux premiers de recourir au « déni plausible » face à des violations, tout en conférant un semblant de légalité et d'autorité aux arrestations et détentions arbitraires auxquelles ils procèdent au nom des secondes<sup>182</sup>.

171. Les Gouvernements émirien et yéménite refusent d'enquêter de manière crédible sur les violations en question et de sanctionner leurs auteurs. Les Émirats arabes unis sont présents au Yémen avec l'accord du Gouvernement légitime, qui a toute latitude pour retirer son consentement, le limiter ou en clarifier la portée, en vue d'améliorer le respect du droit international humanitaire et du droit international des droits de l'homme par les forces émiriennes. Le Gouvernement yéménite n'assure pas non plus, à cet égard, une supervision et un contrôle efficaces de ses propres troupes (voir par. 54).

172. Le Groupe d'experts constate que les personnes responsables de violations liées à des questions de détention au Yémen répondent aux critères de désignation définis aux paragraphes 17 et 18 de la résolution 2140 (2014).

## **B. Forces houthistes et pro-Saleh : violations relatives à la privation de liberté**

173. Le Groupe d'experts a enquêté sur 16 cas d'arrestations arbitraires, de privation de liberté et d'autres violations du droit international humanitaire et du droit international des droits de l'homme par les forces houthistes et pro-Saleh. Onze auteurs ou commanditaires de tels faits ont été identifiés<sup>183</sup>. Parmi les violations recensées, certaines ont été perpétrées par des responsables de l'organisation de sécurité politique basée à Sanaa (3), de l'organisme de sécurité nationale basé à Sanaa (3) et d'autres autorités houthistes (10). Motlaq Amer al-Marrani (connu

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témoignages d'autres détenus ou de leur famille et au moyen d'images satellites, conformément à la méthodologie adoptée par le Groupe d'experts.

<sup>180</sup> Dans le présent rapport, on entend par le terme « détenu » toute personne ayant été privée de sa liberté, y compris les internés civils.

<sup>181</sup> Lettre datée du 8 novembre 2017, adressée au Groupe d'experts par les Émirats arabes unis.

<sup>182</sup> Ibid.

<sup>183</sup> On trouvera à l'annexe confidentielle 63 une évaluation juridique de la situation.

également sous le nom d'Abu Emad), directeur adjoint de l'organisme de sécurité nationale, est impliqué dans toutes les violations sur lesquelles le Groupe a enquêté.

174. Les membres de l'organisation de sécurité politique et de l'organisme de sécurité nationale basés à Sanaa et d'autres autorités houthistes se sont notamment livrés à : des arrestations et des actes de privation de liberté arbitraires ; des actes de torture (y compris d'un enfant) ; des refus d'administration de soins médicaux en temps voulu ; des disparitions forcées prolongées ; le non-respect des garanties d'une procédure régulière ; des mises en détention ayant abouti à trois décès.

175. Au cours de l'année écoulée, le Groupe d'experts a observé que des membres des autorités carcérales tiraient profit de cas de détention. Il a documenté un cas dans lequel un détenu a été libéré contre le paiement, par sa famille, d'une somme de 1 000 000 de rials yéménites (4 000 dollars des États-Unis) à des responsables de l'organisation de sécurité politique basée à Sanaa.

176. Le Groupe d'experts a enquêté sur le cas de personnes emprisonnées au centre universitaire de Dhammar, qui sert d'établissement de détention informel<sup>184</sup>. Leur détention prolongée s'explique principalement par l'incapacité des responsables des forces houthistes et pro-Saleh et de ceux des forces de la « résistance » de s'entendre sur les modalités d'un échange de prisonniers au niveau local. Certains détenus ont été informés qu'ils seraient libérés : soit a) contre paiement d'une rançon ; soit b) à l'occasion d'un échange de prisonniers. Le fait de détenir des civils dans l'unique but de les utiliser comme moyen de pression en vue d'un échange de prisonniers n'est rien de moins qu'une prise d'otage, qui s'inscrit en violation du droit international humanitaire<sup>185</sup>.

#### **Violations commises par les autorités houthistes après le 1<sup>er</sup> décembre 2017**

177. Le Groupe d'experts a entamé des enquêtes sur l'arrestation arbitraire, la privation de liberté et l'exécution extrajudiciaire de personnes affiliées au Congrès populaire général et sur des faits d'incitation à la violence à leur encontre. Le 2 décembre 2017, des faits graves de privation de liberté se sont produits, avec l'arrestation arbitraire de 41 journalistes locaux<sup>186</sup>.

### **C. Usage sans discernement d'engins explosifs dans des zones peuplées de civils**

178. Le Groupe d'experts a enquêté sur 10 cas d'usage sans discernement d'engins explosifs dans des zones densément peuplées, telles que celle de Taëz, qui ont causé la mort de 23 civils (voir tableau 7). Il a constaté que, dans ces affaires, les engins explosifs avaient presque certainement été utilisés sans discernement. On trouvera à l'annexe 64 trois études de cas détaillées, comprenant une évaluation du respect du droit international humanitaire. Dans l'ensemble des cas étudiés, à l'exception de celui qui figure à l'appendice C de l'annexe 64 (voir tableau 7), la responsabilité des faits est attribuée aux forces houthistes et pro-Saleh<sup>187</sup>.

<sup>184</sup> Le nombre de détenus emprisonnés dans le centre universitaire varie entre 25 et 100.

<sup>185</sup> Règle 96 du droit international humanitaire coutumier relative à la prise d'otage (voir [https://ihl-databases.icrc.org/customary-ihl/eng/docs/v2\\_rul\\_rule96](https://ihl-databases.icrc.org/customary-ihl/eng/docs/v2_rul_rule96)). Le droit international humanitaire dispose que les civils ne peuvent être détenus que lorsqu'ils représentent une menace imminente du point de vue de la sécurité, et seulement aussi longtemps que perdure cette menace.

<sup>186</sup> Voir <https://rsf.org/en/news/houthis-holding-41-journalists-hostage-inside-yemini-tv-station>.

<sup>187</sup> L'analyse technique de l'attaque au mortier menée le 2 novembre 2017 indique que la plaque de base du mortier utilisé se trouvait dans une zone contrôlée par Abu al-Abbas.

Tableau 7  
**Récapitulatif des cas d'usage sans discernement d'engins explosifs dans des zones peuplées de civils (2017)**

<i>Date</i>	<i>Lieu</i>	<i>Faits et cible</i>	<i>Type d'engin explosif</i>	<i>Victimes civiles</i>	<i>Appendice de l'annexe 64</i>
18 janvier	Nour, Taëz	Zone résidentielle	Obus de mortier (explosif brisant) de 120 mm	9 morts 8 blessés	E
21 mai	Jahmila (Taëz)	Zone résidentielle	Explosif brisant (à confirmer)	2 morts	F
21 mai	Thabat (Taëz)	Zone résidentielle	Explosif brisant (à confirmer)	3 morts 3 blessés	G
21 mai	Houmeïra (Taëz)	Zone commerciale	Explosif brisant (à confirmer)	2 morts 5 blessés	H
29 mai	Nour (Taëz)	Zone résidentielle	Obus de mortier (explosif brisant) de 120 mm	1 mort 7 blessés	A
30 juin	Joumhourî (Taëz)	Zone résidentielle	Canon sans recul de 106 mm	1 mort 9 blessés	I
6 septembre	Raouda (Mareb)	Zone résidentielle	Obus de mortier (explosif brisant) de 120 mm	3 blessés	B
21 septembre	Sina (Taëz)	Zone résidentielle	Grenade propulsée par roquette (variante RPG-7)	0	J
2 novembre	Ounsoua (Taëz)	Zone résidentielle	Obus de mortier (explosif brisant) de 120 mm	5 morts	D
11 novembre	Riyad	Aéroport civil	Missile balistique à courte portée	0	C

179. L'emploi sans discrimination d'engins explosifs par les forces houthistes et pro-Saleh contre des zones civiles au Yémen et en Arabie saoudite relève des paragraphes 17 et 18 de la résolution 2140 (2014). Le Groupe d'experts constate que l'utilisation répétée de telles armes s'inscrit nécessairement dans le cadre d'une stratégie approuvée par les hauts responsables houthistes, dont Abdulmalik al-Houthi lui-même.

#### **D. Violations commises par le Gouvernement du Yémen**

180. Le Groupe d'experts a enquêté sur des violations du droit international humanitaire et du droit international des droits de l'homme liées aux arrestations et détentions arbitraires, aux disparitions forcées, aux actes de torture, aux mauvais traitements et aux refus d'administrer des soins médicaux en temps voulu, dont 21 personnes ont été victimes. Ces personnes étaient détenues par les responsables ou entités suivantes ou gardées dans des centres contrôlés par ces responsables ou entités : les forces « Ceinture de sécurité » à Aden et Lahj ; les forces spéciales à Mareb ; les Forces d'élite du Hadramout ou de Chaboua ; le général de division Shallal Ali Shaye<sup>188</sup> ; le général de brigade Ali Abdullah Taher<sup>189</sup> ; Ghassan al-Aqrabi<sup>190</sup> ; le colonel Abu Mohammad Abdul Ghani Shaalan<sup>191</sup> ; et Imam

<sup>188</sup> Directeur de la sécurité générale à Aden. Les violations liées à la détention sur lesquelles l'enquête a porté ont été commises dans une résidence placée sous son contrôle à Taouahi.

<sup>189</sup> Ancien directeur des services de sécurité de Mareb (voir <https://yemensaeed.net/news.php?id=61163>).

<sup>190</sup> Superviseur des centres de détention Bir Ahmed I et II.

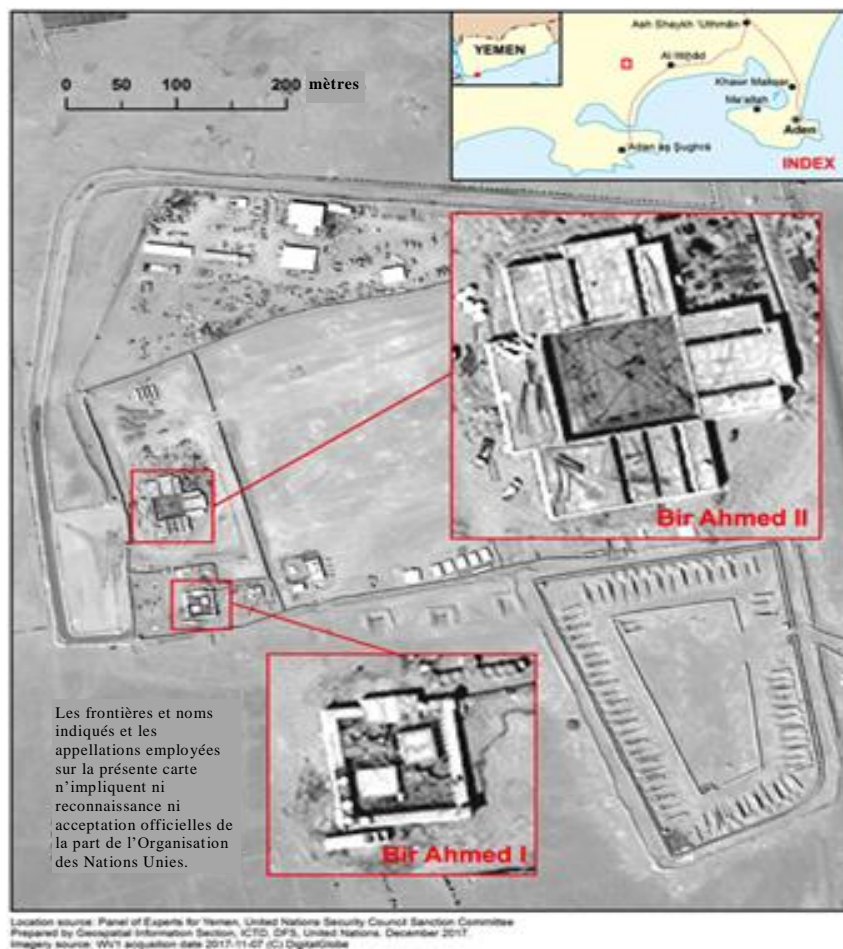
<sup>191</sup> Commandant des forces spéciales de Mareb, le colonel Shallan était présent et avait autorité sur ses troupes lorsqu'un enfant a été tué.

al-Nubi<sup>192</sup>. On trouvera de plus amples informations sur les violations en question à l'annexe 65 et à l'annexe confidentielle 66. Neuf personnes sont mortes en détention, parmi lesquelles trois enfants.

181. Certains hauts fonctionnaires administraient des lieux de détention extrajudiciaires. Dans le quartier de Taouahi à Aden, l'ancienne discothèque Waddah a ainsi été reconvertie en centre de détention sous l'autorité du général de division Shallal Ali Shaye. Le centre de détention extrajudiciaire de Bir Ahmed I, quant à lui, était administré par Ghassan al Aqrabi, affilié aux forces « Ceinture de sécurité » et aux forces des Émirats arabes unis. Le 12 novembre 2017, les Émirats arabes unis ont transféré à Bir Ahmed II des prisonniers dont les dossiers ont été reçus le 13 novembre 2017 par le procureur de la République du Yémen. Début décembre 2017, grâce à son intervention, certains détenus ont pu recevoir des visites familiales à Bir Ahmed II et quelques-uns ont été libérés.

182. En novembre 2017, 133 détenus auraient été transférés du centre de l'aéroport de Riyan à la prison centrale de Moukalla<sup>193</sup>, mais il n'a pas été possible de déterminer si ce transfert concernait tous les prisonniers, les familles de certains d'entre eux n'ayant toujours pas pu entrer en contact avec eux.

Figure XVII  
**Bir Ahmed I et Bir Ahmed II**



<sup>192</sup> Ancien commandant du Camp 20 à Aden.

<sup>193</sup> Voir <http://www.chicagotribune.com/sns-bc-ml--yemen-prisoners-20171113-story.html>.



## **E. Attaques conduites dans des hôpitaux**

183. Le Groupe d'experts a enquêté sur les cas de deux patients gravement malades, assassinés dans l'enceinte de l'hôpital de la Révolution, respectivement le 24 mars et le 13 décembre 2017 (voir annexe confidentielle 67).

184. Le Groupe d'experts enquête également sur le meurtre de blessés dans des hôpitaux de Sanaa, à la suite du décès d'Ali Abdullah Saleh. Les personnes malades, blessées et hors de combat sont protégés par le droit humanitaire international<sup>194</sup>.

## **F. Recrutement et utilisation d'enfants dans les conflits armés**

185. Le Groupe d'experts a enquêté sur les individus et les réseaux qui se livrent au recrutement d'enfants au Yémen. Il a identifié deux personnes ayant recruté cinq enfants pour le compte des forces houthistes (voir annexe 68 et annexe confidentielle 69). Il constate, après avoir suivi ces affaires pendant l'année écoulée, qu'elles ne sont que la partie émergée d'un problème bien plus étendu.

186. Le Groupe d'experts constate que les éléments suivants participent de l'augmentation du recrutement d'enfants :

a) Les salaires n'étant pas versés, les enfants sont obligés de chercher des moyens de subvenir aux besoins de leur famille : les forces houthistes et pro-Saleh versent aux enfants fraîchement recrutés des sommes variant entre 15 000 et 20 000 rials par mois (entre 60 et 80 dollars) ;

b) Du fait de la perturbation des services éducatifs, les enfants se retrouvent souvent oisifs et sont plus facilement victimes de recruteurs de rue ;

c) Les familles qui vivent toujours dans des zones contrôlées par les forces houthistes et pro-Saleh n'osent pas dénoncer ces campagnes de recrutement, qui se poursuivent donc sans obstacle ;

d) La fermeture des aéroports et les restrictions imposées sur les visas empêchent les parents qui auraient les moyens de le faire d'envoyer leurs enfants à l'étranger pour assurer leur protection.

## **IX. Entraves à l'aide humanitaire**

187. Conformément au paragraphe 19 de la résolution [2216 \(2015\)](#), le Groupe d'experts continue d'enquêter sur les obstacles à l'acheminement de l'aide humanitaire au Yémen, ainsi qu'à l'accès à cette aide ou à sa distribution dans le pays.

### **A. Obstacles à l'acheminement de l'aide humanitaire**

188. La coalition dirigée par l'Arabie saoudite a continué de faire obstacle à l'acheminement de l'aide humanitaire et de marchandises au Yémen : a) en continuant à bloquer les vols commerciaux vers l'aéroport de Sanaa (voir annexe 70) ; b) en imposant progressivement des restrictions sur les marchandises d'usage non militaire qui entrent au Yémen par les ports de la mer Rouge (voir annexe confidentielle 71) et c) en limitant strictement les importations de biens commerciaux et d'aide humanitaire entre le 6 et le 23 novembre 2017. Au cours de ladite période, plus de

<sup>194</sup> Voir article 3 commun aux Conventions de Genève de 1949 et article 7.1 du Protocole additionnel aux Conventions de Genève relatif à la protection des victimes des conflits armés non internationaux (Protocole II).

750 600 tonnes de produits commerciaux et humanitaires ont été détournées du Yémen ou n'ont pu entrer dans le pays qu'avec retard<sup>195</sup>.

189. En imposant davantage de restrictions le 6 novembre 2017, la coalition dirigée par l'Arabie saoudite a de nouveau cherché à s'appuyer sur les dispositions du paragraphe 14 de la résolution 2216 (2015) pour entraver l'entrée sur le territoire yéménite de biens d'usage essentiellement civil. Le fait d'empêcher l'accès de la population à nombre des produits figurant à l'annexe confidentielle 71 est contraire à l'esprit de ladite résolution.

190. Le blocus consiste essentiellement à utiliser la menace de la famine comme outil de négociation et arme de guerre. De la même manière, la population est un pion pour les forces houthistes qui intensifient leurs frappes contre l'Arabie saoudite en ayant parfaitement conscience que les éventuelles représailles pèseront en premier lieu sur les civils. Les houthistes comptent sur la condamnation publique de la réaction saoudienne pour se dédouaner de leurs responsabilités à cet égard.

191. En 2017, les États Membres ont continué de ne pas soumettre de rapports concernant les inspections effectuées sur leur territoire et de contrevenir en cela au paragraphe 17 de la résolution 2216 (2015). Ce faisant, ils entravent l'exercice des fonctions du Comité en matière de surveillance, telles qu'elles sont définies au paragraphe 17 de la résolution 2216 (2015), et sapent les mesures mises en place pour garantir que le régime de sanctions n'est pas détourné pour servir des objectifs unilatéraux.

## B. Obstacles à la distribution de l'aide humanitaire

192. En 2017, les forces houthistes et pro-Saleh ont continué de faire obstacle à la distribution de l'aide humanitaire et à l'accès humanitaire<sup>196</sup>. Le Groupe d'experts a enquêté sur les obstacles en question, à savoir : a) le détournement de l'aide humanitaire ; b) les délais ou les refus qui retardent la distribution ; c) les arrestations, les mises en détention, l'intimidation et les actes de torture dont sont victimes les travailleurs humanitaires et la confiscation de leur matériel ; d) les interférences dans la sélection des bénéficiaires, des zones d'opération et des partenaires d'exécution ; e) le classement de certaines zones comme « zones militaires », ce qui les rend inaccessibles aux travailleurs humanitaires ; f) les faits d'extorsion et de racket ; d) le fait d'entraver la livraison du matériel destiné à lutter contre le choléra ; h) les difficultés liées aux procédures de dédouanement ; i) les autorisations tardives qui ralentissent l'importation de médicaments par l'aéroport de Sanaa. La situation est rendue plus difficile encore par le non versement du salaire des fonctionnaires et les restrictions qui pèsent sur la délivrance de visas aux humanitaires.

193. Le Groupe d'experts a également enquêté sur les entraves à l'accès humanitaire imposées par les branches exécutives du pouvoir houthiste (à Taëz, Hajja et Hodeïda), les ministères de l'éducation et de la santé et l'organisme de sécurité nationale basés à Sanaa, dont certains militarisent la distribution de l'aide humanitaire. Le Groupe a établi que Motlaq Amer al-Marrani (connu également sous le nom d'Abu Emad), directeur adjoint de l'organisme de sécurité nationale basé à Sanaa, s'était également rendu responsable d'arrestations et de détentions arbitraires ainsi que de mauvais traitements à l'encontre de travailleurs humanitaires et d'autres membres des services

<sup>195</sup> Informations obtenues par l'intermédiaire du mécanisme de vérification et d'inspection des Nations Unies et de la base de données LogCluster.

<sup>196</sup> Selon des sources de l'Organisation des Nations Unies et des organisations non gouvernementales internationales et nationales.

d'aide humanitaire. Cet individu s'est aussi indûment servi de l'autorité et des pouvoirs qu'il détient dans le domaine de l'accès humanitaire pour s'enrichir.

194. À la demande des acteurs humanitaires, les informations et l'analyse confidentielles concernant la présente section sont consignées à l'annexe confidentielle 72.

## X. Recommandations

195. Le Groupe d'experts recommande au Conseil de sécurité ce qui suit :

a) Envisager d'appeler, dans une résolution ou dans une déclaration de son Président, les États membres de la coalition dirigée par l'Arabie saoudite à ne pas invoquer de manière abusive la résolution 2216 (2015) pour justifier des entraves à l'acheminement de biens essentiels et de l'aide humanitaire par voie aérienne ou maritime ;

b) Envisager, en tant que mesure de confiance, d'autoriser le déploiement d'un vaisseau neutre dans les eaux du port d'Hodeïda, sous les auspices du mécanisme de vérification et d'inspection des Nations Unies, en vue d'accélérer les déchargements et d'assurer une présence neutre aux fins de l'inspection et de la surveillance du déchargement des vaisseaux commerciaux dans les territoires contrôlés par les houthistes ;

c) Envisager de spécifier, dans une résolution, que les composants utilisés pour fabriquer du matériel militaire peuvent relever du champ d'application de l'embargo ciblé sur les armes ;

d) Envisager de demander au Comité d'établir, avec l'appui du Groupe, en collaboration avec les autres organismes concernés des Nations Unies, notamment le Bureau des affaires de désarmement, et en consultation avec les organes et organisations internationales et régionales, un rapport spécial sur l'utilisation militaire des véhicules aériens téléguidés commerciaux dans des zones de conflit et sur ses incidences, et de formuler des recommandations concernant les mesures propres à lutter contre le transfert et l'utilisation de tels engins.

196. Le Groupe recommande au Comité ce qui suit :

a) Envisager de se mettre en rapport avec l'Organisation maritime internationale<sup>197</sup> pour lui recommander de prendre attache avec le groupe d'armateurs qui a publié les *Meilleures pratiques de gestion pour la protection contre les pirates basés en Somalie* en vue de s'assurer que les mesures de protection qui y sont décrites sont adaptées aux nouvelles menaces qui se sont fait jour dans la mer Rouge ;

b) Envisager d'intervenir auprès des Forces maritimes combinées pour les encourager à coopérer avec le Groupe, conformément au paragraphe 10 de la résolution 2117 (2013) et au paragraphe 8 de la résolution 2342 (2017), et à donner suite à ses demandes d'information ;

c) Envisager de rappeler aux États Membres l'obligation qui leur incombe, aux termes du paragraphe 11 de la résolution 2140 (2014), de geler immédiatement les fonds, autres avoirs financiers et ressources économiques se trouvant sur leur territoire qui sont en la possession ou sous le contrôle direct ou indirect des personnes ou entités désignées par le Comité ou de toute personne ou entité agissant pour le compte ou sur les ordres de celles-ci, ou de toute entité en leur possession ou sous leur contrôle, s'agissant notamment, pour les Émirats arabes unis, de Khaled Ali

<sup>197</sup> Voir <http://www.imo.org/fr>.

Abdullah Saleh et des biens placés sous sa gestion, décrits dans le présent rapport et dans le rapport du Comité daté du 31 janvier 2017 (S/2017/81) ;

d) Envisager d'intervenir auprès de l'Organisation des Nations Unies pour l'éducation, la science et la culture afin de l'encourager à publier un communiqué visant à signaler aux sociétés de vente aux enchères et aux musées que l'exportation et la vente de biens culturels yéménites sont illégales et qu'il convient de vérifier que les fonds issus de transactions liées au patrimoine culturel du Yémen ne serviront pas à financer des groupes armés ;

e) Envisager d'engager le Gouvernement du Yémen à mettre en place, en collaboration avec les institutions financières internationales et la coalition dirigée par l'Arabie saoudite, des mécanismes permettant aux banques yéménites qui disposent de mesures effectives de lutte contre le blanchiment d'argent de transférer des devises fortes à l'étranger en vue d'obtenir les lettres de crédit nécessaires à la gestion des importations ;

f) Envisager de prendre attache avec le Bureau du Secrétaire général en vue d'examiner la mise en place, à l'échelon du mécanisme de vérification et d'inspection des Nations Unies, d'un dispositif de prise en charge des plaintes émanant des chargeurs et des transitaires, qui serait accessible sur le site Web du mécanisme.

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**Annex 1: Methodology**

1. The Panel used satellite imagery of areas of Yemen procured by the United Nations from private providers to support its investigations. It also used commercial databases recording maritime and aviation data and mobile phone records. Public statements by officials through their official media channels were accepted as factual unless contrary facts were established. While the Panel strived to be as transparent as possible, in situations in which identifying sources would have exposed them or others to unacceptable personal security risks, the Panel decided not to include identifying information in the present report and instead placed the relevant evidence in United Nations archives.
2. The Panel reviewed social media, but no information gathered was used as evidence unless it could be corroborated using multiple independent or technical sources, including eyewitnesses, to appropriately meet the highest achievable standard of proof.
3. The spelling of toponyms within Yemen often depends on the ethnicity of the source or the quality of transliteration. The Panel has adopted a consistent approach in the present report.
4. The Panel has placed importance on the rule of consensus among the Panel members and agreed that, if differences and/or reservations arise during the development of the report, it would only adopt the text, conclusions and recommendations by a majority of four out of the five members. In the event of a recommendation for designation of an individual or a group, such recommendation would be done on the basis of unanimity.
5. The Panel has offered the opportunity to reply to Member States, entities and individuals involved in the majority of incidents that are covered in this report. Their response has been taken into consideration in the Panel's findings. The methodology for this is provided in appendix A.

## Appendix A to Annex 1: ‘The opportunity to reply’ methodology used by the Panel

1. Although sanctions are meant to be preventative not punitive, it should be recognized that the mere naming of an individual or entity<sup>1</sup> in a Panel’s report, could have adverse effects on the individual. As such, where possible, individuals concerned should be provided with an opportunity to provide their account of events and to provide concrete and specific information/material in support of their narrative. Through this interaction, the individual is given the opportunity to demonstrate that their alleged conduct does not fall within the relevant listing criteria. This is called the ‘opportunity to reply’.
2. The Panel’s methodology on the opportunity to reply is as follows:
  - (a) Providing an individual with an ‘opportunity to reply’ should be the norm;
  - (b) The Panel may decide not to offer an opportunity of reply if there is credible evidence that it would unduly prejudice its investigations, including if it would:
    - (i) Result in the individual moving assets if they get warning of a possible recommendation for designation;
    - (ii) Restrict further access of the Panel to vital sources;
    - (iii) Endanger Panel sources or Panel members;
    - (iv) Adversely and gravely impact humanitarian access for humanitarian actors in the field; or
    - (v) For any other reason that can be clearly demonstrated as reasonable and justifiable in the prevailing circumstances.
3. If the circumstances set forth in 2 (b) do not apply, then the Panel should be able to provide an individual an opportunity to reply.
4. The individual should be able to communicate directly with the Panel to convey their personal determination as to the level and nature of their interaction with the Panel.
5. Interactions between the Panel and the individual should be direct, unless in exceptional circumstances.
6. In no circumstances can third parties, without the knowledge of the individual, determine for the individual its level of interaction with the Panel.
7. The individual, on the other hand, in making their determination of the level and nature of interaction with the Panel, may consult third parties or allow third parties (for example, legal representative or his government) to communicate on his/her behalf on subsequent interactions with the Panel.

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<sup>1</sup> Hereinafter just the term individual will be used to reflect both.

## Appendix B to Annex 1: Violations relating to IHL, IHRL, and acts that constitute human rights abuses investigative methodology

1. The Panel adopted the following stringent methodology to ensure that its investigations met the highest possible evidentiary standards, despite it being prevented from visiting places in Yemen other than Aden. In doing so it has paid particular attention to the “Informal Working Group on General Issues of Sanctions Reports”, [S/2006/997](#), on best practices and methods, including paragraphs 21, 22 and 23, as requested by paragraph 11 of resolution [2342 \(2017\)](#).
2. The Panel’s methodology in relation to its investigations concerning IHL, IHRL and human rights abuses is set out as below:
  - (a) All Panel investigations are initiated based on verifiable information being made available to the Panel, either directly from sources or from media reports.
  - (b) In carrying out its investigations on the use of explosive ordnance, the Panel relies on at least three or more of the following sources of information:
    - (i) At least two eye-witnesses or victims;
    - (ii) At least one individual or organization (either local or international) that has also independently investigated the incident;
    - (iii) If there are casualties associated with the incident, and if the casualties are less than ten in number, the Panel obtains copies of death certificates and medical certificates. In incidents relating to mass casualties, the Panel relies on published information from the United Nations and other organizations;
    - (iv) Technical evidence, which includes imagery of explosive events such as the impact damage, blast effects, and recovered fragmentation. In all cases, the Panel collects imagery from at least two different and unrelated sources. In the rare cases where the Panel has had to rely on open source imagery, the Panel verifies that imagery by referring it to eyewitnesses or by checking for pixilation distortion;
      - a. In relation to air strikes, the Panel often identifies the responsible party through crater analysis or by the identification of components from imagery of fragmentation; and
      - b. The Panel also analyses imagery of the ground splatter pattern at the point of impact from mortar, artillery, or free flight rocket fire to identify the direction from which the incoming ordnance originated. This is one indicator to assist in the identification of the perpetrator for ground fire when combined with other source information.
    - (v) The utilisation of open source or purchased satellite imagery wherever possible, to identify the exact location of an incident, and to support analysis of the type and extent of destruction. Such imagery may also assist in the confirmation of timelines of the incident;
    - (vi) Access to investigation reports and other documentation of local and international organizations that have independently investigated the incident;
    - (vii) Other documentation that supports the narrative of sources, for example, factory manuals that may prove that the said factory is technically incapable of producing weapons of the type it is alleged to have produced;
    - (viii) In rare instances where the Panel has doubt as to the veracity of available facts from other sources, local sources are relied on to collect specific and verifiable information from the ground. (For example, if the Panel wished to confirm the presence of an armed group in a particular area);

- (ix) Statements issued by or on behalf of a party to the conflict responsible for the incident; and/or
  - (x) Open source information to identify other collaborative or contradictory information regarding the Panel's findings.
- (c) In carrying out its investigations on deprivation of liberty and associated violations the Panel relies on the following sources of information:
- (i) The victims, where they are able and willing to speak to the Panel, and where medical and security conditions are conducive to such an interview;
  - (ii) The relatives of victims and others who had access to the victims while in custody. This is particularly relevant in instances where the victim dies in custody;
  - (iii) Interviews with at least one individual or organization (either local or international) that has also independently investigated the incident;
  - (iv) Medical documentation and, where applicable, death certificates;
  - (v) Documentation issued by prison authorities;
  - (vi) Interviews with medical personnel who treated the victim, wherever possible;
  - (vii) Investigation and other documentation from local and international organizations that have independently investigated the incident. The Panel may also seek access to court documents if the detainee is on trial or other documentation that proves or disproves the narrative of the victim;
  - (viii) Where relevant, the Panel uses local sources to collect specific and verifiable information from the ground, for example, medical certificates;
  - (ix) Statements issued by the party to the conflict responsible for the incident; and/or
  - (xx) Open source information to identify other collaborative or contradictory information regarding the Panel's findings.
- (d) In carrying out its investigations on other violations, including forced displacement and threats against medical workers, the Panel relies on information that includes:
- (i) Interviews with victims, eyewitnesses, and direct reports where they are able and willing to speak to the Panel, and where conditions are conducive to such an interview;
  - (ii) Interviews with at least one individual or organization (either local or international) that has also independently investigated the incident;
  - (iii) Documentation relevant to verify information obtained;
  - (iv) Statements issued by the party to the conflict responsible for the incident; and/or
  - (v) Open source information to identify other collaborative or contradictory information regarding the Panel's findings.
- (e) The standard of proof is met when the Panel has reasonable grounds to believe that the incidents had occurred as described and, based on multiple corroboratory sources, that the responsibility for the incident lies with the identified perpetrator. The standard of proof is "beyond a reasonable doubt".



(f) Upon completion of its investigation, wherever possible, the Panel provides those responsible with an opportunity to respond to the Panel's findings in so far as it relates to the attribution of responsibility. This is undertaken in accordance with the Panel's standard methodology on the opportunity to reply. Generally, the Panel would provide detailed information in any opportunity to respond, including geo-locations. However, detailed information on incidents are not provided when there is a credible threat that it would threaten Panel sources, for example, in violations related to deprivation of liberty, violations associated with ground strikes on a civilian home, or in violations associated with children.

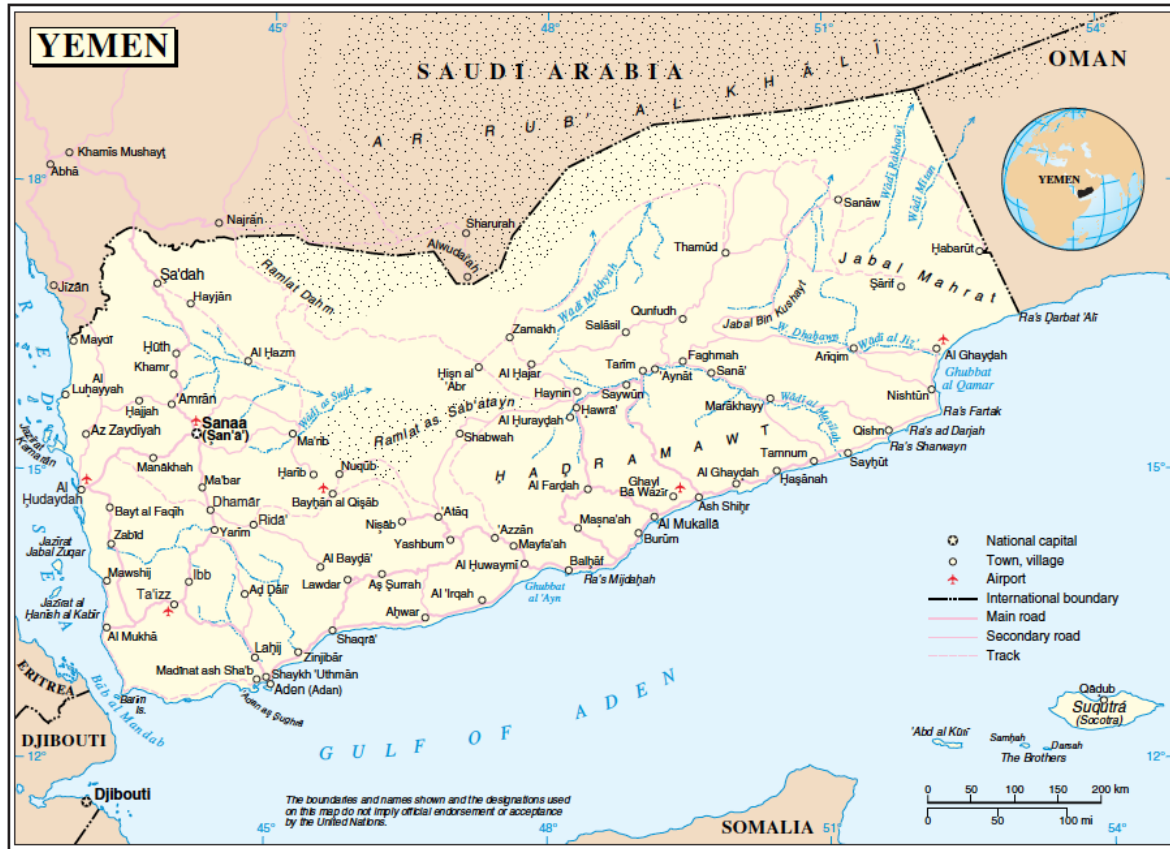
(g) If a party does not provide the Panel with the information requested, the Panel will consider whether this is of sufficient gravity to be considered as non-compliance with paragraph 8 of resolution [2342 \(2017\)](#), and thus consideration for reporting to the Committee.

3. The Panel will not include information in its reports that may identify or endanger its sources. Where it is necessary to bring such information to the attention of the Council or the Committee, the Panel may include more source information in confidential annexes.

4. The Panel will not divulge any information that may lead to the identification of victims, witnesses, and other particularly vulnerable Panel sources, except: 1) with the specific permission of the sources; and 2) where the Panel is, based on its own assessment, certain that these individuals would not suffer any danger as a result. The Panel stands ready to provide the Council or the Committee, on request, with any additional imagery and documentation to supports the Panel's findings beyond that included in its report. Appropriate precautions will be taken though to protect the anonymity of its sources.

## Annex 2: UN Geographic Information Systems (GIS) map (place name identification)

Figure 2.1  
UN GIS place names Yemen



Map No. 3847 Rev. 3 UNITED NATIONS  
January 2004

Department of Peacekeeping Operations  
Cartographic Section

### Annex 3: Summary of Panel correspondence (2017)

Table 3.1  
Correspondence with Member States <sup>1</sup>

<i>Member State</i>	<i>Number of letters sent by the Panel</i>	<i>Number of unanswered letters by Member State</i>	<i>Remarks</i>
Australia	3	3	
Bulgaria	1		
Canada	1		
China	7		
Djibouti	2		
Egypt	2		
Finland	1		
France	4	4	
Germany	3		
India	3		
Islamic Republic of Iran	9	5	
Italy	4		
Japan	1		
Marshall Islands	1	1	
Netherlands	1		
Oman	5	1	
Philippines	1		
Republic of Korea	2		
Russian Federation	5	3	
Kingdom of Saudi Arabia	30	7	
Serbia	2	2	
Singapore	3		
Slovakia	1		
Sweden	1		
Switzerland	9		
Togo	1		
Turkey	2		
Ukraine	2		
United Arab Emirates	22	4	
United Kingdom of Great Britain and Northern Ireland	4	2	
United States of America	10		
Yemen	26	11	

<sup>1</sup> This includes letters received by the Panel in Arabic on 2 January 2018, which had been outstanding for some months. This has not allowed the Panel time to fully analyze and verify all the information provided; hence some of it has not been included in the annexes to this report. The information will be used in ongoing investigations and reported on accordingly at the appropriate time.

<i>Member State</i>	<i>Number of letters sent by the Panel</i>	<i>Number of unanswered letters by Member State</i>	<i>Remarks</i>
<b>Total</b>	<b>169</b>	<b>43</b>	25% unanswered

Table 3.2

**Correspondence with Sana'a based authorities**

<i>Entity</i>	<i>Number of letters sent by the Panel</i>	<i>Number of unanswered letters by entity</i>	<i>Remarks</i>
Sana'a based ministry of foreign affairs	3	2	
<b>Total</b>	<b>3</b>	<b>2</b>	

Table 3.3

**Correspondence with international and regional organizations**

<i>Organization</i>	<i>Number of letters sent by the Panel</i>	<i>Number of unanswered letters by entity</i>	<i>Remarks</i>
Combined Maritime Force	6	6	
IFC (World Bank Group)	1		
<b>Total</b>	<b>7</b>	<b>6</b>	

Table 3.4

**Correspondence with commercial companies**

<i>Company</i>	<i>Number of letters sent by the Panel</i>	<i>Number of unanswered letters by entity</i>	<i>Remarks</i>
Aerovironment (USA)	1	1	Holding email only
Daewoo (Republic of Korea)	1	1	
Dileton Maritime (Greece)	1		
Garmin (USA)	2	1	
MSA Incorporated (USA)	1		
PayPal (USA)	1	1	
Phillips (Netherlands)	1	1	
Prime Tanker Management (Greece)	1		
Winterbotham (Bahamas)	1	1	
<b>Total</b>	<b>10</b>	<b>6</b>	

Table 3.5

**Correspondence with Individuals**

<i>Individual</i>	<i>Number of letters sent by the Panel</i>	<i>Number of unanswered letters by entity</i>	<i>Remarks</i>
Ahmed Ali Abdullah Saleh (Yei.005)	1		

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<i>Individual</i>	<i>Number of letters sent by the Panel</i>	<i>Number of unanswered letters by entity</i>	<i>Remarks</i>
<b>Total</b>	<b>1</b>		

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## Annex 4: Governors loyal to the legitimate Government

Table 4.1  
Governors loyal to the legitimate Government

<i>Se r</i>	<i>Name</i>	<i>Governorate / municipality</i>	<i>Remarks / Appointed</i>
1	<i>(Abd al-Aziz al-Maflakhi,<sup>1</sup> resigned 16 November 2017)</i>	Aden	Resigned November 2017
2	Major General Abu Bakr Hussayn Salem	Abyan	Previous Axis Commander in Abyan Resigned 22
3	Major General Abd al-Ghani Hafed'llah Jamil	Amanat Al Asimah	Minister of State
4	Abd al-Rahman Khazm al-Sa'wr	Amran	July 2017
5	Saleh Ahmed Ali al-Rasas <i>(Replaced Nayef Salih Salem al-Qaysi (QDi.402) on 23 July 2017)</i>	Bayda'	
6	Major General Ali Muqbil Saleh <sup>2</sup> <i>(Replaced Dr Fadhi al-Ja'di)</i>	Dali'	24 December 2017
7	Major General Ali al-Qawsi	Dhamar	
8	Brigadier General Faraj Salami al-Bahasani	Hadramawt	Commander, 2 <sup>nd</sup> Military District. June 2017
9	Major General Abd al-Karim al-Sanini	Hajjah	
10	Dr. al-Hasan Ali Taher	Hudaydah	
11	Major General Abd al-Wahab al-Wai'li	Ibb	
12	Amin al-'Akimi	Jawf	
13	Brigadier General Ahmed Abdullah al-Turky <sup>3</sup> <i>(Replaced Dr Naser al-Khubaji)</i>	Lahij	24 December 2017
14	Rajah Said Ba'Krait <i>(Replaced Mohammed Abdallah Kudah)</i>	Mahrah	28 November 2017
15	Salah Sami'ah	Mahwit	
16	Major General Sultan Ali Mabkhout al-Aradha	Ma'rib	
17	Mohammed al-Hawri	Raymah	
18	Hadi Tarshan Abdullah Tarshan	Sa'dah	

<sup>1</sup> President Hadi issued a statement refusing to accept his resignation. Governor Maflakhi remains outside Yemen. See <http://www.worldbulletin.net/headlines/196024/yemeni-president-rejects-aden-governors-resignation>.

<sup>2</sup> Major General Saleh also remains commander of the 33<sup>rd</sup> Armored Brigade in Dali'.

<sup>3</sup> Brigadier General Ahmed Abdullah al-Turky also remains commander of the 17<sup>th</sup> Infantry Brigade.

<i>Se r</i>	<i>Name</i>	<i>Governorate / municipality</i>	<i>Remarks / Appointed</i>
19	Major General Abd al-Qawi Ahmed 'Ubad al-Sharif	Sana'a	
20	Ali Bin Rashid al-Harthi	Shabwah	June 2017
21	Ahmed Abdullah Ali al-Soqotri	Socotra	June 2017
22	Ameen Ahmed Mahmoud (Replaces Ali al-Mamari) <sup>4</sup>	Ta'izz	24 December 2017

<sup>4</sup> Resigned in late September 2017 over unpaid salaries in his governorate, he rescinded his resignation, and remained in office until replaced. <http://en.nthnews.net/2017/09/28/taiz-governor-appointed-by-hadi-announced-his-resignation-because-of-disagreement-over-salaries/>.

**Annex 5: Network of Nayef Salih Salem al-Qaysi<sup>1</sup>**

Table 5.1  
**Network of Nayef Salih Salem al-Qaysi<sup>2</sup>**

<i>Ser</i>	<i>Name</i>	<i>Position</i>	<i>Location</i>
1	Abdo Rabbo al-Qaysi	Office manager	Aden
2	Ahmed Saleh al-Aysi		
3	Jalal Muqatah		Aden
4	Mohammed Saleh al-Ghunaimy	Local resistance leader	Diy Na'am Front
5	Mohammed Abd al-Qawi Musa al-Homaiqani	Ta'izz front liaison	

<sup>1</sup> <https://www.treasury.gov/press-center/press-releases/Pages/jl0462.aspx>.

<sup>2</sup> <https://www.treasury.gov/press-center/press-releases/Pages/jl0462.aspx>.



## Annex 6: Leadership and structure of provincial security and Security Belt forces<sup>1</sup>

Table 6.1  
Leadership and structure of provincial security and Security Belt forces

<i>Serial</i>	<i>Name</i>	<i>Position</i>	<i>Location</i>	<i>Remarks</i>
1	Colonel Khader al-Nub <sup>2</sup>	Director of General Security	Abyan	
2	Colonel Abd al-Latif al-Sayed <sup>3</sup>	Commander Security Belt Forces	Abyan	
3	Lieutenant Colonel Mohammed al-Oban	Deputy Commander Security Belt Forces	Abyan	
5	Major General Shallal Ali Shaye	Director of General Security	Aden	
6	Brigadier General Wadha Omar Abdulaziz <sup>4</sup>	Commander Security Belt and 3 <sup>rd</sup> Support Brigade	Aden	
7	Brigadier General Munir Mahmoud Ahmed al-Mashali <sup>5</sup>	Commander 1 <sup>st</sup> Support Brigade <sup>6</sup> Emergency Forces	Abyan/Aden	
8	Colonel Nabil al-Mashwashi	Commander 2 <sup>nd</sup> Support Brigade	Aden	
9	Colonel Hader al-Shukhaty	Commander 4 <sup>th</sup> Support Brigade	Lahij	
10	Colonel Mukhtar al-Nubi	Commander 5 <sup>th</sup> Support Brigade	Radfan/Lahij	

<sup>1</sup> Note. Directors of General Security fall under the umbrella of the Ministry of Interior. Security Belt Forces are now organized under each General Security Directorate, as per confidential security officials.

<sup>2</sup> Appointed 14 November 2017, replacing Brigadier General Abdullah al-Fadhli.

<sup>3</sup> Former head of Abyan popular Committees In south Yemen, a militia leader is president's top ally. The Daily Mail, 24 March 2015. <http://www.dailymail.co.uk/wires/ap/article-3009836/In-south-Yemen-militia-leader-presidents-ally.html>.

<sup>4</sup> Replaced Nasser al-Shukhaty.

<sup>5</sup> Also known as Abu al-Yamama al-Yafa'i.

<sup>6</sup> Security Belt Forces component since 17 February 2017.

**Annex 7: Southern Transitional Council (STC) local office directors<sup>1</sup>**

Table 7.1  
**Southern Transitional Council local office directors**

<i>Ser</i>	<i>Name</i>	<i>Position</i>	<i>Office Location</i>
1	Aydarous Muhammed Saleh Haqis	Head of Office	Abyan
2	Dr. Abd al-Nasser Ahmed Ali al-Waly	Head of Office	Aden
3	Abdullah Mahdi Saeed Ahmed	Head of Office	Dali'
4	Nassib bin Ahmed bin Nassib al-'Omry	Head of Office	Hadramawt
5	Faysal Ahmed Hamash Saleh	Head of Office	Lahij
6	Salem Ali Saeed al-Qamiry	Head of Office	Mahrah
7	Ali Muhsin Rawis al-Suleimany	Head of Office	Shabwah
8	Nazim Mubarak Ali bin Qablan	Head of Office	Soqatra

<sup>1</sup> The names were announced on 30 November 2017, see <http://adengad.net/news/290304/>.

## Annex 8: Houthi Governors

Table 8.1  
Houthi appointed governors<sup>1</sup>

<i>Ser</i>	<i>Name</i>	<i>Governorate / municipality</i>	<i>Remarks</i>
1		Aden	
2		Abyan	
3		Amanat Al Asimah	
4	Faysal Ja'man	Amran	
5		Bayda'	
6		Dali'	
7	Fadhil al-Sharqi	Dhamar	
8		Hadramawt	
9	Nayef Abu Kharfashah	Hajjah	
10	Abd al-Khaliq Badr al-Din al-Houthi	Hudaydah	
11	Abd al-Wahid Saleh	Ibb	
12	Sam al-Malahi	Jawf	
13		Lahij	
14		Mahrah	
15		Mahwit	
16		Ma'rib	
17	Murad al-Sharef	Raymah	
18		Sa'dah	
19	Ahmed Qatinah	Sana'a	
20		Shabwah	
21		Socotra	
22	Mansour al-Lakoumi	Ta'izz	

<sup>1</sup> The table includes all governorates of Aden to illustrate those to which the Houthis' have appointed governors.

## Annex 9: The killing of Khaled Ahmed al-Radhi

### I. Introduction

1. The Panel is investigating whether the killing of Khalid Ahmed al-Radhi by the Houthis, on 26 August 2017<sup>1</sup> was a targeted killing, part of a larger strategy or as a consequence of confusion. Khaled Ahmed al-Radhi served as a deputy of the GPC foreign policy committee, was a Colonel in the Armed Forces and the owner of Vulcan Group, the most important supplier of material for the Yemeni Ministry of Defence during Ali Abdullah Saleh (YEi.003)'s presidency.<sup>2</sup>

2. Khaled al-Radhi's family extends from tribal elements in Amran, namely the Al Kharef tribe of the Hashid Confederation, which was led by Bayt al-Ahmar until 2014 when Houthis took over Amran governorate.<sup>3</sup> His family, of Zaydi background, included various pro-Houthi members as well as officials within the GPC and pro-Saleh armed forces. His cousin, Ambassador Abdullah Ali al-Radhi, a former Yemeni envoy to Tehran<sup>4</sup> and London<sup>5</sup> during Ali Abdullah Saleh (YEi.003)'s presidency, is well known for his links to the regime in Tehran. The family's status survived the six wars between Ali Abdullah Saleh (YEi.003)'s regime and Houthis,<sup>6</sup> and the 2011 uprising.

### II. Tensions within the Houthi-Saleh alliance

3. As result of distrust, miscalculation and obstructed lines of communication between former president Ali Abdullah Saleh (YEi.003) and the Houthi leadership, pre-existing tensions within the alliance of necessity deepened in 2017. A speech by Abdulmalik al-Houthi (YEi.004) on 19 August 2017<sup>7</sup> brought to light the level of looming tension. Abdulmalik al-Houthi (YEi.004) referred to rising threats by a 'Fifth Column', used by his supporters to accuse GPC elements protesting unpaid salaries. The speech served to pave the ground for much graver accusations of treason against Ali Abdullah Saleh (YEi.003) and his party.<sup>8</sup>

4. Ali Abdullah Saleh (YEi.003) responded on 20 August<sup>9</sup> 2017 with a speech of his own, setting the stage for the rally in Sana'a on 24 August 2017 to commemorate the 35<sup>th</sup> anniversary of the establishment of the GPC.<sup>10</sup> By this time the Houthis had begun to mobilise militia elements around the capital limits,<sup>11</sup> calling the deployment a security operation, which was not meant to intimidate the GPC. By Saturday 26 August 2016, the Houthis had established a number of checkpoints around Sana'a, some coincidentally, very near residential sites of Ali Abdullah Saleh (YEi.003)'s family and party members.

<sup>1</sup> <https://www.thenational.ae/world/mena/pro-saleh-colonel-killed-in-fighting-with-houthi-allies-in-sanaa-1.623118>.

<sup>2</sup> <http://vulcaniyemen.com/>. The Panel has evidence indicating his involvement in previous contracts.

<sup>3</sup> Houthi militia took control of Shaykh Abdullah bin Hussein al-Ahmar's (d. Dec. 2007) complex in al-Khamr, Amran and demolished all residential quarters on 2 February 2014. See <https://yemenpress.com/news26876.html>.

<sup>4</sup> <https://worldpeace365.wordpress.com/2017/11/08/iran-in-yemen-tehrans-shadow-looms-large-but-footprint-is-small/>; [https://wikileaks.org/plusd/cables/09SANAA149\\_a.html](https://wikileaks.org/plusd/cables/09SANAA149_a.html); [https://wikileaks.org/plusd/cables/09SANAA1662\\_a.html](https://wikileaks.org/plusd/cables/09SANAA1662_a.html).

<sup>5</sup> <https://www.reuters.com/article/us-yemen-saleh/yemens-saleh-stable-recovering-ambassador-idUSTRE75A1HH20110611>.

<sup>6</sup> [https://www.rand.org/content/dam/rand/pubs/monographs/2010/RAND\\_MG962.pdf](https://www.rand.org/content/dam/rand/pubs/monographs/2010/RAND_MG962.pdf).

<sup>7</sup> <http://www.aljazeera.com/news/2017/08/yemen-saleh-stages-mass-rally-houthi-rift-170824183626444.html>.

<sup>8</sup> <https://www.thenational.ae/world/houthi-rebels-may-soon-oust-saleh-yemen-vice-president-says-1.628087>.

<sup>9</sup> <https://www.youtube.com/watch?v=QZHPiVj3ts4andfeature=youtu.be>.

<sup>10</sup> <http://www.aljazeera.com/news/2017/08/yemen-saleh-stages-mass-rally-houthi-rift-170824183626444.html>.

<sup>11</sup> [https://www.youtube.com/watch?v=SArTj\\_AuA0andfeature=youtu.be](https://www.youtube.com/watch?v=SArTj_AuA0andfeature=youtu.be).

### **III. The killing of Khaled Ahmed al-Radhi**

5. Check points not only emerged in order to constrain the movement of Ali Abdullah Saleh (YEi.003) and his loyalists, but as was the case on Saturday 26 August 2017, they aimed to instigate confrontations. Such was the case when Salah Ali Abdullah Saleh and his armed escort were stopped at a check point in the Hadda District, leading to an altercation and clashes when Salah refused to exit his vehicle, and his armed escorts scuffled with Houthi elements. Khaled Ahmed al-Radhi responded by deploying armed tribal elements, in attempts to de-escalate the confrontation and mediate Salah's right of way. The Houthis shot Al-Radhi dead upon exiting his own vehicle.

6. The immediate response to al-Radhi's killing was the suggestion it was a targeted assassination, as one shot to the head was identified as cause of death, with a second wound in the torso area. Houthi gunmen were identified as the culprits, and a sniper shot to the head was confirmed to the Panel.

7. A targeted assassination was generally quickly dismissed as Houthi elements would require an order for such a thing. Furthermore, SRC president Mohammed Ali al-Houthi and SPC president Saleh al-Samad visited al-Radhi's family home on 29 August 2017 to clear all doubt. There are no confirmed reports on the traditional tribal customs arranged to repair relations between the family and Houthis. The Panel maintains the killing of Khaled al-Radhi was an accidental consequence of confusion at a time of heightened tensions.

**CONFIDENTIAL ANNEX NOT FOR PUBLIC DISSEMINATION**

**Annex 10: Ali Abdullah Saleh (YEi.003) sons**

**CONFIDENTIAL ANNEX NOT FOR PUBLIC DISSEMINATION**

**Annex 11: Ali Abdullah Saleh (YEi.003) nephews**

**CONFIDENTIAL ANNEX NOT FOR PUBLIC DISSEMINATION**

**Annex 12: Ali Abdullah Saleh (YEi.003) daughters**



### Annex 13: GPC members killed or detained by the Houthi (December 2017)

Table 13.1  
Officials of the General People's Congress (GPC) Party<sup>1</sup>

<i>Ser</i>	<i>Name</i>	<i>Title</i>	<i>Status</i>
1	<b>Ali Abdullah Saleh (YEi.003)</b>	<b>President, GPC</b>	<b>Deceased (4 December 2017)</b>
2	Sadeq Amin Abu Ras	Vice President, GPC	
3	<b>Aref Awadh al-Zuqa</b>	<b>Secretary General</b>	<b>Deceased</b>
4	Yasser Ahmed al-Awadhi	Assistant Secretary General, Regulatory Affairs	In Sana'a
5	Dr. Abu Bakr al-Qirbi	Assistant Secretary General, Cultural and Information Affairs	Outside Yemen
6	Fayqa al-Saeed	Assistant Secretary General, Civil Society Organizations	In Sana'a
7	Yahya al-Ra'i	Assistant Secretary General/ Speaker of Parliament	In Sana'a

<sup>1</sup> The Panel has been unable to confirm if Sana'a based GPC members are under detention.

**CONFIDENTIAL ANNEX NOT FOR PUBLIC DISSEMINATION**

**Annex 14: Ali Abdullah Saleh (YEi.003) wives**

## Annex 15: Mahrah Governorate Officials

Table 15.1  
Mahrah Governorate Officials

	<i>Name</i>	<i>Position</i>	<i>Location of Origin</i>	<i>Remarks</i>
1	Rajah Saeed Ba’Krait <sup>1</sup>	Governor	Hawf	
2	Salim Mohammed al-Aboodi	Assistant Governor		
3	Ahmed “Qahtan” Muhawi al-Mujibi	Chief of Security		
4	Mughareb bin Burqtaimi	Nishtun Port Director	Kudah	Serves as tribal affairs advisor
5	Ali Salem al-Kharizy	Assistant Governor for Desert Region	Miz’yunah	
6	Abdullah Issa bin Afrar	Sultan		STC member

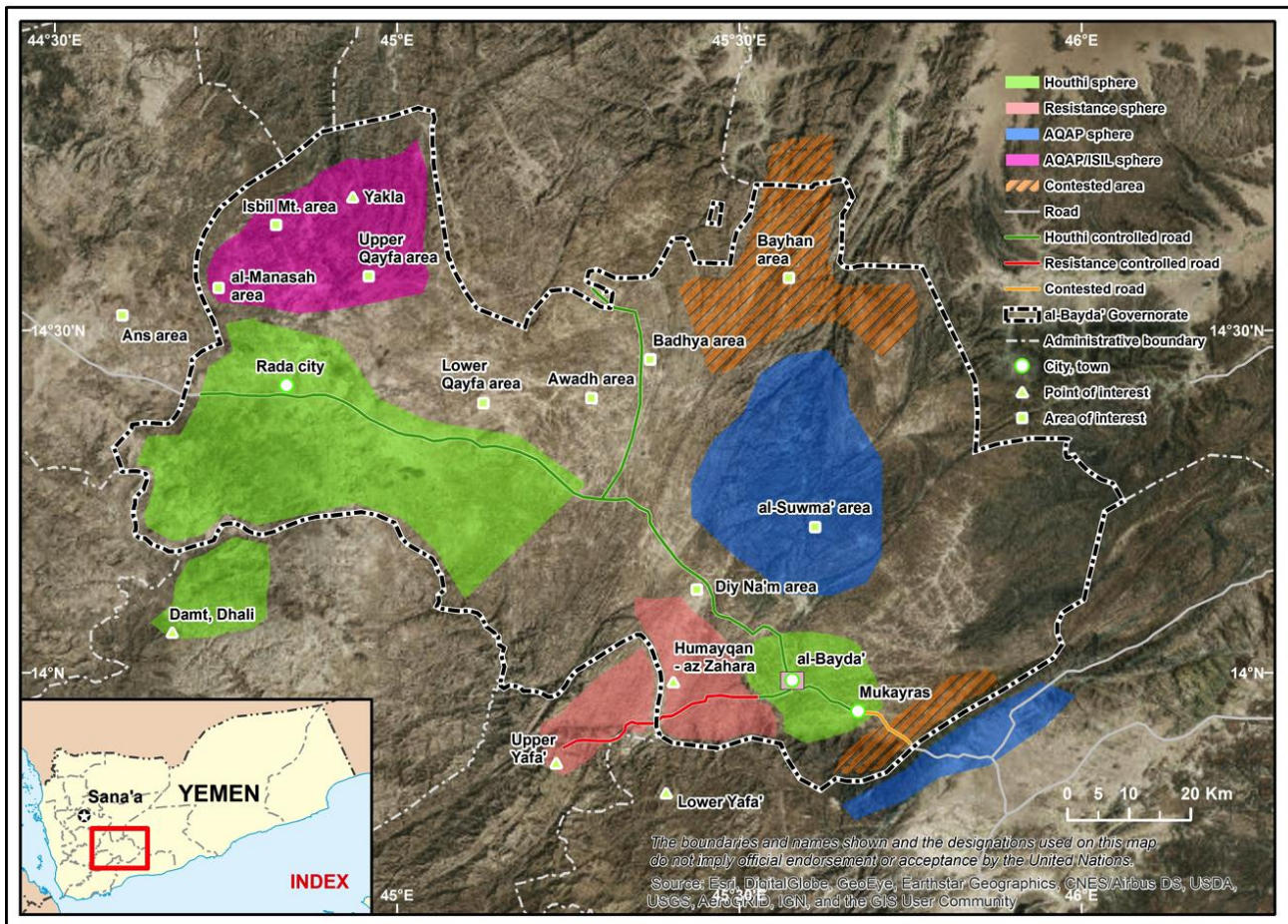
<sup>1</sup> Was appointed on 18 November 2017 by President Hadi, replacing Mohammed Abdullah Kudah.

**Annex 16: AQAP affiliates in Mahrah - 2017**

Table 16.1  
**AQAP affiliates in Mahrah - 2017**

<i>Ser</i>	<i>Name</i>	<i>Title</i>	<i>Location of Origin</i>	<i>Remarks</i>
1	Mohammed Salem Bir al-Sa'b	AQAP affiliate	Bayt Sumud tribe	
2	Abu Bakr Mohammed al-Jaylani	AQAP affiliate	Hawf	
3	Rashid Ali al-Sulimy	AQAP affiliate	Hawf	
4	Hisham al-Hamad	AQAP affiliate	Hawf	
5	Aydha bin Dhuwama	AQAP affiliate	Subaiha	
6	Mohammed Arman	AQAP affiliate	Bayt Sumud Tribe /Herma region	
7	Khudress Arman	AQAP affiliate	Bayt Sumud Tribe /Herma region	Brother to Mohammed Arman

Annex 17: Conflict Map of Bayda<sup>1</sup>



Map No. 4582 UNITED NATIONS December 2017  
 Data and location source: Panel of Experts for Yemen, United Nations Security Council Sanctions Committee

Department of Field Support  
 Geospatial Information Section (formerly Cartographic Section)

<sup>1</sup> Developed by the Panel.

**Annex 18: Network of Abd al-Wahhab al-Humayqani**

Table 18.1  
**Network of Abd al-Wahhab al-Humayqani**

<i>Ser</i>	<i>Name</i>	<i>Position</i>	<i>Location of Origin</i>	<i>Remarks</i>
1	Abdo Rabbo Hussein al-Wuhayshi	Senior aide to Abd al-Wahhab al-Homaiqani	Bayt Sumud tribe	
2	Ali Mohammed Taher al-Homaiqani	Bayda' Resistance	Hawf	
3	Mohammed Ali Mohammed Taher al-Homaiqani	Financial Officer	Hawf	
4	Hisham al-Hamad		Hawf	
5	Hussein Ali Mohammed Taher al-Homaiqani		Subaiha	
6	Suleiman Mohammed Abd al-Rahman al-Homaiqani		Bayt Sumud tribe / Herma region	
7	Abd al-Rahman Abdullah Mohammed al-Homaiqani		Bayt Sumud Tribe / Herma region	Brother to Mohammed Arman

**Annex 19: Associates of Abu al-Abbas**

Table 19.1  
**AQAP associates of Abu al-Abbas**

<i>Ser</i>	<i>Name</i>	<i>Position</i>	<i>Location</i>	<i>Remarks</i>
1	Ali al-Hassan	Salik brigade	Saber mountain	Related to Abd al-Malik al-Hudaby (also AQAP)
2	Majid Mahyub (a.k.a Majid Aby Ayhum)	Salik brigade	Saber mountain	Lieutenant to Abu al-Abbas
3	Azzam al-Farhan	Jund al-Khalifa brigade		Lieutenant to Abu al-Abbas (ISIS associated) <sup>1</sup>

Table 19.2  
**Subordinates of Abu al-Abbas**

<i>Ser</i>	<i>Name</i>	<i>Position</i>	<i>Location</i>	<i>Remarks</i>
1	Ammar al-Jendaby (a.k.a Umar al-Jandabi)	Deputy	Houd al-Sharaf and al-Shaab school	
2	Adnan Rozaiq al-Qamishy	Hassan brigade	al-Saeed library	Also a Damaj student
3	Maran Ghalib	Commander	Musy Gate	
4	Nathan Kuwati			Nephew of Maran Galib (serial 3).

Table 19.3  
**Political and civilian associates of Abu al-Abbas**

<i>Ser</i>	<i>Name</i>	<i>Position</i>	<i>Location</i>	<i>Remarks</i>
1	Abdu Hamoud al-Sagheer	Teacher		Allied to al-Islah through Sheikh Hamoud Saeed Makhalfi (Islah)
2	Harith Lutf al-Aizy	Prison escapee / ex judge in AQAP courts	Suq al-Samil, Houd al Sharaf area	

<sup>1</sup> Formerly worked under Abu Malik al-Musabi, who was killed in action in the Tha'bat area in June 2016.

## Annex 20: Yemeni Government Military Districts and Commanders

Table 20.1  
Yemeni Government Military Districts and Commanders

<i>Military District</i>	<i>Area</i>	<i>Name</i>
1	Sayyun	Major General Saleh Muhammad Tamis <sup>1</sup>
2	Mukalla	Major General Faraj Salamin al-Bahasani <sup>2</sup>
3	Ma'rib	Major General Ahmed Hasan Jibrani <sup>3</sup>
4	Aden	Major General Fadhl Hasan
5	Hudaydah	Major General Amr Sajaf <sup>4</sup>
6	Amran / Sa'dah	Major General Amin al-Wa'ili <sup>5</sup>
7	Dhamar / Sana'a	Major General Nasser al-Dhaybani <sup>6</sup>

<sup>1</sup> On 20 June 2017, Tamis was lightly wounded while attempting to mediate a tribal dispute in Hadramawt.

<sup>2</sup> On 29 June 2017, President Hadi named al-Bahasani Governor of Hadramawt to replace Ahmed bin Brik, who was fired for joining the STC.

<sup>3</sup> Appointed on 21 January 2017.

<sup>4</sup> Appointed on 23 February 2017. Sudanese troops are active in district 5 under the command of Brigadier General Hafiz Taj Maki.

<sup>5</sup> When Major General al-Wa'ili is out of the district, the acting commander is Major General Mansur bin Thawabah.

<sup>6</sup> Appointed 22 August 2017.



## Annex 21: Presidential Protection Brigade Commanders

Table 21.1  
Presidential Protection Brigade Commanders

<i>Ser</i>	<i>Name</i>	<i>Brigade</i>	<i>Rank</i>
1	Sind al-Rahwah	1st	Brigadier General
2	Abd al-Raqib Dabwan	2nd	Brigadier General
3	Ibrahim Haydan al-Sayari	3rd	Brigadier General
4	Mahran al-Qubati	4th	Brigadier General <sup>1</sup>
5	Adnan al-Rozaiq	5th	Brigadier General <sup>2</sup>

<sup>1</sup> Brigadier General Mihran bin Muhammad bin Sayyid al-Qubati was born in 1983 in the Khor Maksar district of Aden. He is also known by the *kunya* Abu Jafar and is loyal to President Hadi

<sup>2</sup> Brigade formed by presidential decree on 17 November 2017.

## Annex 22: Camp 20 case study

### I. Introduction

1. Camp 20<sup>1</sup> was named after the police uprising of 20 June 1967 (Black Tuesday) against British authorities.<sup>2</sup> It was established under the former People Democratic Republic of Yemen (PDRY). The camp was maintained under the Central Security Forces since unification until July 2015.
2. The Panel continues to investigate a number of arbitrary detentions by Government security forces and armed groups operating throughout the liberated governorates of Yemen. A number of incidents in Aden this year led to investigations of Camp 20 in the Crater District of Aden governorate.<sup>3</sup> Ordered closed on 28 October 2017 by President Abdo Rabbo Mansour Hadi,<sup>4</sup> Camp 20 was under the command of Imam Ahmed Muhammed Abdu al-Salwy,<sup>5</sup> who resigned on 31 October 2017.
3. The case of Amjad Mohammed Abd al-Rahman, assassinated on 14 May 2017, is at the centre of the investigation. His assassination and detention related abuses remain unsolved and without proper judicial investigation by local authorities.

### II. Background

4. Imam Ahmed Muhammed Abdu al-Salwy, a.k.a Imam al-Nubi, is originally from the Crater district of Aden governorate. He is regarded as a local preacher and youth leader within the al-Islah Party.<sup>6</sup> It is reported that Imam al-Nubi joined the al-Islah party in 2007, leading a group of party loyalists in 2011 when conflict erupted between Southern Secessionists (Hirak) and al-Islah during the youth uprising against Ali Abdullah Saleh (YEi.003).
5. Al-Nubi later led a group of armed elements against Houthi-Saleh forces in Tawilah neighbourhood of Crater district from March to July 2015. Al-Nubi is said to have taken control of Camp 20 in August following the liberation of Aden from Houthi-Saleh forces.
6. Imam al-Nubi's ascent through the ranks of the Southern Resistance, and his integration into the Security Belt Forces, was facilitated by the position held by his half-brother Mukhtar al-Nubi.<sup>7</sup> Mukhtar was appointed commander of the 5<sup>th</sup> Support Brigade<sup>8</sup> on 23 November 2016 after leading Security Belt Forces in the Radfan district of Lahj governorate.<sup>9</sup> Mukhtar is a well-respected leader within Hirak. Reports indicate that Imam al-Nubi was instrumental in arming Mukhtar and his forces in 2015 from his arsenal in Crater.

<sup>1</sup> Today across from Aban Mosque in Crater, Aden.

<sup>2</sup> <https://www.nam.ac.uk/explore/aden-emergency-1963-67>; and <http://hansard.millbanksystems.com/lords/1967/jun/21/south-arabia-mutiny-by-federal-forces>.

<sup>3</sup> Camp 20 fell under the Ministry of Interior, previously occupied by Central Security Forces until liberation of Aden in July 2015.

<sup>4</sup> <http://www.aden-tm.net/NDetails.aspx?contid=35227>.

<sup>5</sup> Imam al-Nubi did not hold any military rank, as Camp 20 remained under the Ministry of Interior until ordered closed by president Hadi. He was regarded as a 'civilian leader' of the camp. Although Imam al-Nubi dressed in military uniform, no insignias or ranks were ever displayed; <http://adengd.net/news/285234/>. Imam is his given name, not his title.

<sup>6</sup> al-Tajammu al-Yamani lil-Islah (Yemeni Congregation for Reform).

<sup>7</sup> a.k.a. Mukhtar Ahmed Abdu al-Nubi; Mukhtar Ali al-Nubi; Mukhtar Ali Muthni Saleh al-Nubi; and Mukhtar Ahmed Abdu al-Nubi.

<sup>8</sup> <http://almandeb.news/?p=74113>.

<sup>9</sup> <http://adengd.net/news/212587/>.

### III. Amjad's case<sup>10</sup>

7. Elements belonging to the forces in Camp 20 have been accused of engaging in a harassment campaign against those political activists and individuals perceived as supporting 'secularist agendas' in Aden.<sup>11</sup> Among those targeted was Amjad Mohammed Abd al-Rahman.<sup>12</sup>

8. Amjad was a fourth-year student at Aden university, in his early 20s, and has been engaged in political activism since 2011. In February 2015, he co-founded the al-Nadi al-Nasiyya Cultural Organization with a group of like-minded youths. His activism focused on promoting political ideas that conflicted with those of local religious leaders. On 24 January 2017, he published a post on his Facebook page discussing sermons from the al-Hamad mosque in Crater District. That same day he was forcefully removed from near his home by armed men and detained in Camp 20. He was released 24 hours later, deprived of sleep and telling his family he had been tortured.

9. Amjad told the story of his detention in a dark room inside the Camp 20 facilities. Amjad indicated he was repeatedly questioned about his views on God, upsetting his interrogators by answering 'I am my own god', meaning he was self-taught and not a student of any particular religious shaykh. Interrogators are believed to have misinterpreted this and used it as evidence of him being an atheist.

10. At 11:45 hours on 14 May 2017 Amjad was assassinated at the Café Max (an internet shop) on Kuwait Street in Shaykh Othman district. One masked man shot Amjad four times in the face. Witnesses were unable to provide sufficient information about the shooter. The media attributed responsibility to elements from Camp 20.<sup>13</sup>

11. Individuals familiar with Amjad's case point to threats received via WhatsApp text messages from one 'Khaled Sa'yl' and others from inside Yemen and outside, and public warnings via media outlets against his activism.

### IV. Other incidents

12. As a result of the allegations against Amjad, such as him being atheist, his family was unable to hold his funeral services in the area of Crater.<sup>14</sup> He had to be buried in al-Shab district instead. A number of close acquaintances were also harassed by elements from Camp 20 immediately following his death.

13. Among those also harassed by elements from Camp 20 were journalists Hani al-Junaid, Hussam Radman of Dubai TV, Majid al-Shuabi of Abu Dhabi TV, Ismail Salim of Shaqdafah TV (detained/tortured) and Khaled Senami.<sup>15</sup>

### V. Remaining concerns

14. Although Camp 20 has been ordered closed by President Hadi,<sup>16</sup> and Imam al-Nubi has resigned from his command, it is unclear as where he and his troops have been reassigned. The Panel continues to

<sup>10</sup> Information provided with informed consent from the family.

<sup>11</sup> <https://english.alarabiya.net/en/features/2017/04/04/Yemeni-student-in-Aden-gets-detained-tortured-with-electric-wires.html>. The Panel has verified another case where elements associated with Camp 20 were reportedly behind another case of arbitrary arrest and detention because of the detainee being an atheist. In this case, harassments and death threats resulted in the individual having to flee Aden.

<sup>12</sup> <https://womenpress.org/en/womenpress-news/journalists-released-after-being-tortured-and-charged-with-atheism-in-aden.html>.

<sup>13</sup> <https://www.hunaaden.com/news39780.html>.

<sup>14</sup> <https://www.middleeastmonitor.com/20170722-yemens-al-hirak-movement/>.

<sup>15</sup> <https://twitter.com/demolinari/status/917971227825844224>.

<sup>16</sup> <https://presidenthadi-gov-ye.info/archives/بوقف-عدن-امن-مدير-بوجه-الجمهورية-رئيس/>.

monitor individuals who exerted influence over Imam al-Nubi and his troops from outside the Camp and government institutions.

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**Annex 23: Shabwani Elite Forces command structure**

Table 23.1  
**Shabwani Elite Forces command structure**

<i>Ser</i>	<i>Name</i>	<i>Unit</i>	<i>Rank</i>
1	Muhammad al-Buhar al-Qumayshi	Shabwani Elite Forces	Lieutenant Colonel
2	Mahdi Mohammed Barahma	Shabwah Rapid Intervention Forces	Major
3	Muhammed Saleh Farah al-Kirby	Harad Base (Shabwah)	General
4	Muhammed Saleh al-Qakhly al-Nasy	Training Facilities (Shabwah)	Colonel

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## Annex 24: Key Houthi military and security figures

Figure 24.1

### Prominent Houthi military commanders

<i>Ser</i>	<i>Name</i>	<i>Role</i>	<i>Rank/Remarks</i>
1	Muhammad Abd al-Karim al-Ghamari	head of general staff	major general
2	Ali Hamud al-Mushki	deputy head general staff	major general
3	Muhammad Fadhl	head of the navy and coastal defence	major general
4	Abdullah Yahya al-Hakim	head of intelligence	major general (YEi.002) known as Abu Ali al-Hakim <sup>1</sup>
5	Muhammad Nasser al-Ata'fi	minister of defence	major general
6	Ali al-Kuhlani	head of military logistics and support	major general
7	Husayn al-Ruhani	head of special operations	major general
8	Muhammad al-Miqdad	head of military operations	major general
9	Ibrahim al-Shami	head of the air force	major general

<sup>1</sup> Abdullah Yahya al-Hakim was previously the military commander of district 4 for the Houthis. He was appointed to his new position on 20 August 2017.

## Annex 25: Key Houthi political figures

Table 25.1  
Key Houthi political figures

<i>Serial</i>	<i>Name</i>	<i>Title</i>	<i>Organization</i>	<i>Remarks</i>
1	Mohammed Ali al-Houthi	president	supreme revolutionary committee	Military wing
2	Abdullah Yahya ‘Abu Ali’ al-Hakim (YEi.002)	chief of military intelligence / commander of republican guard (Dec 2017)	ministry of defence	Military wing
3	Mutlaq ‘Abu Emad’ Amer al-Marani	deputy director	national security bureau (‘NSB’)	Military wing
4	Abdul Karim al-Houthi	chairman	executive committee	Affiliated with Military wing
5	‘Mohammed’ Abd al-Salam Salah Filaitah	spokesman	politburo	Affiliated with Military wing
6	Saleh al-Samad	president	supreme political council	Political wing
7	Mahdi al-Mashat	chief of staff	sayyid abdulmalik badr al-din al-houthi	Political wing
8	Ali al-Emad	chairman	revolutionary monitoring committee/ politburo	Political wing
9	Hamza al-Houthi		foreign affairs committee	Political wing
10	Hussein al-‘Izzi		foreign affairs committee	Political wing

**Annex 26: Saudi Arabia published Houthi “Most Wanted” list<sup>1</sup>**Figure 26.1  
Houthi “Most Wanted” list

<i>Ser</i>	<i>Name</i>	<i>Reward (US\$)</i>	<i>Remarks</i>
1	Abdul Malik al-Houthi	30,000,000	(YEi.004)
2	Saleh Ali al-Samad	20,000,000	president, supreme political council
3	Muhammad Ali al-Houthi	20,000,000	head of revolutionary committee
4	Zakariya Yahya al-Shami	20,000,000	
5	Abdullah Yahya al-Hakim	20,000,000	(YEi.002)
6	Abd al-Khaliq al-Houthi	20,000,000	
7	Muhammad Nasser al-Ata‘fi	20,000,000	minister of defence
8	Yusif al-Madani	20,000,000	head of 5 <sup>th</sup> military district
9	Abd al-Qadir al-Shami	20,000,000	
10	Abd al-Rabb Jarfan	20,000,000	
11	Yahya Muhammad al-Shami	20,000,000	
12	Abd al-Karim Amir al-Din al-Houthi	15,000,000	
13	Yahya Badr al-Din al-Houthi	10,000,000	
14	Hassan Muhammad Zayd	10,000,000	
15	Safr Maghdi al-Sufi	10,000,000	
16	Muhammad Abd al-Karim al-Ghamari	10,000,000	
17	Abd al-Raziq al-Marwani	10,000,000	
18	Amar Ali al-Marani	10,000,000	
19	Ibrahim Ali al-Shami	10,000,000	
20	Fadhl Muhammad al-Matla	10,000,000	
21	Muhsin Saleh al-Hamzi	10,000,000	
22	Ahmed Saleh Hindi Daghsan	10,000,000	
23	Yusif al-Fiyshi	10,000,000	
24	Husayn Hamud al-Azzi	5,000,000	
25	Ahmed Muhammad Yahya Hamid	5,000,000	
26	Talal Abd al-Karim Aqlan	5,000,000	
27	Abdullah Muhammad Hajir	5,000,000	
28	Fares Mana‘a	5,000,000	
29	Ahmed Abdullah Aqubat	5,000,000	
30	Abd al-Latif Hamud al-Mahdi	5,000,000	head of 4 <sup>th</sup> military district
31	Abd al-Hakim Hashim al-Khaywani	5,000,000	

<sup>1</sup> This list was released by the Saudi Arabian government on 6 November 2017.



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<i>Ser</i>	<i>Name</i>	<i>Reward (US\$)</i>	<i>Remarks</i>
32	Abd al-Hafiz al-Saqqaf	5,000,000	
33	Mubarak Mishn al-Zayadi		head of 3 <sup>rd</sup> military district; member of SPC
34	Ali Sa'id al-Razimi	5,000,000	
35	Saleh al-Sha'ir	5,000,000	
36	Ali Hamud al-Mushki	5,000,000	deputy head general staff
37	Muhammad Sharaf al-Din	5,000,000	
38	Dhayf Allah Qasim al-Shami	5,000,000	
39	Abu Ali al-Kuhlani	5,000,000	
40	Ali Nasser Qirshah	5,000,000	

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**Annex 27: Houthi family tree**

Table 27.1  
**Houthi family tree**

1. The Houthi family tree shows the sons of Badr al-Din Amir al-Din Husayn al-Houthi (1922 – 2010), the father of Abdulmalik al-Houthi (YEi.004).

<i>Ser</i>	<i>Wife</i>	<i>Name</i>	<i>Remarks</i>
	Wife 1		
1		Husayn Badr al-Din al-Houthi <sup>1</sup>	From Khawlan bin Amr (Deceased) (1960 – 2004) Initial Houthi Movement Leader
2		Yahya Badr al-Din al-Houthi	Current minister of education in '28 November government'
3		Ahmed Badr al-Din al-Houthi	
4		Abd al-Qadir Badr al-Din al-Houthi	
	Wife 2		
5		Muhammad Badr al-Din al-Houthi	
6		Hamid Badr al-Din al-Houthi	
	Wife 3		
7		Ibrahim Badr al-Din al-Houthi	
8		Amir al-Din Badr al-Din al-Houthi	
	Wife 4		A Sayyid woman from the Sittin family
9		Abdulmalik Badr al-Din al-Houthi	(YEi.004)
10		Abd al-Khaliq Badr al-Din al-Houthi	(YEi.001)
11		Najm al-Din Badr al-Din al-Houthi	
12		Abd al-Salam Badr al-Din al-Houthi	
13		Ali Badr al-Din al-Houthi	

<sup>1</sup> Husayn Badr al-Din al-Houthi married one of his daughters to a top lieutenant, Yusuf al-Madani, who continues to remain a key Houthi military commander to this day.

## Annex 28: Houthi military districts and commanders

Table 28.1  
Houthi military districts and commanders

<i>military district</i>	<i>Location</i>	<i>Name</i>	<i>Remarks</i>
1	Sayyun	No known Houthi commander	
2	Mukalla	No known Houthi commander	
3	Ma'rib	Mubarak Salih al-Mishin	
4	Aden	Abd al-Latif Hamud Mahdi	Appointed 25 April 2017
5	Hudaydah	Yusif al-Madani <sup>1</sup>	Married to daughter of Husayn Badr al-Din al-Houthi
6	Amran / Sa'dah	Muhammad Yahya al-Hawari <sup>2</sup>	
7	Dhamar / Sana'a	Hamid al-Kharashi	

<sup>1</sup> Al-Madani is a trusted member of the Houthis, who was named Houthi commander of the 5<sup>th</sup> military district when a Saudi Arabia-led coalition attack on the port city of Hudaydah looked imminent.

<sup>2</sup> The Panel is now able to confirm that reports that major general Muhammad al-Hawari was killed in the Saudi Arabia-led coalition strike on the Community Hall in Sana'a on 8 October 2016 were incorrect.

## Annex 29: Summary of reported PBIED and SVIED attacks (2017)

Table 29.1  
Summary of reported PBIED and SVIED attacks (2017)

<i>Ser</i>	<i>Date</i>	<i>Location</i>	<i>Device Type</i>	<i>Target</i>	<i>Civilian Fatalities</i> <sup>1</sup>	<i>Military Fatalities</i>	<i>Civilians Injured</i>	<i>Military Injured</i>	<i>Claimed by</i>	<i>Remarks</i>
1	7 Jan 2017	Al-Wadea, Abyan	PBIED	Military checkpoint,		6		20	No claim	
2	11 Jan 2017	Loder, Abyan	PBIED			1		5	AQAP	
3	15 Feb. 2017	Bayda	SVIED		3		3		AQAP	
4	24 Feb 2017	Zinjibar	SVIED	Military Camp		8		11	AQAP	
5	29 Mar 2017	Al-Houta, Lahj	SVIED			6			AQAP	
6	9 Apr 2017	Aden	PBIED	CP						Failed attack
7	7 Jun 2017	Zanjibar	SVIED	Governor		2			AQAP	
8	12 Jun 2017	Da'wan	SVIED			2			AQAP	
9	8 Aug 2017	Lodor	SVIED	103 Brigade		3		6	AQAP	Arif Abd al-Hassan Habib
10	23 Oct 2017	Abyan	SVIED	CP		4		10	AQAP	
11	29 Oct 2017	Al Mahfad, Abyan	SVIED / PBIED			3			AQAP	
12	5 Nov 17	Khormaksar, Aden	SVIED			18			ISIL	SVIED and 4 x PBIED
13	14 Nov 17	Shiekh Othman, Aden	SVIED	Security Belt Operations Centre		6			ISIL	Abu Haga al-Adani

<sup>1</sup> Excluding the 'suicide' bomber. Named in Remarks column where published.

Figure 29.1  
Summary of SVIED attacks (Quarterly 2016 - 2017)

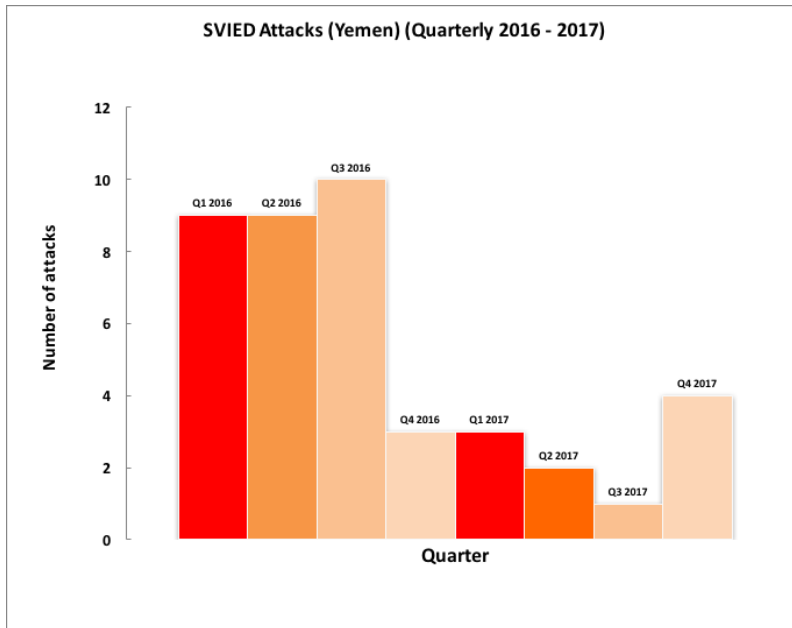
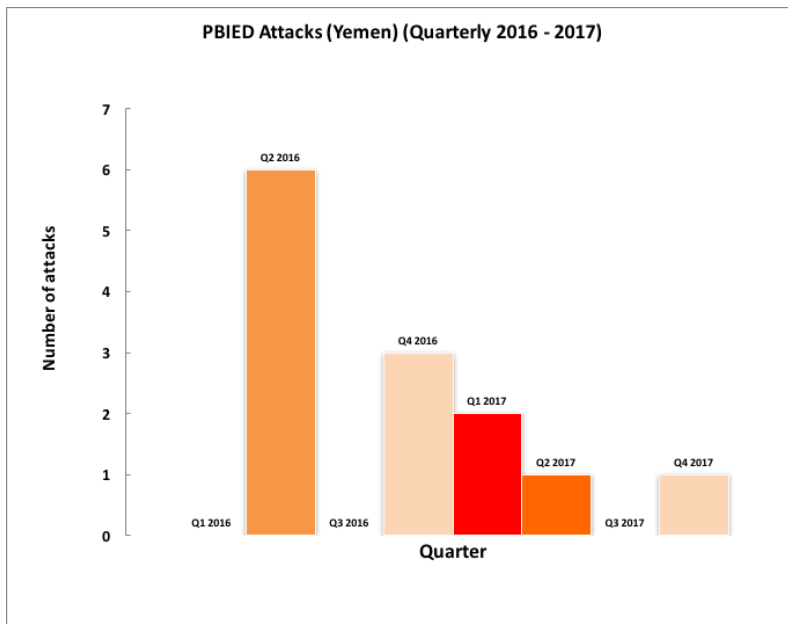


Figure 29.2  
Summary of PBIED attacks (Quarterly 2016 - 2017)



**Annex 30: AQAP linked persons of interest to the Panel<sup>1</sup>**Figure 30.1  
**Prominent AQAP figures**

<i>Ser</i>	<i>Name</i>	<i>Role</i>	<i>Remarks</i>
1	Qasim Yahya al-Raymi	Leader	(QDi.282) Yemeni
2	Ibrahim Asiri	Chief bomb maker	Saudi
3	Said Attif al-Awlaqi	Head of AQAP (Shabwah <sup>2</sup> )	Yemeni
4	Muntasir Badi	Financier in Abyan	
5	Khaled Umar Batarfi	Battle commander	Yemeni
6	Khalid al-Daba	AQAP leader in Lahij	May be under arrest <sup>3</sup>
7	Muhammad Abdullah Husayn Daramah	Judge on Shariah Council	
8	Muhammad Abd al-Karim al-Ghazali	Financial Head	Yemeni
9	Abu Yusif al-Lahji	Head of AQAP (Lahij)	Yemeni
10	Khamis Arfaj al-Marwani	Head of AQAP (Jawf)	Yemeni
11	Salim al-Najdi	Media figure	Saudi
12	Ibrahim al-Quso	Propagandist	Former Guantanamo detainee / Sudanese
13	Wa'il Sayf (Abu Salim al-Adani)	Head of AQAP (Aden)	Yemeni
14	Muhammad Umar	Military Commander Jawf	Yemeni
15	Nayif al-Qaysi <sup>4</sup>	Financier	(QDi.402) Yemeni
16	Adil Abdu al-Dhubhani <sup>5</sup>	Militia Leader Ta'izz	Yemeni, (a.k.a Abu al-Abbas)
17	Sayf Abd al-Rabb al-Hayashi <sup>6</sup>	Weapons/Dealer Financier	Yemeni
18	Bilal Ali Muhammad al-Wafi <sup>7</sup>	Commander in Ta'izz	Yemeni
19	Ghalib al-Zaidi <sup>8</sup>	AQAP leader in Ma'rib	(QDi.401) Yemeni

<sup>1</sup> This table has been compiled from a variety of sources, including confidential sources, interviews with individuals inside and outside of Yemen, open sources, news reports and AQAP documents.

<sup>2</sup> On 20 June 2017 a US strike killed Abu Khattab al-Awlaqi, the deputy head of AQAP in Shabwah.

<sup>3</sup> The Panel has received a report, which it has been unable to verify, that security forces loyal to President Hadi may have arrested Khalid al-Daba.

<sup>4</sup> Nayif al-Qaysi is the former Governor of Bayda' for the legitimate Government. He was sanctioned by the UN ISIL (Da'esh) and Al-Qaida Sanctions Committee on 22 February 2017. He was removed from his post as Governor on 23 July 2017. He was sanctioned by the Terrorist Financing Target Center (TFCT) and its member States on 25 October 2017.

<sup>5</sup> Adil Abdu al-Dhubhani, better known as Abu al-Abbas, is the most powerful militia leader in Ta'izz (see 2017 Panel Mid-term Update, paras. 28 – 33). He has received significant support in the past from the UAE. He was sanctioned by the TFCT on 25 October 2017.

<sup>6</sup> Sayf al-Hayashi was sanctioned by the TFCT on 25 October 2017.

<sup>7</sup> Bilal al-Wafi was sanctioned by the TFCT on 25 October 2017.

<sup>8</sup> On 22 February 2017 the ISIL (Da'esh) and Al-Qaida Sanctions Committee listed al-Zaidi (QDi.401).

## Annex 31: AQAP and the tribes (and the 23 May 2017 US raid)

### I. Introduction

1. This section includes a case study of the al-‘Idhal clan of the Murad tribe and the 23 May 2017 US raid.
2. Tribes in Yemen are not monolithic entities<sup>1</sup> that either decide to join or provide refuge to AQAP as a group.<sup>2</sup> Instead what tends to happen is that individual members of a particular tribe join AQAP and then welcome outside fighters into their village, effectively providing AQAP with an umbrella of tribal protection.
3. Such tribesmen have dual identities. They are AQAP members to al-Qaida, and tribesmen to their tribes. This means that while they are sometimes targeted and killed as AQAP members, they are often avenged as tribesmen.
4. This issue of dual identities is also at the centre of the US raid on a cluster of homes belonging to the al-‘Idhal clan of the Murad tribe<sup>3</sup> in Ma’rib on 23 May 2017.<sup>4</sup> The US carried out the raid on a target it had identified as AQAP, which was then defended on the ground as an attack on the tribe.

### II. Background

5. In late April or early May 2017, approximately three weeks prior to the raid, one member of the clan, Muhammad Said al-‘Idhal, an AQAP member, was killed in a US armed unmanned aerial vehicle (AUAV) strike.<sup>5</sup> Following his death, at least seven men from outside the clan moved in to his house.<sup>6</sup> It was this very house that the United States then subsequently targeted on 23 May 2017.

### III. The Raid

6. The night raid began at approximately 02:00 hours on 23 May 2017, with approximately 50 troops from the US Navy SEAL<sup>7</sup> special forces descending on the village.<sup>8</sup> Almost immediately the raiding party came under attack by the al-‘Idhal clan tribesmen, who seeing their village was under attack could not have been aware that only one particular house was being targeted.

<sup>1</sup> Many, although certainly not all, tribes in Yemen belong to two main tribal confederations, Hashid and Bakil. Each tribal confederation is led by a *shaykh ma-shaykh* (sheikh of sheikhs). The Hashid tribe is smaller than the Bakil tribe but, at least until recently, acted as a more cohesive whole. Neither tribal confederation, however, speaks with one voice on any given issue. Indeed, it is more helpful to think of each tribal confederation as an alliance of member states, each pursuing their own self-interests.

<sup>2</sup> In fact, the tribes of Yemen and AQAP are closer to natural enemies than they are to allies, as both groups seek to control and administer territory.

<sup>3</sup> The Murad tribe has roughly 60,000 members.

<sup>4</sup> This is the second US military raid against AQAP that the Panel has documented in 2017. The first, on 29 January 2017, included the use of UAE forces.

<sup>5</sup> The US acknowledged a drone strike in Ma’rib on 18 April 2017. <http://www.centcom.mil/MEDIA/NEWS-ARTICLES/News-Article-View/Article/1162256/pentagon-spokesman-updates-iraq-syria-yemen-operations/>. Another drone strike in Ma’rib was reported on 29 April 2017, which killed an individual named Muhammad al-‘Idhal. <http://www.almadaronline.com/article/90812>. The Panel has not been able to independently verify if this individual was Muhammad Said al-‘Idhal.

<sup>6</sup> These appear to be the seven men the US targeted and killed during the raid as AQAP members. Confidential local source.

<sup>7</sup> Sea, Air and Land.

<sup>8</sup> Confidential local source, and <http://www.centcom.mil/MEDIA/PRESS-RELEASES/Press-Release-View/Article/1190002/us-forces-conduct-counter-terrorism-raid/>.

7. Five tribesmen were killed, ranging in age from 15 – 80, and another five were wounded.<sup>9</sup> Both AQAP and local Yemenis highlighted this fact in subsequent statements and accounts of the raid.<sup>10</sup> The US troops also killed the seven individuals that they had targeted, who were staying in the house of the late Muhammad Said al-‘Idhal.<sup>11</sup>

8. The US has not released the names of those seven individuals, and neither local Yemeni reporting nor the AQAP statement acknowledged their deaths.<sup>12</sup> AQAP members who survived the raid prevented villagers from entering Muhammad Said al-‘Idhal’s house after the raid, and over the next few days the seven bodies were removed from the village for burial in an unknown location.<sup>13</sup>

#### IV. The aftermath

9. The raid on the AQAP house in an al-‘Idhal clan village illustrates the complexities of fighting AQAP in the midst of the broader conflict in Yemen. Although the US achieved its target, by killing seven AQAP members, it also killed five tribesmen who were acting in self-defence. They were defending their village not to protect AQAP but rather because of the perception that their village was under attack by, to them, unknown armed men. Such actions can have unintended consequences. On one hand, armed UAV strikes and armed raids such as the one on 23 May 2017 can induce some clans and tribes to deny aid to AQAP. On the other hand, the death of tribesmen can act as a force-multiplier for AQAP, leading to more men joining AQAP in order to avenge their fallen relatives.<sup>14</sup>

10. AQAP is aware that it needs the tribes to operate in Yemen. If the tribes in Yemen were to turn against AQAP en masse, the terrorist organization would have no freedom to manoeuvre, no recruits and no future. AQAP is aware of this and has therefore developed a two-track approach to the tribes. Firstly, AQAP propaganda frequently stresses its desire for positive relations with various tribes; overtures that most tribes ignore.<sup>15</sup> Secondly, it is actively working to recruit young tribesmen,<sup>16</sup> not simply because it wants more fighters, but because these particular tribal fighters represent the entry into tribal society that AQAP so desires.

11. It is not the tribes of Yemen that are a problem when it comes to the war against AQAP. Indeed, the tribes’ could be a powerful ally against AQAP, providing some governance and structure in areas where AQAP would otherwise have a free hand. Instead, it is young, not quite fully integrated tribesmen who represent the greatest challenge. They are able to use their two identities as tribesmen and AQAP members to blur the lines and provide AQAP with protection and foothold they need to grow and thrive in Yemen.

12. The Panel believes that the dynamics outlined in this annex represent a threat to the peace, security, and stability of Yemen.

<sup>9</sup> The names of the dead are: Nasser Ali Mahdi al-‘Idhal, Saleh Lutfaf al-‘Idhal, Yasser Lutfaf al-‘Idhal, Abdullah Said al-‘Idhal, and Abd al-Qadir Saleh al-‘Idhal.

<sup>10</sup> See AQAP’s statement of 26 May 2017. [https://azelin.files.wordpress.com/2017/05/al-qacc84\\_idah-in-the-arabian-peninsula-22about-the-american-landing-upon-the-muracc84d-tribe22.pdf](https://azelin.files.wordpress.com/2017/05/al-qacc84_idah-in-the-arabian-peninsula-22about-the-american-landing-upon-the-muracc84d-tribe22.pdf). For Yemeni reporting see, for example: <http://www.almasdaronline.com/article/91432>.

<sup>11</sup> <http://www.centcom.mil/MEDIA/PRESS-RELEASES/Press-Release-View/Article/1190002/us-forces-conduct-counter-terrorism-raid/>.

<sup>12</sup> Similarly, the United States statement failed to acknowledge the five tribesmen killed in the raid.

<sup>13</sup> Confidential local source.

<sup>14</sup> The Panel has information suggesting that both trends are taking place within the al-‘Idhal clan.

<sup>15</sup> For most tribes AQAP is a minor nuisance not a major concern.

<sup>16</sup> Part of this recruiting process involves the payment of monthly salaries, which the Panel continues to investigate. Older tribesmen typically have little interest in joining AQAP as they are often more established men with families and positions of influence in the tribes and see AQAP as a threat.



## Annex 32: ISIL affiliated persons of interest to the Panel<sup>1</sup>

Figure 32.1  
Prominent ISIL figures

<i>Ser</i>	<i>Name</i>	<i>Role</i>	<i>Remarks</i>
1	Abu Sulayman al-Adani <sup>2</sup>	Head of ISIL-Yemen	Yemeni
2	Nasir al-Ghaydani (Abu Bilal al-Harbi)	An ISIL leader	Deceased <sup>3</sup>
3	Khaled Abdullah al-Marfadi	Military commander	Yemeni <sup>4</sup>
4	Khaled Umar al-Marfadi	Financial official	Yemeni <sup>5</sup>
5	(Abu Abd al-Rahman al-Muhajir) <sup>6</sup>	Shariah official	
6	(Abu Saleh) <sup>7</sup>	Military commander	
7	Radwan Muhammad al-Qanan <sup>8</sup>	ISIL leader in Aden	Yemeni
8	Muhammad Said Umar Bawazir	An ISIL leader	
9	Nashwan al-Wali al-Yafa‘i <sup>9</sup>	Financier	Yemeni
10	Khalid Sa’id Ghabish al-Ubaydi <sup>10</sup>	ISIL leader in Hadramawt	Yemeni

<sup>1</sup> This table has been compiled from a variety of sources, including confidential sources, interviews with individuals inside and outside of Yemen, open sources, and news reports.

<sup>2</sup> Abu Sulayman al-Adani was named by Terrorist Financing Target Center (TFCT) and its member states as the head of ISIL-Yemen and was sanctioned on 25 October 2017. See: <https://www.treasury.gov/press-center/press-releases/Pages/sm0187.aspx>.

<sup>3</sup> The Panel can confirm that Abu Bilal al-Harbi has been killed. Following his death, ISIL in Yemen named a training camp in al-Baydha after him.

<sup>4</sup> al-Marfadi is from Yafa‘a. He was sanctioned by the TFCT on 25 October 2017.

<sup>5</sup> Also from Yafa‘a.

<sup>6</sup> al-Muhajir reportedly also uses the *kunya*: Abu Muhammad al-Kanani.

<sup>7</sup> Abu Saleh reportedly also uses the *kunya*: Abu Husayn.

<sup>8</sup> Radwan Qanan was sanctioned by the TFCT on 25 October 2017.

<sup>9</sup> Nashwan al-Yafa‘i was sanctioned by the TFCT on 25 October 2017.

<sup>10</sup> Khalid al-Ubaydi was sanctioned by the TFCT on 25 October 2017.

### Annex 33: Arms supply routes to Houthi territory in Yemen

Table 33.1  
Summary of arms supply routes to Houthi territory in Yemen

<i>Ser</i>	<i>Transport mode</i>	<i>Destination / Route</i>	<i>Status for arms supply</i>	<i>Remarks</i>
1	Air	Airports in Houthi controlled territory	<b>Closed</b>	<ul style="list-style-type: none"> <li>▪ Saudi Arabia-led coalition has air superiority. Air routes under constant airborne surveillance.</li> </ul>
2	Air	Air delivery to improvised air strips or by air drops	<b>Highly unlikely</b>	<ul style="list-style-type: none"> <li>▪ Saudi Arabia-led coalition has air superiority. Air routes under constant airborne surveillance.</li> </ul>
3	Sea Vessels > 300t <sup>1</sup>	Red Sea ports (e.g. Hudaydah)	<b>Unlikely</b>	<ul style="list-style-type: none"> <li>▪ All vessels require UNVIM clearance and are subject to random or planned inspection or interdiction by Saudi Arabia-led coalition naval forces.</li> <li>▪ No seizures on this route since March 2017.</li> <li>▪ Possible for non-explosive weapons in component form concealed in cargo, but land routes are a better option, as interdiction risks are lower.</li> </ul>
4	Sea Vessels < 300t	Red Sea ports or across beaches	<b>Unlikely</b>	<ul style="list-style-type: none"> <li>▪ Small vessels risk interdiction by Saudi Arabia-led coalition or Combined Maritime Forces (CMF)<sup>2</sup> naval forces.</li> <li>▪ No seizures on this route since March 2017.</li> </ul>
5	Sea	Gulf of Aden ports or across beaches (west of Qishn)	<b>Effectively closed</b>	<ul style="list-style-type: none"> <li>▪ Ports in territory under control of legitimate government of Yemen.</li> <li>▪ Vessels risk interdiction by Saudi Arabia-led coalition or CMF naval forces.</li> <li>▪ Subsequent interdiction risk on land route.</li> <li>▪ Evidence of vessels smuggling arms from Yemen to Somalia across beaches.<sup>3</sup></li> </ul>

<sup>1</sup> Regulation V/19 of SOLAS (International Convention for the Safety of Life at Sea, 1974) requires that automatic identification systems (AIS) be fitted and used on vessels of above 300 gross tonnes.

The AIS may be switched off to hide a vessel's position if engaged in nefarious activity, but the vessel will still be visible to naval radar. Lack of an AIS signal would raise the immediate suspicions of Saudi Arabia-led coalition or CMF naval vessels.

<sup>2</sup> <https://combinedmaritimeforces.com>.

<sup>3</sup> Paras. 103 - 110 to S/2017/925.

<i>Ser</i>	<i>Transport mode</i>	<i>Destination / Route</i>	<i>Status for arms supply</i>	<i>Remarks</i>
6	Sea	Arabian Sea ports or across beaches (east of Qishn)	Possible	<ul style="list-style-type: none"> <li>▪ Ports in territory (e.g. Ghaydah) not under effective control of legitimate government of Yemen.</li> <li>▪ Vessels risk interdiction by Saudi Arabia-led coalition, CMF or Omani naval forces.</li> <li>▪ Subsequent interdiction risks on land route.</li> <li>▪ Interdiction risk at border control posts (BCP) if landed in Oman.</li> </ul>
7	Land	From Oman	Possible	<ul style="list-style-type: none"> <li>▪ Initial interdiction dependent on effectiveness of control checks at busy BCP.</li> <li>▪ Interdiction risks increase with proximity to Houthi controlled territory as checkpoints increase with proximity.</li> <li>▪ Not suitable for larger calibre weapons, such as artillery, as concealment in vehicles difficult.</li> </ul>
8	Land	Southern main supply route (MSR) from Al Ghaydah	Open	<ul style="list-style-type: none"> <li>▪ Interdiction risks increase with proximity to Houthi controlled territory as checkpoints increase with proximity.</li> <li>▪ Not suitable for larger calibre weapons, such as artillery, as concealment in vehicles difficult.</li> </ul>
9	Land	Northern MSR via Thamud	Open	<ul style="list-style-type: none"> <li>▪ Interdiction risks increase with proximity to Houthi controlled territory as checkpoints increase with proximity.</li> <li>▪ Not suitable for larger calibre weapons, such as artillery, as concealment in vehicles difficult.</li> </ul>
10	Land	From Saudi Arabia	Closed	<ul style="list-style-type: none"> <li>▪ Border is well patrolled.</li> </ul>

## Annex 34: Summary of Houthi-Saleh SRBM and FFR attacks against Saudi Arabia

1. Tables 34.1 to 34.4 contain summaries of Houthi-Saleh forces short-range ballistic missile (SRBM) or free flight rocket FFR attacks against Saudi Arabia during the conflict. The data was supplied by Saudi Arabia, and then compared against the media and Houthi-Saleh reported attacks in paragraphs 81 to 85 and annex 42 of [S/2017/81](#) and the consolidated tables below developed by the Panel.
2. Table 34.1 contains a summary of the total number of reported or confirmed launches.

Table 34.1

### Summary of confirmed or reported Houthi-Saleh SRBM and FFR attacks against Saudi Arabia (2015 - 2017)

Year	<i>SCUD B /C or Hwasong-5/6</i>		<i>Borkan -2 (SCUD ER)<sup>1</sup> or Borkan-2H</i>		<i>Qaher-1 (S-75)</i>		<i>Zelzal-2/3</i>		<i>OTR-21 Tocka</i>		<i>Not Known</i>		<i>Totals</i>	
	<i>L<sup>2</sup></i>	<i>Intercepted<sup>3</sup></i>	<i>L</i>	<i>Intercepted</i>	<i>L</i>	<i>Intercepted</i>	<i>L</i>	<i>Intercepted</i>	<i>L</i>	<i>Intercepted</i>	<i>L</i>	<i>Intercepted</i>	<i>L</i>	<i>Intercepted</i>
2015	3	1 (33%)			1	9 (50%)					2	1 (50%)	23	11 (48%)
					8									
2016 <sup>4</sup>	6	1 (17%)	2	2 (100%)	2	12 (50%)	2	1 (50%)	2	2 (100%)	11	3 (27%)	47	21 (45%)
2017			9	4 (43%)	4	4 (100%)					1	14 (78%)	33	23 (73%)
Totals	9	2 (22%)	11	6 (58%)	4	25 (62.5%)	2	1 (50%)	2	2 (100%)	3	18 (60%)	112	55 (49%)

<sup>1</sup> These are probably SCUD-B or Hwasong-5 or 6 SRBM modified for extended range by the Houthi-Saleh alliance.

<sup>2</sup> L = Launched.

<sup>3</sup> Reported or confirmed as being intercepted and destroyed in flight by anti-missile systems. Probably PAC-3 Patriot.

<sup>4</sup> Note corrected figures from annex 42 of [S/2017/81](#).

3. Table 34.2 contains a summary of missile and FFR launches that have been confirmed to the Panel by the Government of Saudi Arabia.

Table 34.2

**Summary of Saudi Arabian government confirmed Houthi-Saleh SRBM and FFR attacks against Saudi Arabia (2015 - 2017)**

Year	<i>SCUD B /C or Hwasong-5/6</i>		<i>Borkan - 2(SCUD ER)<sup>5</sup> or Borkan-2H</i>		<i>Qaher-1 (S-75)</i>		<i>Zelzal-2/3</i>		<i>OTR-21 Tocka</i>		<i>Not Known</i>		<i>Totals</i>	
	<i>L<sup>6</sup></i>	<i>Intercepted<sup>7</sup></i>	<i>L</i>	<i>Intercepted</i>	<i>L</i>	<i>Intercepted</i>	<i>L</i>	<i>Intercepted</i>	<i>L</i>	<i>Intercepted</i>	<i>L</i>	<i>Intercepted</i>	<i>L</i>	<i>Intercepted</i>
2015	2	1 (50%)			7	5 (71%)					2	1 (50%)	11	7 (64%)
2016	1	1 (100%)	2	2 (100%)	1	10 (67%)					5	2 (40%)	23	15 (65%)
2017			7	3 (33%)	4	4 (100%)					1	12 (80%)	25	18 (72%)
<b>Totals</b>	<b>3</b>	<b>2 (67%)</b>	<b>9</b>	<b>5 (58%)</b>	<b>2</b>	<b>19 (73%)</b>					<b>2</b>	<b>15 (68%)</b>	<b>60</b>	<b>41 (70%)</b>

<sup>5</sup> These are probably SCUD-B or Hwasong-5 or 6 SRBM modified for extended range by the Houthi-Saleh alliance.

<sup>6</sup> L = Launched.

<sup>7</sup> Intercepted and destroyed in flight by anti-missile systems. Probably PAC-3 Patriot.

4. Table 34.3 contains a summary of launches reported in open source media, but not confirmed by the Government of Saudi Arabia.

Table 34.3

**Summary of other media reported Houthi-Saleh SRBM and FFR attacks against Saudi Arabia (2015 - 2017)**

Year	<i>SCUD B /C or Hwasong-5/6</i>		<i>Borkan - 2(SCUD ER)<sup>8</sup> or Borkan-2H</i>		<i>Qaher-1 (S-75)</i>		<i>Zelzal-2/3</i>		<i>OTR-21 Tocka</i>		<i>Not Known</i>		<i>Totals</i>	
	<i>L<sup>9</sup></i>	<i>Intercepted<sup>10</sup></i>	<i>L</i>	<i>Intercepted</i>	<i>L</i>	<i>Intercepted</i>	<i>L</i>	<i>Intercepted</i>	<i>L</i>	<i>Intercepted</i>	<i>L</i>	<i>Intercepted</i>	<i>L</i>	<i>Intercepted</i>
2015	1	0 (0%)			11	4 (36%)							12	4 (33%)
2016	5	0 (0%)			9	2 (22%)	2	1 (50%)	2	2 (100%)	6	1 (17%)	24	6 (25%)
2017			2	1 (50%)							4	3 (75%)	6	4 (60%)
Totals	6	0 (0%)	2	1 (50%)	2	6 (30%)	2	1 (50%)	2	2 (100%)	1	4 (40%)	42	14 (33%)

<sup>8</sup> These are probably SCUD-B or Hwasong-5 or 6 SRBM modified for extended range by the Houthi-Saleh alliance.

<sup>9</sup> L = Launched.

<sup>10</sup> Intercepted and destroyed in flight by anti-missile systems. Probably PAC-3 Patriot.

5. Table 34.4 contains more details of SRBM missile and FFR attacks that have been confirmed by the government of Saudi Arabia (shown as a numerical serial),<sup>11</sup> and those reported in the media or claimed by the Houthi-Saleh alliance (shown as an alphabetical serial).

Table 34.4

**Details of confirmed and reported Houthi missile and FFR attacks against Saudi Arabia (June 2015 – 18 December 2017)**

<i>Serial</i>		<i>Coordinates (° ‘ ‘‘)</i>							
<i>KSA Confirmed</i> <sup>12</sup>	<i>Reported</i>	<i>Date</i>	<i>Likely missile type</i>	<i>Launch point</i>	<i>Patriot interception</i>	<i>Impact point</i>	<i>Probable target</i>	<i>Distance (km)</i>	<i>Location / Remarks</i>
1		6 Jun 2015		16 35 36N 43 43 06E	N 18 08 03 E 42 25 51		Khamis Mushayt	219	
2	A	29 Jun 2015	SCUD	16 32 50N 44 07 39E		19 11 15N 45 01 15E	Sulayvil base	308	
3	B	26 Aug 2015	Qaher-1	15 18 05N 44 12 54E	16 51 23N 42 41 22E		Jizan	238	Jizan
4	C	15 Oct 2015	SCUD	15 18 49N 44 12 52E		18 56 48N 42 41 58E	Khamis Mushayt	435	
	D	4 Dec 2015	Qaher-1			16 53 59N 44 35 01E	Jazan airport		Coordinates are centre of target and not impact point.
	E	9 Dec 2015	Qaher-1			16 53 57N 44 33 26E	Jazan		Coordinates are centre of target and not impact point.
	F	9 Dec 2015	Qaher-1			16 53 57N 44 33 26E	Jazan		Coordinates are centre of target and not impact point.
99	G	13 Dec 2015	Qaher-1	16 25 40N 44 08 08E		18 18 17N 42 43 54E	Khamis Mushayt		
5		14 Dec 2015		Unidentified		18 27 32N 42 41 58E	Khamis Mushayt		
	H	18 Dec 2015	Qaher-1			17 33 19N 44 14 33E	Najran		Impacted east of town
	I	19 Dec 2015	Qaher-1			17 33 19N 44 14 33E	Najran		Impacted near museum
	J	19 Dec 2015	Qaher-1	15 23 41N 44 10 10E		16 30 41N 42 58 24E	Al-Wahal BCP		Coordinates are centre of target and not impact point.

<sup>11</sup> In either table 42.2 of S/2017/81 or letter to the Panel dated 4 October 2017.

<sup>12</sup> The coordinates provided by the Saudi Arabian authorities are predominantly based on those from the Shared Early Warning System (SEWS) data.

Serial	KSA Confirmed <sup>12</sup>	Reported	Date	Likely missile type	Coordinates (° ' ")			Probable target	Distance (km)	Location / Remarks
					Launch point	Patriot interception	Impact point			
		K	20 Dec 2015	Qaher-1			18 18 19N 42 44 43E	Khamis Mushayt airport		Coordinates are centre of target and not impact point.
6	L		21 Dec 2015	Qaher-1	15 23 41N 44 10 10E	16 43 53N 42 44 22E		Jazan	213	
7	M		21 Dec 2015	Qaher-1	15 24 48N 44 13 05E	16 52 08N 42 41 01E		Jazan airport	230	
99	N		23 Dec 2015	Qaher-1	16 26 05N 44 03 55E	18 18 19N 42 43 43E		Jazan Aramco	?	
8			25 Dec 2015	Qaher-1	16 26 05N 44 03 55E		18 30 49N 42 49 31E	Jazan	266	Landed north of Khamis Mushayt town
O	O		26 Dec 2015	Qaher-1	15 15 48N 44 14 05E	Reported destroyed in flight		Najran		
9	P		27 Dec 2015	SCUD	15 54 20N 43 59 51E	17 54 38N 44 10 14E		Najran	226	Najran
	Q		27 Dec 2015	Qaher-1			16 53 47N 44 33 26E	Jazan		Coordinates are centre of target and not impact point.
	R		28 Dec 2015	Qaher-1		Reported destroyed in flight		Najran		
	S		30 Dec 2015	Qaher-1		Reported destroyed in flight				
10	T		31 Dec 2015	Qaher-1	N 15 19 42 E 44 04 33	N 17 00 06 E 43 02 06			217	Jazan
11	U		1 Jan 2016	Qaher-1	16 41 43N 43 51 51E		17 59 39N 42 49 26E	Khamis Mushayt	182	
12			7 Jan 2016	Qaher-1	15 00 08N 44 13 35E	16 50 16N 42 38 47E		Jazan	265	
13			28 Jan 2016	Qaher-1	14 59 08N 44 20 23E		17 34 51N 44 43 39E	Khamis Mushayt	292	Disappeared from radar screen
	V		8 Feb 2016	Qaher-1			18 18 19N 42 44 43E	Khamis Mushayt airport		Coordinates are centre of target and not impact point.



Serial				Coordinates (° ' ")				Distance (km)	Location / Remarks	
	KSA Confirmed <sup>12</sup>	Reported	Date	Likely missile type	Launch point	Patriot interception	Impact point			Probable target
14	W		8 Feb 2016	Qaher-1	16 25 39N 44 08 34E	18 00 43N 42 52 06E		Abha	222	
15	X		9 Feb 2016	Qaher-1	15 20 50N 44 02 33E	16 59 28N 42 29 06E		Jazan	248	
16			11 Feb 2016	Qaher-1	15 22 55N 44 09 29E		17 02 45N 42 27 15E	Jazan	269	Exploded in the air
17	Y		13 Feb 2016	Qaher-1	16 24 23N 44 04 51E	18 05 56N 42 45 56E		Abha	234	
18	Z		9 May 2016		16 23 52N 44 05 01E	18 16 48N 42 55 50E		Khamis Mushayt	252	
19	AA		9 May 2016		16 40 05N 43 50 53E		18 20 43N 42 22 57E	Najran	243	Disappeared from radar screen
	AB		13 May 2016	Qaher-1			16 53 47N 44 33 26E	Jazan		Coordinates are centre of target and not impact point.
	AC		20 May 2016	Qaher-1			16 53 47N 44 33 26E	Jazan		Coordinates are centre of target and not impact point.
20	AD		30 May 2016	Qaher-1	15 29 57N 44 05 27E	17 00 53N 44 22 11E		Najran	171	
	AE		6 Jun 2016	SCUD			Reported destroyed in flight	King Khalid airbase		
21	AF		4 Jul 2016	Qaher-1	16 43 42N 43 50 27E	18 17 22N 42 39 55		Abha	214	
22	AG		23 Jul 2016	Qaher-1	Unidentified	17 34 34N 44 09 03E		Najran		
23			27 Jul 2016	Qaher-1	16 37 41N 43 50 44E		17 56 47N 43 15 23E	Khamis Mushayt	159	
24	AH		10 Aug 2016	Qaher-1	16 49 17N 43 48 21E	17 44 43N 43 02 57		Khamis Mushayt	135	
25	AI		10 Aug 2016	Qaher-1	16 46 44N 42 48 23E	17 39 06N 43 07 24		Abha	103	
26			12 Aug 2016	Qaher-1	15 52 24N 43 05 57E		Unidentified	Jazan		

Serial	KSA Confirmed <sup>12</sup>	Reported	Date	Likely missile type	Coordinates (° ' ")			Probable target	Distance (km)	Location / Remarks
					Launch point	Patriot interception	Impact point			
27			13 Aug 2016	Qaher-1	16 44 54N 43 46 29E	18 18 04N 42 40 48		Abha	208	
		AJ	16 Aug 2016	Qaher-1			18 20 43N 42 22 57E	Najran		Seven reported civilian fatalities
		AK	19 Aug 2016	Qaher-1		Reported destroyed in flight		Khamis Mushayt		
28			25 Aug 2016		15 16 29N 44 03 45E	16 40 03N 42 45 50E		Jazan	208	
		AL	26 Aug 2016	SCUD			16 52 55N 42 33 44E	Jizan Hamiyej Power Station		Coordinates are centre of target and not impact point.
29			30 Aug 2016		15 55 09N 43 11 19E		18 16 37N 42 19 20E	Landed in Aqabat al-Sima' (Abha)	278	
		AM	31 Aug 2016	Zelzal-3			18 20 43N 42 22 57E	Najran		Coordinates are centre of target and not impact point.
		AN	2 Sep 2016	SCUD			21 28 58N 40 32 39E	King Fahid airbase		Coordinates are centre of target and not impact point.
		AO	10 Sep 2016	SCUD				Asir province		
		AP	10 Sep 2016	SCUD			17 39 46N 42 03 44E	Al Shqaiigh water plant		
30			11 Sep 2016		15 56 01N 43 58 06E		16 48 34N 43 05 46E	Jazan	135	
31		AQ	12 Sep 2016	SCUD	16 49 03N 43 43 56E	17 57 13N 43 00 18E		Khamis Mushayt	148	
		AR	4 Oct 2016	Zelzal-3				Al Montazah		
		AS	8 Oct 2016	Qaher-1			18 18 17N 42 43 54E	Khamis Mushayt		Coordinates are centre of target and not impact point.
99		AT	9 Oct 2016		16 44 33N 43 49 10E	21 28 36N 40 27 18E		Ta'if	634	
		AU	20 Oct 2016				16 53 47N 44 33 26E	Jazan		Coordinates are centre of target and not impact point.
		AV	20 Oct 2016				18 20 43N 42 22 57E	Najran		Coordinates are centre of target and not impact point.

Serial	KSA Confirmed <sup>12</sup>	Reported	Date	Likely missile type	Coordinates (° ' ")			Probable target	Distance (km)	Location / Remarks				
					Launch point	Patriot interception	Impact point							
99	AW	27 Oct 2016			17 03 14N		22 02 50N	Khulays governorate, Ta'if	667					
					43 23 33E		39 52 14E							
						AX	1 Nov 2016				16 53 47N	Jazan		Coordinates are centre of target and not impact point.
									44 33 26E					
						AY	1 Nov 2016				18 20 43N	Najran		Coordinates are centre of target and not impact point.
											42 22 57E			
						AZ	1 Nov 2016					Asir province		
						BA	15 Nov 2016		OTK-21 Tochka		Reported destroyed in flight		Najran	
	BB	15 Nov 2016		OTK-21 Tochka	Reported destroyed in flight		Najran	2 <sup>nd</sup> FFR reported						
	BC	26 Nov 2016			Reported destroyed in flight		Khamis Mushayt							
	BD	27 Jan 2017			Reported destroyed in flight		Najran							
	BE	30 Jan 2017					Zuqar Island							
						13 56 41N 42 45 36E								
99		5 Feb 2017		ER	17 07 09N 43 33 39E		24 20 32N 46 19 04E	Muzahimiyah	852					
32		14 Feb 2017			16 35 35N 43 53 45E	18 10 55N 42 39 09E		Khamis Mushayt	221					
33		18 Feb 2017			16 46 28N 43 48 48E		17 38 50N 42 08 20E	Abha	201					
34		16 Mar 2017			14 52 29N 42 58 29E	16 37 11N 42 36 45E		Ta'if	198					
35		19 Mar 2017			15 32 43N 44 10 17E	16 52 17N 43 02 28E		Jazan	191					
36		27 Mar 2017			16 37 50N 43 52 20E	17 57 09N 43 26 43E		Khamis	154					

Serial				Coordinates (° ' ")				Distance (km)	Location / Remarks
	KSA Confirmed <sup>12</sup>	Reported	Date	Likely missile type	Launch point	Patriot interception	Impact point		
37			27 Mar 2017		16 37 50N 43 52 20E	18 18 33N 43 30 28E		Najran	191
38			27 Mar 2017		16 38 14N 43 51 25E	18 08 00N 42 54 00E		Najran	166
39			19 May 2017		16 37 14N 43 51 28E	17 59 52N 43 19 28E		Najran	163
40			4 Feb 2017		17 03 47N 43 36 29E	22 12 57N 45 37 55E		Khamis Mushayt	
41			14 Feb 2017		16 35 35N 43 53 45E	18 10 55N 42 39 09E		Khamis Mushayt	221
42			18 Feb 2017		16 46 28N 43 48 48E		17 38 50N 42 08 20E	Shuqayq	203
43			16 Mar 2017		14 52 29N 42 58 29E	16 37 11N 42 36 45E		Jazan	198
44			19 Mar 2017		15 32 43N 44 10 17E	16 51 17N 43 02 28E		Jazan	189
		BF	20 Mar 2017			Reported destroyed in flight		Najran	
45	BG		27 Mar 2017	Qaher-1	16 37 50N 43 52 20E	17 57 09N 43 26 43E		Khamis Mushayt	157
46	BH		27 Mar 2017	Qaher-1	16 37 50N 43 52 20E	18 18 33N 43 30 28E		Khamis Mushayt	191
47	BI		27 Mar 2017	Qaher-1	16 38 14N 43 51 25E	18 08 00N 42 54 00E		Abha	195
48	BJ		27 Mar 2017	Qaher-1	16 37 14N 43 51 28E	17 59 52N 43 19 28E		Khamis	163
49			19 May 2017	SCUD	17 03 47N 43 36 29E	22 12 57N 45 37 55E		Najran	
50	BK		19 May 2017	ER	17 07 10N 43 36 57E		24 03 54N 46 24 28E	Riyadh governorate	825
51	BL		22 Jul 2017	Borkan-2H	17 04 04N 43 51 08E		23 58 55N 38 14 26E	Yanbu*	965

<i>Serial</i>				<i>Coordinates (° ' ")</i>				<i>Distance (km)</i>	<i>Location / Remarks</i>
	<i>KSA Confirmed<sup>12</sup></i>	<i>Reported</i>	<i>Date</i>	<i>Likely missile type</i>	<i>Launch point</i>	<i>Patriot interception</i>	<i>Impact point</i>		
52	BM	26 Jul 2017	SCUD-C type	16 23 36N 44 05 03E	21 23 46N 40 34 10E		Ta'if	668	Warhead is cluster munition type from a SCUD-C type.
53		7 Aug 2017		18 04 46N 45 00 02E		16 32 03N 42 48 33E	Jazan	289	
54		27 Aug 2017		18 04 46N 43 03 26E	18 13 80N 42 31 26E			58	
	BN	27 Oct 2017				22 12 57N 45 37 55E	Najran		
99	BO	4 Nov 2017	Borkan-2H	15 57 09N 43 48 13E	Reported destroyed in flight	24 56 27N 46 43 29E	Riyadh, King Khaled airbase	820+	
	BP	30 Nov 2017			Reported destroyed in flight		Khamis Mushayt		
100	BQ	19 Dec 2017	Borkan-2H				Riyadh	1,000+	

## Annex 35: SCUD-C type modification programme

### I. Background

1. The first time an SRBM was launched with an extended range (ER-SRBM) beyond that normally expected of the known missiles in the Houthi-Saleh inventory was on 9 October 2016. Since then there has been four confirmed launches of SRBM with a range slightly in excess of the known maximum range of 550km to 600km for this SRBM type (see table 35.1).

Table 35.1  
Confirmed Houthi-Saleh SCUD-C launches (>600km)

Ser	Date	Target	Range (km)	Remarks
1	9 Oct 2016	Ta'if	634	▪ Reported as intercepted by Patriot MIM-104 system.
2	27 Oct 2016	Ta'if	667	▪
3	19 May 2017	Najran	611	▪ Reported as intercepted by Patriot MIM-104 system.
4	26 Jul 2017	Ta'if	668	▪ Warhead is a cluster munition type from SCUD-C type (see paragraph 6)

2. The Panel finds that it is almost certain that these particular missiles were not the ER-SRBM (at annex 36), but rather as a result of minor modifications being made to the SCUD-C type SRBM known to be in the possession of the Houthi-Saleh alliance prior to January 2015. It is possible that this is the missile the Houthis refer to as the Borkan-2 (see figure 35.1).

Figure 35.1  
Houthi media image of Borkan-2



## II. Technical options to extend range

3. The Panel assesses that the only realistic technical options to extend the range<sup>1</sup> of the SCUD-C type SRBM, are limited to:

- (a) Reducing the explosive weight within the warhead to virtually nil;
- (b) Reducing component weight;
- (c) Increasing the liquid bi-propellant capacity of an SRBM by adding additional fuel and oxidizer tanks; or
- (d) Increasing the liquid bi-propellant capacity of an SRBM by adding larger fuel and oxidizer tanks in place of the current tanks.

### A. Reduction of warhead weight

4. The removal of the high explosive warhead would save, dependent on the SRBM type, approximately 600kg in weight. A significant proportion of the weight of the missile consists of the liquid bi-propellant (65%) and warhead (10% - 15%). The majority of the propellant expended launching the SRBM along the first phase of its trajectory in order to gain height above ground and counter the force of gravity; hence the missile is continually losing weight as the propellant burns. Therefore, in theory, a noticeable range increase could be achieved by the removal of the warhead weight, as this would be less weight that is needed to be lifted against the force of gravity. Even without a warhead, the damage caused entirely by the kinetic energy of the missile body impacting the ground would be localized, but significant.

5. As one of the aims of the Houthi-Saleh missile campaign is strategic propaganda, then the loss of any warhead damage is insignificant to them. Appendix 1 shows the weight of propellant and warheads for each of the SRBM in the possession of Houthi-Saleh forces at the outbreak of the conflict. This data supports the finding that extended range for these particular SRBM types may be being gained by removing the explosive from the warheads SCUD-C type missiles in their arsenal.<sup>2</sup>

6. Evidence of a programme to lighten the load of these SRBM in order to extend range is the use of a carrier warhead for sub-munitions, as identified by the Panel from the remnants of the launch against Ta'if on 26 July 2017 (figure 35.2).

<sup>1</sup> Due to the differential in altitude above sea level (ASL) a missile fired from the higher altitude of Yemen (approx. 2,250m ASL) against Riyadh (610m ASL) there would be a very limited range extension of only 1.4km.

<sup>2</sup> The removal of the warhead would alter the centre of gravity of the missile. Computational fluid dynamics (CFD) modeling may be required to confirm how much ballistic stability would be retained in flight, and what extended range could be expected.

Figure 35.2  
 SCUD C type sub munition warhead (Ta'if, 26 July 2017)<sup>3</sup>



## 2. Reducing component weight

7. A reduction in the weight of components would result in an incremental, but small, increase in the theoretical maximum range of the missile system. This was certainly done in the case of the SRBM fired against Ta'if on 22 July 2017. Among the remnants of this SRBM the Panel identified that the compressed air bottles used to pressurise the fuel system were made of a composite material, rather than the steel of the standard SCUD-C type system (figures 35.3 and 35.4). The compressed air bottles used were modern and manufactured by a United States company, Mine Safety Appliances Incorporated,<sup>4</sup> or one of their subsidiaries. The response from the manufacturer to a Panel tracing request for this component<sup>5</sup> included a comment that the component was mass-produced and no serial numbers were allocated.

Figure 35.3  
 MSA composite compressed air bottles



Figure 35.4  
 MSA composite compressed air bottles



<sup>3</sup> All imagery taken by Panel unless otherwise indicated. This image was from a confidential source.

<sup>4</sup> <http://us.msasafety.com/Supplied-Air-Respirators-%28SCBA%29/SCBA-Parts-%26-Accessories/Air-Cylinders/p/000010000800002001>.

<sup>5</sup> Panel letter dated 20 November 2017.



### 3. Increasing liquid propellant capacity (additional fuel and oxidiser tanks)

8. A small increase in the liquid bi-propellant capacity of an SRBM could be achieved by adding additional small fuel and oxidizer tanks in any free space within the missile body. Such free space is very limited though, and the installation of the necessary piping and valves to integrate with the designed fuel flow system would require a significant degree of engineering expertise to achieve in practice. The Panel has seen no evidence of this approach being taken.

### 4. Increasing liquid propellant capacity (larger fuel and oxidiser tanks)

9. A larger increase in the liquid bi-propellant capacity of an SRBM would be achieved by adding larger fuel and oxidizer tanks, in place of the current tanks. This would require a significant degree of engineering expertise to achieve as it would require cutting the missile in half to add the extended range tanks and additional pipe lengths and valves. It is part of the route taken by the Democratic People's Republic of North Korea (DPRK) in the development of the Hwasong-7 and Hwasong-9 extended range SCUD variants.<sup>6</sup> Outside the DPRK only Syria has been reported to own such a system. The Panel finds that the Houthi has not taken this approach, as the dimensions of the liquid propellant tank remnant inspected from the Ta'if SRBM fall within those of the normal SCUD-C type SRBM.

## III. IHL non-compliance

10. The Panel finds that in their use of SRBM, Houthi-Saleh forces failed to take account of the inherently indiscriminate nature of the weapon in that:

- (a) Since the blast and fragmentation danger areas are primarily based on the size and design of the explosive warhead, this missile's likely impact on civilians was foreseeable, especially when directed at civilian populated areas; and
- (c) As such weapons have a known Circular Error Probability (CEP)<sup>7</sup> of up to 1,000m, they should not be used against targets within 1,000m of the civilian population.

## IV. Panel findings

11. The Panel finds that:

- (a) The SRBM used for the attack against Ta'if, Saudi Arabia on 26 July 2017 was highly probably a SCUD-C / Hwasong-6 type SRBM with minor modifications to save weight, thus slightly increasing range;
- (b) Based on the ranges achieved, it is highly likely that the other attacks listed in table 35.1 were also locally modified SCUD-C / Hwasong-6 type SRBM and not the ER-SRBM covered at annex 36;
- (c) It is possible that the Houthi-Saleh missile engineers of the 5<sup>th</sup> and 6<sup>th</sup> missile brigade would have the technical capacity to make such minor modifications with little, or no, external assistance;
- (d) It is almost certain that the minor modifications made to the SCUD-C / Hwasong-6 type SRBM would not result in the necessary increase in range to target the Riyadh area.

<sup>6</sup> <https://missilethreat.csis.org/missile/scud-er/>.

<sup>7</sup> The CEP is a measure of a weapon system's precision. It is defined as the radius of a circle, centered on the mean, whose boundary is expected to include the landing points of 50% of the missiles fired.



## Appendix A to Annex 35: Analysis of Houthi-Saleh SRBM weights versus extended range

Table A.35.1

### Weight of liquid bi-propellant and explosive warheads in Houthi-Saleh SRBM

Item	Nomenclature	SCUD-B		SCUD-C		Hwasong-5		Hwasong-6	
		Tonne s	Litres	Tonne s	Litres	Tonne s	Litres	Tonnes	Litres
Fuel	Kerosene (TM-185) <sup>8</sup>	1.31	1,617	1.81	2,235	1.31	1,617	1.81	2,235
Oxidiser	IRFNA <sup>9</sup> (AK-271)	2.45	1,815	2.53	1,874	2.45	1,815	2.53	1,874
Total	Bi-Propellant	3.76	3,432	4.34	4,109	3.76	3,432	4.34	4,109
Warhead		0.99		0.60		0.99		0.77	
Launch Weight <sup>10</sup>		5.90		6.40		5.90		6.57 (est)	
% Weight Saving		16.7%		<b>9.4%</b>		16.7%		<b>11.7%</b>	
Design Range (km)		300		<b>600</b>		350		<b>600</b>	

<sup>8</sup> JET A-1 could be used as a substitute. It is the standard aviation fuel for turbo engines and available in Yemen.

<sup>9</sup> Inhibited Red Fuming Nitric Acid.

<sup>10</sup> This is the weight of the bi-propellant, warhead and the missile components (e.g. rocket motor, guidance unit, missile body).

## Annex 36: Extended Range (ER) Short Range Ballistic Missile (Borkan-2H)

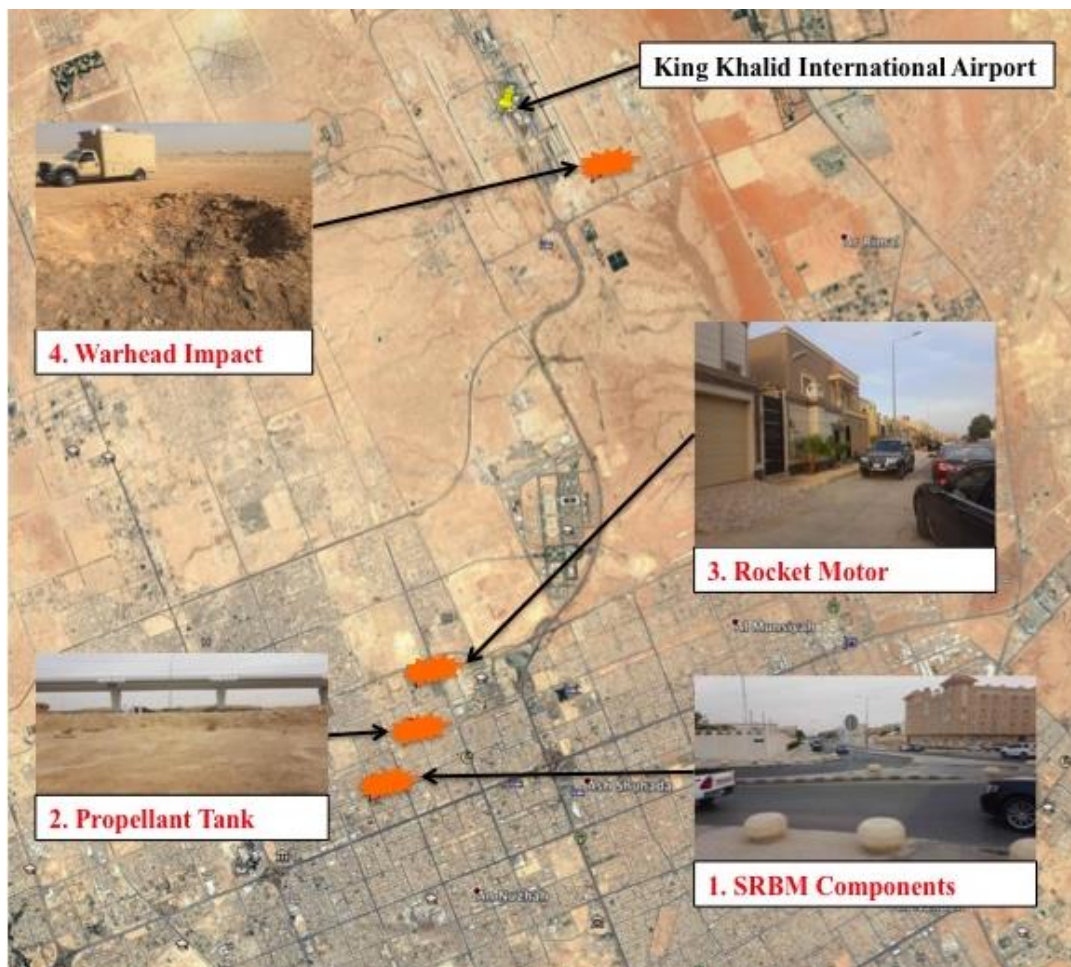
### I. Introduction

1. The Panel travelled to Riyadh, Saudi Arabia from 17 to 21 November 2017 to inspect debris recovered from short-range ballistic missiles (SRBM) attacks launched against Saudi Arabia by Houthi-Saleh forces on 19 May, 22 July, 26 July and 4 November 2017. The Saudi Arabian authorities recovered all components unless otherwise indicated. The Panel also visited Saudi Arabia from 24 – 26 December 2017 to inspect remnants of a further SRBM attack on Riyadh on 19 December 2017.

2. The Panel visited two Saudi Arabian military bases where the authorities had gathered remnants from four SRBM attacks against Saudi Arabia. The Panel also visited four impact points from the 4 November 2017 attack, where other remnants of the SRBM were identified. These being inside Riyadh city and King Khalid International Airport (KKIA) (see figures 36.1 and 36.2).

Figure 36.1

Impact points of final ER-SRBM track (4 November 2017)<sup>1</sup>



<sup>1</sup> All imagery taken by Panel unless otherwise indicated.

Figure 36.2  
Remnants identified along final ER-SRBM track (4 November 2017)<sup>2</sup>



## II. Initial observations

3. The launch and impact points are at table 36.1. The Panel made the following initial general observations on the condition of the SRBM remnants (table 36.2):

Table 36.1  
Launch and impact points

<i>Attack date</i>	<i>Target</i>	<i>Launch point</i>	<i>Impact point</i>	<i>Remarks</i>
19 May 2017	Southern Riyadh Province	17 <sup>0</sup> 03'47"N, 43 <sup>0</sup> 26'29"E	24 <sup>0</sup> 03'54"N, 46 <sup>0</sup> 24'28"E	
22 Jul 2017	Yanbu	17 <sup>0</sup> 04'04"N, 43 <sup>0</sup> 51'08"E	23 <sup>0</sup> 49'29"N, 38 <sup>0</sup> 23'47"E	
26 Jul 2017	Taif	16 <sup>0</sup> 23'36"N, 44 <sup>0</sup> 05'03"E	21 <sup>0</sup> 23'46"N, 40 <sup>0</sup> 34'10"E	

<sup>2</sup> Images taken by Saudi Arabia security agencies immediately after attack.

<i>Attack date</i>	<i>Target</i>	<i>Launch point</i>	<i>Impact point</i>	<i>Remarks</i>
4 Nov 2017	Riyadh	15°57'59"N, 43°48'13"E	24°56'27"N, 46°43'29"E	Impact point of warhead. Launch point based on Patriot data.
19 Dec 2017	Riyadh	16°39'51"N, 43°52'13"E	24°35'43"N, 46°38'17"E <sup>3</sup>	After intercept. Two impact points for Patriot intercept missile debris were identified. No ER-SRBM debris has yet been identified.

Table 36.2

### General observations on all missile remnants inspected in Saudi Arabia by the Panel

<i>Attack date</i>	<i>Target</i>	<i>Approximate range (km)</i>	<i>Location of remnants inspected</i>	<i>General observations on SRBM remnants</i>
19 May 2017	Southern Riyadh Province	838	Military base, 100km from Riyadh	Partial inspection due to time constraints and inaccessibility of components. No conclusions made.
22 Jul 2017	Yanbu	942	Military base, Riyadh	Rear section, comprising elements of rocket motor, recovered from immersion in water by the Saudi authorities. Partial inspection only possible.
26 Jul 2017	Taif	668	Military base, 100km from Riyadh	Several components, including only remnant of warhead and guidance section recovered by the Saudi authorities. Subsequent Panel analysis identified this was not an ER-SRBM (see annex 35).
4 Nov 2017	Riyadh	1,043	Military base, Riyadh	The most complete SRBM with extensive and well-preserved remnants. Full inspection by Panel.
19 Dec 2017	Riyadh	965	Riyadh area	No ER-SRBM debris yet identified.

## III. Analysis of SRBM tracks

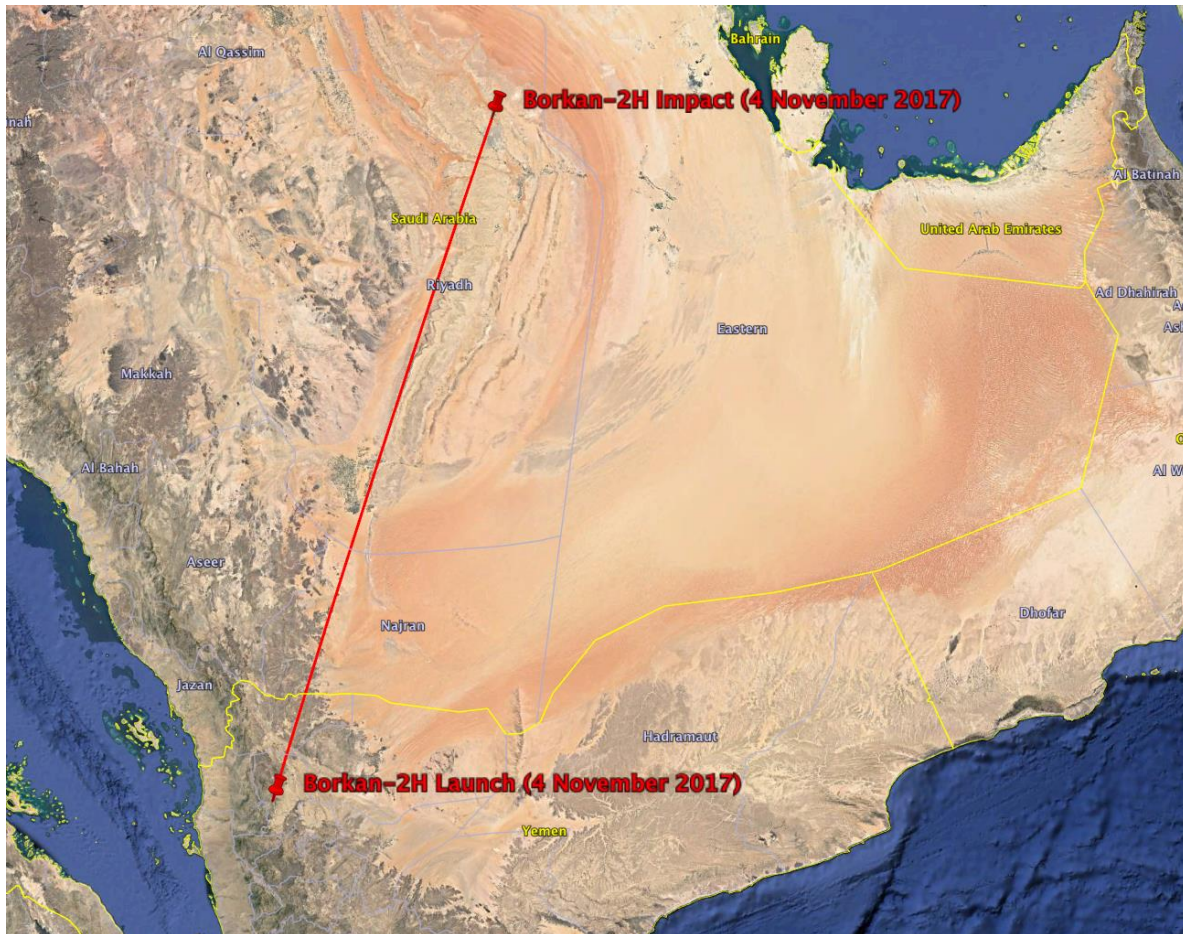
### A. 4 November 2017 ER-SRBM against Riyadh

4. The Saudi Arabian authorities provided the Panel with the coordinates of the ER-SRBM flight path based on data from the target event report from the Patriot anti-missile system.<sup>4</sup> The Panel confirmed the track of the ER-SRBM (figure 36.3) through extrapolation of the identified four points of debris impact. The track was assessed as being 017° and which bisects the Saudi Arabian provided launch coordinates, which are for the settlement of al-Mayqa' in Amran governorate of Yemen. Based on the high intensity presence of Saudi Arabian armed forces along that track inside Saudi Arabian held territory within Yemen, the Panel finds it almost certain that the ER-SRBM for the 4 November 2017 attack could not have been covertly launched from a closer range within Saudi Arabian territory.

<sup>3</sup> Other impact point at 24°33'45"N, 46°38'13"E.

<sup>4</sup> The Shared Early Warning Systems (SEWS) data estimates a launch point one degree of longitude further North, which would mean a range of 937km.

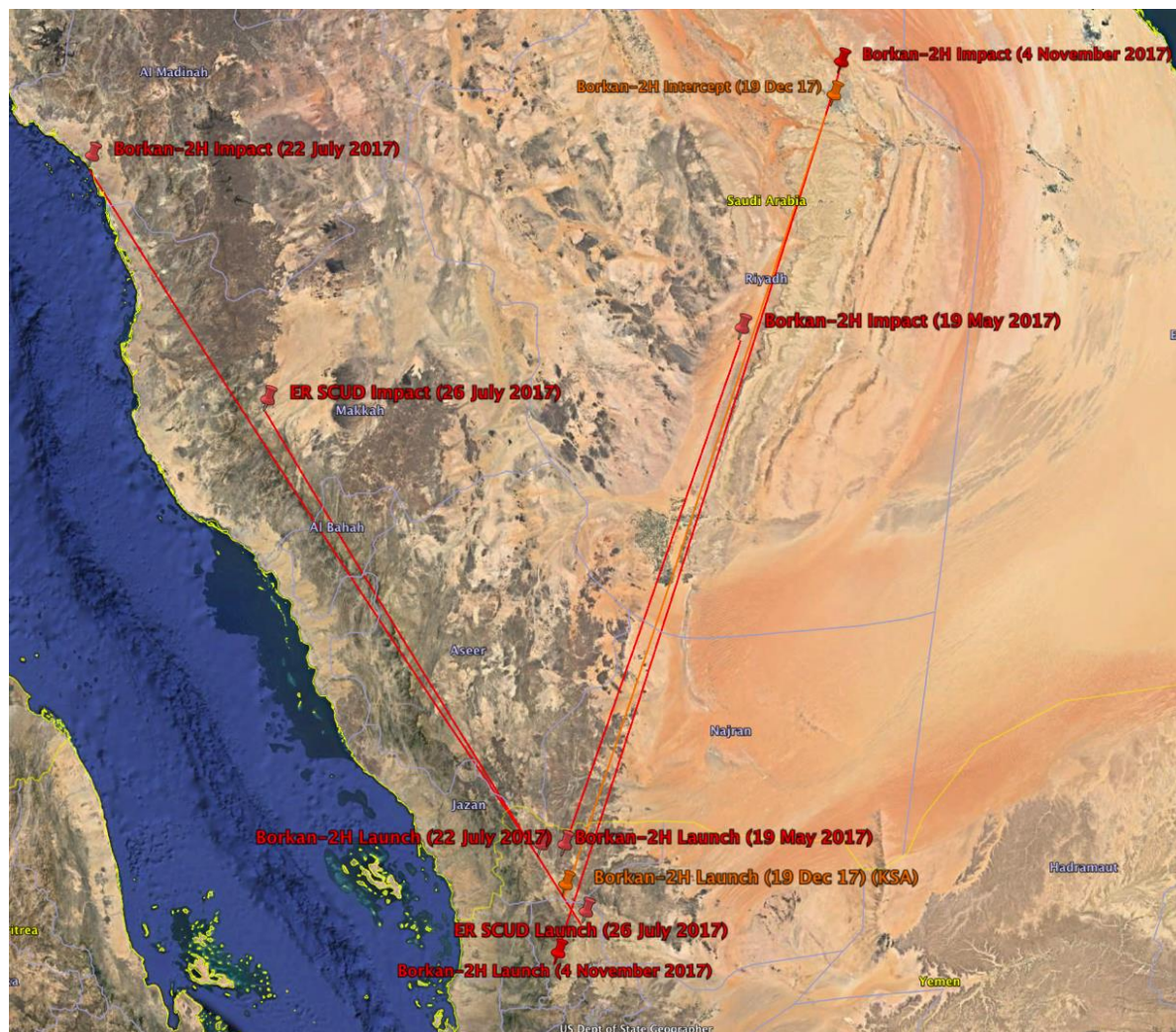
Figure 36.3  
Estimated ER-SRBM track from launch to impact



**B. Reported tracks for all ER-SRBM launches**

6. The Panel was unable to independently verify the tracks of the other four ER-SRBM provided by the Saudi Arabian authorities. The Saudi Arabian authorities have reported them as being as shown in figure 36.5.

Figure 36.5  
Reported tracks of other SRBM<sup>5</sup>



#### IV. Technical analysis of remnants

7. Table 36.3 summarises the technical observations of the Panel for the 4 November 2017 Riyadh ER-SRBM. This analysis will be further refined should any response to tracing requests be received. Supporting imagery and further explanation is at appendix A. Table 36.4 summarises the technical observations of the Panel for the 22 July 2017 Yanbu ER-SRBM. Confirmatory imagery from the 22 July Yanbu ER-SRBM is at appendix B.

<sup>5</sup> The Panel found that the 26 July 2017 was not an ER-SRBM, but a slightly modified SCUD-C/Hwasong-6. See details at annex 35.



Table 36.3  
**Technical observations for the 4 November 2017 ER-SRBM**

<i>Serial</i>	<i>Functional area</i>	<i>Component</i>	<i>General observations on ER-SRBM remnants</i>
1	Warhead	Warhead Cone	<ul style="list-style-type: none"> <li>▪ Fragments of the warhead were recovered, but neither the shape nor design could be determined from them.</li> <li>▪ The explosive weight of the warhead could not be determined from the fragmentation, and it is possible a reduced weight warhead was used as a weight saving measure to extend range.</li> </ul>
2	Guidance Unit	Electronics	<ul style="list-style-type: none"> <li>▪ One component had 2009 stamped on it, which is probably the year of manufacture of that component.</li> <li>▪ The guidance unit is of a different, and more modern, design to that of the SCUD-C and Hwasong-6.</li> </ul>
3	Missile Main Assembly (MMA)	Exterior skin	<ul style="list-style-type: none"> <li>▪ The exterior skin of the oxidiser tanks is made of 5000 series of between 1.8mm to 2.1mm thickness aluminium alloy, rather than steel, which is used on the SCUD C, Hwasong-6 and Qiam-1 missiles.</li> <li>▪ The welding of the MMA exterior skin was typical of that to be expected in a manufacturing plant.</li> <li>▪ The welding used to join the oxidiser and fuel sections together and to the guidance and tail units was of a low quality and was not applied by the original manufacturer. It was artisanal welding.</li> <li>▪ The exterior skin had been over painted blue, with Borkan 2-H (in Arabic) added in white. The quality of the over paint did not match the quality of the original manufacturers paint, which could be observed on parts of the missile body.</li> <li>▪ The over paint of the artisanal welds used to join the main components showed brush strokes, as opposed to the general original body paint that had been sprayed on.</li> </ul>
4	Missile Main Assembly (MMA)	Liquid propellant tanks	<ul style="list-style-type: none"> <li>▪ The fuel tank is to the rear of the oxidiser tank, whereas in the SCUD and Hwasong-6 series of SRBM it is situated forward of the oxidiser tank.</li> <li>▪ The oxidiser tank had internal aluminium alloy reinforcing ribs added to increase structural rigidity.</li> <li>▪ The oxidizer tank was split in two internally to allow for the redistribution of oxidizer in flight to maintain a suitable centre of gravity, and hence ballistic stability.</li> <li>▪ 6 valves were identified on the oxidiser tank sections. (<i>On the Yanbu 22 July 2017 SRBM three valves were identified on the fuel tank section</i>).<sup>6</sup> A SCUD-C type missile only has 4 x Valves (1 x FFV, 1 x FDV, 1 x OFV and 1 x ODV). See appendix 3.</li> </ul>
5	Tail unit	Rocket Motor	<ul style="list-style-type: none"> <li>▪ The rocket motor is typical in design of that to be found on the SCUD and Hwasong-6 series of SRBM. Further analysis is needed to identify if any modifications have been made to improve performance of the rocket motor.</li> </ul>

<sup>6</sup> The Panel's initial analysis is that for the complete missile system these may be 3 x Combined Drain and Fuel Filling Valves (DFFV), 3 x Vent Valves, 2 x Pressure Relief Valves (PRV) and 1 x Valve (purpose unknown). Panel investigations continue to determine the exact purpose of each valve.

<i>Serial</i>	<i>Functional area</i>	<i>Component</i>	<i>General observations on ER-SRBM remnants</i>
6	Tail unit	Jet vane housing internal control vanes	<ul style="list-style-type: none"> <li>Three jet vane housings had a logo cast in the metal. The logo reported<sup>7</sup> to be that of Shahid Bakeri Industries, Iran. A tracing request has been sent to the Islamic Republic of Iran.</li> </ul>
7	Tail unit	Compressed air bottles	<ul style="list-style-type: none"> <li>The compressed air bottles recovered were made of carbon fibre and not the steel bottles expected from a SCUD C. The Panel assesses this was a design change to save weight.<sup>8</sup></li> </ul>
8	Tail unit	Stabiliser fins	<ul style="list-style-type: none"> <li>According to the Saudi authorities no stabiliser fins were recovered during their search. The Qiam-1 guidance system negates the need for stabiliser fins, which is also a weight saving measure.</li> </ul>

Table 36.4

**Technical observations for the 22 July 2017 ER-SRBM**

<i>Serial</i>	<i>Functional area</i>	<i>Component</i>	<i>General observations on ER-SRBM remnants</i>
1	Missile Main Assembly (MMA)	Fuel tank	<ul style="list-style-type: none"> <li>A pipe from the fuelling valve of the fuel tank is in place to allow for fuelling in the horizontal position only. This has tactical advantages, allowing the missile to be fuelled in buildings or caves before being erected into its vertical launch position.</li> <li>It would also have a secondary function as an anti-static measure during fuelling operations.</li> <li>The welding of the MMA exterior skin was typical of that to be expected in a manufacturing plant.</li> <li>The welding used to join the fuel tank to the tail section was of a low quality and was almost certainly not applied by the original manufacturer. It was artisanal welding.</li> <li>The exterior skin of the fuel tanks is made of 5000 series of between 1.8mm to 2.1mm thickness aluminium alloy, rather than steel, which is used on the SCUD C, Hwasong-6 and Qiam-1 missiles.</li> </ul>
2	Tail unit	Rocket Motor	<ul style="list-style-type: none"> <li>The rocket motor is typical in design of that to be found on the SCUD and Hwasong-6 series of SRBM. Further analysis is needed to identify if any modifications have been made to improve performance of the rocket motor.</li> </ul>
3	Tail unit	Compressed air bottles	<ul style="list-style-type: none"> <li>The compressed air bottles recovered were made of carbon fibre and not the steel bottles expected from a SCUD C. The Panel assesses this was a design change to save weight.</li> </ul>

<sup>7</sup> The logo is very similar to that on trade stand at <http://www.sns.co.ir/?p=327>. The Iranian response to a tracing request stated that this was not the Sahid Bagheri Industrial Group (SBIG) as initially thought by the Panel. A second tracing request relating to Shahid Bagheri (Bakeri) Industries has been sent and a response is awaited.

<sup>8</sup> The composite bottles identified on the Ta'if SRBM (26 July 2017) were mass-produced by a US manufacturer. A tracing request was responded to by the US manufacturer who stated that the bottles were mass produced and that serial numbers were not allocated to each bottle produced.

<i>Serial</i>	<i>Functional area</i>	<i>Component</i>	<i>General observations on ER-SRBM remnants</i>
4	Tail Unit	Wind-bolts <sup>9</sup>	<ul style="list-style-type: none"> <li>The Wind-bolt housing identified had metal covering the location where the fin would normally be located. There was no evidence of a fin ever having been removed.</li> </ul>
10	Tail unit	Stabiliser fins	<ul style="list-style-type: none"> <li>No stabiliser fins were recovered. The Qiam-1 guidance system negates the need for stabiliser fins, which is also a weight saving measure.</li> </ul>

8. There are significant design differences to this SRBM compared to the SCUD-C / Hwasong-6 series of SRBM known to be in Houthi-Saleh possession since the imposition of the targeted arms embargo on 14 April 2015. The technical differences of this SRBM are of such significance, and would require complex ballistic modelling, extensive test and evaluation, that they highly unlikely to be the result of upgrades to the SCUD-C / Hwasong-6 series. The use of an aluminium alloy body, lack of fins and use of lighter components, such as the carbon fibre air bottles, all indicate design changes specifically made to save weight. The reversal of the positioning of the fuel and oxidizer tanks in the main missile assembly is most likely related to ensuring the centre of gravity is in a position to ensure stable flight. Table 36.5 summarises the design features and characteristics of the SCUD-C / Hwasong-6 versus Qiam-1 versus the Borkan-2H. These are illustrated at figure 36.6.

Table 36.5  
Design feature comparison

<i>Serial</i>	<i>Functional area</i>	<i>Design Feature</i>	<i>SCUD C</i>	<i>Hwasong-6</i>	<i>Qiam-1</i>	<i>Borkan-2H</i>
1	Warhead	Triconic warhead shape	X <sup>10</sup>	✓	✓	✓
2	Guidance Unit	Advanced guidance system	X	X	✓	✓
3A	Missile Main Assembly (MMA)	Steel airframe	✓	✓	✓	X
3B	Missile Main Assembly (MMA)	Aluminium alloy airframe	X	X	X	✓
3C	Missile Main Assembly (MMA)	Oxidiser tank (Front)	X	X	✓	✓
3D	Missile Main Assembly (MMA)	Fuel tank (Rear)	X	X	✓	✓
3E	Missile Main Assembly (MMA)	Horizontal fuelling capability pipe	X	X	✓	✓
3F	Missile Main Assembly (MMA)	Internal reinforcing aluminium alloy ribs	X	X	Not known	✓
3G	Missile Main Assembly (MMA)	Factory quality welding all over	✓	✓	✓	X
3H	Missile Main Assembly (MMA)	Artisan welding	X	X	X	✓

<sup>9</sup> Four wind-bolts are used to secure the base of the missile to the launch platform to keep the missile secure during elevation and prior to firing. It is highly probable that these are explosively cut during the missile firing sequence immediately prior to launch.

<sup>10</sup> X = Not Present.

Serial	Functional area	Design Feature	SCUD C	Hwasong-6	Qiam-1	Borkan-2H
3I	Missile Main Assembly (MMA)	4 x liquid bi-propellant Filling/Draining Valves	✓	✓	X	X
3J	Missile Main Assembly (MMA)	9 x liquid bi-propellant Filling/Draining Valves, Pressure Relief valves (PRV) and other valves TBC. <sup>11</sup>	X	X	✓	✓
4A	Tail unit	Rocket Motor	✓	✓	✓	✓
4B	Tail unit	Actuator for internal graphite control vanes	✓	✓	✓	✓
4C	Tail unit	Composite compressed air bottles	X	X	Not known	✓
4D	Tail unit	Wind-bolt housings covered	X	X	✓	✓
4E	Tail unit	Stabiliser fins	✓	✓	X	X

Figure 36.6

**Major components and their relative position compared to a Qiam-1 SRBM<sup>12</sup>**

9. Based on the components seen by the Panel and the design of the ER-SRBM, the Panel finds that SCUD C / Hwasong-6 missiles are not being modified into the Borkan-2H. The Panel does not discount the option that some components from these missile types are being used in the Borkan-2H though.

**V. Estimation of warhead size**

10. The crater size at KKIA (figure 36.7) for the 4 November 2017 Borkan-2H attack was estimated by photogrammetry as being 3.18m in diameter and 0.67m in depth. Explosive engineering software<sup>13</sup> predicts that an explosive mass of 45kg (TNT equivalent) (+/- 20%) would be required for the formation of a crater of these dimensions. Open source information states that the warhead size for the Qiam-1 is 750kg, so a reduction in warhead size has very probably been made as a further weight saving measure to increase range.

<sup>11</sup> See appendix 3 for comparison of valve layouts on missiles.

<sup>12</sup> Qiam-1 missile image from <http://3.bp.blogspot.com/-qsK7VV6oZfc/Tq1ET0NyVdl/AAAAAAAAAAdo/NGlhWpeJTsw/s1600/Qiam-1.jpg>.

<sup>13</sup> Explosive Engineers Toolbox. OnePoint4 Limited.

Figure 36.7  
4 November 2017 crater at KKIA



## VI. Source of the Borkan-2H

10. The Panel considers that it is unlikely that the Government of Yemen obtained any new extended range (ER) SRBM during the final years of Ali Abdullah Saleh's (YEi.003) presidency, which ended on 25 February 2012. His relationship with Iran was such that Iranian military support in terms of advanced ER-SRBM technology, particularly of a missile that had only just entered Iranian operational service during 2010, would almost certainly not be forthcoming. There is also no evidence of the supply of any advanced ER-SRBM technology to Yemen between the assumption of the Presidency by Abdrabbuh Mansur Hadi and 20 January 2015 when the Houthis took control.

11. During 20 January to 26 March 2015 there would have been a short window of opportunity to ship complete ER-SRBM to the Houthi-Saleh forces prior to the commencement of the Saudi Arabia-led coalition air campaign. This is also assessed as unlikely as: 1) the first launch of an ER-SRBM was not until either 9 October 2016, when a missile flew 634km,<sup>14</sup> or 5 February 2017 when an ER-SRBM impacted on Muzahimiyah (a flight of 852km); and 2) there would be no need to weld the missile sections together with artisanal welding. Furthermore, had the Houthi-Saleh forces access to ER-SRBM technology when the Saudi Arabia-led coalition air campaign started on 26 March 2015, then it is highly likely they would have used them in retaliatory attacks at that time. If this narrow window of opportunity was exploited then it is more likely that the Borkan-2H would have been shipped as complete missiles, negating the requirement to assemble them in Yemen in less than ideal conditions. The Panel thus considers that the component sections for these ER-SRBM were almost certainly shipped to Yemen in violation of the

<sup>14</sup> This was the first reported impact of a SRBM beyond the maximum range of 600km for the SCUD-C or Hwasong-6.

targeted arms embargo of 14 April 2015. The Panel does not yet have prima facie evidence as to the identity of the supplier.

12. The Panel still considers it unlikely that complete ER-SRBM have been smuggled into Yemen post the implementation of the targeted arms embargo on 14 April 2015. Their size, being 12m x 1m when packed in a wooden crate, would have made them vulnerable to interdiction by Saudi Arabia-led coalition ground and naval forces. Whereas, if smuggled in main section form,<sup>15</sup> the largest section would be approximately 4m x 1m when packed in a wooden crate, which is a much more manageable and concealable size. The missile is not modular by design but the main sections could be shipped after manufacture by the factory for later assembly. The Houthi-Saleh missile engineers then assemble them into complete missiles and functionality test the systems to ensure reliability on launch. Evidence for this option includes the difference in weld quality between the main components themselves (factory quality) and the joints between the main components (poor quality), and the poor over paint quality in places. The missile when assembled is then referred to as the Borkan-2H by the Houthi-Saleh alliance. The Panel has not yet seen any evidence of external missile specialists working in Yemen in support of the Houthi-Saleh engineers.

13. The Panel thus finds that the Borkan-2H is not a missile type known to have been in the possession of the Yemeni Armed Forces prior to 2015. The design features (at table 36.5 above), technical characteristics and dimensions are consistent with those reported for the Iranian designed Qiam-1 missile (illustrated at figure X.6). Notwithstanding this, a major design difference between the Qiam-1 and the Borkan-2H is that the Qiam-1 is constructed of steel, compared to the aluminium alloy of the Borkan-2H. The Panel therefore finds that the Borkan-2H is an advanced derivative of the Iranian Qiam-1 specially designed with weight saving measures by the designers of the Qiam-1 to achieve the range of 1000+km. A standard Qiam-1 has a declared operational range of 750km.

14. Further evidence of Iranian manufacture of the Borkan-2H components is provided by two components inspected by the Panel:

(a) Three jet vane housings for the internal graphite control surface vanes are marked with a logo similar to that of Shahid Bagheri Industries.<sup>16</sup> This organization a subsidiary of the Iranian Aerospace Industries Organization (IAIO) (figures 36.8 to 36.10). The Panel has sent a tracing request to the Islamic Republic of Iran and is waiting for a response; and

(b) A printed circuit board (PCB) in a relay box marked SHIG 6081. The Panel believes SHIG is the abbreviation for the Shahid Hemat Industrial Group. It is a subsidiary of the Iranian Aerospace Industries Organization. The Panel has sent a tracing request to the Islamic Republic of Iran and is waiting for a response.

<sup>15</sup> Those sections being a warhead, a guidance unit, a fuel tank, an oxidiser tank and a tail unit.

<sup>16</sup> Also known as the Shahid Bagheri Industrial Group (SBIG) and Shahid Bakeri Industries.

Figure 36.8  
**Jet vane housing with Shahid Bakeri Industries logo markings**



Figure 36.9  
**Shahid Bagheri Industries trade stand with logo<sup>17</sup>**



Figure 36.10  
**Jet vane housing with Shahid Bagheri Industries logo markings**



## VII. Likely trafficking routes

15. The Panel thus considers there are now only likely to be three trafficking routes that explain the availability of this advanced ER-SRBM technology used in the Borkan-2H SRBM:

- (a) Along the land route from the Omani border, or Ghaydah and Nishtun in Mahrah governorate after ship to shore transshipment to small dhows. A route that has already seen limited seizures of anti-tank guided weapons and also of liquid bi-propellant oxidiser field storage tanks (see appendix D). The Panel considers this route as the most likely option;

<sup>17</sup> Source: <http://www.sns.co.ir/?p=327>.

(b) Through a Red Sea port in shipping containers, via a third country port and not on a vessel direct from the supplier, or as loose crates using false bills of lading, referring to, for example, agricultural machinery. This option carries a high risk of interdiction as all containers are now cross-loaded at either Jeddah or King Abdullah Port and are subjected to inspection by the Saudi Arabian authorities.<sup>18</sup> Prior to January 2017 Djibouti and Salalah, Oman were used as transshipment ports for containers, and only 25% were subjected to more detailed inspection.<sup>19</sup> It is possible shipments of ER-SBRM main sections were successfully shipped using this route prior to its closure. The Djibouti to Hudaydah container route is now effectively closed as subsequent delays to shipping due to frequent Saudi Arabia-led coalition re-inspections in the Coalition Holding Area (CHA) resulted in a significant increase in shipping costs;<sup>20</sup> or unlikely;

(c) Through a Red Sea port concealed within a bulk cargo carrier or even a fuel tanker. This route carries a high risk of detection by a Saudi Arabia-led coalition inspection in the CHA. In addition it would require that the illicit cargo be loaded onto a vessel with no recent calls at Iranian ports, or with Iranian connections, as such vessels are subjected to additional clearance research by UNVIM and the Saudi Arabia-led coalition naval vessels in the Coalition Holding Area (CHA).

16. The use of small fishing dhows being used across Red Sea beaches is not considered a very likely option due to the heavy naval presence of the Saudi Arabia-led coalition and Combined Maritime Forces (CMF) in the Red Sea and Gulf of Aden. No illicit arms shipments to Yemen have been detected on this route since 20 March 2016, and those detected have been assessed as being destined for Somalia.<sup>21</sup>

17. The detection of missile component shipments presents major challenges;

(a) The metal and carbon fibre composition of the components means that arms and explosive search (AES) dogs would not indicate that the component containers, likely wooden crates, were suspicious. Other than the warhead, which could be sent unfilled, there are no explosive or gun oil scents for the dogs to detect; and

(b) The x-ray profile of the ER-SRBM main sections may not be recognizable to all x-ray operators, although the warhead should raise suspicions. For example, the fuel and oxidizer tanks would appear similar to other commercial storage tanks.

## VII. IHL aspects

20. In respect of the missiles fired at Saudi Arabia, the Panel cannot conclude that Abdulmalik al-Houthi (YEi.004) consented to each individual missile strike against Saudi Arabia. However, the Panel finds without a reasonable doubt that it is the policy adopted by the Houthi leadership that allows for the continued use of these missiles against Saudi Arabia. Given the foreseeable political and military repercussions, it is unlikely that the missile launched on 4 November 2017 at King Khalid International Airport, could have taken place without the knowledge and prior consent of Abdulmalik al-Houthi (YEi.004). The Panel has concluded that this missile strike violated IHL, in that it targeted a civilian airport, and constitutes a threat to peace, security and stability of Yemen. (See more detailed IHL analysis at annex 64).

<sup>18</sup> Source: UNVIM.

<sup>19</sup> Ibid.


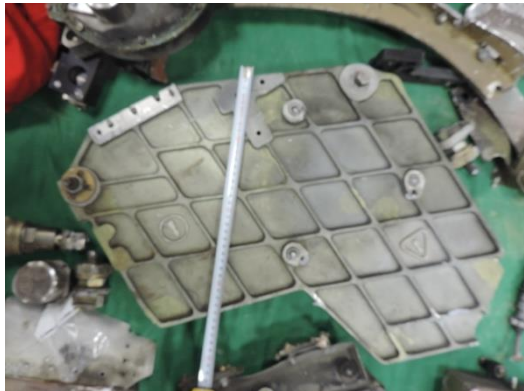

<sup>20</sup> Pacific International Lines (PIL) were the only major shipper using this route and other shippers prefer now using Jeddah to avoid delays at sea.

<sup>21</sup> 2017 Panel 2017 Midterm Update and SEMG S/2017/924 (paras. 115 - 118).





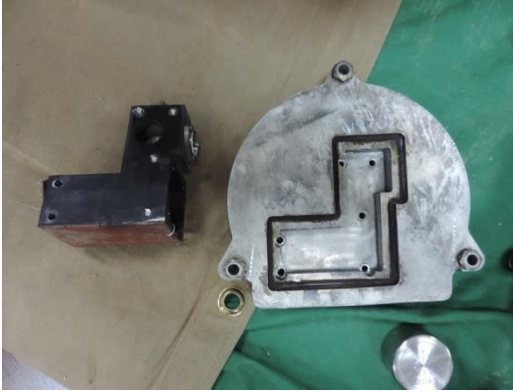

**Appendix A to Annex 36: Imagery supporting technical analysis for 4 November Riyadh Borkan-2H**

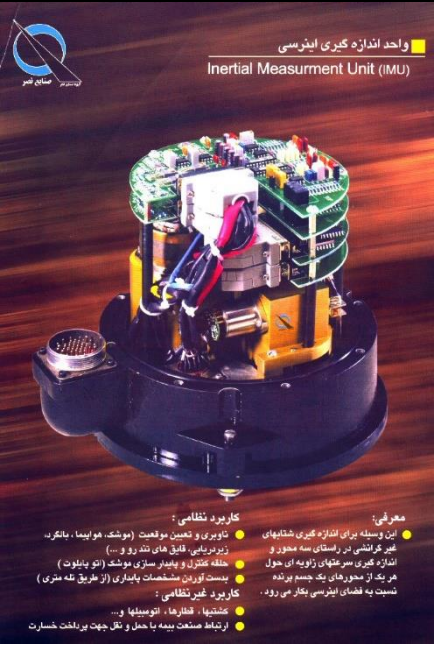


Table A.36.1  
**Imagery design characteristics of SCUD-C/Hwasong-6 SRBM versus Borkan-2H SRBM<sup>22</sup>**

<i>Serial 23</i>	<i>Component</i>	<i>Remarks</i>	<i>Image</i>
1	Warhead	Fragmentation recovered suggests warhead detonation may have occurred.	
2	Advanced guidance system	Mounting plate for inertial navigation system (INS). Not seen on SCUD-C. Arrows used to identify the direction of component mounting.	
2	Advanced guidance system	Relay unit (may be common to SCUD-C)	





<sup>22</sup> The Panel has a comprehensive set of imagery of the remnants of three of the four SRBM strikes covered in this annex. Only those that illustrate a design feature difference between the SCUD-C / Hwasong-6 and the Borkan-2H have been included.




<sup>23</sup> Cross references to serial number in table 36.3.


Serial 23	Component	Remarks	Image
2	Advanced guidance system	Relay unit (Panel removed cover)	
2	Advanced guidance system	Relay unit. Contains printed circuit board (PCB) marked SHIG 6081. The Panel believes SHIG is the abbreviation for the Shahid Hemat Industrial Group. It is a subsidiary of the Iranian Aerospace Industries Organization.	
2	Advanced guidance system	Three-point mounting plate for inertial measurement unit (IMU).	
2	Advanced guidance system	Reverse of three-point mounting plate for IMU. Similar in design to that of a IMU used on larger Iranian rockets.	

Serial 23	Component	Remarks	Image
2	Advanced guidance system	Open source <sup>24</sup> image of IMU mounting plate used on larger Iranian rockets. Shows very similar mounting plate design.	 <p>واحد اندازه گیری اینرسی Inertial Measurement Unit (IMU)</p> <p>کاربرد نظامی:          • ناوبری و تعیین موقعیت (موشک، هواپیما، بانکر، زیردریایی، قاتل های تند رو و ...)          • هدایت کنترل و هدایت سازی موشک (تو پانگوت)          • هدایت آژیرین مشخصات پایدارى (از طریق شه سزى)          کاربرد غیر نظامی:          • کشتیا، قارها، اتوبلیها و ...          • ارتقاء صنعت بیمه با حمل و نقل جهت پرفکت خسارت</p> <p>معرفی:          • این وسیله برای اندازه گیری شتابهای غیر گرانشی در راستای سه محور و اندازه گیری سرشکتهای زاویه ای حول هر یک از محورهاى یک جسم پرنده نسبت به فضای اینرسی بکار می رود.</p>
3B	Aluminium alloy airframe	1.8mm	
3C	Oxidiser tanks forward	Oxidiser tank. Tanks join just to right of the "H".	

<sup>24</sup> Supplied by confidential source.

Serial 23	Component	Remarks	Image
3C	Oxidiser tank forward	Oxidiser Vent Valve	
3D	Horizontal filling capability pipe		
3E	Internal reinforcing aluminium alloy ribs		
3F	Factory quality welding	Factory weld on left and artisanal weld on right.	

<i>Serial</i> 23	<i>Component</i>	<i>Remarks</i>	<i>Image</i>
3G	Artisan welding	Artisanal welding used to join main sections of missile together.	
3H	Artisan welding	Note factory quality weld at right angles to artisanal weld.	
4A	Rocket Motor	Further analysis required to identify any differences from SCUD-C rocket motor.	




<i>Serial</i> 23	<i>Component</i>	<i>Remarks</i>	<i>Image</i>
4B	Jet vane housing for internal graphite control vanes	Metallurgical examination of the graphite may provide more evidence of manufacturer. Three were recovered.	
4C	Composite compressed air bottles	Identical in size, material and shape to the ones recovered from the 26 July 2017 Yanbu Borkan-2H. <sup>25</sup>	
4D	Stabiliser fins	No remnants identified.	

<sup>25</sup> Similar composite air bottles were recovered from the SRBM remnants of the 26 July 2017 Ta'if attack, from which the manufacturer was identified. The response from the manufacturer to a Panel tracing request for this component included a comment that the component was mass-produced and no serial numbers were allocated.

## Appendix B to Annex 36: Imagery supporting technical analysis from 22 July 2017 Yanbu Borkan-2H


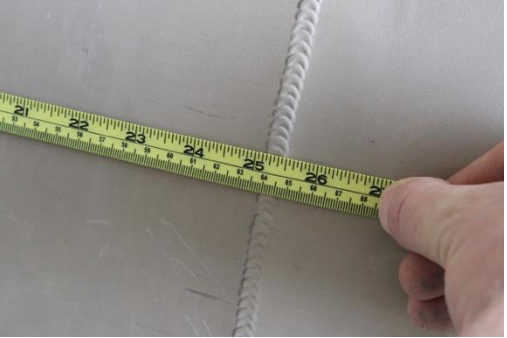


Table B.36.1

### Imagery design characteristics of SCUD-C/Hwasong-6 SRBM versus Borkan-2H SRBM<sup>26</sup>

<i>Serial 27</i>	<i>Component</i>	<i>Remarks</i>	<i>Image</i>
3B	Aluminium alloy airframe	1.8mm	
3D	Fuel tank to rear	Fuel Valve. Note use of yellow paint, a common identifier for fuel ports.	
3E	Horizontal filling capability pipe		

<sup>26</sup> The Panel has a comprehensive set of imagery of the remnants of the three of the four SRBM strikes covered in this annex. Only those that illustrate a design feature difference between the SCUD-C / Hwasong-6 and the Borkan-2H have been included.

<sup>27</sup> Cross references to serial number in table 36.4.

Serial 27	Component	Remarks	Image
3F	Internal reinforcing aluminium alloy ribs		
3F	Artisan welding	<p>Artisanal welding used to join main sections of missile together. Rust was evident on the artisanal welding on remnants of the Yanbu SRBM that was recovered from water by the Saudi authorities, whilst the factory welds on the same remnant were rust free.</p>	
4A	Rocket Motor	Remnants of propellant supply piping visible.	
4B	Composite compressed air bottles	Damaged but recognisable as composite air bottles.	



## Appendix C to Annex 36: Comparison of layout of filling, drainage and pressure valves for SCUD-C type SRBM and the Borkan-2H

1. The schematic at figure C.36.1 of the SCUD-C type SRBM design is based on a wide range of both open and confidential sources.

Figure C.36.1  
Schematic of SCUD-C type SRBM design<sup>28</sup>

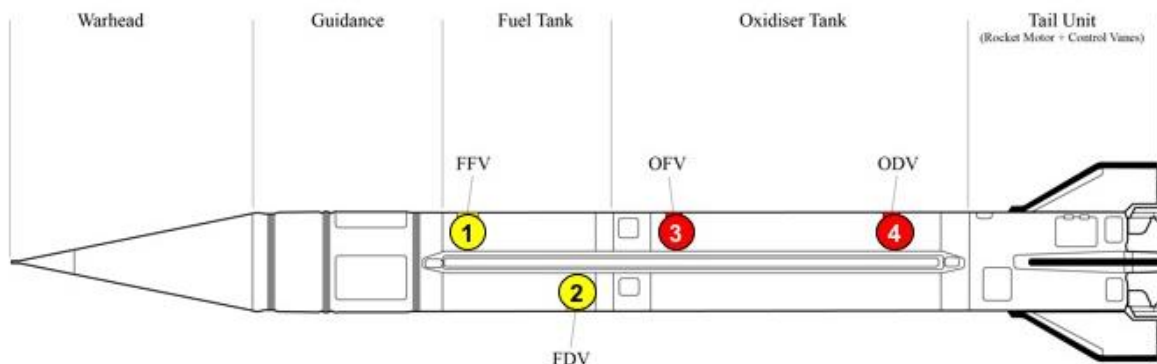


Table C.36.1  
Layout of filling, drainage and pressure valves for SCUD-C type<sup>29</sup>

Valve Number	Component	Remarks
1	Fuel Filling Valve (FFV)	Position is at forward end of fuel tank, meaning the SRBM can only be fuelled efficiently to maximum capacity when in the vertical launch position.
2	Fuel Drainage Valve (FDV)	
3	Oxidiser Filling Valve (OFV)	
4	Oxidiser Drainage Valve (ODV)	

2. The Panel has compiled the illustration at figure C.36.2 from their examination of the remnants of both the 22 July 2017 Yanbu ER-SRBM and the 4 November 2017 Riyadh ER-SRBM. The triconic warhead is for illustrative purposes only, as the shape could not be defined from recovered fragments. It is included as all open source imagery shows the Qiam-1 with a triconic warhead.

<sup>28</sup> Panel diagram. Not to scale. Valves are shown larger proportionally than on real missile to assist in identification.

<sup>29</sup> The section is still under Panel analysis.

Figure C.36.2  
**Schematic of Borkan-2H ER-SRBM design<sup>30</sup>**

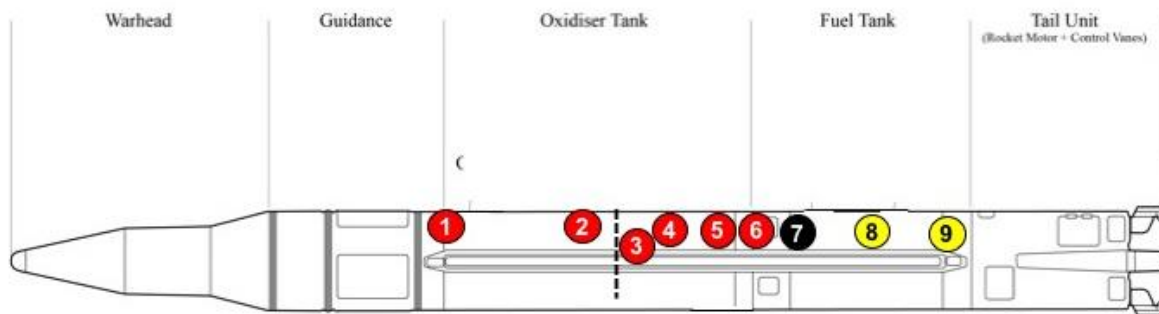
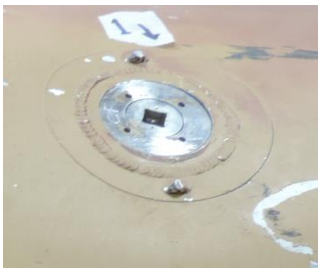








Table C.36.2  
**Layout of filling, drainage and pressure valves for Borkan-2H ER-SRBM design<sup>31</sup>**

Valve Number	Component	Marking on missile <sup>32</sup>	Image
1	Oxidiser Valve (Probable Filling and Drainage) (4 November 2017 ER-SRBM)		
2	Oxidiser Filling and Drainage Valve (4 November 2017 ER-SRBM)	FILLING DRAIN-O	
3	Oxidiser Valve (Probable Pressure Relief Valve) (4 November 2017 ER-SRBM)		
4	Oxidiser Filling and Drainage Valve (4 November 2017 ER-SRBM)	FILLING DRAIN-O	

<sup>30</sup> Panel diagram. Not to scale. Valves are shown larger proportionally than on real missile to assist in identification.

<sup>31</sup> The section is still under Panel analysis.

<sup>32</sup> All the markings were in English.

<i>Valve Number</i>	<i>Component</i>	<i>Marking on missile<sup>32</sup></i>	<i>Image</i>
5	Oxidiser Valve (Probable Pressure Relief Valve) (4 November 2017 ER-SRBM)	VENT-O	
6	Oxidiser related Valve (4 November 2017 ER-SRBM)		
7	TBC		
8	Fuel Vent Valve (22 July 2017 ER-SRBM)	VENT-F	
9	Fuel Filling and Drainage Valve (22 July 2017 ER-SRBM)	FILLING DRAIN-F	

**Appendix D to Annex 36: Suspect process equipment for liquid bi-propellant oxidizer**

1. A consignment of components was captured by UAE forces operating near Mar'ib in Yemen during January 2017. Imagery was made available by the UAE for Panel analysis.
2. The consignment contained individual items of process equipment, such as pumps, tanks, drums and vessels, some of which appear to be of specific design for particular purposes:
  - (a) A stainless-steel vessel housing with two mixing impellers (figures C.36.1 and C.36.2);
  - (b) A large mixing or transfer vessel (figures C.36.3 and C.36.4);
  - (c) A horizontal vessel with a dished (and hinged) end-piece that is rated for elevated temperatures and pressures, which appears to be fitted with particular level instrumentation, and has a pressure relief valve (figures C.36.5, C.36.6 and C.36.7);
  - (d) A heating vessel (figure C.36.8); and
  - (e) Two vessels (figures C.36.9 and C.36.10), which are virtually identical in design, configuration and size to the liquid bi-propellant oxidiser storage tanks known to be used for the SCUD missile system (figures C.36.11 and C.36.12 for comparison).
3. The consignment also contained the conventional electrical equipment such as switchgear, control panels, electrical cabinets, drives and motors, cabling and instrumentation necessary to provide the power and control systems. There is some labelling in Farsi, suggesting Iranian origin.
4. Although most of the equipment can be considered standard for the chemical, food or similar industries, some items show artisanal crafting such as unusual welding connectors (pipelines and flanges) and other improvised engineering features. This confirms adaptation for a purpose other than initially designed for.

Figure D.36.1  
**Mixing impellers**<sup>33</sup>

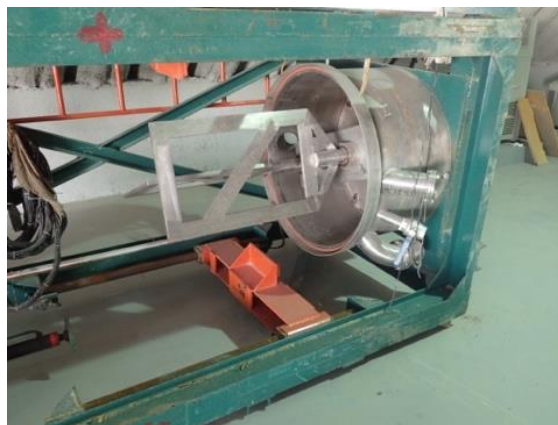
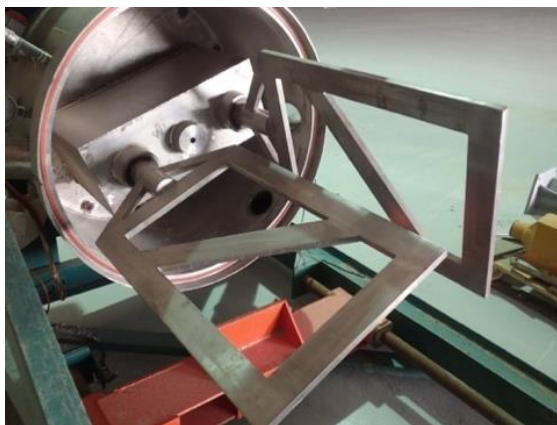


Figure D.36.2  
**Mixing impellers**



<sup>33</sup> Imagery courtesy of a Member State and confidential sources.

Figure D.36.3  
Storage or transfer vessel



Figure D.36.4  
Storage or transfer vessel



Figure D.36.5  
Pressure vessel



Figure D.36.6  
Pressure vessel



Figure D.36.7  
Pressure vessel



Figure D.36.8  
Heating vessel



Figure D.36.9  
**Field storage tanks for liquid bi-propellant oxidiser**



Figure D.36.10  
**Field storage tanks for liquid bi-propellant oxidiser**



Figure D.36.11  
**Liquid bi-propellant oxidiser field storage tank<sup>34</sup>**



Figure D.36.12  
**Liquid bi-propellant oxidiser field storage tank<sup>35</sup>**



<sup>34</sup> Stored at Gharyan Air Defence base, Libya (2017). Confidential source.

<sup>35</sup> [http://www.gulflink.osd.mil/envs/scud\\_irfna.htm](http://www.gulflink.osd.mil/envs/scud_irfna.htm).

Table D.36.1  
**Origin and destination of mixing unit components**

Serial	Component	Serial / Lot number OR Markings	Manufacturer		Supplied to			
			Company	Country / entity	Date	Company	Country / entity	
1	Component TGC-63X 150-S	RKV0604001	Ningbo Sono Manufacturing Company (STNC)	China			Not supplied directly to Yemen	
2	Model YS90S@ Light Duty Multi-Stage Pump	S/N 14040993	Tianjin Electromotor Company (Steam) <sup>1</sup>	China			Company merged and not manufacturing	
3	Compact NSX 100B Surge Protective Device	15/14 GNVAK	Schneider Electric Industries SAS <sup>2</sup>	France				
4	M3KP 224 SMb 4 Motor	S/N E856237200 ABB Oy Motors <sup>3</sup>	Probably counterfeit					
5	Hydraulic Pump	VDE05Z0	Hanning Electro-Werke GmbH <sup>4</sup>	Germany			Not traced	
6	PM80 Pump	V-109	Pentax Industries SPA <sup>5</sup>	Italy	2013		Inconclusive	
7	120000UF 15V Capacitor	5796393	Phillips NV <sup>6</sup>	Netherlands				
8	PU 12x8 Pneumatic Hose	W3B4L097	Jisehan Hosetech, Tanhay Corporation <sup>7</sup>	Republic of Korea	Feb 2015	Noavar Hava Limited <sup>8</sup>		Iran

<sup>1</sup> <http://www.steampumps.com>.

<sup>2</sup> <http://www.schnieder-electric.com>.

<sup>3</sup> <http://www.abb.com>. The company has informed the Panel that the recovered motor was a fake.

<sup>4</sup> <http://www.hanning-hew.de>.

<sup>5</sup> <http://www.pentax-pumps.it>.

<sup>6</sup> <http://www.phillips.com>.

<sup>7</sup> <http://www.tanhay.com>.

<sup>8</sup> <http://noavarhava.com/>.

Serial	Component	Serial / Lot number OR Markings	Manufacturer		Supplied to		
			Company	Country / entity	Date	Company	Country / entity
9	Transformer	JS90565-1	Alfa Technic Limited	Iran			
10	Moulded Case Circuit Breaker		Pars Fanal <sup>9</sup>	Iran		Alfa Technic Limited	Iran
11	ECT 8472 Industrial Pressure Transmitter	513487-046	Trafag AG	Member State	Aug 2014	Noran Sanat Daryaye Chalous Company <sup>10</sup>	Iran
12	Solenoid Valves Models 4V21008 and 4V110-15		AirTac International Group <sup>11</sup>	Entity			
13	Hydraulic Unit	0729212	Hid-Tek Limited <sup>12</sup>	Turkey	May 2015	Araz Fakhr Azar Limited Company <sup>13</sup>	Iran
14	L404F 'Pressuretrol' Controller	97-3667D L404F 1102 3	Honeywell Incorporated <sup>14</sup>	USA			
15	KBR-14 Pressure Gauges	15 Apr 22 15 Apr 23 DN25PN16	KBR Incorporated <sup>15</sup>	USA			
16	Series 150SJ Low Water Cut-Off/Pump Generator	160J	ITT McDonnell and Miller <sup>16</sup>	USA			

<sup>9</sup> [www.parsfanal.com](http://www.parsfanal.com).

<sup>10</sup> 257 South Lalehazar Street, 11447, Tehran, Iran.

<sup>11</sup> [http://en2.airtac.com/us.aspx?c\\_kind=6andc\\_kind2=141](http://en2.airtac.com/us.aspx?c_kind=6andc_kind2=141).

<sup>12</sup> <http://www.hid-tek.com.tr>.

<sup>13</sup> <http://www.arazfakhrazar.com>.

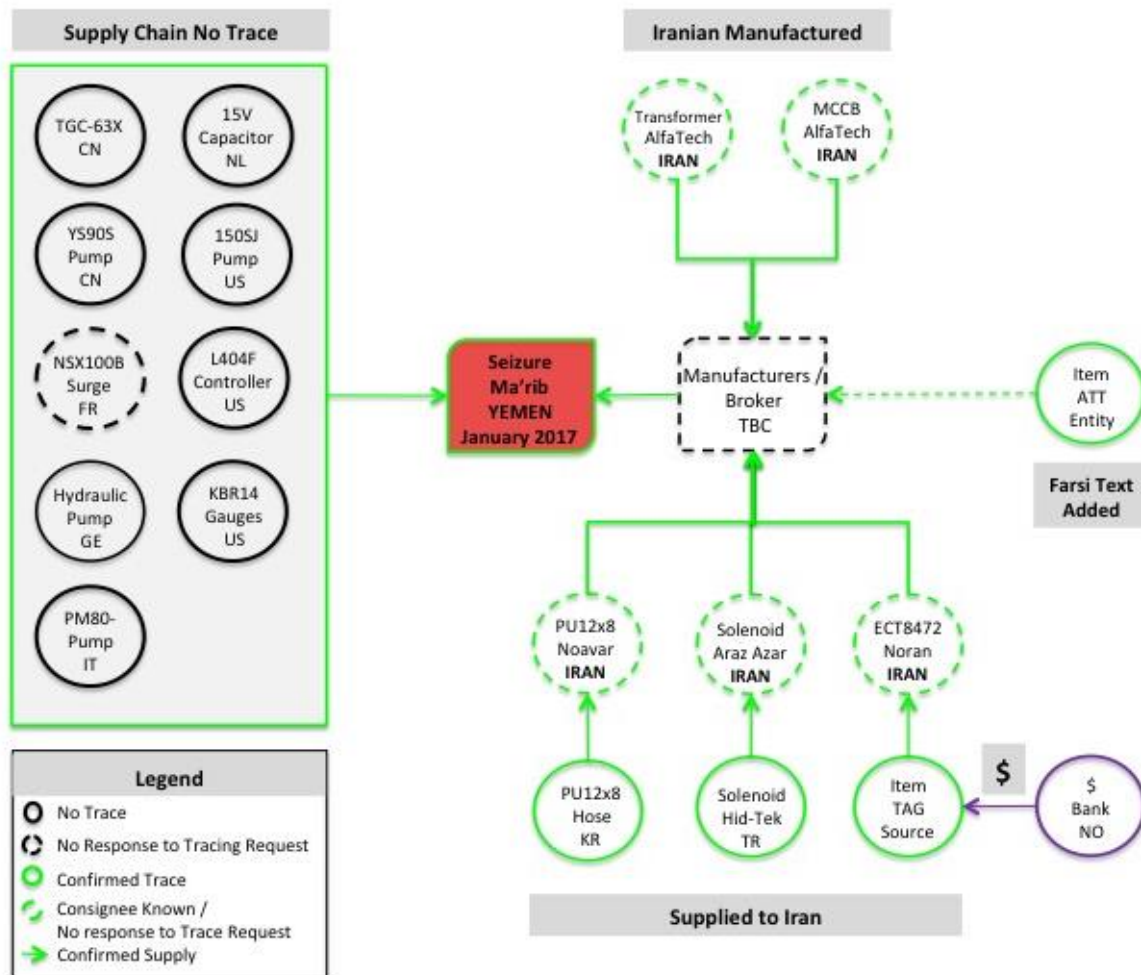
<sup>14</sup> <http://www.honeywell.com>.

<sup>15</sup> <http://www.kbr.com>.

<sup>16</sup> [www.xylem.com](http://www.xylem.com). ITT is a subsidiary company.



Figure D.36.13  
Supply chain diagram



6. The following images are of equipment and components for the tracing requests listed in table C.36.1 above.

Figure D.36.14  
**Component TGC-63X 150-S**



Figure D.36.15  
**Model YS90S@ Light Duty Multi-Stage Pump**



Figure D.36.16  
**Compact NSX 100B Surge Protective Device**



Figure D.36.17  
**M3KP 224 Smb 4 Motor**

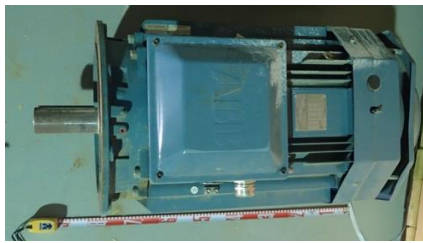


Figure D.36.18  
**Hydraulic Pump**



Figure D.36.19  
**12000UF 15V Capacitor**



Figure D.36.20  
**PU 12x8 Pneumatic Hose**  
 (Traced: KR > IR)



Figure D.36.21  
**Transformer**  
 (Traced: Manufactured in IR)

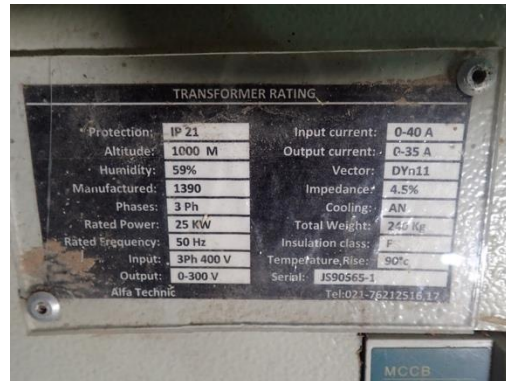


Figure D.36.22  
**Moulded Case Circuit Breaker**  
 (Traced: Manufactured in IR)



Figure D.36.23  
**ECT 8472 Industrial Pressure Transmitter**  
 (Traced: Member State > IR)



Figure D.36.24  
**Solenoid Valves Models 4V210-08 / 4V110-15**  
 (Partial Traced: > IR)



Figure D.36.25  
**Hydraulic Unit**  
 (Traced: TR > IR)



Figure D.36.26  
**'Pressuretrol' Controller**

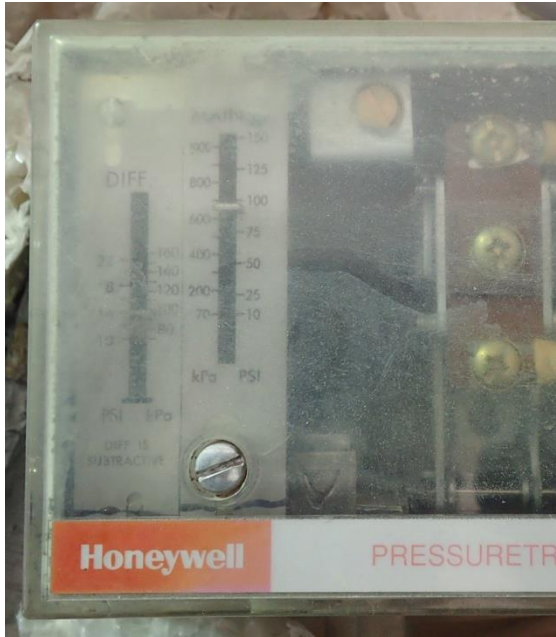


Figure D.36.27  
**KBR-14 Pressure Gauges**

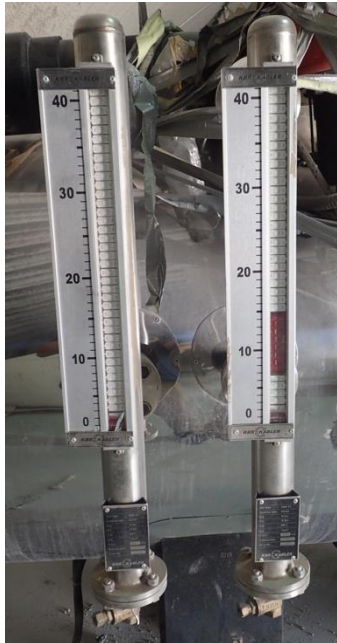


Figure D.36.28  
**Series 150SJ Low Water Cut-Off/Pump  
Generator**



**Appendix E to Annex 36: Response of Islamic Republic of Iran****Permanent Mission of the Islamic Republic of Iran to the United Nations**

622 Third Ave New York, NY 10017 www.Iran-UN.org Tel:+1(212)687-2020 Fax:+1(212)867-7086 E-mail:PR-Iran@un.int

In the name of God, the most Compassionate, the most Merciful

No. 100379

22 January 2018

Excellency,

Upon instruction from my Government, and with regard to the final report of Panel of Experts on Yemen established pursuant to Security Council Resolution 2140 (2014), requested under paragraph 6 of the UN Security Council Resolution 2342 (2017), I have honor to bring the following points to the attention of the members of the Committee:

1- The Islamic Republic of Iran reiterates its principled position on the necessity of an early, all-inclusive Yemeni led peaceful settlement to put an end to the Yemen crisis. In this regard, we re-emphasize the need for the immediate and unconditional cessation of the military aggression conducted by the Saudi-led Coalition, the elimination of the air, sea and land blockade on Yemen and the unimpeded urgent humanitarian aid and medical assistance to the Yemeni people.

2- My Government also re-emphasizes the imperative of according priority to addressing the threat posed by growing terrorism and violent extremism, including the presence of al-Qaida in the Arabian Peninsula (AQAP) and future potential growth of the Islamic State in Iraq and Levant (ISIL, also known as Da'esh) affiliates in Yemen which continues to constitute a threat to international peace and security.

3- The Saudi Arabian regime, misusing certain provisions of UN Security Council Resolution 2216 (2015), continues its relentless aggression in Yemen that has devastated the lives of millions of people while, at the same time, aims to distract the attention of the international community through libeling baseless allegations against other UN Member States.

4- Despite the fact that the UNSC Resolution 2216 (2015) is not a balanced document and fails to acknowledge the realities in Yemen, the Islamic Republic of Iran has undertaken to implement its provisions and to continue its compliance. In this regard, certain directives have been issued to the relative authorities, including those responsible for trade control.

5- In accordance with its longstanding position, my Government has actively engaged in cooperation with different international mechanisms, including the UN Secretary General Special Envoy for Yemen, the UN Office for the Coordination of Humanitarian Affairs, and the Panel of Experts established pursuant to resolution 2140 (2014). In this regard, despite our reservations and critical points



## Permanent Mission of the Islamic Republic of Iran to the United Nations

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about some of the Panel's assessments in its report, the Panel was received in Tehran on 15-16 January 2018, During which different aspects of the Yemen crisis as well as the main findings and assessments contained in the Panel's report were discussed in meetings with relevant Iranian authorities.

6- Unfortunately, the report contains accusations against my Government based on fabricated evidence provided by Saudi Arabia. Seemingly, the initial assessment of the Panel is based on such evidence.

7- The Panel, based on fabricated evidence provided by the Saudi Arabia and citing some non-exclusive apparent features belong to 2 of 82 missiles, allegedly launched from Yemeni territories targeting the Saudi Arabia, has tried to link these two missiles and Iran's Qiam-1 short range ballistic missile. In this regard, almost all other references to the non-apparent characteristics of the Qiam-1, including those related to the effective range, warhead weight, internal design features, internal fueling system, navigation system and etc., are erroneous. Meanwhile, the Panel has failed to provide its reliable sources of these speculations. It is worthy to note that evidence projected by the violations of international law have no probative value. All other claims, including similarities between logos found on components and trademark belongs to certain military industries in Iran, are inaccurate and flawed.

8- In each and every claim, including the alleged transfer of missile components to Yemen, in addition to "technical matching of components", substantiated information regarding "the exact time of transfer" and "the available routes" must be clearly furnished. In this context, the assessments by the Panel lack logical merit. Due to the imposed all-round blockade and given the sensitivity, heavyweight and large size of the parts (including the launcher, oxidizer's tank and, etc.), technical difficulty of re-aligning and coaxializing disassembled parts, there are serious uncertainties about the possibility of external origins for the missiles as well as the related component and feasibility to supply with unconventional routes.

9- Based on open source information, prior to the onset of hostilities and adoption of UN Security Council Resolution 2216 (2015), the Yemeni Government had considerable potentials in the field of ballistic missiles and notable stockpiles of SRBMs including SCUD B, C, Hwasong 5, 6, Borkan-1, Ghaheer-1, and etc. that could have been utilized by its local expertise as the technical bases for further upgrades.

10- There are also conflicts and contradictions between statements and positions provided by the Saudi Arabian authorities and those put out by the Panel with regard to strike or interception of missiles. The qualities of the retrieved missile



## Permanent Mission of the Islamic Republic of Iran to the United Nations

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components contradict the assertion about intercepting the missile by defense systems which is an issue that should be clarified.

11- There is serious doubt regarding the authenticity and credibility of the Panel's assessment. In general, the Panel has failed to fully comply with the relevant fact-finding requirements. It is a well-established rule of international law that such a claim against a sovereign State requires a degree of certainty that the Panel failed to reach. Particularly, the Panel's report even fails to comply with the Methodological Standards elaborated in different phrases in the Annex of UNSC document S/2006/997, inter alia, paragraph 21, 22, 23, 25, 27, and 28. The Islamic Republic of Iran firmly believes that, in this case, the Panel should have considered the admissibility of the evidence from State that is party to the conflict as a preliminary step. Moreover, the reliability and probative values of the evidence are questionable on many reasonable grounds, including those enumerated above. The liberal approach taken by the Panel vis-à-vis the allegations would encourage more fabrications of allegation for political purposes. Accordingly, not only did the Panel not help restoring peace and security in the region, but would also hurdle the possibility of any political solution in the future.

12- The Islamic Republic of Iran categorically rejects those baseless allegations contained in the Panel's report and reiterates that it has no policy to transfer to or manufacture arms in Yemen. It is incumbent upon the Panel to revise and correct its assessments on the implementation of Arms Embargo imposed by UN Security Council Resolution 2216 (2015).

I should appreciate if you would have this letter included as an Annex to the Final Report of the Panel of Expert pursuant to the Security Council Resolution 2140 (2014).

Eshagh Al-Habib  
Ambassador  
Charge d'Affaires, a.i.

Ahmed Himmiche  
Coordinator  
Panel of Experts on Yemen  
Security Council resolution 2342 (2017)  
to the United Nations, New York

### Annex 37: Reported UAV attacks on UAE forces in Yemen (2016 - 2017)

1. The UAE have reported eleven attacks against their ground forces by attack UAVs and one crashed UAV (table 37.1) to the Panel.<sup>1</sup>

Table 37.1  
UAV attacks against UAE ground forces

Serial	Date	Time (GMT)	Location	Remarks
1	19 Sep 2016		Sharurah, Ma'rib	Crashed UAV (Serial Number: 22-17-28) (See annex 38)
2	1 Dec 2016	17:17	Ma'rib	
3	1 Dec 2016	17:50	Ma'rib	
4	1 Dec 2016	18:20	Ma'rib	
5	3 Dec 2016	09:46	Ma'rib	
6	13 Dec 2016	19:20	Ma'rib	
7	13 Dec 2016	20:00	Ma'rib	
8	2 Jan 2017	17:17	Al Mandab	
9	7 Jan 2017	18:20	Al Mandab	
10	8 Jan 2017	23:15	Al Mandab	
11	9 Jan 2017	00:50	Ma'rib	
12	17 Jan 2017	20:20	Al Mandab	

2. On 19 September 2016 a Qasef-1 UAV, launched from Sana'a airport area, crashed in the Sharurah Area near Ma'rib governorate. The UAV had travelled for approximately 100km at an average flight speed of 150kph for 40 minutes (figure 37.1).

Figure 37.1  
UAV Track (19 September 2016)<sup>2</sup>



<sup>1</sup> Letter to Panel on 26 January 2017 from Permanent Mission.

<sup>2</sup> Panel diagram based on a Member State's information.



## Annex 38: Houthi-Saleh ‘Qasef-1’ unmanned aerial vehicles (UAV)

### A. Seizures

1. On 27 November 2016, a Dubai registered truck (Dubai/13933) was intercepted at the Almeel checkpoint near Ma’rib and was found to contain components for at least six complete Qasef-1 UAV and some components for up to another 24 UAV.<sup>1</sup> Components were also recovered by UAE forces from crashed UAV in Ma’rib (19 September 2016)<sup>2</sup> and Aden Airport (16 November 2016).<sup>3</sup>

2. The medium sized Qasef-1 (Striker-1) UAV (figures 38.1 and 38.2) is virtually identical in design and capability to that of the Ababil-T<sup>4</sup> UAV (figures 38.3 and 38.4) manufactured by the Iran Aircraft Manufacturing Industries (HESA).<sup>5</sup> The Ababil-T is a short to medium range attack UAV with the capability of delivering a 30 to 45kg warhead up to 150km.

Figure 38.1  
Houthi image of UAV Qasef 1 (Striker 1)<sup>6</sup>



Figure 38.2  
Crashed UAV Qasef 1<sup>7</sup>



Figure 38.3  
Iranian Ababil-T UAV<sup>8</sup>



Figure 38.4  
Iranian Ababil-T UAV<sup>9</sup>



### B. Design and manufacture standards

<sup>1</sup> Letter from Member State. Including Qasef-1 Serial Numbers 22-122-33, 22-122-34, 22-122-38, 22-1721-39, 22-1721-?, 22,1721-0 and 22-1722-9.

<sup>2</sup> Letter from Member State. Qasef-1 Serial Numbers 22-1728.

<sup>3</sup> Qasef-1 Serial Numbers 22-122-39.

<sup>4</sup> Source. Identified from Janes’ [www.janes.his.com](http://www.janes.his.com) database.

<sup>5</sup> HESA is a subsidiary of the government owned Iran Aircraft Industries Organization (AIO), located in Isfahan, Iran. AIO is itself part of the Defence Industries Organization (DIO) conglomerate.

<sup>6</sup> Sources. 1) <https://mobile.almasdarnews.com/article/photos-hourhis-reveal-new-types-surveillance-attack-drones>; and 2) <https://www.youtube.com/watch?feature=youtu.be&v=YfsV6C4W8b4&app=desktop> (at 29 – 41 seconds).

<sup>7</sup> Source. Conflict Armament Research. Other information also derived from, or cross checked with, Conflict Armament Research, *Iranian Technology Transfers to Iran*, March 2017. [http://www.conflictarm.com/download-file/?report\\_id=2465&file\\_id=246](http://www.conflictarm.com/download-file/?report_id=2465&file_id=246).

<sup>8</sup> Image courtesy of Janes’ [www.janes.his.com](http://www.janes.his.com) database.

<sup>9</sup> Ibid.

5. The design and manufacture standards for the Qasef-1 UAV are not of a high quality. Table 38.1 summarises some of these issues.

Table 38.1  
Qasef-1 UAV design issues

<i>Serial</i>	<i>Component / Issue</i>	<i>Comment</i>	<i>Operational limitation</i>
1	Li-Ion Battery	Only one battery is fitted to the UAV. It powers the servos for the ailerons and the GPS.	There is no built-in redundancy, so a battery failure will lead to immediate flight termination.
2	DC Output Converter	This is fitted to step down the voltage from 11.1V for the aileron servos to 3V for the GPS.	
3	Circuit Boards	Silicone has been used as a form of crude insulation.	This may melt at high operating temperatures leading to electrical failures.
4	Circuit Boards	Metal bolts have been used to secure the circuit boards to the UAV.	These may cause short circuits and electrical failures.
5	Li-Ion Battery (2,680mAh)	Wrapped in red tape.	There is no rationale for this, other than possibly to try and disguise manufacturer and hence source.
6	GPS	GPS is the sole means of inputting target data.	Once the UAV reaches the target the GPS will switch off the power and the UAV will “glide” to the target. Target accuracy can thus only be within +/- 25m, dependent on the cruising altitude set by the operator. It is not a precision weapon.

### C. Tracing and sources

6. The Panel initiated tracing requests for those components that had markings in order to identify the manufacturer and supply chain for the Qasef-1 UAV (see summary and diagram at appendix A).

7. One component, the Titanium Gear Servo HS-7955TC, was traced from the manufacturer to Tehran Hobby<sup>10</sup> in Iran. The payment was made by Succor Trading through Emirates Islamic Bank (account number: 370XXXXXX6102). The component was supplied to Tehran Hobby limited in mid-2015, subsequent to the implementation of the targeted arms embargo on 14 April 2015.

8. One component, the DC Output Converter, was traced from the manufacturer to Arman Optimized Systems<sup>11</sup> in Iran. Initially Arman Optimized Systems paid for the components from an Iranian Bank and

<sup>10</sup> Tehran Hobby, Eastern Suite, 1st Floor, No.1 Espinas Building, Mirzababaei Blvd, Pounak Square, Tehran, Iran. <http://tehranhobby.com/>.

<sup>11</sup> Arman Optimized Systems, 5<sup>th</sup> Floor, 111 Ebne Yamin Street, North Sohrevardi Avenue, Tehran, Iran. +98 21 8850 1327. Source: Confidential.

components were delivered directly, but commencing in August 2015 the company requested delivery to a logistics company<sup>12</sup> in Hong Kong and payment was made from a Hong Kong bank.<sup>13</sup>

9. The Panel has also identified that in 2012 another component type, the L78 Voltage regulator, was supplied by the manufacturer to one of three other companies in China. The subsequent movement of this component could not be traced.

10. A Model V-10 Gyroscope is identical in design to one recovered from an Iranian manufactured Ababil-3 UAV in Iraq. The serial number of one of the Qasef-1 V-10 gyroscopes is a 4-digit serial number (S/N 2218) and only 83 serial numbers different from the Ababil-3 UAV (S/N 2301) recovered in Iran. These both very possibly being from the same source.<sup>14</sup>

#### **D. Panel findings**

11. The components necessary to assemble Ababil-T UAV have been supplied to the Houthi-Saleh alliance. Although Houthi-aligned media announced that the Sana'a-based ministry of defence manufactured the UAV, in reality they are assembled from components supplied by an outside source and shipped into Yemen.

12. The Panel finds that, based on: 1) the design, dimensions and characteristics of the UAV; and 2) the identification and tracing of component parts, the material necessary to assemble the Qasef-1 UAVs, emanated from Iran. The assembled UAV are then virtually identical to the ABABIL-T manufactured by the Iran Aircraft Manufacturing Industries (HESA).<sup>15</sup> The Panel finds that the Ababil-T UAV has been designed and produced specifically for the military purposes of remote explosive attack or ISTAR.

13. The Panel finds that as the Islamic Republic of Iran has not provided any information to the Panel of any change of custody of the Qasef-1 or the components, the Islamic Republic of Iran is in non-compliance with paragraph 14 of resolution 2216 (2015) in that it failed to take the necessary measures to prevent the direct or indirect supply, sale or transfer of military related equipment to the Houthi-Saleh forces, an entity acting at the direction of listed individuals.

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<sup>12</sup> Part supplied via Turn Key International Logistics Company Limited, Flat D. G/F Roxy Industrial Centre, 41 – 49 Kwai Cheong Road, Hong Kong, China. +852 9219 8927 / +852 6382 1975. Source: Confidential.

<sup>13</sup> Industrial and Commercial Bank of China (Asia) Limited, Hong Kong, China. (SWIFT: UBHKHKHH). Account Number: 86XXXXXX4237. Account Name: Ginseng Global Company Limited.

<sup>14</sup> Iranian Technology Transfers to Yemen, Conflict Armament Research Limited, London, March 2017.

<sup>15</sup> HESA is a subsidiary of the government owned Iran Aircraft Industries Organization (AIO), located in Isfahan, Iran. AIO is itself part of the Defence Industries Organization (DIO) conglomerate.

## Appendix A to Annex 38: QASEF-1 component tracing

Table A.38.1  
Origin and destination of UAV components

Ser	Component	Serial / Lot number	Image reference <sup>16</sup>	Manufacturer		Supplied to		
				Company	Country / entity	Date	Company	Country / entity
1	Sail Propeller Y-A 22x18		IMG_2997	Sail Aviation Propeller <sup>17</sup>	China		No response to tracing request	
2	Titanium Gear Servo HS-7955TC		IMG_2998	Hitec <sup>18</sup>	Republic of Korea	Mid 2015	Tehran Hobby Limited <sup>19</sup>	Iran
3	DC Output Converter MIW 3021		IMG_3029	Minmax	Entity	Post Aug 2015	Arman Optimised Systems <sup>20</sup>	Iran
4	NAVIOR Satellite Compass NAVIS NC144_02	58013428	IMG_3028	NAVIS Ukraine <sup>21</sup>	Ukraine	2009	Anshuai Electronics <sup>22</sup>	India
5	Voltage Regulator	L78	P2020160	ST Microelectronics	Member State	2002	WT Microelectronics, <sup>23</sup> Willas-Array Electronics, <sup>24</sup> or Selcom Electronics <sup>25</sup>	Hong Kong, China Hong Kong, China
6	DLE-111 Petrol Engine		IMG_2995	Mile Hao Xing Technology Company <sup>26</sup>	China		Company claims a counterfeit	
7	Full Duplex Multi-Frequency Data Link	FKAR-D94-1018	IMG_3009	Not identified				
8	Li-Ion Battery	2212230	IMG_3006	Not identified				
9	Vertical Gyroscopes V10	1233, 1768, 2076, 2099, 2109, 2216 and 2218	IMG_3047	Not identified			S/N 2301 seen on an Iranian Ababil-3 recovered in Iraq	

<sup>16</sup> Sources: Conflict Armament Research and Confidential Sources. Images at appendix 2.

<sup>17</sup> Sail Aviation Propeller, Audio Supplies Company Limited, Kaiyuan City, Liaoning Province, China. Email: <mailto:2284001479@qq.com>.

<sup>18</sup> HITEC RCD Korea, Ochang, Cheongwon-gun, Chungcheongbuk-do, Republic of Korea. <http://www.hitecrd.co.kr/new/>. Possibly manufactured in China though by Hitec-Multiplex China Incorporated, 3F of Hong Li Building 1, 24W Jinfeng Road, Jindig Industrial Park, Tanglia, Zhuhai, China. <http://www.hitecrd-china.com>.

<sup>19</sup> Tehran Hobby, Eastern Suite, 1st Floor, No.1 Espinas Building, Mirzababaei Blvd, Pounak Square, Tehran, Iran. <http://tehranhobby.com/>.

<sup>20</sup> Arman Optimized Systems, 5<sup>th</sup> Floor, 111 Ebne Yamin Street, North Sohrevardi Avenue, Tehran, Iran. +98 21 8850 1327. Part supplied via Turn Key International Logistics Company Limited, Flat D. G/F Roxy Industrial Centre, 41 – 49 Kwai Cheong Road, Hong Kong, China. +852 9219 8927.

<sup>21</sup> NAVIS Ukraine LLC, Smela Street, Mazur 14, Cherkasy Region, Ukraine 20704. <http://www.navis-ukraine.com.ua>.

<sup>22</sup> Anshuai Electronics, Plot 21, Venkateshwara Colony, Ecil Post, Hyderabad – 500062, Andhra Pradesh, India. Although NAVIS state they supplied to Anshuai, this company states they did not receive that particular serial number. Panel investigations continue.

<sup>23</sup> WT Microelectronics Limited, Lot 3719, H DD 104, Hong Kong, China. <http://www.wtmec.com/WT/?lang=en>.

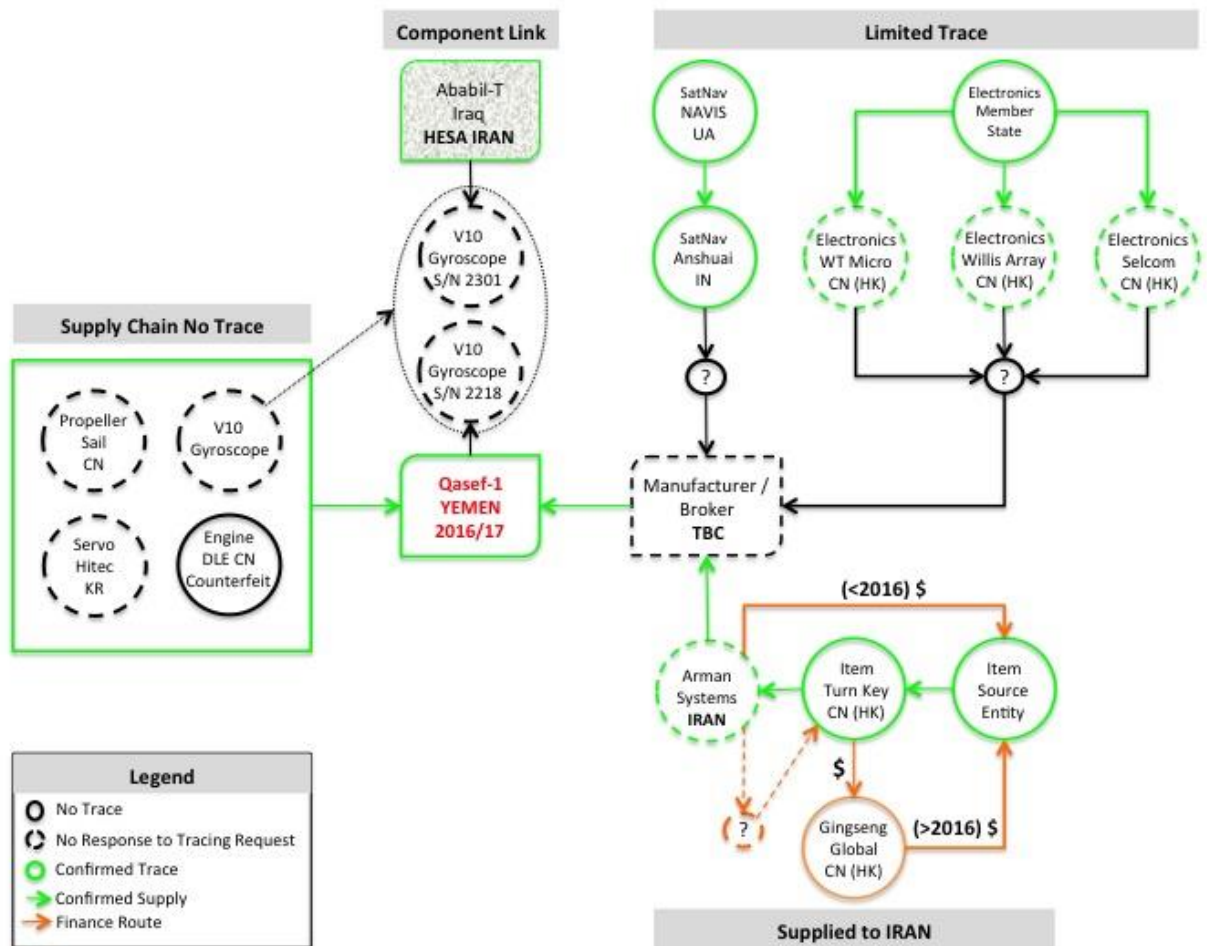
<sup>24</sup> Willis-Array Electronics, 24/F, Wyler Centre, Phase 2, 200 Tai Lin Pai Road, Kwai Chung, New Territories, Hong Kong, China. <http://www.willas-array.com/index.php?lang=en>.

<sup>25</sup> Selcom Group S.p.A., Via A. Grandi, 5, 40013 Castel Maggiore (BO), Italy. Manufactured by Selcom Electronics Limited, A7/A24 Workshop, No 5399, Waiqingsong Road, Waiqingsong H, Shanghai, 201707, China. <http://www.selcomgroup.com/contacts/>.

<sup>26</sup> Mile Hao Xiang Technology Co. Ltd, located in the Chinese Yunnan Honghe Hani Autonomous Prefecture of Maitreya. (<http://www.dlengine.com>).

Ser	Component	Serial / Lot number	Image reference <sup>16</sup>	Manufacturer		Supplied to		
				Company	Country / entity	Date	Company	Country / entity

Figure A.38.1  
Supply chain diagram



Appendix B to Annex 38: QASEF-1 component imagery<sup>27</sup>

Figure B.38.1  
IMG-2997: Sail Propeller



Figure B.38.2  
IMG-2998: Titanium Gear Servo HS-7955TC

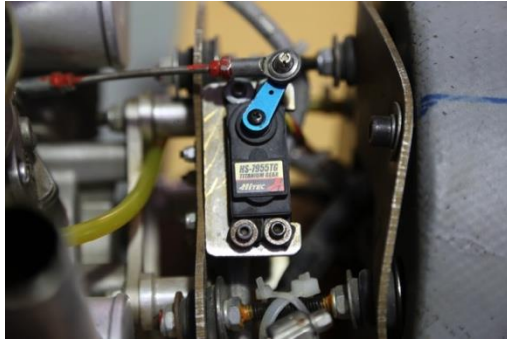


Figure B.38.3  
IMG-3029: DC Output Converter MIW 3021



Figure B.38.4  
IMG-3028 NAVIOR Satellite Compass NAVIS NC144\_02



Figure B.38.5  
P2020160: L78 Voltage Regulator

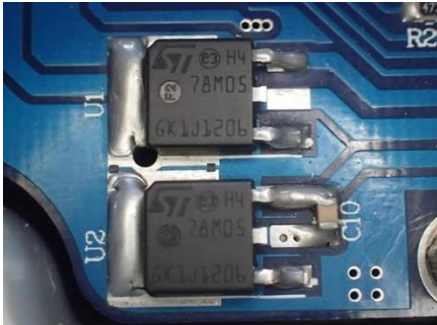
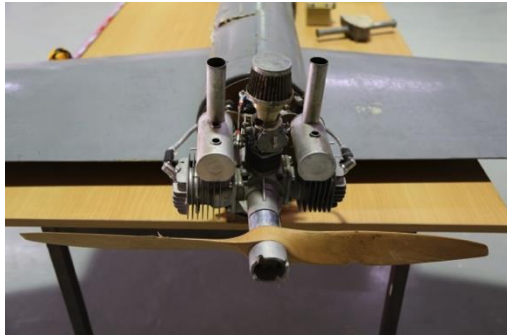


Figure B.38.6  
IMG-2995: DLE-111 Petrol Engine



<sup>27</sup> Imagery from Conflict Armament Research.

Figure B.38.7  
**IMG-3009: Full Duplex Multi-Frequency  
Data Link**



Figure B.38.8  
**IMG-3006: Li-Ion Battery**



Figure B.38.9  
**IMG-3047: Vertical Gyroscope V10**



Figure B.38.10  
**IMG-3053: Li-Ion Battery Unknown Make**



## Annex 39: Houthi-Saleh ‘Rased’ unmanned aerial vehicles (UAV)

### A. Seizures

1. The Saudi Arabia-led coalition has seized a number of crashed or downed ‘Rased’ UAV in 2017; 1) Nihm (25 March 2017); 2) Sana’a (20 September 2017); and Kirsh, Lahij (20 September 2017) (see figures 39.1 to 39.3).<sup>1</sup>

Figure 39.1  
Downed ‘Rased’ UAV  
Nihm (25 March 2017)



Figure 39.2  
Downed ‘Rased’ UAV  
Sana’a (20 September 2017)



Figure 39.3  
Downed ‘Rased’ UAV  
Kirsch, Lahij (20 September 2017)



### B. Design

2. The Panel is almost certain that the ‘Rased’ UAV is actually the commercially available Skywalker-8 manufactured by Skywalker Technology Limited of China ([www.skywalker-model.com](http://www.skywalker-model.com)). The common design and characteristics between the two UAV are shown at figures 39.4 and 39.5.

<sup>1</sup> Twitter: @JoshuaKoontz\_1.



Figure 39.4  
'Rased' v Skywalker-8 type indicators 1



### Type Indicators 1

1. Winglet shape and size.
2. Tail profile.
3. Nose profile.
4. Wing area and shape.

X-8 Skywalker Imagery from [www.img.banggood.com](http://www.img.banggood.com).

Figure 39.5  
'Rased' v Skywalker-8 type indicators 2



### Type Indicators 2

1. Aileron position and size.
2. Access panel.



X-8 Skywalker Imagery from [www.img.banggood.com](http://www.img.banggood.com).

3. Dimensional analysis by photogrammetry provides a further indicator that the two UAV are the same. Photogrammetry was used to estimate the dimensions of an X-8 Skywalker to compare it to the declared Houthi dimensions (figure 39.6). The Houthi declared dimensions of a wingspan of 2.2m and a length of 1.0m. Photogrammetry derived dimensions of an X-8 Skywalker produce a wing span tip to tip of 2.24m and a length from nose tip to rear of wing tip of 1.1m. When allowing for error due to parallax these are virtually identical to the Houthi declared data.

Figure 39.6

**'Rased' versus Skywalker-8 type dimensional analysis by photogrammetry**

KNOWN OBJECT PHOTOGAMMETRY		Image	20150711101811-3964.jpg
Known Dimensions	mm	On Screen	Scale
X-8 Wing Span (Foil)	2122	270	0.1272
Estimated Dimensions	mm	On Screen	Scale
Wing Span (Tips)	<b>2240</b>	285	0.1272

KNOWN OBJECT PHOTOGAMMETRY		Image	20150711101844-9760.jpeg
Known Dimensions	mm	On Screen	Scale
Main Body Length	790	80	0.1013
Estimated Dimensions	mm	On Screen	Scale
Length (Nose to Tail)	<b>1086</b>	110	0.1013

**C. Supply options**

4. The X-8 Skywalker is widely available commercially (see table 39.1). The Panel has also identified that the X-8 Skywalker is unique in its design, and that no other comparable UAV is available in commercial markets.

Table 39.1

**Commercial availability of Skywalker X-8**

Ser	Company	Country	Remarks
1	Airelectronics <sup>2</sup>	Spain	
2	Aerosystems West <sup>3</sup>	USA	
3	Banggood <sup>4</sup>	China (Hong Kong)	Shipped from Hong Kong, China
4	DH Gate.com <sup>5</sup>	Global	Shipped direct from China
5	E-Bay <sup>6</sup>	UK	Shipped direct from Hong Kong, China
6	Flitetest.com <sup>7</sup>	USA	Reviewed by USA consumer

<sup>2</sup> <http://www.airelectronics.es/products/solutions/x8/>.

<sup>3</sup> <https://www.aerosystemswest.com/product-page/skywalker-x8-flying-wing>.

<sup>4</sup> [https://www.banggood.com/es/Skywalker-X8-X-8-Black-White-FPV-Flying-Wing-2122mm-EPO-RC-Airplane-KIT-p-1104501.html?utm\\_source=google&utm\\_medium=cpc\\_ods&utm\\_content=ana&utm\\_campaign=es-Splan-ds-feed-plane&gclid=EAlaIqobChMI9LH7hPvW1gIV7rvtCh3wtAiYEAAYASAAEgLVpVD\\_BwE](https://www.banggood.com/es/Skywalker-X8-X-8-Black-White-FPV-Flying-Wing-2122mm-EPO-RC-Airplane-KIT-p-1104501.html?utm_source=google&utm_medium=cpc_ods&utm_content=ana&utm_campaign=es-Splan-ds-feed-plane&gclid=EAlaIqobChMI9LH7hPvW1gIV7rvtCh3wtAiYEAAYASAAEgLVpVD_BwE).

<sup>5</sup> <https://www.dhgate.com/uk/skywalker-x8-uk.html>.

<sup>6</sup> <http://www.ebay.co.uk/itm/SkyWalker-2120mm-X8-RC-Plane-White-KIT-No-Electronics-/171816307772>.

<sup>7</sup> <https://www.flitetest.com/articles/skywalker-x-8>.

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<i>Ser</i>	<i>Company</i>	<i>Country</i>	<i>Remarks</i>
7	FPVModel.com <sup>8</sup>	China	Shipped direct from China.
8	Porcupine RC <sup>9</sup>	USA	Shipped direct from Hong Kong, China
9	UAV Systems International <sup>10</sup>	USA	Sold as part of a full UAV surveillance system in USA
10	UuuStore.com <sup>11</sup>	China	Shipped direct from China.

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<sup>8</sup> [https://www.fpvmodel.com/skywalker-white-x8-airplane-fpv-flying-wing\\_g27.html](https://www.fpvmodel.com/skywalker-white-x8-airplane-fpv-flying-wing_g27.html).

<sup>9</sup> [http://www.porcupinerc.com/SkyWalker-2120mm-X8-FPV-RC-Plane-KIT-Black-No-Electronics\\_p\\_534.html](http://www.porcupinerc.com/SkyWalker-2120mm-X8-FPV-RC-Plane-KIT-Black-No-Electronics_p_534.html).

<sup>10</sup> <http://www.uavsystemsinternational.com/product/x8-long-range-surveillance-drone/>.

<sup>11</sup> <http://www.uuustore.com/skywalker-x8-epo-white-uav-flying-wing-2120mm-big-fpv-necessary-airplane-p-1830.html>.

## Annex 40: Chronology of reported sea mine incidents in Red Sea (2017)

Table 40.1

### Summary of sea mines warnings, seizures or deployments (2017 to date)

<i>Ser</i>	<i>Date</i>	<i>Mine Type</i>	<i>Incident type</i>	<i>Location near</i>	<i>Geo-location</i>	<i>Remarks</i>
1	Nov 2016	Improvised	Find	Hudaydah		Reported to Panel by a confidential source.
2	4 Feb 2017	Not Known	Threat	Mukha		US MARAD <sup>1</sup> warns of sea mines near entrance to Mukha harbour. <sup>2</sup>
3	7 Mar 2017	Improvised	Explosion	Hudaydah	13 <sup>o</sup> 16.64'N , 43 <sup>o</sup> 10.96'E	Mine strike against A54 Qatari launch.
4	7 Mar 2017	Not Known	Explosion	Mukha	13 <sup>o</sup> 13.00'N , 43 <sup>o</sup> 13.50'E	Mine strike against the Yemen Coastguard vessel, YN Safwan al-Ozavbi. <sup>3</sup>
5	23 Mar 2017	Improvised	Find, Rendered Safe	Midi	16 <sup>o</sup> 15.00'N , 42 <sup>o</sup> 48.00'E	Recovered off beach.
6	25 Mar 2017	Improvised	Detonated during Render Safe Procedure (RSP)	Hudaydah	16 <sup>o</sup> 20.48'N , 42 <sup>o</sup> 45.01'E	Mine detonated when attempt made by private maritime security team to detach electrical conductor to isolate the detonator.
7	25 Mar 2017	Improvised	Find, Rendered Safe	Mukha	13 <sup>o</sup> 20.00'N , 43 <sup>o</sup> 14.00'E	
8	15 Apr 2017	Improvised x 4	Find, Rendered Safe		16 <sup>o</sup> 20.38'N , 42 <sup>o</sup> 45.39'E	One detonated during tow to disposal site.
9	15 Apr 2017	Improvised	Find, Rendered Safe		16 <sup>o</sup> 20.43'N , 42 <sup>o</sup> 44.35'E	Detonated during tow to disposal site.
10	24 Apr 2017	Improvised	Detonated during Render Safe Procedure (RSP)			Location not provided.

<sup>1</sup> Maritime Administration (United States Department of Transport).

<sup>2</sup> <https://www.marad.dot.gov/msci/alert/2017/22863/>.

<sup>3</sup> Also reported by MARAD. <https://www.marad.dot.gov/msci/alert/2017/23275/>.

<i>Ser</i>	<i>Date</i>	<i>Mine Type</i>	<i>Incident type</i>	<i>Location near</i>	<i>Geo-location</i>	<i>Remarks</i>
11	30 Apr 2017	Improvised	Detonated during Render Safe Procedure (RSP)		16°19.82'N , 42°45.90'E	
12	1 May 2017	Not Known	Explosion	Hudaydah	16°15.00'N , 42°48.00'E	Reported to have being detonated by local fishermen.
13	27 May 2017	Improvised x 2	Find, Rendered Safe	Thwaq Island <sup>4</sup>	16°18.37'N , 42°45.94'E	Reported to Committee by Saudi Arabia on 30 September 2017.
14	5 Jun 2017	Improvised	Find, Rendered Safe		13°19.26'N , 43°10.09'E	
15	5 Jun 2017	Improvised	Find, Rendered Safe		13°19.35'N , 43°10.07'E	
16	6 Jun 2017	Improvised	Find, Rendered Safe by demolition		13°19.17'N , 43°09.87'E	
17	6 Jun 2017	Improvised	Find, Rendered Safe		13°18.56'N , 40°39.93'E	
18	6 Jun 2017	Improvised	Find, Rendered Safe		13°18.39'N , 43°09.21'E	
19	7 Jun 2017	Improvised	Find, Rendered Safe by demolition		13°19.43'N , 43°09.78'E	
20	7 Jun 2017	Improvised	Find, Rendered Safe		13°19.90'N , 43°09.80'E	
21	7 Jun 2017	Improvised	Find, Rendered Safe		13°19.54'N , 43°09.63'E	
22	7 Jun 2017	Improvised x 2	Find, Rendered Safe		16°20.44'N , 42°44.75'E	

<sup>4</sup> 16°18'42.61"N, 42°41'10.77"E.

<i>Ser</i>	<i>Date</i>	<i>Mine Type</i>	<i>Incident type</i>	<i>Location near</i>	<i>Geo-location</i>	<i>Remarks</i>
23	8 Jun 2017	Improvised	Find, Rendered Safe by demolition		13°18.62'N , 43°09.47'E	
24	8 Jun 2017	Improvised	Find, Rendered Safe by demolition		13°18.21'N , 43°09.35'E	
25	8 Jun 2017	Improvised	Find, Rendered Safe by demolition		13°19.08'N , 43°09.80'E	
26	8 Jun 2017	Improvised	Find, Rendered Safe		13°19.55'N , 43°09.63'E	
27	8 Jun 2017	Improvised	Find, Rendered Safe		13°19.50'N , 43°09.73'E	
28	10 Jul 2017	1 x Improvised	Find	Midi	16°15.00'N , 42°47.00'E	Reported to be recovered South-West of Port and rendered safe by Yemeni military.
29	14 Sep 2017	Improvised	Find	Ghurab Island		Unconfirmed media reports.
30	20 Sep 2017	Improvised	Find, Rendered Safe		16°16.56'N , 42°45.36'E	
31	25 Sep 2017	Improvised	Detonated during Render Safe Procedure (RSP)		16°16.56'N , 42°45.52'E	
32	25 Sep 2017	Improvised	Detonated during Render Safe Procedure (RSP)		16°16.05'N , 42°45.45'E	
33	25 Sep 2017	Improvised	Find, Rendered Safe		16°17.01'N , 42°43.97'E	Detonated during tow to disposal site.

## Annex 41: Analysis of improvised sea mines

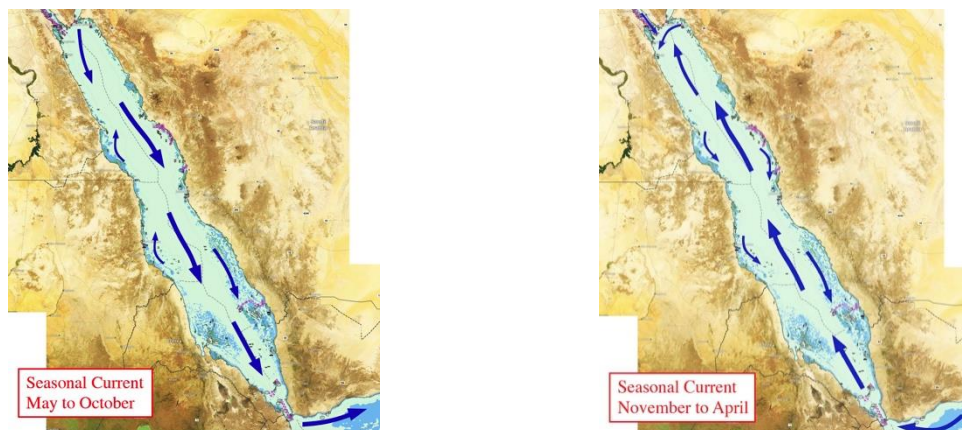
### A. Threat

1. Sea mines are low cost, easy to deploy, tactically very effective, difficult to detect and thus are a potent threat to both naval and commercial vessels. Relatively small quantities present a threat out of proportion to their numbers. The now confirmed possession, and probable use in the Red Sea area of sea mines by Houthi-Saleh forces adds another dimension to the maritime security environment. The deployment of these improvised sea mines now threatens the delivery of humanitarian assistance should they drift into the vital sea lines of communication (SLOC) or the approaches to the Red Sea ports. There is also the possibility of a merchant vessel being struck by a sea mine due to the volume of traffic and relatively constrained area of the Red Sea. The spatial density (mines/nm<sup>2</sup>) of these sea mines will be a major contributory factor as to whether a vessel is hit. The last time when sea mines were sown in the Red Sea was 1984 resulting in 19 vessels being struck over a period of months. Only a single mine was detected, disarmed and recovered.<sup>1</sup>

2. The direction of drift of any sea mines within the Red Sea is seasonally dependent. From May to November 2017 the mines will have drifted down the Red Sea until they join the predominantly Southern summer current and reach the Strait of Bab al-Mandab, or drift ashore back on the Yemeni coast or coastal islands (as indicated by the recovery from Thwaaq Island). It is possible that they will then drift through the Strait of Bab al-Mandab into the Eastern Indian Ocean.

3. In November 2017 the currents changed direction. Any remaining improvised sea mines will continue to drift down the coast with the Eastern Boundary Current until they reach Mukha and the Strait of Bab al-Mandab, where they will be drawn into the predominantly Northern winter current, reverse direction and drift up the central channel of the Red Sea near or in the major shipping lanes towards the Suez Canal area (figure 41.1).

Figure 41.1  
Seasonal sea mine drift in Red Sea<sup>2</sup>



### B. Technical analysis

4. The recovered improvised sea mines are similar in design and concept to mid-20th century sea mines. They are locally manufactured and contain approximately 21 kg of high explosive. Table 41.1 contains data on the

<sup>1</sup> [www.washingtonpost.com/archive/politics/1984/09/18/british-moving-possible-mine-from-red-sea/a5f41b34-8f7b-4fa3-990c-dc1dee3648c6/?utm\\_term=.9a199f7b0232](http://www.washingtonpost.com/archive/politics/1984/09/18/british-moving-possible-mine-from-red-sea/a5f41b34-8f7b-4fa3-990c-dc1dee3648c6/?utm_term=.9a199f7b0232) and [www.csmonitor.com/1984/0808/080817.html](http://www.csmonitor.com/1984/0808/080817.html).

<sup>2</sup> Information on seasonal currents from [http://www.hisutton.com/Houthi\\_mines\\_in\\_Red\\_Sea.html](http://www.hisutton.com/Houthi_mines_in_Red_Sea.html).



mine design and dimensions.

Table 41.1  
Design and dimensions of Houthi-Saleh improvised sea mines

<i>Ser</i>	<i>Area</i>	<i>Data</i>	<i>Remarks</i>
1	Dimensions	0.72m (L) x 0.397m (D)	
2	Initiation system (switch)	4 x Contact Horns	
3	Initiator	Commercial electric detonator	
4	Booster explosive charge	RDX (0.7kg)	Probably harvested military explosive from abandoned explosive ordnance (AXO)
5	Main explosive charge	Ammonium Nitrate / Aluminium (20.3kg)	Improvised Ammonal Velocity of Detonation = 4,000m/s+
6	Power Source	16 x AA Batteries	
7	Container type	Ferrous cylinder	

5. The “Thwaq” mines were reported as being of sound construction, with a degree of standardization between the mines, which includes quick connectors to the wiring harness. The mines are assessed as being watertight, meaning that it should not be expected that they would leak and subsequently sink.

6. There are a number of features of the “Midi” mine that challenge its design integrity. These are discussed in table 41.2, which refers to figure 41.2.

7. **WARNING.** At least 4 of the 25 improvised mines (16%) encountered by the Saudi Arabia-led coalition to date have initiated during the render safe procedure, or when being towed to a safe disposal site.

Figure 41.2  
The “Midi” improvised sea mine<sup>3</sup>



<sup>3</sup> Widely reported in media. e.g. Covert Shores, 25 March 2017.

Table 41.2  
**Design and dimensions of Houthi-Saleh improvised sea mines**

<i>Red Circle</i>	<i>Generic</i>	<i>Analysis</i>	<i>Remarks</i>
1	Horns	No rust on horns so probably plastic	Presence of AA batteries means not chemical as there is no requirement for an electrolyte to charge a battery.
2	Mooring wire	Based on the cable diameter and rim size, the cable is no more than 30m.	
3	Cradle	Assuming the steel is one inch angle iron means that could be too small to overcome the buoyancy of the mine on its own and would require a sinker attached to it. From known mine dimensions the cradle is assessed as being approximately 0.45m (L) x 0.4m (W). From density calculations it is estimated that the mass of the cradle plus 30m of mooring wire is approximately 26kg.	No sinkers identified.
4	Mooring wire	Approximately 30m of possible 10mm steel cable.	
5	Dissolving Arming Disc		There is no mine release mechanism on the cradle, which would be required if the mine were to be armed hydrostatically.
6	Unknown vessel		
7	Container	Based on the dimensions of the “Thwaq” mine, the container is 0.72m long by 0.397m diameter. Assuming 10mm thickness steel, the approximate container weight is 87kg.	

7. There are slight design differences between the “Midi” mine and the “Thwaq” mines, namely the positioning of the Dissolving Arming Disc, which is central on the “Midi” mine and offset on the “Thwaq” mine.

8. The buoyancy of an object can be calculated by comparing the Buoyancy Force (Newtons (N)) against the Gravity Force (N).

$$\text{Buoyancy Force} = \text{Volume (m}^3\text{)} \times \text{Density of Water (kg/m}^3\text{)} \times \text{Force of Gravity (g) (m/s}^2\text{)}$$

$$\text{Gravity Force} = \text{Mass (kg)} \times \text{g (m/s}^2\text{)}$$

9. If the buoyancy force is greater than the gravity force then the improvised mine will float. In this case the steel thickness of the improvised mine body will be the determining factor as to whether the improvised mines float or sink. For these improvised sea mines if the steel is thicker than 7mm the improvised mines will sink.

## Annex 42: Technical analysis of ATGW 9M133 ‘Kornet’ versus ‘Dehleyvah’

1. Tables 42.1 and 42.2 show the location of the markings and other “identifiers”. Supporting imagery is at figures 42.1 to 42.4.

Table 42.1

### Identifiers for ATGM type (9M133 ‘Kornet’ v ‘Dehleyvah’)

<i>Serial</i>	<i>Identifier or markings</i>	<i>9M133 ‘Kornet’</i>	<i>‘Dehleyvah’</i>	<i>Remarks</i>
1	End Cap Chamfer	Minimal	Pronounced	
2	Tube Code	Yes	None	K (K) = Warhead Type H (N) = Warhead Code
3	Warhead Filling and Date	Yes	None	
4	Load Condition	Yes	None	OK CHAP means Fuzed
5	Missile Type Code	Numerical only	Numerical and text	M (M) = Missile Code
6	Lot / Batch Number	02 - 08	LOT: 07 DATE: 2015	
7	ATGM Serial Number	Numerical only	S/N: then Numerical	
8	Temperature Limitations	None	-20 <sup>0</sup> C to +50 <sup>0</sup> C	
9	Body Colour	Sandy Green	Olive Green	
10	Tube Material	Wrapped GRP	Extruded	
11	Font for Markings	Stencil type	Block type	

Table 42.2

### Identifiers for ATGM type (9M133-1 ‘Kornet’ (Export Version) v ‘Dehleyvah’)

<i>Serial</i>	<i>Identifier or markings</i>	<i>9M133 ‘Kornet’</i>	<i>‘Dehleyvah’</i>	<i>Remarks</i>
1	End Cap Chamfer	Minimal	Pronounced	
2	Tube Code	Yes	None	K (K) = Warhead Type H (N) = Warhead Code
3	Load Condition	Yes	None	FULLY LOADED means Fuzed
4	Missile Type Code	Numerical only	Numerical and text	M (M) = Missile Code
5	Lot / Batch Number	02 - 08	LOT: 07 DATE: 2015	
6	ATGM Serial Number	Numerical only	S/N: then Numerical	
7	Temperature Limitations	None	-20 <sup>0</sup> C to +50 <sup>0</sup> C	
8	Body Colour	Sand	Olive Green	
9	Tube Material	Wrapped GRP	Extruded	
10	Font for Markings	Stencil type	Block type	

Figure 42.1  
9M133 'Kornet' ATGM<sup>1</sup>



Figure 42.2  
9M133 'Kornet' ATGM (Export Version)<sup>2</sup>

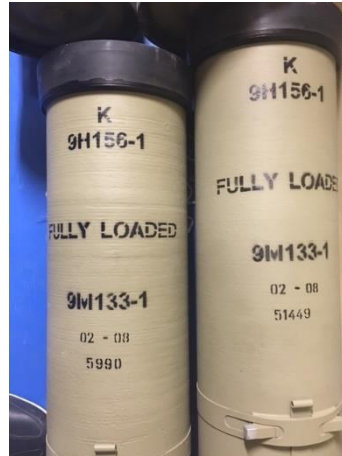


Figure 42.3  
'Dehleyvah' ATGM<sup>3</sup>



Figure 42.3  
'Dehleyvah' ATGM markings<sup>4</sup>



<sup>1</sup> Panel image.

<sup>2</sup> Ibid.

<sup>3</sup> Confidential source.

<sup>4</sup> Ibid.

## Annex 43: Summary of black market small arms ammunition prices<sup>1</sup>

Figure 43.1

Graph of Black Market prices (Yemen) (2015 – 2017)

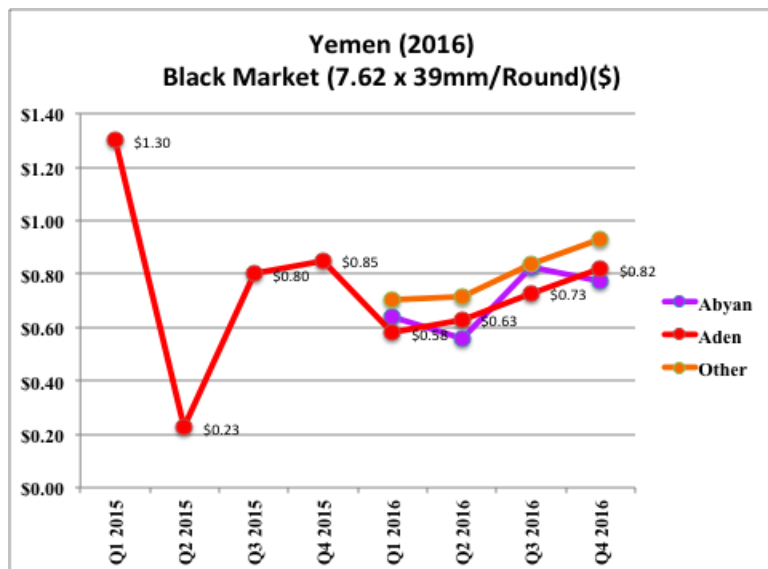
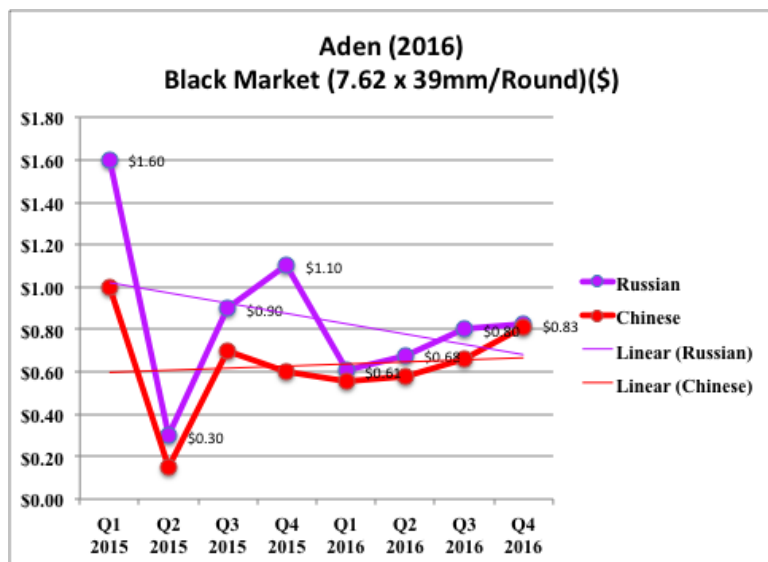


Figure 43.2

Graph of Black Market prices (Aden) (2015 - 2017)



<sup>1</sup> Data sourced from a UN agency in Yemen.

Figure 43.3  
 Graph of Black Market prices (Abyan) (2016 - 2017)

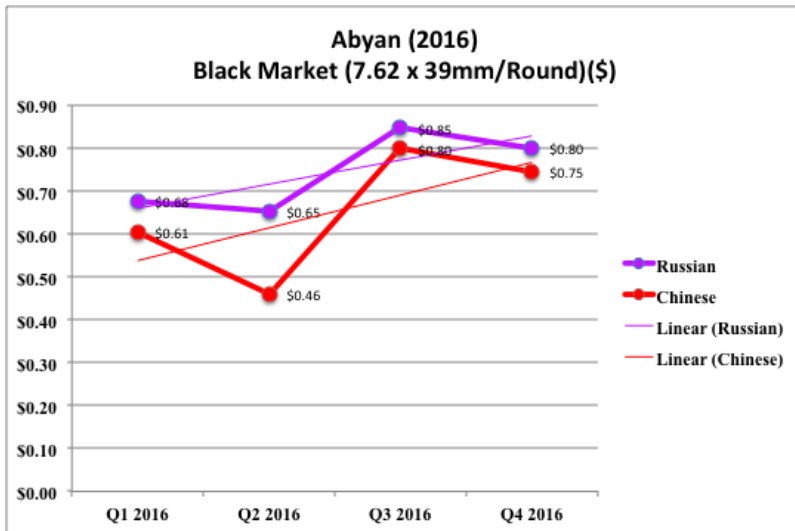
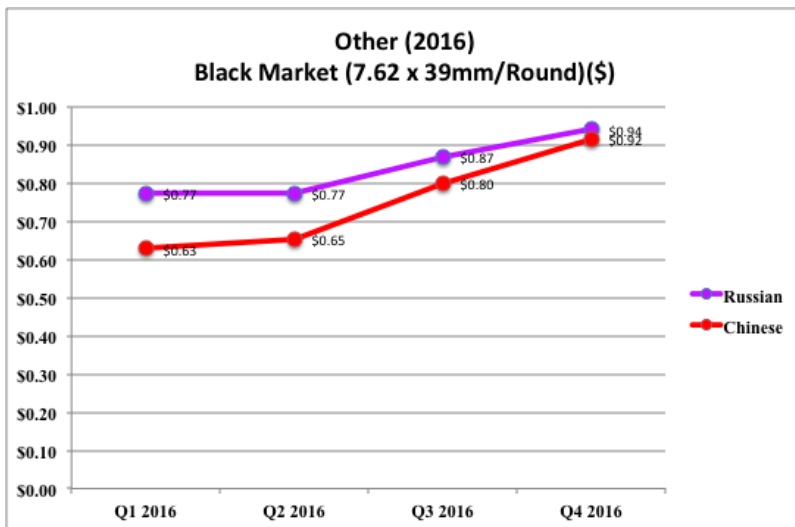
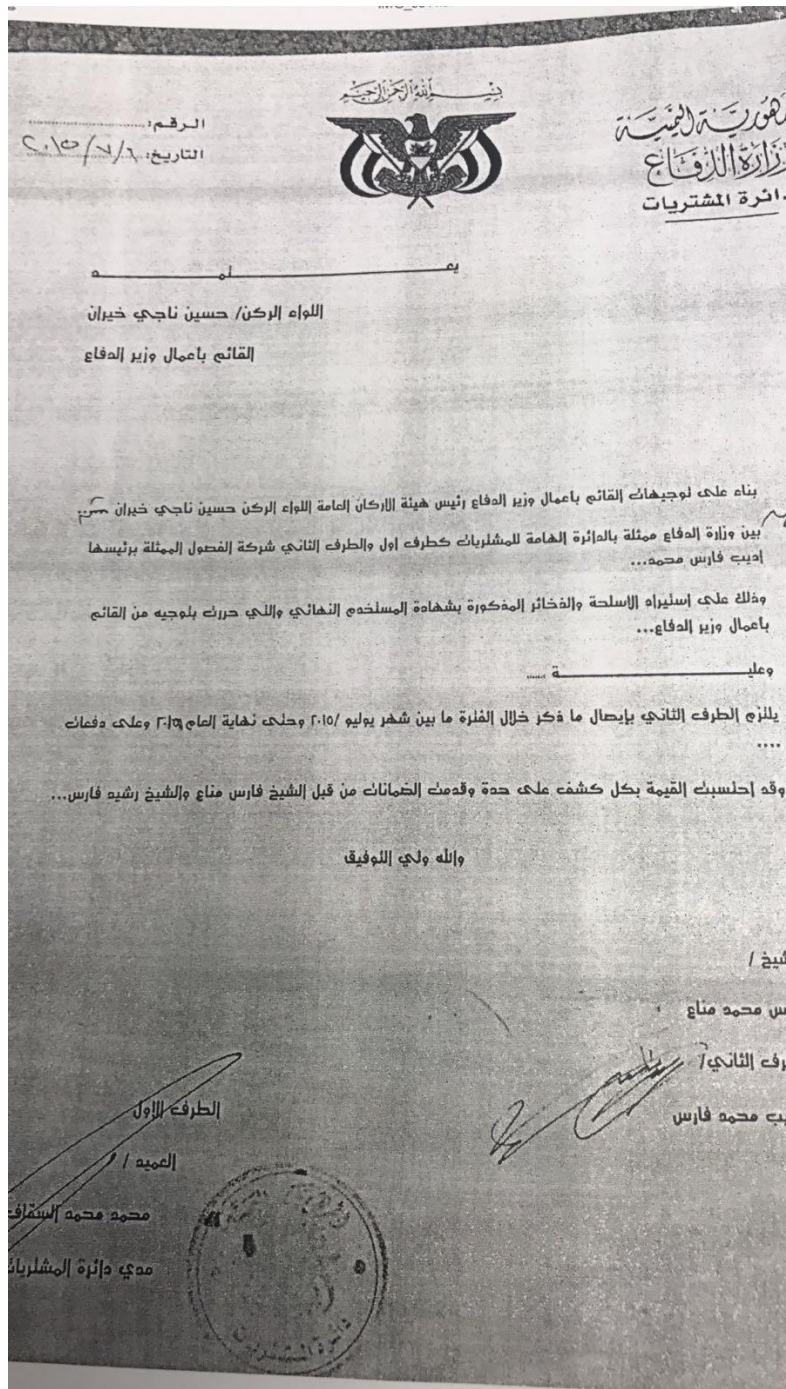


Figure 43.4  
 Graph of Black Market prices (Other) (2016 - 2017)



## Annex 44: End User Certificates

Figure 44.1  
EUC related letter from Houthi-Saleh administration



*UN official translation from Arabic*<sup>1</sup>

Republic of Yemen  
Ministry of Defence  
Procurement Office

No. ...

Date: 1 July 2015

Major General Husayn Najiy Khayran  
Acting Minister of Defence

On the instructions of the acting Minister of Defence and Chief of the General Staff, Major General Husayn Najiy Khayran, [handwritten addition, illegible] between the Ministry of Defence, represented by the Procurement Office, being the first party, and the Fusul corporation, represented by its director, Mr. Adib Fares Mohammed, being the second party, for the importation of the arms and ammunition mentioned in the end user certificate that was drafted on the instructions of the acting Minister of Defence.

Accordingly, the second party undertakes to deliver in instalments the above-mentioned in the period between July 2015 and the end of 2016.

The value was calculated on the basis of each invoice individually and guarantees were offered by Mr. Fares Mana'a and Mr. Rashid Fares.

Mr. Fares Mohammed Mana'a

Second party

(Signed) Mr. Adib Mohammed Fares

First party

[stamped] (Signed) Colonel Muhammad Muhammad al-Saqqaf

Director, Procurement Office

---

<sup>1</sup> 1702089E dated 13 February 2017.



Figure 4.2  
EUC to support possible attempt to procure arms from Bulgaria

D.M./KH/5120  
30/6/2015

*End User Certificate No.(D.M/KH/ /2015)*

*To whom it may concern:*

We the ministry of Defense of the Republic of Yemen hereby officially confirm that following goods:

No.	Item	Qty
1	AKSU-74U cal. 5.45mm (short assault rifle)	10.000
2	AKSU-74U cal. 7.62x39mm	10.000
3	AKSU assault rifle cal. 7.62x39mm	20.000
4	Ammunition 5.45x39mm	5.000.000
5	Ammunition 9x18mm	10.000.000
6	Ammunition 6.35mm	10.000.000
7	Pistol caliber 9x18mm	10.000
8	Pistol caliber 6.35mm	20.000

جفرى قيس  
مصطفى  
الح  
ذخيرة  
ذخيرة  
ذخيرة  
مدى  
مدى

Will be Imported for Ministry of Defense of the Republic of Yemen from Bulgaria Republic purchased by "ARSENAL 2000 JSCO 100, ROZOVA DOLINA ST. 6100 KAZANLAK, BULGARIA".

The above mentioned equipment will exclusively be used by Yemeni Army and will not be re-exported to any other third party.

The Ministry of Defense hereby confirms the importation of these goods will be ensured by AL-FOSOL TRADING headed by Mr. Adeb F. Mohamed.

Delivery : In several shipments during the years 2015-2016.

This certificate is valid till the 31 December 2016.///

With best regards,,,

Brig /  
Mohammed Mohammed AL-Sakkaf  
Director of Procurement Department

ما لينا

Figure 44.3  
EUC to support possible attempt to procure arms from China, Iran, Serbia and Slovak Republic

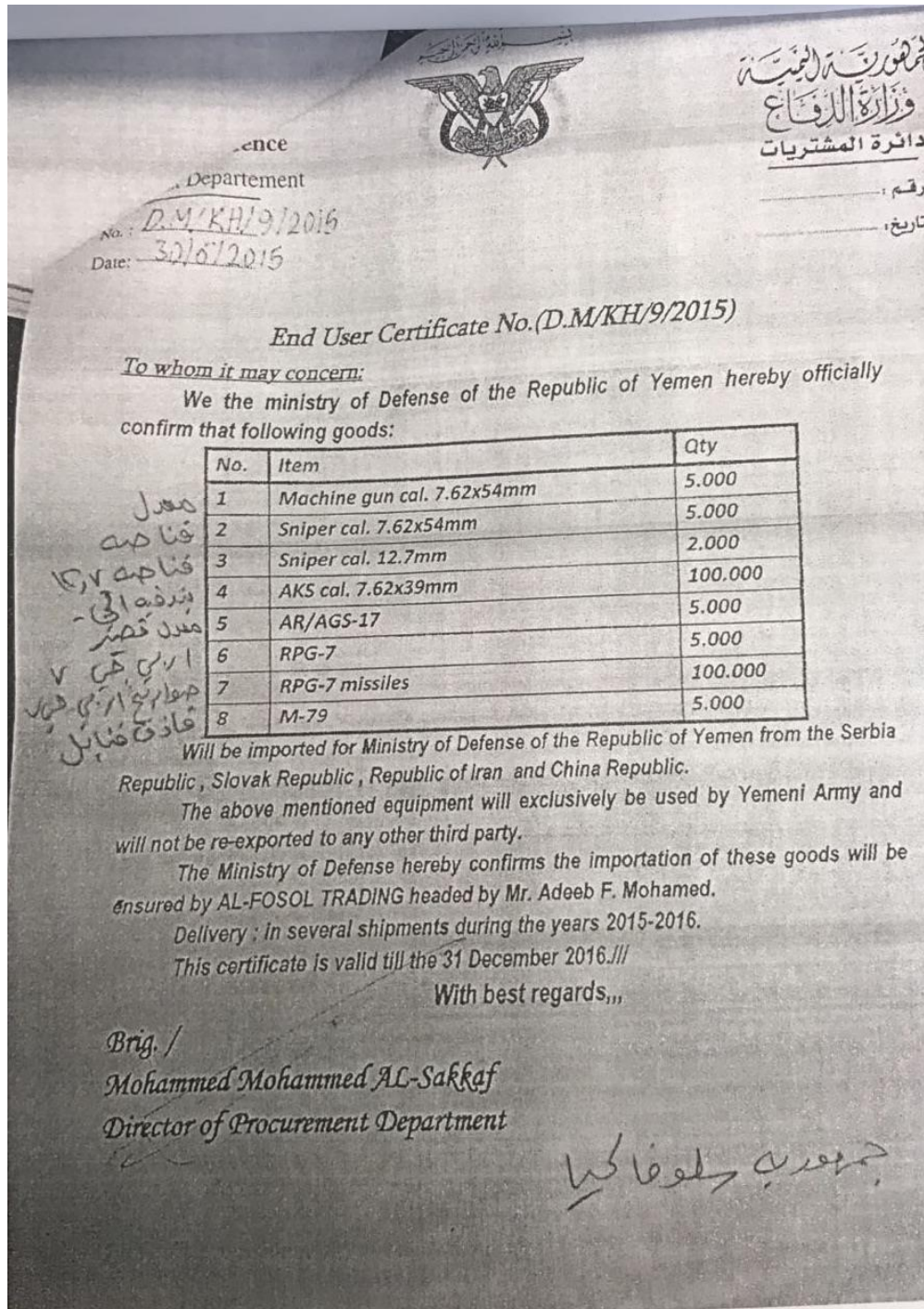


Figure 44.4  
Second EUC to support possible attempt to procure arms from Iran

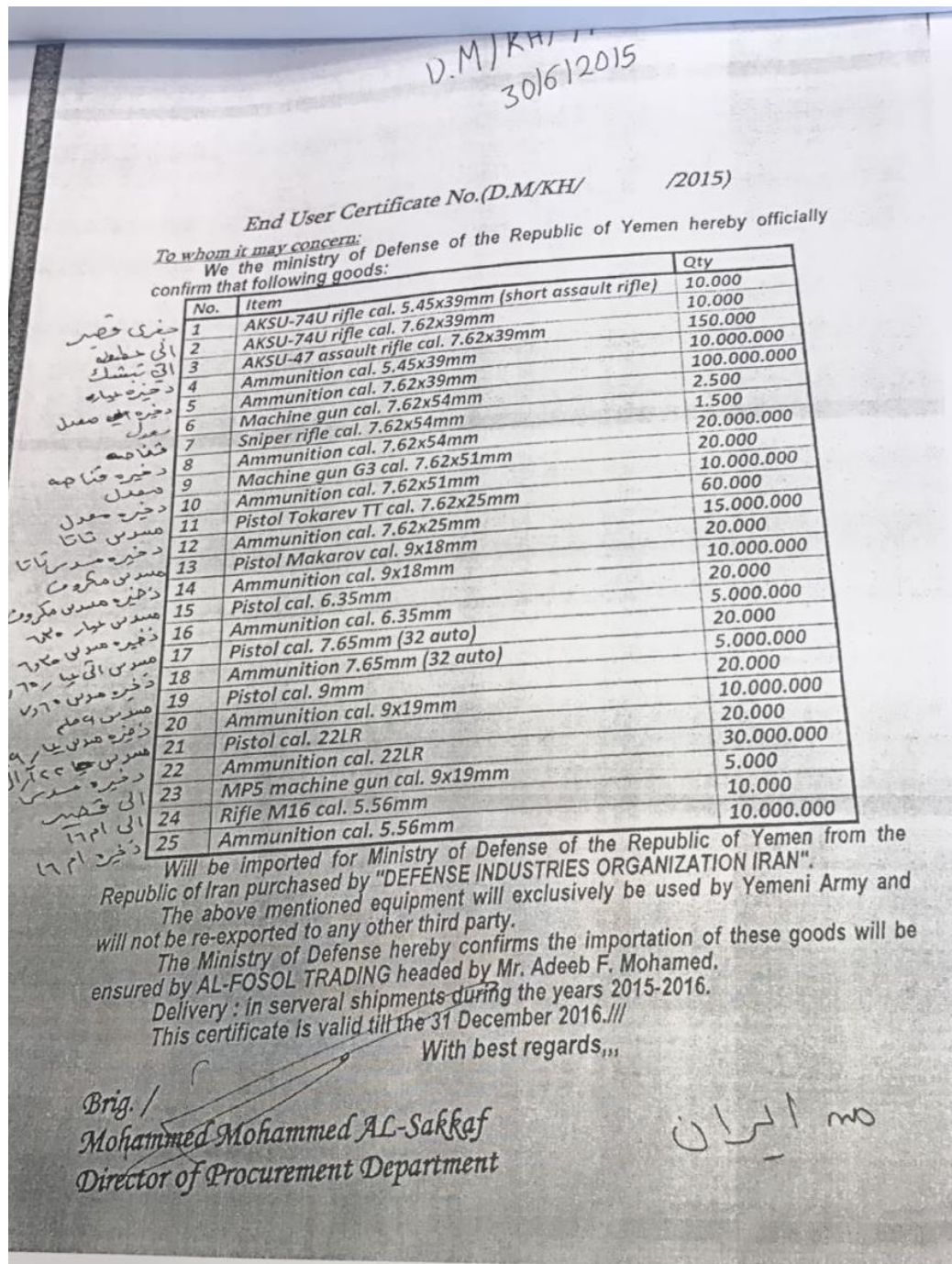


Figure 44.5  
EUC to support possible attempt to procure arms from the Philippines

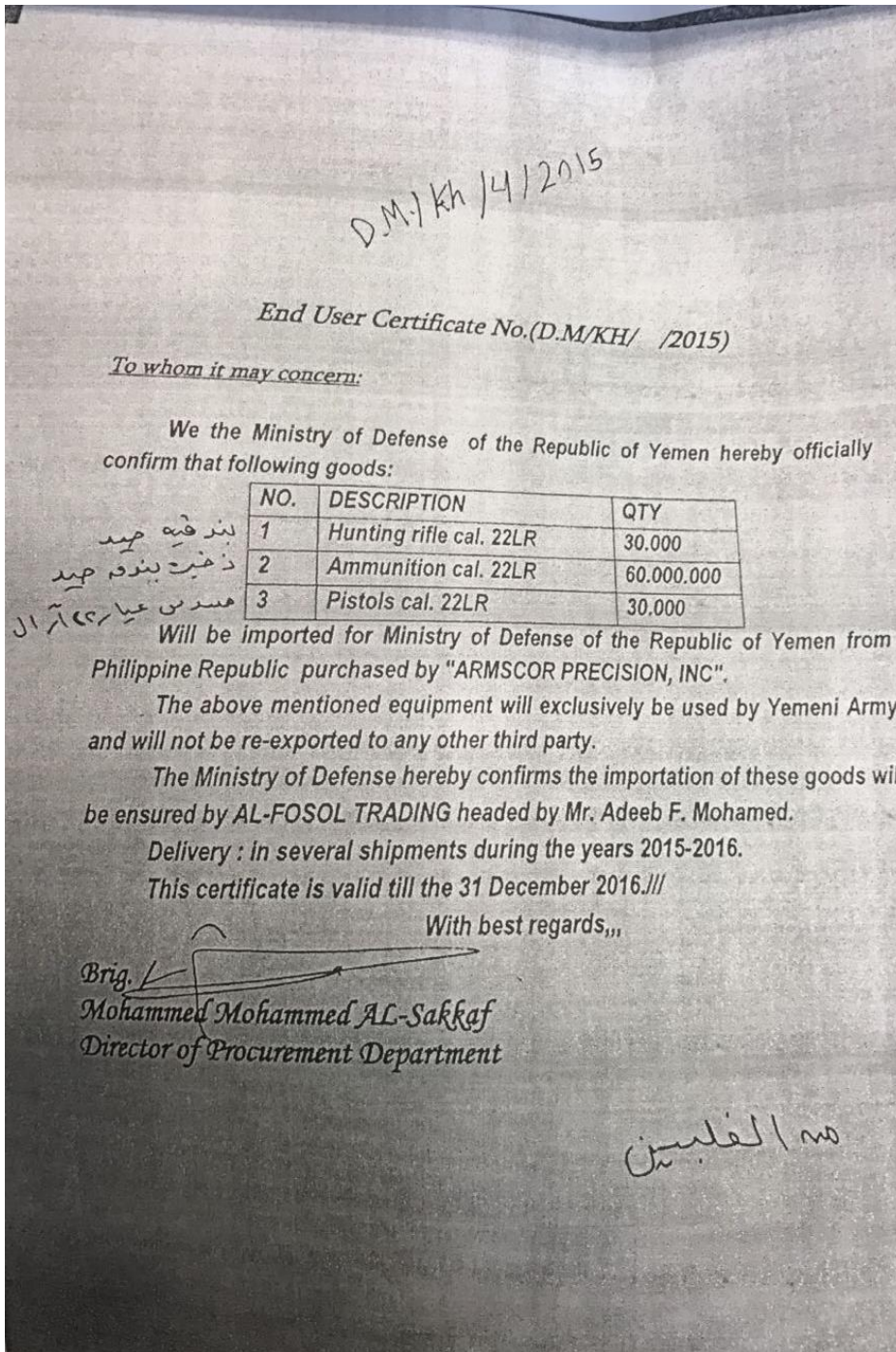


Figure 44.6  
 Second EUC to support possible attempt to procure arms from Serbia

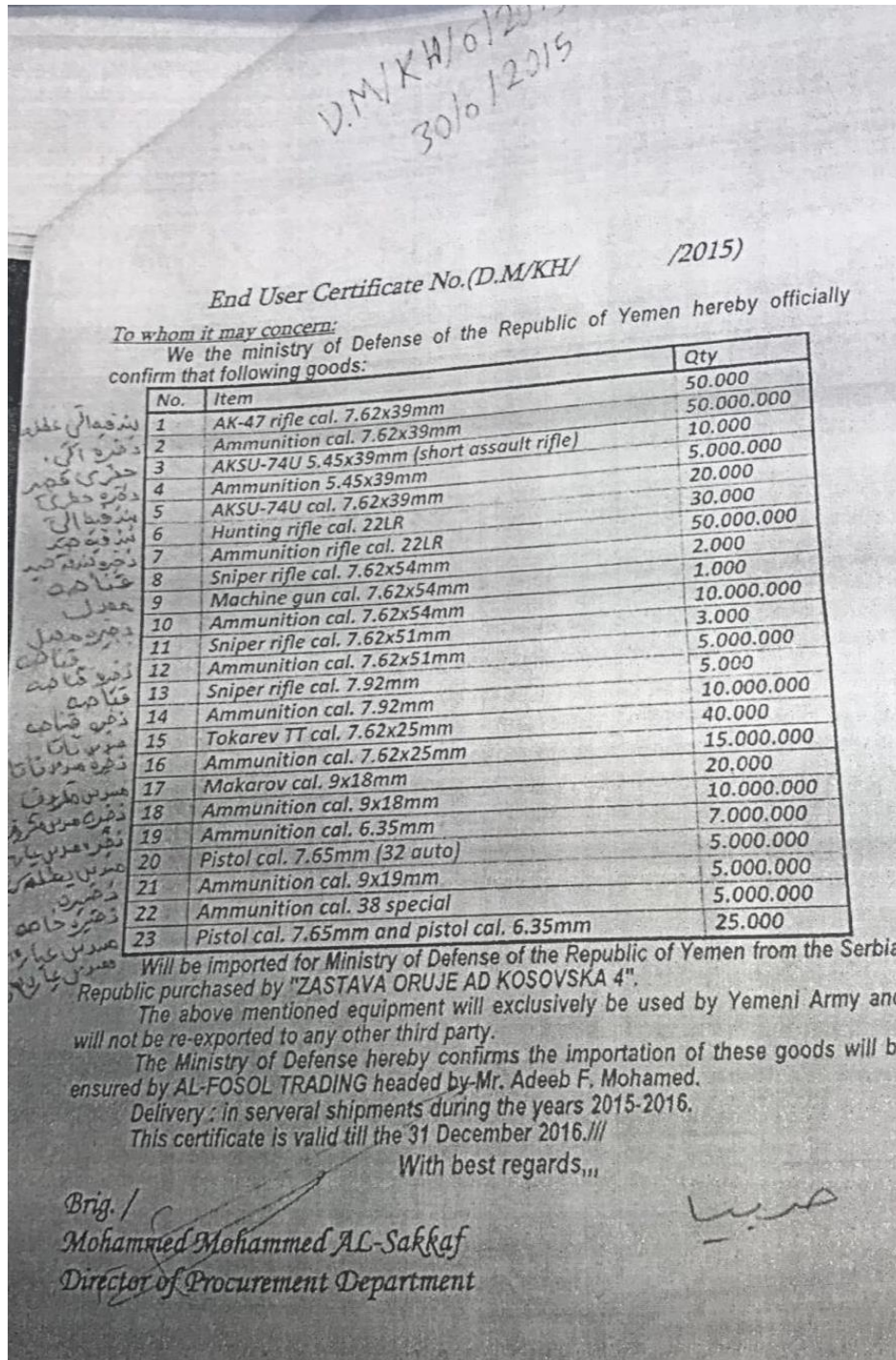
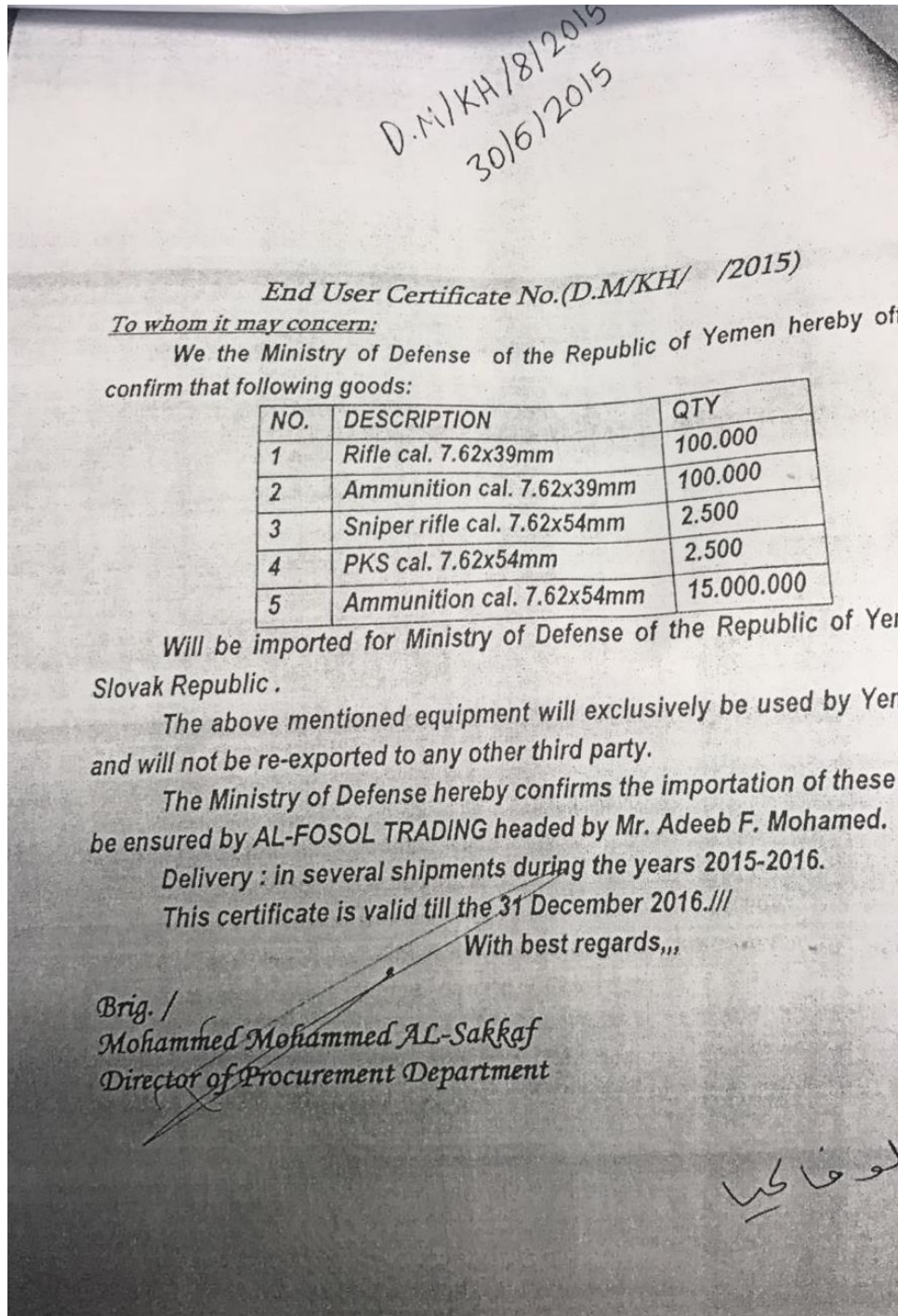



Figure 44.7

Second, third and fourth EUC to support possible attempt to procure arms from the Slovak Republic



Yemen  
Ministry of Defence  
Department

No. : **D.M/KH/10/2015**  
Date: **30/12/2015**



وزارة الدفاع  
دائرة المشتريات

الرقم :  
التاريخ :

**End User Certificate No.(D.M/KH/10/2015)**

**To whom it may concern:**  
We the ministry of Defense of the Republic of Yemen hereby officially confirm that following goods:

No.	Item	Qty
1	AK-47 rifle cal. 7.62x39mm	200.000
2	Ammunition cal. 7.62x39mm	100.000.000
3	Sniper rifle cal. 7.62x54mm	5.000
4	PKS cal. 7.62x54mm	2.500
5	Ammunition cal. 7.62x54mm	15.000.000
6	AKSU-74U cal. 7.62x39mm	20.000
7	AKSU-74U cal. 5.45x39mm (short assault rifle)	10.000
8	Ammunition 5.45x39mm	5.000.000
9	Hunting rifle cal. 22LR	30.000
10	Ammunition rifle cal. 22LR	50.000.000
11	Pistol cal. 22LR	20.000
12	Tokarev TT cal. 7.62x25mm	50.000
13	Ammunition cal. 7.62x25mm	5.000.000
14	Makarov cal. 9x18mm	15.000
15	Ammunition cal. 9x18mm	5.000.000
16	Pistol cal. 6.35mm	30.000
17	Ammunition cal. 6.35mm	7.000.000
18	Pistol cal. 7.65mm (32 auto)	20.000
19	Ammunition 7.65mm (32 auto)	5.000.000
20	Pistol cal. 9mm	15.000
21	Ammunition cal. 9x19mm	5.000.000
22	Ammunition cal. 38 special	5.000.000
23	Machine gun M16 cal. 5.56mm	10.000
24	Ammunition M16 cal. 5.56mm	10.000.000

Will be imported for Ministry of Defense of the Republic of Yemen from the Slovak Republic purchased by "VERSOR, S.R.O KARADZHICHOVA STEET 8, SLOVAKIA".

The above mentioned equipment will exclusively be used by Yemeni Army and will not be re-exported to any other third party.

The Ministry of Defense hereby confirms the importation of these goods will be ensured by AL-FOSOL TRADING headed by Mr. Adeeb F. Mohamed.

Delivery : in several shipments during the years 2015-2016.

This certificate is valid till the 31 December 2016.///

With best regards,

Brig. /  
**Mohammed Mohammed AL-Sakkaf**  
Director of Procurement Department

جيهوديه سلوفاكيا

D.M/KH/14/2015  
15/7/2015

*End User Certificate No.(D.M/KH/14/2015)*

*To whom it may concern:*

We the ministry of Defense of the Republic of Yemen hereby officially confirm that following goods:

No.	Item	Qty
1	AKSU-74U cal. 5.45mm (short assault rifle)	20.000
2	AKSU-74U cal. 7.62x39mm	20.000
3	AKSU assault rifle cal. 7.62x39mm	20.000
4	Ammunition 5.45x39mm	10.000.000
5	Ammunition 7.62x39mm	20.000.000
6	Ammunition 9x18mm	20.000.000
7	Ammunition 6.35mm	20.000.000
8	Pistol caliber 9x18mm	20.000
9	Pistol caliber 6.35mm	20.000

حفي فصر  
الى لظنه  
الى تشيل  
ذقرو جفري  
ذقرو ال  
ذقرو مرس  
مرس  
مرس

Will be imported for Ministry of Defense of the Republic of Yemen from the Slovak Republic.

The above mentioned equipment will exclusively be used by Yemeni Army and will not be re-exported to any other third party.

The Ministry of Defense hereby confirms the importation of these goods will be ensured by AL-TAWAFOQ AL-ARABY headed by Mr. Khalid Abdullah.

Delivery : in several shipments during the years 2015-2016.

This certificate is valid till the 31 December 2016.///

With best regards,,,

Brig. /

Mohammed Mohammed AL-Sakkaf

Director of Procurement Department

جمهورية لوفاكيا



## Annex 45: Estimated revenue available to groups based on 2011 CBY budget

Table 45.1  
2011 Budget estimated revenues (YER Million)

<i>Budget item</i>	<i>Designation</i>	<i>Central authorities</i>	<i>Local authorities</i>	<i>Current control</i>
1	Tax	363,837	16,929	
1.1	Zakat		11,588	Houthi
1.1.1.1	Zakat agriculture		397	Houthi
1.1.1.2	Zakat qat		837	Houthi
1.1.1.3	Zakat vegetables		234	Houthi
1.1.1.4	Zakat animals		33	Houthi
1.1.1.5	Zakat public companies		2,137	Houthi
1.1.1.6	Zakat private companies		4,883	Houthi
1.1.1.7	Zakat individuals		1,404	Houthi
1.1.1.8	Zakat fitra <sup>1</sup>		1,053	Houthi
1.1.1.9	Other zakat		605	Houthi
1.2	Tax on revenues	170,067	1,653	
1.2.1.1	Tax state salaries	73,996		Houthi
1.2.1.2	Tax salaries joint companies	17,175		Houthi
1.2.1.3	Tax salaries private companies	19,148		Houthi
1.2.1.4	Liberal professions		462	Houthi
1.2.1.5	Estate rent tax		1,190	Houthi
1.2.1.6	Estate sale tax	1,797		Houthi
1.2.2.	Corporate income tax	56,797		Houthi
1.2.3.1	Tax penalties	1,146		Houthi
1.5	Commodities and services	137,403		
1.5.1.1	Fuel	22,215		Houthi
1.5.1.3	Cigarettes	31,999		Houthi
1.5.1.4	Qat		2,321	Houthi
1.5.1.5	Others	12,462		Houthi
1.5.1.11	Tax construction products	46,389		Both
1.5.1.12	Other commodities	52,674		
1.5.1.13	Services and cell phones	11,376		Houthi
1.5.1.16	Other services	56,318		
1.5.4.14	Tax telecommunications	2,899		Houthi
1.6.1.	Customs	52,979		
1.6.1.1	Vehicles	6,124		Import, reduced <sup>2</sup>

<sup>1</sup> Zakat given by all Muslims after the completion of the fasting month of Ramadan

<sup>2</sup> The term reduced means that the revenue available now is reduced from that available in 2011 due to the conflict.

<i>Budget item</i>	<i>Designation</i>	<i>Central authorities</i>	<i>Local authorities</i>	<i>Current control</i>
1.6.1.2	Electric equipment	1,725		Import, reduced
1.6.1.3	Medical	2,657		Houthi
1.6.1.7	Customs others	42,470		
2	Foreign Assistance	36,278		Government
2.1.x.x	Foreign government donors	17,823		
2.2.x.x	International organizations donors	18,455		
3	Revenues Public Ownership	1,318,793		Houthi
3.1.2.2	Industrial revenues	1,754		Severely reduced
3.1.2.3	Telecom revenues	14,945		Houthi
3.1.2.5	Financial revenues	17,203		Severely reduced
3.1.2.6	Public extractive revenues	11,076		Government, reduced
3.1.4.1	Oil exports	728,287		Government, reduced
3.1.4.2	Oil internal consumption	393,051		Government, reduced
3.1.4.3	Natural gas exports	38,474		Government, reduced
3.1.4.4	Natural gas internal consumption	26,195		Government, reduced
3.1.4.7	Licences mineral exploitation	20,743		Government, reduced
3.1.4.8	Tax oil companies	2,993		Government, reduced
3.1.4.14	Others	22,526		
3.2.1.3	Fisheries revenues	456		Government, reduced
3.2.1.4	Vehicle registration	165		Houthi, reduced
3.2.1.5	Book sales revenues	31		Houthi
3.2.2.3	Registrar revenues	197		Houthi
3.2.2.6	Legal registrations	26		Houthi, reduced
3.2.2.11	Passports		516	Houthis reduced
3.2.2.14	Consular	2,273		Government
3.2.2.15	Identification cards		279	Houthi, reduced
3.2.2.16	Birth registration		7	Houthi
3.2.2.17	Drivers licence		127	Houthi reduced
3.2.2.18	Well digging licence		9	Houthi, reduced
3.2.2.19	Market place		30	Houthi, reduced
3.2.2.20	Central butcheries		12	Houthi, reduced
3.2.3	Non-market institutions	6,125		
3.2.3.3	Printed forms	2,675		
3.2.3.6	Universities	72		Houthi, reduced
3.2.3.23	Others	3,370		
3.3	Penalties	541		Houthi, reduced
3.5.1	Others	30,071		
3.5.1.1	Funds	7,473		

<i>Budget item</i>	<i>Designation</i>	<i>Central authorities</i>	<i>Local authorities</i>	<i>Current control</i>
3.5.1.3	Waste	254		
3.5.1.4	Remaining non-executed budget	17,218		
3.5.1.5	Others	7,114		
5.4.2.1	Long term securities	14,980		
	<b>Totals</b>	<b>2,818,623</b>	<b>978</b>	

Table 45.2

**Main budget items likely available to the Houthis (YER Millions)**

<i>Budget item</i>	<i>Designation</i>	<i>Central authorities</i>	<i>Local authorities</i>	<i>Under Houthi control</i>
1	Tax	363,837	16,929	Yes
2	Foreign Assistance	0		No
3	Revenues Public Ownership	43,649	980	Small portion
	<b>Totals</b>	<b>407,486</b>	<b>17,909</b>	

## Annex 46: Customs extortion of traders

1. The Panel gathered evidence indicating that Yahya Mohamed Abdullah al-Osta, the acting head of the Sana'a based Yemen customs authority ('YCA'), appointed by Mohamed Ali Al Houthi on 28 May 2016<sup>1</sup>, played a major role in establishing mechanisms with the aim of applying additional customs taxes outside the legal framework. This facilitated the extortion of traders.
2. As the mechanisms did not have any legal basis, al-Osta coerced selected members of the chamber of commerce in Sana'a to sign an agreement allowing inspection and fees associated with them.
3. In early 2017 random customs checks were instigated in the Sana'a area, which targeted traders not affiliated with the Houthis for false customs declaration at the ports. Extortion and customs clearance delays led to discontent within the Sana'a based chamber of commerce, with traders vehemently complaining about the new procedures after the shooting of a trader at a customs check point on 1 March 2017.<sup>2</sup> On 3 March and 8 April 2017, the 'YCA' agreed to conduct checks outside the port, although the agreement was coerced and not legal. It was denounced and cancelled publicly by the same chamber on 13 August 2017.
4. Since then Yahya Mohamed Abdullah al-Osta has overseen the implementation of illegal mechanisms for the collection of customs duties for the benefit of Houthi armed groups acting on behalf and under the control of Abdulmalik al-Houthi (YEi 004).
5. On 4 April 2017, the Sana'a based ministry of finance established new permanent customs posts at the Amran and Dhamar checkpoints,<sup>3</sup> designed to exploit the additional taxes as a result of the decrease of traffic from Hudaydah port.

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<sup>1</sup>Mohamed Abdullah al-Osta was a mid-level staff member working as a legal advisor within the ministry of finance.

<sup>2</sup> Chamber of Commerce meeting on 1 March 2017, confirmed to the Panel by members of the chamber, <https://www.youtube.com/watch?v=LhIFKR7R3Tk>, authenticity confirmed to the Panel by members of the chamber.

<sup>3</sup> Decision 138 of 2017, see [http://customs.gov.ye/news\\_show\\_ar.php?id=132](http://customs.gov.ye/news_show_ar.php?id=132).

## Appendix A to Annex 46: Coercion of the chamber of commerce and industry (meeting on 4 March 2017)

REPUBLIC OF YEMEN  
MINISTRY OF FINANCE  
YEMEN CUSTOMS

جمهورية اليمن  
وزارة المالية  
الجمرك اليمنية

المستشارية  
الرئيس  
التاريخ  
الرقم  
٢٠١٧/٤٨

**محضر إجتماع**  
**بشأن التنسيق المشترك بين مصلحة الجمارك والغرف التجارية الصناعية**  
**بأمانة العاصمة ومحافظة صنعاء**

إنه في تمام الساعة التاسعة صباحاً من يوم السبت الموافق ٢٠١٧/٣/٤م عقد إجتماع مشترك بين قيادة مصلحة الجمارك وقيادة الغرف التجارية الصناعية بأمانة العاصمة ومحافظة صنعاء وذلك بشأن التنسيق المشترك بين مصلحة الجمارك ممثلة بالأستاذ/ يحيى محمد الأسطى القائم بأعمال رئيس مصلحة الجمارك - وكيل المصلحة والغرفة التجارية الصناعية بأمانة العاصمة ممثلة بالأستاذ/ محمد محمد صلاح نائب رئيس الغرفة التجارية الصناعية بالأمانة والغرفة التجارية الصناعية بمحافظة صنعاء ممثلة بالأستاذ/ حسين محمد السوارى رئيس الغرفة وحضر الإجتماع كل من :

مصلحة الجمارك	الغرفة التجارية
يحيى شرف الكبسي - الوكيل المساعد للشئون الفنية	محمد شارب - عضو مجلس إدارة الغرفة
مجاهد الطهيف - الوكيل المساعد لشئون الضابطة	محمد الأنسي - مستشار الغرفة التجارية
عبدالله المهدي - مستشار المصلحة	
نور الدين البديح - مدير عام الضابطة	
علي حسين حميد - مدير عام جمرك رقابة صنعاء	
محمد حسين العابد - نائب مدير عام الرقابة	
مشام راجح - مسئول غرفة العمليات	

**وبعد طرح بعض النقاط خرج الجلسون بالاتفاق على الآتي**

١. عدم دخول البضائع الواردة من الحديد والصليف
٢. بالنسبة للبضائع الواردة بموجب الاتفاقية العربية القائمة المستثناءة والاتفاقية اليمنية السعودية يقدم التاجر أقرار بموجب البيان الجمركي ويسدد الفارق حسب الاحتماب من القيمة بواقع ٤٨% ويقوم الجمرك بمعينة عينة من الحمولة بنسبة ٢٠% كون تلك البضائع خاضعة للأثر المالي وفي حالة إكتشاف ما يخالف ذلك يتم التوسع في عملية التفتيش .
٣. بالنسبة للبضائع الواردة من عدن تخضع للمعينة وبنسبة من ١٠% إلى ٢٠% وتخضع للتفتيش في حالة وجود المخالفات وإذا لم يوجد أي مخالفات تفرج فوراً بدون أي مصاريف سوى عشرون الف أجور إضافية .
٤. البضائع غير المنشأ العربي ذات المقاسات القائمة وعلى سبيل المثال :
 

- الزيوت - الصابون	- زيوت الطبخ	- الحديد + الخشب
- المعلبات - الحلويات	- الدجاج المجمد	- الأسمنت غير العربي
- شراب الطاقة - المواد الخام للصناعة وغيرها		

Email: info@Customs.gov.ye  
Tel: +967 - 1 - 500522  
Fax: +967 - 1 - 260381  
Yemen -a'Sana

www.customs.gov.ye

1

REPUBLIC OF YEMEN  
MINISTRY OF FINANCE  
YEMEN CUSTOMS

جمهورية اليمن  
وزارة المالية  
الجمارك اليمنية

تاريخ: ٢٠١٧/٤/١٨

يسرى عليها المعاينة بمطابقتها بالعينة مع البيان الجمركي .

٥. أي واردات لا تحمل بيانات جمركية تعامل وفقاً لأحكام التهريب وبموجب قانون الجمارك .

٦. الإلتزام بقرارات رئيس الوزراء لعام ٢٠١٦م المتعلقة بمكافحة التهريب .

وفقاً لذلك تم الإتفاق بين كل من الغرفة التجارية بأمانة العاصمة والغرفة التجارية بمحافظة صنعاء من جهة ومصصلحة الجمارك من جهة أخرى وعلى الجمارك إبلاغ الأمن المركزي والمفتش العام بوزارة الداخلية بضرورة منع الملاحظات في الشوارع وسط العاصمة .

٧. بالنسبة للواردات من منفذ الوديعة والشحن يتم تقديم أقرار من التاجر باي فارق بالبضاعة ويساعد في جزء من الغرامة في حالة عدم وجود أي فارق بعد ذلك .

وعلى الجميع أتباع أساليب حضارية في التوعية والتواصل المستمر والتعاون عملاً بمبدأ الشراكة القائمة بين الجمارك والقطاع التجاري .

وأقبل المحضر في تمام الساعة العاشرة والنصف صباحاً من نفس اليوم السبت الموافق ٢٠١٧/٣/٤م وتم التوقيع بين الطرفين في جو من الود والإخاء .

والله الموفق ،،،

مقرر الإجتماع  
فيصل محمد العزير العوامي

ممثل مصصلحة الجمارك			ممثل الغرفة التجارية		
الاسم	الصفة	التوقيع	الاسم	الصفة	التوقيع
محمد محمد شارب	عضو مجلس إدارة الغرفة بأمانة العاصمة		يحيى شرف الكبسي	الوكيل المساعد للشؤون الفنية	
محمد عبدالله الأنسي	مستشار الغرفة التجارية بالأمانة		مجاهد الطهيف	الوكيل المساعد لشؤون الضابطة	
			عبدالله المهدي	مستشار المصلحة	
			نور الدين البديح	مدير عام الضابطة	
			علي حسين حميد	مدير عام جمارك رقابة صنعاء	
			محمد حسين العابد	مفتش عام رقابة	
			هشام راجح	مستول غرفة العمليات	

يقوم

نائب رئيس الغرفة التجارية الصناعية بأمانة العاصمة  
أ/ محمد محمد صلاح

رئيس الغرفة التجارية الصناعية بمحافظة صنعاء  
أ/ حسين محمد السواري

القائم بأعمال رئيس مصصلحة الجمارك  
وكيل المصلحة  
أ/ يحيى محمد الأنسي

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Yemen -a'Sana

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2

*UN official translation from Arabic*

Date: 9 April 2017

**Minutes of the meeting on joint coordination between the customs authority and the chambers of commerce and industry of the capital governorate and Sana'a governorate**

At 0900 hours on the morning of Saturday, 4 March 2017, a joint meeting was held between the leadership of the customs authority and the leaderships of the chambers of commerce and industry of the capital governorate and Sana'a governorate. The subject was joint coordination between, on the one hand, the customs authority, represented by Yahya Muhammad al-Osta, Chargé d'affaires a.i. and deputy chief of the customs authority, and, on the other hand, the chamber of commerce and industry of the capital governorate, represented by Muhammad Muhammad Salah, deputy head of the chamber of commerce and industry of that governorate, and the chamber of commerce and industry of Sana'a governorate, represented by Husayn Muhammad al-Suwari, Head of the Chamber.

The meeting was attended by the following:

**The chamber of commerce**

Muhammad Sharib – member of the board of directors of the chamber  
 Muhammad al-Insi – counsel to the chamber of commerce

**The customs authority**

Yahya Sharaf al-Kibsi – assistant deputy for technical affairs  
 Mujahid al-Tahif – assistant deputy for control affairs  
 Abdullah al-Mahdi - counsel to the authority  
 Nur al-Din al-Badah - director-general of control, Sana'a  
 Ali Husayn Hamid - director-general of customs inspection  
 Muhammad Husayn al-Abid- assistant director-general of inspection  
 Hisham Rajih- operations room official

[*Handwritten:*] Authentic copy, Director of the Office of the Deputy (*Illegible signature*)

**After discussing various issues, the attendees agreed on the following:**

1. Goods coming from Hudaydah and Salif would not be granted entry.
2. For incoming goods exempted under the existing Arab agreement and the Yemeni-Saudi agreement, the merchant shall provide a customs declaration and pay any discrepancy based on a calculation of 48 per cent. Customs will conduct a spot check of 20 per cent of any shipment to determine if they are subject to financial payment. If any are found to be in violation, the inspection will be widened.
3. Goods coming from Aden will be subject to a 10 to 20 per cent check, and will be subject to inspection if violations are found. If no violations are found, they will be released immediately without any payment other than 20,000 in additional charges.
4. Goods not of Arab origin meeting existing specifications include the following:

Olives – soap	Cooking oils	Metal and wood
Canned goods - sweets	Frozen chicken	Non-Arab cement

Energy drinks – raw materials for manufacturing, etc.

Such goods will be subject to checks to make sure they match the customs declaration precisely.

5. Any imports not accompanied by a customs declaration will be treated under provisions for smuggling and the Customs Act.

6. The Prime Minister’s 2016 decision on combating smuggling will be complied with.

In accordance with the preceding, an agreement was reached between, on the one hand, the chamber of commerce of the capital governorate and the chamber of commerce of Sana’a governorate, and, on the other hand, the customs authority. The customs authority committed to informing central security and the Inspector-General of the Ministry of the Interior of the need to prohibit raids in the streets inside the capital.

7. For imports at the Wadi’ah and Shahn crossing points, the merchant will submit a declaration of any discrepancy in the goods. He will be assisted in paying part of the fine, provided no additional discrepancy is found.

All parties committed to keep each other informed and to engage in cordial communication and cooperation under the principle of partnership between Customs and the private sector.

The meeting ended at 1030 hours on that day, Saturday 4 March 2017. The two sides signed in a spirit of friendship and brotherhood.

May God grant success.

(Signed) Faysal Abdulaziz **al-Awwami**



## Appendix B to Annex 46: Coercion of the chamber of commerce and industry (meeting 8 April 2017)

REPUBLIC OF YEMEN  
MINISTRY OF FINANCE  
YEMEN CUSTOMS

الجمهورية اليمنية  
وزارة المالية  
مصلحة الجمارك

**محضر إجتماع تنسيق بين مصلحة الجمارك والغرفة التجارية**

اجتمعت الغرفة التجارية الصناعية بأمانة العاصمة صنعاء مع مصلحة الجمارك في يوم السبت الموافق ٢٠١٧/٤/٨م وتم استعراض المحضر السابق وإقرار ما ورد به وفي نفس الوقت تم المناقشة لمختلف الأوضاع القائمة وتوصل المجتمعون إلى الآتي :

(١) فيما يخص الغرامة في حالة أن يكون المستورد أو التاجر قدم أقرار صحيحاً سليماً من حيث الكمية والسعر الناقد فإن المصلحة توافق على إلغاء الغرامة بحيث يكون الإقرار قبل فتح وسيلة النقل .

(٢) التنسيق المستمر بين الغرفة والمصلحة في كل القضايا الناشئة والتي تهم الطرفين .

(٣) التوقف عن التصعيد الإعلامي ويتحمل كلا مسؤوليته في هذا الجانب .

(٤) تسهيل الإجراءات لكل تاجر أو مستورد ملتزم متعاون مع الدائرة الجمركية وفي إطار القانون .

(٥) الإقرار من الجميع أن الرقابة الجمركية التي فتحتها مصلحة الجمارك حالياً بالمحافظات هي نتيجة لما تقتضيه الضرورة كما ورد بالمادة رقم (٦٧) من قانون الجمارك رقم (١٤) لسنة ١٩٩٠م وتعديلاته .

أقر الجميع ما ورد وتم التوقيع على المحضر .

ممثل مصلحة الجمارك				ممثل الغرفة التجارية			
م	الاسم	الصفة	التوقيع	م	الاسم	الصفة	التوقيع
١	نور الدين البوح	مدير عام الضابطة		١	محمد محمد شارب	عضو مجلي إدارة الغرفة	
٢	محمد علي المحفدي	مدير عام الإيرادات		٢	محمد عبدالله الأنسي	مستشار رئيس مجلس الإدارة	
٣	علي محمد القباطي	مستشار لشئون الرقابة والتفتيش		٣	خالد علي العلي	مدير عام الغرفة التجارية	
٤	عصام الكبسي	مدير إدارة الإعلام					

يعتمده

القائم بأعمال رئيس مصلحة الجمارك  
الأوكيل المحلطة  
/ يحيى محمد الأنطوق الحصار

رئيس الغرفة التجارية  
الصناعية بأمانة العاصمة  
محمد محمد شارب

Email: info@Customs.gov.ye  
Tel : +967 - 1 - 500522  
Fax: +967 - 1 - 260381  
Sana'a - Yemen

www.customs.gov.ye

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لئب الأتوري

*UN official translation from Arabic*

**Minutes of the coordination meeting between the customs authority and the chamber of commerce**

The chamber of commerce and industry at the capital governorate Sana'a met with the customs authority on Saturday, 8 April 2017. The previous minutes were reviewed and adopted. At the same time, various outstanding matters were discussed and those present agreed on the following:

1. With regard to the fee in cases where the importer or merchant has submitted an accurate declaration of the quantity and prevailing price, the authority agrees to waive the fee where the declaration is prior to the opening of the means of transport.
2. There would be ongoing coordination between the chamber and the authority on any emerging issues of concern to both parties.
3. Media escalation would cease, and both parties would take responsibility in that regard.
4. Procedures would be facilitated for any merchant or importer in compliance who cooperated with the Authority within the law.
5. All present declared that the customs supervision currently being inaugurated in the governorates was as needed in accordance with article 67 of the customs act (No. 14 of 1990, as amended).

Appendix C to Annex 46: Letter of 13 August 2017 from the chambers of commerce and industry to the customs authority cancelling the agreement of 4 March 2017

جمهورية اليمن  
 Republic of Yemen  
 Chamber of Commerce & Industry  
 Capital Secretariat

أمانة العاصمة  
 غرفة التجارة الصناعية  
 أمانة العاصمة  
 الغرفة التجارية الصناعية بأمانة العاصمة - صنعاء  
 سكرتارية مجلس الإدارة  
 الصادر المصام  
 رقم: ٢٠١٧/٤/٤٣  
 التاريخ: ١٣/٨/٢٠١٧  
 تلقاه:

رقم /  
 ربح /

عناية الأخ / يحيى محمد الأسطى

المحترم  
 القائم بأعمال رئيس مصلحة الجمارك

الموضوع / إشعار رسمي بإلغاء الاتفاقات الأخيرة بين الغرفة التجارية ومصلحة الجمارك


تهديكم الغرفة التجارية الصناعية بأمانة العاصمة أطيب التحية والتقدير متمنية لكم مزيداً من التقدم في المجال العملي .

وإشارة إلى الموضوع أعلاه ، وإلى الاتفاقات الموقعة مع مصلحة الجمارك بتاريخ ٢٠١٧/٤/٢٠ ، وبرغم الإجحاف في حق القطاع الخاص في بعض بنود تلك الاتفاقات إلا أن الغرفة أرادت أن تحول دون حدوث انسداد في العلاقة بين القطاع الخاص ومصلحة الجمارك، فوقنا على تلك الاتفاقية المجحفة مع مصلحة الجمارك أملاً في تطبيع العلاقة بين المصلحة والقطاع الخاص، التي ساءت كثيراً بسبب المعاملة المهينة للقطاع الخاص من قبل إدارة وموظفي الجمارك، واستحداث آليات وقرارات مخالفة لقانون الجمارك والنصوص القانونية ذات الصلة، واستحداث دوائر جمركية في كل من نمار عمران و... الخ، وإعادة جميع الإجراءات والوثائق الجمركية الرسمية التي تمت في الدوائر الجمركية الواقعة على المنافذ البرية والبحرية للجمهورية اليمنية .

إلا أن مصلحة الجمارك استمرت وتستمر كل يوم في عرقلة الحركة التجارية وابتكار وسائل وإجراءات لتضييق الخناق على التاجر اليمني بكل ما تحمله الكلمة من معنى.

إذ تقوم مصلحة الجمارك بفرض رسوم غير مبررة على البضائع الواردة من عدن عوضاً عن خضوعها للتفتيش والمعاينة مرة أخرى ودفع رسوم وغرامات يرغم وجود بيانات جمركية صحيحة لتلك البضائع، كما أن البضائع الواردة من ميناء الحديدة والصليف تتعرض هي الأخرى للتأخير والابتزاز والغرامات، وكذلك البضائع الواردة من الوديعة والمكلا والشحن... الخ. وبموجب العديد من الشكاوى التي تعكس أنين ومعاناة كافة القطاع

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



**Republic of Yemen**  
 Chamber of Commerce & Industry  
 Capital Secretariat

**الجمهورية اليمنية**  
**غرفة التجارة الصناعية**  
**أمانة العاصمة**

No. / رقم  
Date: / تاريخ

كما أن مصلحة الجمارك تصر على توريد الرسوم الجمركية (نقداً)، وهذا الإجراء كارثة كبيرة على القطاع الخاص، بسبب أزمة السيولة التي تواجهها بلادنا حالياً وامتناع البنك المركزي عن تزويد البنوك التجارية بالعملية الوطنية، ناهيك عن المخاطر الكبيرة لنقل السيولة من مكان لآخر في مثل هذه الأوضاع.

ولا ننسى الغرامات الباهظة التي يتحفنا بها موظفو الجمارك والتعسف في تأخير الإجراءات وغيرها من المضايقات والتعسفات التي يعاني منها القطاع الخاص كل يوم، حتى باتت الإجراءات الجمركية في المناطق الشمالية هاجساً يُنقل كاهل جميع التجار بلا استثناء.

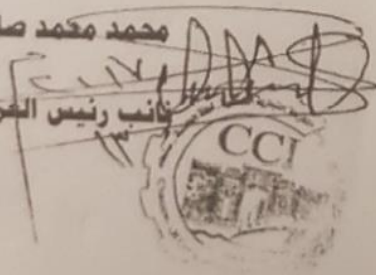
وبدلاً من أن تكون الاتفاقية الموقعة بين القطاع الخاص ممثلاً بالغرفة التجارية بأمانة العاصمة صنعاء ومصلحة الجمارك وسيلة لتخفيف الحمل على التجار إذا بمصلحة الجمارك تسيء استعمال تلك الاتفاقية وتشرعن لإجراءاتها وابتزازها للقطاع الخاص أكثر من ذي قبل، وما يجده التجار من عنق وضرر من مصلحة الجمارك تضاعف أكثر بعد تلك الاتفاقية.


**لذلك:**

فإن الغرفة التجارية الصناعية بأمانة العاصمة صنعاء وبناء على الكم الكبير من الشكاوى المقدمة من جميع شرائح ومكونات القطاع الخاص والتي تطالب بإلغاء هذه الاتفاقيات التي تضر الاقتصاد الوطني بشكل كلي، ونشعركم رسمياً بإلغاء الاتفاقية الموقعة بين المصلحة والغرفة حتى إشعار آخر.

والله الموفق ،،،

محمد محمد صلاح  
 نائب رئيس الغرفة





صورة مع التهمة لـ:  
 - فضيلة الأخ / رئيس المجلس النيابي حفظه الله  
 - فضيلة الأخ / رئيس مجلس النواب  
 - دولة الأخ / رئيس مجلس الوزراء  
 - فضيلة الأخ / وزير المالية

Sana'a - Al-Zubairi St. P.O.Box: 195

*UN official translation from Arabic*

Date: 12 August 2017

**Subject: Official notice of cancellation of recent agreements between the chamber of commerce and the customs authority**

The chamber of commerce and industry of the capital governorate presents its compliments and wishes you continued progress in your work.

I write in reference to the above subject and agreements that we signed with the customs authority on 3, 4 and 20 April 2017. Even though some of their provisions were prejudicial to the private sector, the chamber was trying to prevent any sources of friction in relations between the private sector and the customs authority, and we signed those unfair agreements with the customs authority in the hope of normalizing relations between the Authority and the private sector. Those relations had deteriorated considerably owing to abusive treatment of the private sector by the customs administration and officials, the introduction of mechanisms and decisions contrary to the customs act and other relevant legal provisions, the creation of customs departments in Dhamar, Amran, and so on. We had hoped for the restoration of all the official customs procedures and documentation used in customs departments at land and sea border points in the Republic of Yemen.

Unfortunately, the customs authority has continued to persist daily in impeding commercial activity and inventing new procedures that strangle Yemeni merchants, in every sense of the word.

The customs authority imposes unjustified duties on goods coming from Aden. It subjects them to additional inspections, checks, duties and fees even when those goods have valid customs declarations. Goods coming from the ports of Hudaydah and Salif are also subject to delays, theft and fees, as are goods coming from Wadi'ah, Mukalla and Shahn. There have been numerous complaints coming from all over of the commercial and private sectors. Merchants, importers, owners, investors and businessmen are all complaining about arbitrary customs practices and procedures, and are demanding the cancellation of these unfair agreements.

The Customs Authority is also insisting on the payment of customs duties in cash. That is a disaster for the private sector, given the liquidity crisis currently faced by our country and the refusal by the Central Bank to supply commercial banks with national currency, not mention the increased risk of liquid assets being diverted from one location to another under such conditions.

That is not even to mention the exorbitant fees being charged by customs officials and the arbitrary delays, procedures and other inconveniences suffered by the private sector every day. In the northern regions, customs procedures remain a burden on the shoulders of all merchants without exception.

The agreement signed between the private sector – represented by the chamber of commerce and industry in the capital governorate Sana'a – and the customs authority was supposed to lighten the burden on merchants. Instead, the customs authority is abusing that agreement, misapplying its procedures, and fleecing the private sector more than ever before. Merchants have found that the hardship and damage inflicted on them by the customs authority has only been compounded by the agreement.

Therefore, given the enormous volume of complaints submitted by all parts of the private sector demanding the cancellation of these agreements, and the damage these agreements are doing to the overall national economy, the chamber of commerce and industry at the capital governorate Sana'a hereby notifies you officially of the cancellation of the agreements signed between the authority and the chamber until further notice.

*(Signed)* Muhammad Muhammad **Salah**

Deputy Head of the Chamber

## Annex 47: Houthi revenue from black market sales of oil products

Table 47.1

### Estimates of oil distribution and sale costs<sup>1</sup>

<i>Item</i>	<i>YER (Market<sup>2</sup> Rate)</i>	<i>YER (CBY<sup>3</sup> Rate)</i>	<i>US\$<sup>4</sup></i>	<i>Remarks</i>
1. Total cost with delivery in Sana'a (Diesel per L)	184			
2. Total cost with delivery in Sana'a (Petrol per L)	196			
<i>a. Delivery cost to Red Sea ports (diesel/L)</i>	<i>135</i>	<i>93</i>	<i>0.37</i>	<i>US\$446/Ton (1,200L)</i>
<i>b. Delivery cost to Red Sea ports (petrol/L)</i>	<i>140</i>	<i>96</i>	<i>0.38</i>	<i>US\$520/Ton (1,350L)</i>
<i>c. Transport cost to Sana'a</i>	<i>6</i>	<i>5</i>	<i>0.02</i>	<i>Private transport</i>
<i>d. YPC Fees/(Diesel per L)</i>	<i>43</i>	<i>29.5 / 34.2</i>	<i>0.12 / 0.14</i>	<i>Collected by Houthis</i>
<i>e. YPC Fees/(Petrol per L)</i>	<i>50</i>	<i>29.5 / 34.2</i>	<i>0.12 / 0.14</i>	<i>Collected by Houthis</i>
3. Official sale price (Sana'a)	215	147	0.59	
3a. Black Market price (Sana'a) (Diesel per L)	240 <sup>5</sup>	164 / 171	0.66 / 0.68	Houthi affiliate
3b. Black Market price (Sana'a) (Petrol per L)	250 <sup>6</sup>	164 / 171	0.66 / 0.68	Houthi affiliate
4. Houthi Margin/L (Sales) (Diesel/Petrol)	56 / 54			On Sales
5. Total Houthi Margin/L (Diesel/Petrol)	99 / 104			Including YPC fee

<sup>1</sup> Confidential sources in the oil and gas industry in Yemen.

<sup>2</sup> At unofficial exchange rate of USD\$ 1 = YER 365.

<sup>3</sup> CBY rate is YER 250 to US\$1.00.

<sup>4</sup> At CBY rate.

<sup>5</sup> Current price per liter for diesel and petrol. The price reached YER 280 throughout 2016 and early 2017. See statement of the acting chief of customs [http://customs.gov.ye/news\\_show\\_ar.php?id=130](http://customs.gov.ye/news_show_ar.php?id=130).

<sup>6</sup> Ibid.

Table 47.2  
**Estimates of potential oil revenue for the Houthis (5 May 2016 – 30 July 2017)<sup>7</sup>.**

<i>Item</i>	<i>Delivered (MT)</i>	<i>Delivered (L)</i>	<i>Houthi margins</i>	
			<i>YER (Market)<sup>8</sup></i>	<i>US\$ (CBY Rate)<sup>9</sup></i>
Total fuel deliveries to Red Sea ports (MT)	2,031,609			
Total if all Petrol (L)		2,742,672,15	0	1,273,849,200
Total if all Diesel (L)		2,437,930,80	0	1,077,872,400

<sup>7</sup> The Panel could not estimate the costs after July 2017 as: 1) exchange rate stopped to be fixed to YER 250 for 1 USD\$; and 2) cost of fuel increased continuously since July and reached 25% in December 2017 compared to July 2017.

[http://www.bunkerindex.com/prices/bixfree\\_1709.php?priceindex\\_id=4](http://www.bunkerindex.com/prices/bixfree_1709.php?priceindex_id=4).

<sup>8</sup> At unofficial exchange rate of USD\$ 1 = YER 365. The fuel is sold on the black market so this rate applies.

<sup>9</sup> Official exchange rate used in this case as that is the value the Houthis would acquire if exchanged on international market.

**CONFIDENTIAL ANNEX NOT FOR PUBLIC DISSEMINATION**

**Annex 48: List of consignees for fuel import in Red Sea ports**



Table X.2

**Number of tankers for consignees for fuel import in Red Sea ports before and after 1 March 2017**

Ser	Consignees	Number of tankers before	Number of tankers after
1	Abha Global Trading	2	
2	Aggreko Yemen for Agricultural Products	2	
3	az-Zahraa Establishment for Trading and Agencies	2	
4	Bin Dowal for Iron Steel Co. Mukalla, Yemen	2	
5	Dynasty Trading Yemen	2	
6	Mok Corporation for Trading and Oil Services	2	
7	Oil Premier Oil Services and Trading	2	
8	Matrixoil Import, Yemen	3	
9	Middle East Shipping	3	
10	Ahmed Mohammed Saleh Albaidhani for Trading	4	
11	Nama'a Power Oil Services and Importing	4	
12	Elaf for Import Oil Derivatives	5	
13	Albarakah Republic Trading Company	1	1
14	Golden Oil FZC, Sharjah, UAE	1	1
15	Yemen Company for Industrial Investment	1	2
16	Balad al Khairat for Import Petroleum	1	7
17	Yemen Petroleum Company	3	1
18	Deema Yemen for Trading and Agencies	3	9
19	Climax for Import	4	2
20	Sam Oil Company for Trade and Oil Services	7	20
21	Tamco Petroleum	7	14
22	Atico Trading and Industry	10	11
23	Yahya Oseily Export Company Limited	11	17
24	Begad International for Import	13	
25	al Attas for Trade and Marketing		4
26	al Huthaily General Trading		3
27	Alchemist Energy Trading DMCC		3
28	al Emteaz International for Importing		3
29	Falcon Shipping and Marine Services		3
30	Waqood for Investment		3
31	al Zahra Trading and Agencies Establishment		2
32	Hamady for Trade and Cold Store		2
33	MOPC for Oil and Gas Services		2
34	Vamoil International		2

**Annex 49: Risks of looting and trafficking of antiquities and cultural objects**

Figure 49.1  
Example of artefacts seized in Geneva

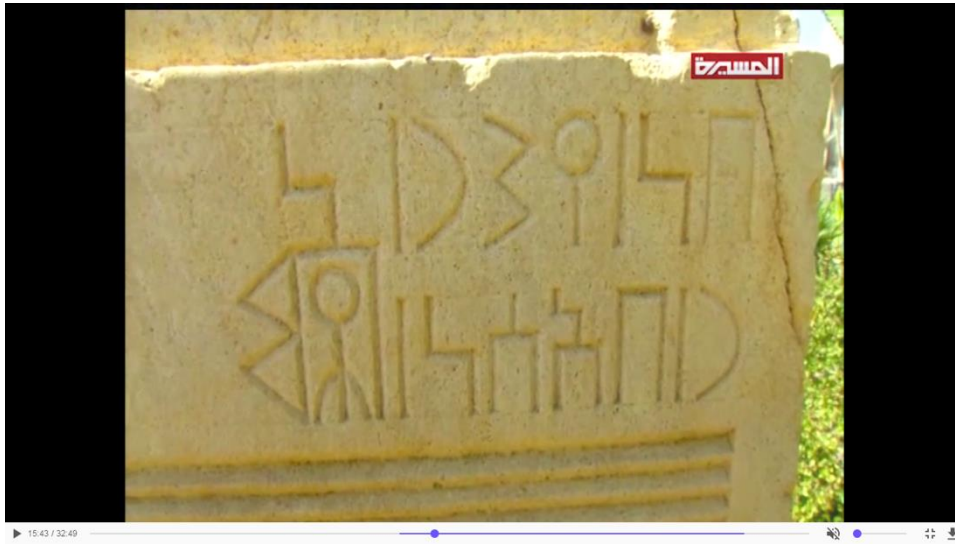


Figure 49.2  
Artefacts observed in Lahij<sup>1</sup>



<sup>1</sup> Sources: Yafa News, August 2017, <http://www.yafa-news.net/archives/263955>. Interview with the director of archaeology at al-Dad district, Lahij (November 2017).

Figure 49.3  
Artefacts observed in in Tebbat Tawfiq Saleh Sourg of Sana'a<sup>2</sup>



<sup>2</sup> [http://almasirah.net/gallery/preview.php?file\\_id=10481#.Wuifxroebms.whatsapp](http://almasirah.net/gallery/preview.php?file_id=10481#.Wuifxroebms.whatsapp).

Figure 49.4  
Artefacts observed in Ta'izz under the control of resistance forces (Museum al-Ardi in Ta'izz)



A resistance fighter inspects the damage to the Ta'izz National Museum, Yemen.  
Photo: AHMAD AL-BASHA/AFP/Getty Images.<sup>3</sup>

<sup>3</sup> <https://news.artnet.com/art-world/taiz-national-museum-destroyed-419792>.

## Annex 50: Banks and finance institutions in Yemen

Table 50.1

### Yemeni banks and financial institutions

<i>Ser</i>	<i>Bank</i>	<i>Capital YER Billion</i>	<i>Branch(s)</i>	<i>Government stake %</i>	<i>Other stake %</i>	<i>Founded</i>	<i>Remarks</i>
1	Central Bank of Yemen (CBY)	6.0	21	100		1971	
2	Yemen Bank for Reconstruction and Development	15.0	44	51	P <sup>1</sup> 49	1962	Shareholder in Kamaran (KIIC)
3	National Bank of Yemen	10.0	27	100		1969	Known as Al Ahli Bank, owned by the Government, the only bank with head office in Aden
4	Arab Bank	6.0	9		F100%	1972	
5	United Bank Limited	6.0	3		F100%	1972	
6	Housing Bank	0.2	1	97%	P3%	1977	
7	International Bank of Yemen	15.0	23		P85%, F15%	1979	Associated with Shahir Abdulhaq Bishr
8	Yemen Kuwait Bank for Trade and Investment	6.0	12		P100%	1979	Associated with Alsonidar family
9	Cooperative and Agricultural Credit Bank	14.9	51	100		1982	Owns branches in Djibouti and in Bosaso, Puntland, Somalia
10	Al-Rafidayn Bank	6.5	1		F100%	1982	
11	Yemen Commercial Bank	7.9	14	10	P90%	1993	Associated with al-Rowayshan family
12	Islamic Bank of Yemen for Finance and Investment	4.4	6	4.5	P73.5%, F22%	1995	Associated with Al-Aswadi family
13	Tadhamon International Islamic Bank	20.0	21		P96.7%, F3.3%	1996	Associated with Hayel Saeed family

<sup>1</sup> P = Private Investor stake and F = Foreign Investor state.

<i>Ser</i>	<i>Bank</i>	<i>Capital YER Billion</i>	<i>Branch(s)</i>	<i>Government stake %</i>	<i>Other stake %</i>	<i>Founded</i>	<i>Remarks</i>
14	Saba Islamic Bank	16.0	16		P85%, F15%	1997	Associated with Al Ahmar family and Dubai Islamic Bank
15	Yemen Gulf Bank	1.3	2	1%	P77%, F22%	2001	
16	Shamil Bank of Yemen and Bahrain	6.0	9		P57%, F43%	2002	
17	Qatar National Bank (QNB)	6.0	1		F100%	2007	
18	Al-Amal Microfinance Bank	3.8	18	45%	P20%, F35%	2008	
19	Al-Kuraimi Islamic Microfinance Bank	10.0	23		P100%	2010	Associated with the Al-Kuraimi family

Table 50.1  
Money exchangers operating in Yemen

Ser	Name	Arabic Name	Used by traders	Presence in Sana'a	Presence in Ta'izz
1	Abd al-Aawi al-Amri Exchange	عبدالقوي العامري للصرافة			Yes
2	Abdellah Meftah Exchange	عبدالله مفتاح للصرافة		Yes	
3	Abdullah Al Amri Exchange	عبد الله العامري للصرافة	Yes		
4	Abu Adel Exchange	ابو عادل للصرافة		Yes	
5	Abu Hisham Exchange	ابو هشام للصرافة		Yes	
6	Abu Meftah Exchange	أبو مفتاح للصرافة	Yes		
7	Abu Murad Exchange	ابو مراد للصرافة		Yes	
8	Abu Taha Athur Exchange	ابو طه الثور للصرافة		Yes	
9	Ahmed al Amri Exchange	احمد العامري للصرافة		Yes	Yes
10	Ahmed Al Amri Exchange	أحمد العامري للصرافة	Yes		
11	Al Akwa'a Exchange	الأكوع للصرافة	Yes		
12	Al Arabiya Exchange	العربية للصرافة		Yes	
13	Al Atiri Exchange	العطيري للصرافة		Yes	
14	Al Aydarus Exchange	العيدروس للصرافة	Yes	Yes	
15	Al Azzi Exchange	العزي للصرافة			Yes
16	Al Baidani Exchange	البيضان للصرافة	Yes		
17	Al Barq Exchange	البرق للصرافة	Yes	Yes	
18	Al Busairi Exchange	البيسيري للصرافة	Yes		
19	Al Faqih Exchange	الفقيه للصرافة			Yes
20	Al Gharassi Exchange	الغراسي للصرافة	Yes		
21	Al Hajri Exchange	الحجري للصرافة	Yes	Yes	
22	Al Hatha'a Exchange	الحظاء للصرافة		Yes	
23	Al Hattar Exchange	الهتار للصرافة		Yes	
24	Al Hazmi Exchange	الحزمي للصرافة	Yes		
25	Al Jazeera Exchange	الجزيرة اخوان	Yes	Yes	Yes
26	Al Kabus Exchange	الكبوس للصرافة		Yes	



Ser	Name	Arabic Name	Used by traders	Presence in Sana'a	Presence in Ta'izz
27	Al Khaleej Exchange	الخليج للصرافة		Yes	
28	Al Khulaidi Exchange	الخليدي للصرافة			Yes
29	Al Mahraqi Exchange	المحرقى للصرافة	Yes		
30	Al Majrabi Exchange	المجربي للصرافة	Yes		
31	Al Marah Exchange	المرح للصرافة		Yes	
32	Al Marry Exchange	المرى للصرافة	Yes		
33	Al Mesbahi Exchange	المصباحى للصرافة		Yes	
34	Al Mihdar Exchange	المحضر للصرافة	Yes		
35	Al Muhajeer Exchange	المهاجر للصرافة	Yes		
36	Al Muttahida Exchange	المتحدة للصرافة	Yes		
37	Al Omgui Exchange	العمقى للصرافة	Yes		
38	Al Qasmi Exchange	القاسمى للصرافة		Yes	
39	Al Qutaibi Exchange	القطيبي للصرافة	Yes		
40	Al Yabani Exchange	اليباني للصرافة	Yes		
41	Al Yemeni Exchange	اليمنى للصرافة	Yes		
42	Alamari Exchange	مؤسسة المرى للصرافة		Yes	
43	Amran Exchange	عمران للصرافة	Yes		
44	Annajm Exchange	النجم للصرافة	Yes		
45	Annasser Exchange	الناصر للصرافة	Yes		Yes
46	Annuman Exchange	النعمان للصرافة	Yes	Yes	
47	Ashahdi Exchange	الشاحدي للصرافة	Yes		
48	Assaeed Exchange	السعيد للصرافة	Yes		
49	Assaifi Exchange	الصفى للصرافة	Yes		
50	Assuraimi Exchange	الصريمى للصرافة	Yes		
51	Athur Exchange	الثور للصرافة	Yes		
52	Attadamun Exchange	التضامن للصرافة	Yes		
53	Azzubairi Exchange	الزبيرى للصرافة	Yes		
54	Ba Wazeer Exchange	باوزير للصرافة	Yes		

Ser	Name	Arabic Name	Used by traders	Presence in Sana'a	Presence in Ta'izz
55	Bakhash Exchange	بخاش للصرافة	Yes		
56	Behyan Exchange	بهيان للصرافة	Yes		
57	Ben Amer Exchange	بن عامر للصرافة	Yes		
58	Dahhan Exchange	دحان مفتاح للصرافة		Yes	
59	Exchange	الحظاء للصرافة	Yes		
60	Hamood Ahmed Yuseef Exchange	حمود احمد يوسف للصرافة			Yes
61	Heza'a Meftah Exchange	هزاع مفتاح للصرافة		Yes	
62	Mahfuth al-M'abari Exchange	محفوظ المعبري للصرافة			Yes
63	Masood Exchange	مسعود للصرافة	Yes		
64	Mathna Exchange	مثنى للصرافة	Yes		
65	Muhamed Abdulmalik Athur Exchange	محمد عبدالملك الثور للصرافة		Yes	
66	Muhsein Shrhan Exchange	محسن شرهان للصرافة		Yes	
67	Munawar Lotf Exchange	منور لطف للصرافة			Yes
68	Naguib Radif Exchange	نجيب رضيف للصرافة			Yes
69	Nahshal Exchange	نهشل للصرافة	Yes		
70	Sabra Exchange	صبرة للصرافة	Yes	Yes	
71	Saleh Al Arwi Exchange	صالح العروي للصرافة		Yes	
72	Shar'ab Arruna Ben Lotf Exchange	شرعب الرونة بن لطف للصرافة			Yes
73	Suwaid and Sons Exchange	سويد واولاده للصرافة		Yes	
74	Suwaid Exchange	سويد للصرافة	Yes		

**Annex 51: Money supply M0<sup>1</sup> of YER (1999 to present)**

Table 51.1

**Value (YER Million) by banknote denomination**

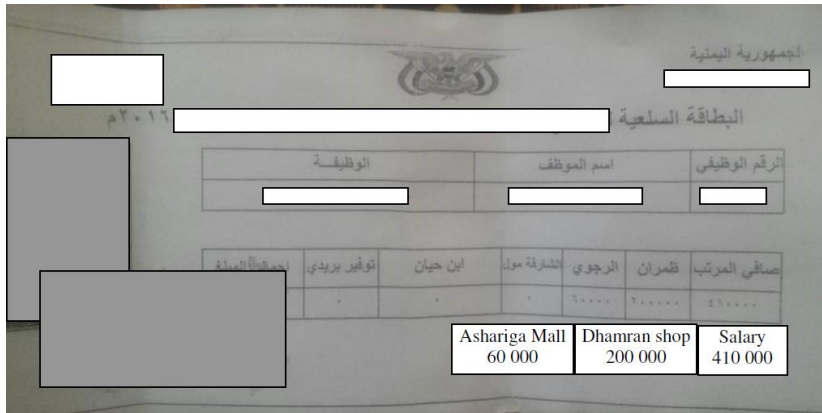
<i>Value (YER Million) for each banknote denomination</i>											
<i>Year</i>	<i>1</i>	<i>5</i>	<i>10</i>	<i>20</i>	<i>50</i>	<i>100</i>	<i>200</i>	<i>250</i>	<i>500</i>	<i>1000</i>	<i>Coins</i>
1999	123	247	649	1,556	12,842	48,589	40,819		30,469	33,770	19
2000	123	289	679	1,156	11,492	50,540	43,235		31,439.0	62,469.0	19
2001	123	327	807	1,083	9,840	49,760	42,287		39,113	72,236.8	19
2002	122	376	829	1,047	9,155	53,354	40,919		58,802	79,151	19
2003	124	390	920	994	9,727	53,271	41,618		75,255	91,954	19
2004	124	425	1,081	902	10,134	49,159	39,990		87,782	113,181	19
2005	127	457	1,165	908	6,404	31,083	36,793		100,209	160,359	19
2006	127	474	1,250	965	4,570	21,591	32,897		102,518	254,934	19
2007	127	483	1,315	1,089	4,184	17,939	27,205		111,758	279,873	19
2008	128	532	1,399	1,227	4,289	15,415	21,961		129,336	316,196	19
2009	128	551	1,461	1,325	4,528	14,810	10,087	10,563	158,597	349,650	19
2010	128	557	1,536	1,417	4,085	13,079	5,125	16,650	141,553	387,249	19
2011	128	559	1,613	1,502	3,357	12,208	3,967	19,787	151,882	605,263	19
2012	128	584	1,845	1,775	2,892	14,556	3,124	11,235	109,260	687,378	19
2013	128	614	1,934	2,110	2,755	15,056	2,724	9,000	79,022	708,532	19
2014	129	675	1,936	2,412	2,409	14,373	2,397	10,833	73,578	746,123	19
2017									600,000	400,000	

<sup>1</sup> M0 is a measure of the money supply, which combines any liquid or cash assets held within a central bank and the amount of physical currency circulating in the economy.

## Annex 52: Vouchers issued by Abu Nabil Al Qaramani

1. Voucher card indicating that an employee with a salary YER 410,000 was to receive vouchers worth YER 200,000 and YER 60,000 to be used respectively in Dhamran market and Ashariga market

Figure 52.1  
Al Qaramani voucher ID card to be used with voucher<sup>1</sup>



2. Allocation of YER 5,000 and YER 10,000 vouchers to one administrative service

Figure 52.2  
Al Qaramani vouchers (YER 20,000 and YER 30,000)



<sup>1</sup> Source: Employee with identity masked.

**Annex 53: Money laundering of new (counterfeit) YER 5,000 promissory notes<sup>1</sup>**

Figure 53.1

**Seized counterfeit YER 5,000 denomination promissory notes and blanks passport**



Figure 53.2

**Packaged counterfeit YER 5,000 denomination promissory notes**



<sup>1</sup> Images from confidential source and Jawf press.

Figures 53.3 and 54.4

**Subsequent seizure en-route in Houthi controlled areas**



53.3: Seizure by Houthis in Ibb



53.4 Seizure by legitimate Government in Ma'rib

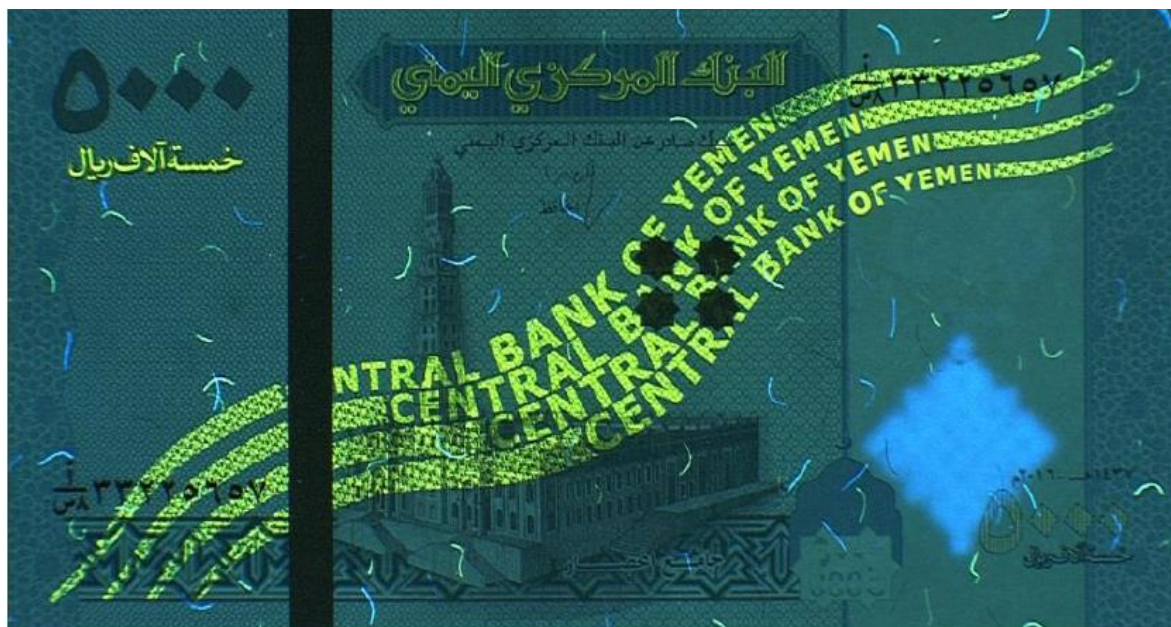
Figure 53.5

**Detailed image of counterfeit YER 5,000 denomination promissory note received by the Panel used in forensic analysis**



Figure 53.6

Detailed image of counterfeit YER 5,000 promissory note received by the Panel used in forensic analysis



### I. Technical analysis

1. There is a noticeable absence of a watermark, a security thread in the substrate or security features which are present in a majority of banknotes produced on paper substrate, including 500 YER and 1,000 YER notes.
2. There is a noticeable absence of intaglio print, a printing technique typically utilised on banknotes and passports.
3. The front of the note is protected by: 1) yellow green fluorescent ink (it contains fluorescent substance in addition to visible colour pigments - Arabic script in yellow green); and 2) the fluorescent overprint (image which is invisible under white light and it fluoresces under UV light – wavy decorative and textual elements in Latin script in yellow green).
4. The serial number is printed ink-jet by propelling small droplets of liquid ink directly onto the substrate, a technique that is not usually utilised on banknotes.
5. Poor adhesion of the stripe onto the substrate, with some fragments of the holographic stripe missing. These defects suggest that the applied holographic foil choice is inadequate and is likely that the foil would not withstand well a typical banknote lifecycle / circulation.
6. The colour shifting security feature depicting four eight-pointed stars is printed utilising colour shifting ink that is not widely available and only from a limited number of suppliers.
7. Semantic difference with notes issued by the CBY found in the second line of text on the front of notes, just under the line: Central Bank of Yemen. On the YER 1,000 note the text reads: Issued by virtue of the Central Bank of Yemen Law, while on the YER 5,000 note the text reads: Cheque issued by the Central Bank of Yemen.
8. The words in the sequence Five Hundreds Riyals ( **خمسمائة ريال** in Arabic) under the numeric 500 are separated by one spaces in the YER 500 note while the words in the sequence Five Thousand Riyals(

خمسة الاف ريال in Arabic )are stuck together, to appear as FiveThousandRiyals. The spaces which are seen in Yemeni and most Arabic notes with varying width are not seen in notes with Arabic characters such as from Jordan, Iran and KSA.

9. The serial number on genuine YER 500 and YER 1,000 notes is a seven digit number, while on the counterfeit YER 5,000 note it is an eight digit number.
10. The banknote serial number on the YER 1,000 note appears in two positions, in a vertical and a horizontal direction, whilst the serial number on the YER 5,000 note appears twice, only in a horizontal direction.
11. The lack of intaglio printing, watermark and / or a security thread due to budgetary constraints are usually those of lower denominations and extremely rarely of higher denomination
12. The poor fit could be caused by the utilisation of inadequate printing equipment, poor process control or both - suggesting that the questioned note was not printed by a company ordinarily involved in banknote manufacturing.
13. Simulation of a security print feature is usually expected to be seen on counterfeit notes.
14. The manufacturer of the questionable YER 5,000 note appears to have access to equipment and materials that are available to a commercial printing company.
15. The ability to source and successfully utilise colour shifting and fluorescent inks is an indication that the manufacturer of the 5000 YER note is a security printing company generally specialised in printing of cheques, tax stamps or other security documents such as gift vouchers.



Figure 53.7

Semantic comparison between 5 000 YER note (middle) with 500 YER (top) and 1000 YER bottom



## II. Conclusions

16. Following a thorough comparative evaluation, and due to a number of observed deficiencies, most notably the absence of: 1) intaglio printing; 2) letterpress numbering; 3) watermark; and 4) a security thread, the note does not meet the standards of a contemporary, counterfeit-resilient banknote.

17. The see-through feature on the note exhibits poor registration between front and reverse of the note, where blue and green segments of the numerals should be joined to give perfect or near-perfect fit between print on the front and reverse. This fault might appear only on a small number of banknotes. If the fault appears on a large number of banknotes it would indicate that the printer is not able to control the process well. One of the most unexpected characteristics of the questioned banknote is not the absence of a split duct printing, but its simulation, which only gives the appearance of the smooth merging of inks into each other. One other plausible explanation would be that the feature was deliberately sacrificed in order to ensure more economical use of a substrate.

## **Annex 54: Cases of seizure of the non-authorized export of banknotes and gold bars through Shehen, Mahrah**

### **I. Banknotes and gold bars seized in Shehen, Mahrah on 9 May 2017**

1. The Panel is investigating a potential case of trafficking of finance assets potentially for the benefit of listed individuals following the seizure on 9 May 2017 at the Shehen border crossing point (BCP) with Oman. A pickup truck was inspected by Yemeni local authorities and found to contain the equivalent of US\$ 3.42 Million in mixed foreign currency and gold.<sup>1</sup> The customs service proceeded the same day with the arrest of the two individuals, seizure of the vehicle, the deposit of the shipment at the CBY branch and the submission of the case to the prosecutor.

2. On 15 May 2017, the prosecutor, Naji Said Mohamed Kadah, ordered the customs to release the two individuals and the vehicle, and to handover the shipment to a third person presented as the owner. As the Head of Customs refused, the Governor himself ordered him to comply informing him that he was in contact with President Hadi on the subject. The Panel has not received any confirmation as to the current custody of the shipment. The individuals involved are:

(a) Mohamed Mohamed Saleh al-Addah from Shabwah, arrested at the BCP as the custodian of the shipment;

(b) Saleh Saed Ahmed Judhaib from Ma'rib, arrested at the BCP; and

(c) Saleh Yahya Mohamed Abdullah al-Haddad, owner of the Yahya Mohamed al-Haddad company for trade and entrepreneurships, presented documentation claiming that he was the owner of the shipment.

3. This case is an illustration of the smuggling activity in Mahrah as well as the involvement of local authorities in the trafficking.

Figure 54.1

**Cash and gold bars seized at Shehen BCP, Mahrah on 9 May 2017<sup>2</sup>**

<sup>1</sup> GBP 5,425, AED 150,000, SAR 8,726,106, QAR 107,429, US\$ 178,850 and 19.04 kg of gold (“at US\$39 per gram”).

<sup>2</sup> Source: <https://www.al-omana.com/news56507.html>, 9 May 2017. Corroborated by local customs and judiciary authorities.



Figure 54.2  
 Customs receipt for GBP 5,425 cash seized at Shehen BCP, Mahrah on 9 May 2017

إدارة المالية  
 خليفة توريد نقدية إلى البنك المركزي اليمني المركزي الرئيسي الفرع

رقم: 71  
 التاريخ: 10/05/17  
 نوع المورد: محلي

جهة الموردة: جهاز / سلطة / هيئة / محافظة

البيان - ينكر رقم وتاريخ أول وآخر قسمة متحصلة	نوع	بند	فصل	باب	المبلغ ريال
بيان	نوع المورد				5425
أعطانا باسم / محمد محمد صالح العده					

Figure X54.3  
 Customs receipt for AED 150,000 cash seized at Shehen BCP, Mahrah on 9 May 2017

رقم 367  
 لعدد بوزة ١٩٥١٨ / ١٦  
 التاريخ ١٦ / ٥ / ١٩  
 نوع المورد : مركزي / محلي / مهتر  
 مكتب

مملكة توريد تلبية إلى البنك المركزي الليبي المركزي الرئيسي  
 الجمهورية الموردة  
 وزارة / جهات  
 مصلحة / هيئة  
 محافظة

بيان - يتكرر رقم وتاريخ و مبلغ أو، والخير نسبية متحصلات	بيان نوع المورد	نوع	بند	فصل	باب	المبلغ ريال
						١٥٠٠

Figure 54.4  
 Customs receipt for SAR 8,726,106 cash seized at Shehen BCP, Mahrah on 9 May 2017

٢٠١١ / ٥  
 رقم: 45369  
 تاريخ: ١٩ / ٥ / ٢٠١٧  
 نوع المورد: مركزي / محلي / مشترك  
 وزارة / جهاز  
 مصلحة / هيئة  
 محافظة

وزارة المالية  
 خزانة توريد نقدية إلى البنك المركزي اليمني المركزي الرئيسي / الأمانة العامة  
 المديرية العامة للمالية  
 المديرية العامة للمالية

بيان - ينكر رقم وتاريخ ومبلغ أول وآخر قسيمة متحصلات	بيان نوع المورد	نوع	بند	فصل	باب	المبلغ ريال
						٨٧٢٦١٠٦
بيان - ينكر رقم وتاريخ ومبلغ أول وآخر قسيمة متحصلات بيان نوع المورد: مركزي / محلي / مشترك نوع المورد: مركزي / محلي / مشترك رقم: 45369 تاريخ: ١٩ / ٥ / ٢٠١٧ وزارة / جهاز مصلحة / هيئة محافظة						

Figure 54.5  
 Customs receipt for QAR 107,429 cash seized at Shehen BCP, Mahrah on 9 May 2017

٢٠١١ / ٥  
 رقم: 45368  
 تاريخ: ١٩ / ٥ / ٢٠١٧  
 نوع المورد: مركزي / محلي / مشترك  
 وزارة / جهاز  
 مصلحة / هيئة  
 محافظة

وزارة المالية  
 خزانة توريد نقدية إلى البنك المركزي اليمني المركزي الرئيسي / الأمانة العامة  
 المديرية العامة للمالية  
 المديرية العامة للمالية

بيان - ينكر رقم وتاريخ ومبلغ أول وآخر قسيمة متحصلات	بيان نوع المورد	نوع	بند	فصل	باب	المبلغ ريال
						١٠٧٤٢٩
بيان - ينكر رقم وتاريخ ومبلغ أول وآخر قسيمة متحصلات بيان نوع المورد: مركزي / محلي / مشترك نوع المورد: مركزي / محلي / مشترك رقم: 45368 تاريخ: ١٩ / ٥ / ٢٠١٧ وزارة / جهاز مصلحة / هيئة محافظة						

Figure 54.6  
Customs receipt for 7 x 19.04kg gold bars seized at Shehen BCP, Mahrah on 9 May 2017

٢٠١٦ / ٥  
رقم 445372  
١٧/٥/٢٠١٦

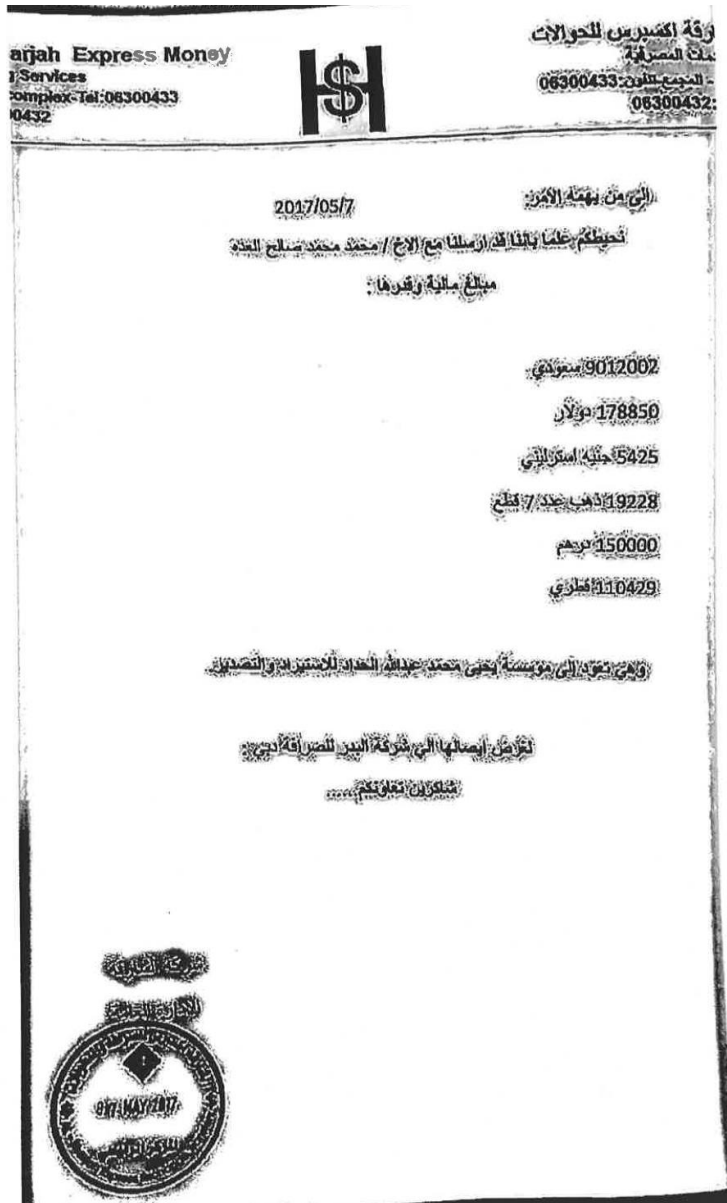
وزارة المالية  
خليفة توريد تلبية إلى الجبلة المركزي اليمني للأوقاف الرئيسي الخيا

الجهة الموردة  
وزارة / جهاز  
مصلحة / هيئة  
محافظة

التاريخ ١٩ / ٥ / ٢٠١٧  
نوع المورد: مركزي / محلي / مشترك  
مكتب

المبلغ ريال	باب	فصل	بند	نوع	بيان نوع المورد	بيان - يتكرر رقم وتاريخ ومبلغ أول وآخر فصيحة منتجات
١٩٠٤	١٩	١٩	١٩	١٩	١٩	١٩

Figure 54.7  
Declaration for funds deposited in Dubai



NOTE: Declaration that the funds were handed over to Mohamed Mohamed Saleh al-Addah for deposit at the Al Bader Exchange in Dubai,

Figure 54.8  
Yahya Mohamed al-Haddad Institute for Trade and Enterprise registration documents (4 September 2013)



NOTE: Registration document for “Yahya Mohamed al-Haddad Institute for Trade and Enterprises” under the name of Yahya Mohamed Abdullah al-Haddad on 4 September 2013.



Figure 54.9  
Identity document of Saleh Saed Ahmed Judhaib



Figure 54.10  
Identity document of Mohamed Mohamed Saleh al-Addah



Figure 54.11  
Vehicle licence plate of truck seized at Shehen BCP, Mahrah on 8 May 17



**B. Banknotes and gold bars seized at Shehen BCP, Mahrah on 17 July 2017**

1. The Panel is investigating two additional potential cases of trafficking of finance assets potentially for the benefit of listed individuals:
  - (a) Seizure on 17 July 2017 at Shehen BCP of 7,174,700 Saudi Riyal (SAR); and
  - (b) Seizure on 27 July 2017 at Shehen BCP of 300,000 SAR and 42 gold bars.
2. On 9 May 2017 at the Shehen BCP with Oman, a pickup truck was inspected by Yemeni local authorities and found to contain the equivalent of US\$ 3.42 Million in mixed foreign currency and gold.<sup>3</sup> The customs service proceeded the same day with the arrest of the two individuals, seizure of the vehicle, the deposit of the shipment at the CBY branch and the submission of the case to the prosecutor.
3. The Panel has shared the information with the Government of Yemen and is still awaiting a reply to its information requests.

<sup>3</sup> GBP 5,425, AED 150,000, SAR 8,726,106, QAR 107,429, US\$ 178,850 and 19.04 kg of gold (“at US\$39 per gram”).

Figure 54.12

Customs form XX 378 on the seizure on 17 July 2017 at Shehen BCP of SAR 7,174,700

رقم 378

مجلس  
مصلحة الجمارك  
وزارة المالية  
جمهورية الكويت

محضر ضبط رقم ١٩ لعام ٢٠١٧ م

فتح محضر الضبط بمركز جمرك  
الوقت الساعة ١١:١٥ صباحاً  
اليوم ١٧/٧/٢٠١٧ التاريخ الموافق ١٧/٧/٢٠١٧  
بمعرفتي أنا  
دائرة جمارك / م / الهدى  
المتهم / المتهمين صالح محمد بن عبد الله بن صالح  
اللقب اللقب  
الجنس  
رقم بطاقة الهوية رقم جواز السفر ٥١١٢٨  
رقم جواز السفر  
إصداره  
الوظيفة  
المرفق  
السكن في الجمهورية  
خارج الجمهورية  
مغادر إلى

نحن الموقعين أدناه قمنا / قمنا بضبط المخالفة الجمركية / جريمة تهريب المخالفة لنص المادة  
١٦ ( ١٦ ) لعام ١٩٠ والقوانين الأخرى النافذة، وذلك أثناء قيامنا بمهمتنا في نقطة / مركز / دائرة  
١- السلع المدونة في الاستمارة المرفقة  
٢- الأموال النقدية  
٣- الحلي والمجوهرات  
ت بقيمة  
وخاضعة لجمركية

Figure 54.13

Customs form XX 379 on seizure on 27 July 2017 at Shehen BCP of SAR 300,000 and 42 gold bars

رقم 04379

مجلس  
مصلحة الجمارك  
وزارة المالية  
جمهورية الكويت

محضر ضبط رقم ٢٠ لعام ٢٠١٧ م

فتح محضر الضبط بمركز جمرك  
الوقت الساعة ١١:١٥ صباحاً  
اليوم ٢٧/٧/٢٠١٧ التاريخ الموافق ٢٧/٧/٢٠١٧  
بمعرفتي أنا  
دائرة جمارك / م / الهدى  
المتهم / المتهمين صالح محمد بن عبد الله بن صالح  
اللقب اللقب  
الجنس  
رقم بطاقة الهوية رقم جواز السفر ٨٤٤٢  
رقم جواز السفر  
إصداره  
الوظيفة  
المرفق  
السكن في الجمهورية  
خارج الجمهورية  
مغادر إلى

نحن الموقعين أدناه قمنا / قمنا بضبط المخالفة الجمركية / جريمة تهريب المخالفة لنص المادة  
١٦ ( ١٦ ) لعام ١٩٠ والقوانين الأخرى النافذة، وذلك أثناء قيامنا بمهمتنا في نقطة / مركز / دائرة  
١- السلع المدونة في الاستمارة المرفقة  
٢- الأموال النقدية  
٣- الحلي والمجوهرات

**CONFIDENTIAL ANNEX NOT FOR PUBLIC DISSEMINATION**

**Annex 55: Confiscation of MV Androussa (IMO 9101182)**

## Annex 56: Houthis order to seizure assets owned by their opponents

Figure X56.1

Order to the Sana'a based CBY by "the committee for the identification and the confiscation of assets owned by traitors" to freeze assets of 1223 individuals<sup>1</sup>



<sup>1</sup> The order was posted in several media. The Panel confirmed its authenticity with confidential financial sources in Sana'a. The Panel is analyzing the list comprising the 1,223 names.

***Panel's unofficial translation from Arabic***

Republic of Yemen  
supreme political council  
committee for identification and seizure of assets owned by traitors

23/12/2017

to the governor of the central bank

Based on the order of the special criminal prosecutor number 4376 dated 17 November 2017 which mandated us to take measures for the provisional seizure of assets owned by traitors whose names are in the attached list comprising of 1,223 names starting by Ebtahaj Abdullah al-Kamel and ending by Yussef Hussein Mahdi.

In this regard and in order to implement the special criminal prosecutor's order, we trust you could issue a circular to all banks for the provisional seizure of all bank accounts owned by traitors whose assets are seized and whose names are in the attached list

signed  
**major general Abdelhakim Hashem al Khewani**  
**deputy minister of interior**  
**head of the committee for identification and seizure of assets owned by traitors**

END OF TRANSLATION

## Annex 57: Saleh financial network

Table 57.1

### List of individuals and entities of Saleh financial network

<i>Ser</i>	<i>Identity</i>	<i>Type</i>
1	<b>Ali Abdulah Saleh (Yei.003)</b> <b>(Deceased on 4 November 2017)</b>	Person
2	Ahmed Ali Abdullah Saleh (Yei.005) (a.k.a Ahmed Al-Ahmar Ali Abdullah)	Person
3	Khaled Ali Abdullah Saleh (a.k.a. Khaled Al-Ahmar Ali Abdullah)	Person
21	Towkay Limited British Virgin Islands	Company
22	Trice Bloom Limited, British Virgin Islands	Company
23	Precision Diamond Limited, British Virgin Islands	Company
24	Unmatchable Limited, British Virgin Islands	Company
25	Albula Limited, Turks and Caicos Islands	Company
26	Foxford Management Limited, Bahamas	Company
27	Weisen Limited, British Virgin Islands	Company
28	M-S Ansan Wikfs Hadramawt Limited, Cayman Islands	Company
29	SCI 59 Rue Galilee, France	Company
31	M-S ANSAN Wikfs Limited, Cayman Islands	Company
32	Ansan Wikfs Darfur (for Gold), Cayman Islands	Company
35	Afhamka B.V. Netherlands	Company
36	Wild Horse Investment Inc, Bahamas	Company
37	Raydan Investments LLC, UAE	Company
38	Tilsit Real Estate BV, Netherlands	Company
41	The Pact Trust	Company
43	59 Rue Galilee, Paris 75008, France	Address

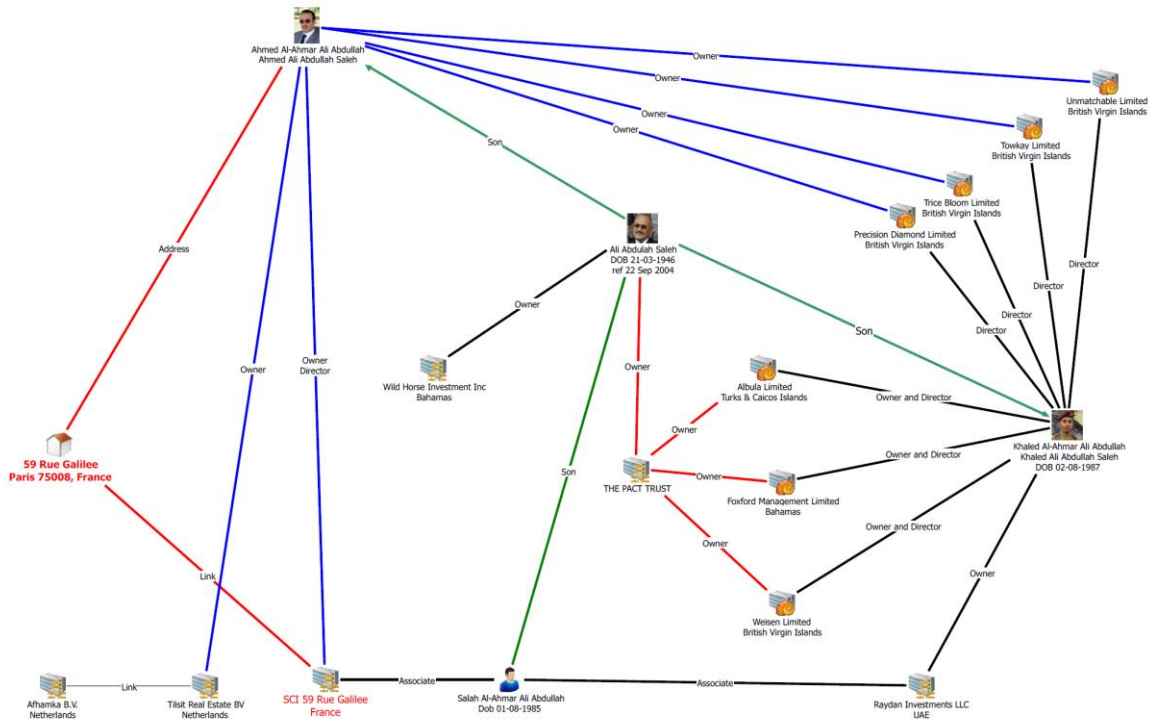
Table 57.2  
**Raydan Investment Holdings Limited transfers in UAE<sup>1</sup>**

<i>Date</i>	<i>AED</i>	<i>US\$</i>	<i>Investment / Transfer in UAE</i>
Jan to Apr 2014	5,173,301	1,407,865	Ecostar International Holdings Limited
Feb to Apr 2014	25,560,000	6,955,910	Al Ramz Securities LLC bank account number AEXXXXXXXXXXXXX58492164, National Bank
9 Jun 2014	44,085,680	12,000,000	Staroil Operating Company bank account number AEXXXXXXXXXXXXX89601, Abu Dhabi Islamic Bank
25 Jun 2014	963,685	262,300	Select Global Development LLC account number AEXXXXXXXXXXXXX09693, Mashreq Bank
23 Mar 2015	1,237,789	336,906	EMAAR Properties PJSC Opera Grand account number AEXXXXXXXXXXXXX54615, Commercial Bank of Dubai
22 Apr 2015	103,385	28,140	Eversheds LLP bank account number AEXXXXXXXXXXXXX39001, HSBC Bank Middle East for oil concession payment
<b>Totals</b>	<b>77,123,860</b>	<b>20,891,121</b>	

<sup>1</sup> The currency of transfer is in normal bold text. All exchange rates from [www.xe.com](http://www.xe.com) on 3 July 2017. US\$ 1 = AED 3.67.



Figure 57.1  
Saleh financial network



## Annex 58: Case studies of air strikes in Yemen (2017)

1. The Panel initiated investigations on ten air strikes against civilian targets in Yemen during 2017. Full case studies for four of these air strikes are included as shown in table 58.1.<sup>1</sup>
2. The Panel arrived at its findings and conclusions based on its own investigations and information available in the public domain. If the Saudi Arabia-led coalition can provide verifiable information on the military objectives sought to be achieved that may counter the Panel's conclusions and findings, the Panel stands ready to review them.
3. Saudi Arabia, on behalf of the Saudi Arabia led-coalition has refused to engage with the Panel, stating that "the coalition's activities" fall outside the mandate of the Panel of Experts.<sup>2</sup> The Panel reaffirms that violations of IHL, including those that are committed by the Saudi Arabia-led coalition, as a party to the conflict in Yemen, fall within the Panel's mandate and that those individuals responsible for planning, deciding on and/or executing air strikes<sup>3</sup> that disproportionately affect civilians and civilian infrastructure may fall under the designation criteria contained in paragraphs 17 and 18 of resolution 2140 (2014). The Saudi Arabia-led coalition, as the military entity carrying out these air strikes, can also fall within paragraphs 17 and 18 of resolution 2216 (2015) (see paragraph 8).

Table 58.1

### Full case studies of air strikes against civilian targets

<i>Date</i>	<i>Location</i>	<i>Incident and target</i>	<i>Type of ordnance</i>	<i>Civilian casualties</i>	<i>Case study in Appx</i>
16 Mar 2017	Red Sea	Maritime helicopter attack against Somali migrant boat.	Small arms ammunition	42 dead 34 injured	A
25 Aug 2017	Sana'a	Air delivered ordnance against a civilian residence	High explosive (HE) aircraft (a/c) bomb	16 dead 17 injured	B
2 Sep 2017	Hajjah	Air delivered ordnance against a civilian residence	HE a/c bomb	3 dead 13 injured	C
1 Nov 2017	Sa'dah	Air delivered ordnance against a night market	HE a/c bomb fitted with Paveway guidance unit.	31 dead 26 injured	D

4. In the ten incidents investigated the Panel finds that:
  - (a) The use of precision-guided weapons<sup>4</sup> is a strong indicator that the intended targets were either the objects or the individuals affected by the air strikes;

<sup>1</sup> The Panel selects its cases accordance with its IHL methodology in Annex 1, primarily based on the availability of requisite high standard of evidence.

<sup>2</sup> Letter from the Kingdom of Saudi Arabia dated 10 October 2017.

<sup>3</sup> Regarding those executing attacks, it is possible that the pilot of the aircraft may fire his or her weapons in reliance of the accuracy of the information that may have been previously provided to him or her. In these cases, the Panel finds that it is those commanders who plan and decide upon the air strikes, who have at their disposal the relevant information from a variety of sources, who have the responsibility to ensure compliance with international humanitarian law. See also William Boothby and Michael N. Schmitt, *The Law of Targeting* (Oxford University Press, 2012).

<sup>4</sup> Precision-guided weapons systems have low percentage failure rates.

- (b) In all cases investigated, there was no demonstrable evidence that the civilians in, or near these objects, who are *prima facie* immune from attack, had lost their civilian protection;
- (c) Even if in some of the below mentioned cases, the Saudi Arabia-led coalition had targeted legitimate military objectives, the Panel finds, based on its investigations, that it is highly unlikely that the IHL principles of proportionality and precautions in attack were respected in these incidents;
- (d) The cumulative effect on civilians and the civilian objects demonstrates that even if precautionary measures were taken, they were largely inadequate and ineffective; and
- (e) In respect of the individual case studies, the Panel finds that:
- (i) Except for case study 1, the only military entity capable of carrying out these airstrikes is the Saudi Arabia-led coalition. In case study 1, it is highly unlikely that an entity other than the Saudi Arabia-led coalition could have carried out the attack;
- (ii) Except for cases 2 and 4, the Saudi Arabia-led coalition has not acknowledged its involvement in any of the attacks, nor clarified, in the public domain, the military objective sought to be achieved. In cases 2 and 4, the Panel is unable to concur with the justifications provided by the Saudi Arabia-led coalition.
- (iii) In case study 4, an attack on a night market, even if there was a Houthi gathering as claimed by the Saudi Arabia-led coalition, evidence strongly demonstrates that the Saudi Arabia-led coalition did not meet IHL requirements of proportionality and precautions in attack. This also applies to case summary 7;
- (iv) Except for case summary 10, where Saudi Arabia-led coalition targeted the 22<sup>nd</sup> Armoured Brigade of the legitimate Government, there is no demonstrable evidence that all those affected were deprived of the protection afforded to civilians; and
- (v) In the cases where air strikes targeted residential buildings, over half of those affected were children. The Panel finds that measures taken in the Saudi Arabia-led coalition in its targeting process to minimize child casualties, if any, remain largely ineffective.<sup>5</sup>

5. In the absence of any verifiable information from the Saudi Arabia-led coalition, the Panel concludes that the evidence strongly demonstrates that these air strikes violated the IHL obligations of individual member States of the Saudi Arabia-led coalition. All States whose forces engage in, or otherwise participate in military operations on behalf of the coalition are responsible for “all acts committed by persons forming part of its armed forces”.<sup>6</sup> These States “may not evade their obligations by placing their contingents at the disposal of an ad hoc coalition”.<sup>7</sup> All Saudi Arabia-led coalition member States and their allies<sup>8</sup> also have an obligation to take appropriate measures to ensure respect for IHL by the Saudi Arabia-

<sup>5</sup> For measures reportedly taken by the Saudi Arabia-led coalition to reduce child casualties, see paragraph 200 of the Secretary General’s Report on Children in Armed Conflict, S/2017/821, 24 August 2017. The report notes that “the United Nations was informed of measures taken by the Saudi Arabia-led coalition in 2016 to reduce the impact of conflict on children, including through their rules of engagement and the establishment of a joint incident assessment team mandated to review all incidents involving civilian casualties and identify corrective action”. Yet, of the 43 incidents examined by the Joint Incident Assessment Team (JIAT), made available to the Panel, in only two incidents did it find that the Saudi Arabia-led coalition violated IHL. The Panel also notes that there is no transparency in the implementation of the recommendations of the JIAT by the Saudi Arabia-led coalition.

<sup>6</sup> See updated [commentary to common article 1 of the Geneva Conventions of 12 August 1949](#). See also article 3 of The [Hague Convention respecting the Laws and Customs of War on Land of 1907](#).

<sup>7</sup> See updated [commentary to common article 1 of the Geneva Conventions](#).

<sup>8</sup> Based on the updated [commentary to common article 1](#), “allies” may include those States that engage in “financing, equipping, arming or training” of the coalition armed forces for their engagement in

led coalition.<sup>9</sup> This obligation is especially incumbent upon the Government of Yemen, upon whose request and with whose consent the air strikes are being conducted (see S/2015/217). The Panel stands ready to provide the Committee with further information if requested, but in the interest of brevity, provides only summaries of the cases in table 58.2 below.

Table 58.2  
Other air strikes against civilian targets

<i>Appx to Annex 58</i>	<i>Date</i>	<i>Location</i>	<i>Incident and target</i>	<i>Type of ordnance</i>	<i>Civilian casualties</i>
D	9 Jun 2017	Sana'a	Air delivered EO against residential building	Mk 82 or 84 HE bomb / Paveway	4 dead 8 wounded
E	4 Aug 2017	Sa'dah	Air delivered EO against a civilian residence	Mk 84 2000lb aircraft bomb	9 dead 3 injured
F	23 Aug 2017	Arhab	Air delivered EO against hotel	Mk 82 or 84 HE bomb / Paveway	33 dead 25 injured <sup>10</sup>
G	16 Sep 2017	Ma'rib	Air delivered EO against civilian vehicle	HE a/c bomb or air to ground missile (AGM)	12 dead
H	10 Nov 2017	Sa'dah	Air delivered EO against residential building	Mk 82 or 84 HE bomb / Paveway	4 dead 4 injured
I	14 Nov 2017	Ta'izz	Air delivered ordnance against legitimate Government of Yemen forces on Saber mountain	Mk 82 or 84 HE bomb / Paveway	3 dead 5 injured

6. The Panel also takes note of the JIAT findings that differ from Panel findings in 2016, on the case study summaries contained in serials 5, 7, 8, and 9 of S/2017/81. The Panel, after evaluating the information provided by the JIAT in the public domain, attaches the full case studies of those incidents in annex 60. The Panel, in contrast to the JIAT findings, confirms that: 1) the Saudi Arabia-led coalition was responsible for those air strikes; and 2) in the absence of any credible evidence to the contrary including the military objectives, which can only be provided by the Saudi Arabia-led coalition, evidence still strongly demonstrates that the Saudi Arabia-led coalition violated IHL in those incidents.

Yemen and/or those States that plan, carry out and debrief operations jointly with the coalition. For the specific States that are involved, see para. 30.

<sup>9</sup> This obligation to respect and ensure respect under common article 1 of the [Geneva Conventions of 12 August 1949](#) is not limited to those coalition States that actively participated in this air strike as stated in the updated commentary. "The duty to ensure respect ... is particularly strong in the case of a partner in a joint operation, even more so as this case is [closely](#) related to the negative duty neither to encourage nor to aid or assist in violations of the Conventions. The fact, for example, that a High Contracting Party participates in the financing, equipping, arming or training of the armed forces of a Party to a conflict, or even plans, carries out and debriefs operations jointly with such forces, places it in a unique position to influence the behaviour of those forces, and thus to ensure respect for the Conventions".

<sup>10</sup> UN figures. See "[Press briefing note on Yemen, Cambodia and Guatemala](#)". Media and witnesses reported that 60 people died, and 13 were injured. In accordance with Panel methodology in annex 2, the Panel relies on UN data when the casualty figure is above ten. The Panel has requested, and is awaiting, an update on the figures from the UN OHCHR.

7. IHL requires military commanders and those responsible for planning, authorizing and executing decisions regarding attacks to take all feasible precautions to avoid, and in any event to minimize, incidental loss of civilian life, injury to civilians and damage to civilian objects. Air strikes that disproportionately affect civilians and civilian infrastructure are veritable threats to the peace, security and stability of Yemen.

## Appendix A to Annex 58: Maritime attack against Somali migrant boat, Hudaydah on 16 March 2017<sup>11</sup>

### I. Introduction

1. This case study aims at identifying acts considered by the Panel as potential violations of IHL. This annex includes the Panel's findings on the incident relating to an attack on a boat carrying civilian migrants that occurred on 16 March 2017, within 60 nautical miles (nm) off the Yemeni Red Sea coast.<sup>12</sup>

2. This incident took place in a maritime area where there has been a recent escalation of hostilities. All the available evidence points to the incident being directly linked to the Yemen conflict. Given that no Member State or organization has so far accepted responsibility for the incident, the Panel is currently discounting the possibility that the incident was a result of a legitimate law enforcement operation permitted under Article 73 of the United Nations Convention on the Law of the Sea, unless further evidence to the contrary is found.

### II. Background<sup>13</sup>

3. On the night of 16 March 2017,<sup>14</sup> a small vessel carrying approximately 146 passengers<sup>15</sup> was attacked in the Red Sea off the coast of Yemen. There were at least 42 fatalities, which included 11 Somali women,<sup>16</sup> and 34 Somalis, including eight children, were injured.<sup>17</sup> The vessel, which contained predominantly Somali nationals, was sailing away from Yemen when the incident occurred.<sup>18</sup> Sources state that some of the migrants had left al-Kharaz camp in Ras al-Ara in Lahij Governorate in Yemen and that the boat was destined for Sudan.<sup>19</sup> Survivors state that late in the night of 16 March 2017, a large vessel approached the boat and ordered the boat to stop. When the boat proceeded without stopping, rockets were fired that did not impact on the boat. The helicopter, highly likely to have come from the large vessel, fired on the boat for five minutes and then circled the boat and fired again from another direction resulting in the damage and injuries documented in this case study.<sup>20</sup> The helicopter

<sup>11</sup> This case study was included in the mid-term update submitted to the Committee on 28 July 2017. An updated version is included here.

<sup>12</sup> Some accounts state that the vessel was between 30 - 55 nm off the coast of Yemen when the incident occurred. As far as the Panel is aware, there were no distress call made to the shore and there is no open source record of the geo-location of the incident. The Government of Yemen claims a territorial sea out to 12 nm from their coast, a contiguous zone of 24 nm and an exclusive economic zone out to 200nm. This is in accordance with the United Nations Convention on the Law of the Sea (UNCLOS) [www.un.org/depts/los/convention\\_agreements/texts/unclos/unclos\\_e.pdf](http://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf), which Yemen ratified on 21 July 1997 and acceded to the subsequent Agreement that amended the original convention on 13 October 2014.

<sup>13</sup> For media coverage on the issue, see <http://ca.reuters.com/article/topNews/idCAKBN1600UI-OCATP>, <http://www.euronews.com/2017/03/17/dozens-of-somali-refugees-killed-in-airstrike-off-yemen>, <https://ethiocritical.com/2017/06/06/saudi-chopper-massacre-analysis-of-the-deaths-of-42-somali-refugees-at-sea-and-why-justice-is-beyond-them/amp/>. For the Government of Somalia's initial response, see <http://www.independent.co.uk/news/world/middle-east/saudi-arabia-led-coalition-blamed-somalia-deadly-attack-boat-refugees-fleeing-yemen-a7637456.html>.

<sup>14</sup> Some witnesses stated that the attack occurred after around 21.00 hours.

<sup>15</sup> This included four Yemenis.

<sup>16</sup> In Yemen, women are not considered likely to engage in hostilities. Under IHL, women, like children are afforded special protection.

<sup>17</sup> OHCHR. See also <http://www.unhcr.org/news/press/2017/3/58cc01754/news-comment-unhcrs-spokesperson-william-spindler-attack-refugee-boat-yemen.html>. UNHCR reports that at least 42 were killed in the incident, [www.unhcr.org/news/press/2017/3/58cfe9824/unhcr-condemns-refugee-deaths-yemen-calls-inquiry.html](http://www.unhcr.org/news/press/2017/3/58cfe9824/unhcr-condemns-refugee-deaths-yemen-calls-inquiry.html).

<sup>18</sup> Source: UN.

<sup>19</sup> UN. Some sources stated that the boat stopped at many unspecified locations along the path to pick up migrants who joined the journey.

<sup>20</sup> Testimony from Panel sources, testimonies shared by two organizations, interviews with UN agencies, and international organizations, Somali diaspora, information/ reports provided by four international organizations, and open source documentation. There were no reports of the shots being fired from the vessel.

then left, as did the vessel. After 30 minutes<sup>21</sup> the boat proceeded to shore, without encountering further resistance or any assistance.

4. The Panel has not obtained any evidence that demonstrates the presence of any fighters, weapons or military equipment in the vessel that would have made the vessel a legitimate military target, nor had any party to the conflict alleged the boat to be a military target (see paragraph 20). The Panel's request to visit the site to interview survivors and inspect the boat was denied by the Houthi-Saleh alliance.<sup>22</sup>

Figure A.58.1  
Migrant boat in port after attack (17 March 2017)<sup>23</sup>



### III. Technical analysis<sup>24</sup>

#### A. Wound ballistics and calibre

5. The Panel analysed imagery from a range of sources that was taken on 17 and 22 March 2017. From the immediate post-incident imagery of 17 March 2017, which included human remains still on the vessel, wounds were identified that had all the characteristics of the penetrating and perforated trauma<sup>25</sup> typical of that caused by the impact of a high velocity small arms round. It is almost certain<sup>26</sup> that the wounds had been caused by small arms fire from a weapon of a calibre of no more than 7.62mm.

#### B. Location of firing point

6. The circumstances surrounding the incident mean that only the perpetrator themselves can confirm the exact geo-coordinates the weapon was fired from. All forensic evidence from the firing point would remain on the firing platform or be lost to the sea. Notwithstanding this, examination of physical forensic evidence on the small vessel itself provides indicators as to the direction and altitude of the firing point.

7. Examination of the imagery taken on 22 March 2017 and obtained by the Panel identified a bullet strike from a small calibre high velocity round of between 5.56mm to 7.62mm in one of the blue barrels on the deck of the vessel (figures A.58.2 to A.58.5). The bullet has perforated the top of the barrel and the kinetic energy of impact has caused plastic deformation to the barrel material in the area immediately surrounding the bullet strike. Figure 1.X.5 shows the damage to the hull of the vessel caused by a bullet perforating the hull from the inside to

<sup>21</sup> Sources informed the Panel that those alive hid themselves beneath the bodies of the dead and remained motionless for approximately 30 minutes to avoid further attack.

<sup>22</sup> Letter to Panel dated 23 March 2017.

<sup>23</sup> Photos contained in this case study were obtained from three confidential sources who collected the imagery independently of each other and these photos were verified against multiple different open source imagery.

<sup>24</sup> The Panel has consulted with an independent ballistic forensic scientist Mr. Philip Boyce BSc, MSc, who agrees with the technical analysis of the Panel.

<sup>25</sup> Penetrating trauma occurs when the bullet remains within the human body. Perforating trauma occurs when the bullet passes through the human body. In the case of perforating trauma from a high velocity projectile the exit will typically be larger than the entry wound.

outside. Larger calibre bullets (12.7mm and above), or cannon rounds (20mm and above) would have caused substantially more damage than that shown in the imagery.



Figure A.58.2  
**Bullet strike on blue barrel**<sup>27</sup>



Figure A.58.3  
**Bullet strike on blue barrel**



Figure A.58.4  
**Bullet strike on blue barrel**



Figure A.58.5  
**Bullet strike on hull**<sup>28</sup>



8. Closer examination of figures A.58.3 to A.58.5 also clearly shows a directional impact strike indicating that the round was fired from a direction forward of the vessel. This direction correlates with the training given to armed forces that are taught that the ideal firing position from a moving platform to a moving target is generally with the target moving directly towards you. This reduces the need for lateral deflection<sup>29</sup> when aiming, and also makes best use of the 'beaten zone' of a machine gun as it means the target is moving into the impact zone and not out of it.

9. The beaten zone of a machine gun is the elliptical pattern formed by the rounds striking the ground or the target. The size and shape of this beaten zone changes when the range to the target changes or when the machine

<sup>27</sup> Image source: Confidential.

<sup>28</sup> Source: <https://www.youtube.com/watch?v=-DI4SnO59D8>.

<sup>29</sup> Deflection is a technique used for effectively firing a projectile at a moving target, which is also known as "leading the target". It means shooting ahead of a moving target so that the target and projectile will collide.

gun is fired from differing altitudes. On uniformly sloping or level terrain, the beaten zone is long and narrow. As the altitude of the machine gun increases, its attitude to the target changes and the relative beaten zone becomes shorter and slightly wider. Figures A.58.6 to A.58.8 illustrate how the beaten zone of a machine gun will change dependent on its platform. In this case: 1) normal land; 2) the deck of a ship; and 3) from an aerial platform such as a helicopter.

Figure A.58.6  
**Beaten Zone (MG on Ground)**

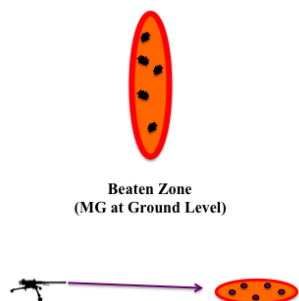


Figure A.58.7  
**Beaten Zone (MG on Deck of Ship)**

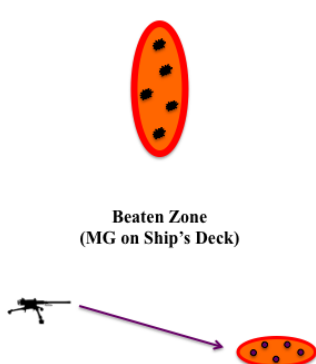


Figure A.58.8  
**Beaten Zone (MG on Helicopter)**



10. The Panel finds it highly unlikely that a surface attack from another small vessel took place as: 1) the gunshot damage on the blue barrel (figures A.58.3 and A.58.4) was not from low angle trajectory high velocity fire; and 2) the humans on the vessel would have shielded the blue barrel from low angle trajectory high velocity fire.

Figure A.59.9  
**Bullet trajectory analysis (side view)**

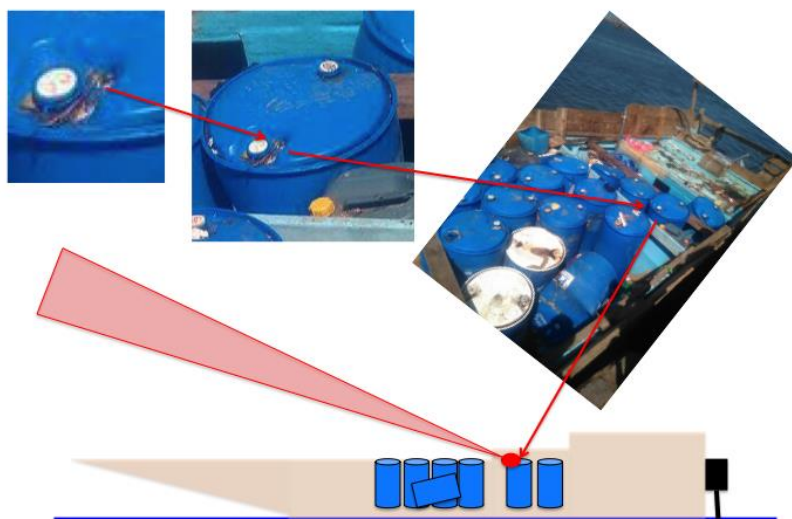
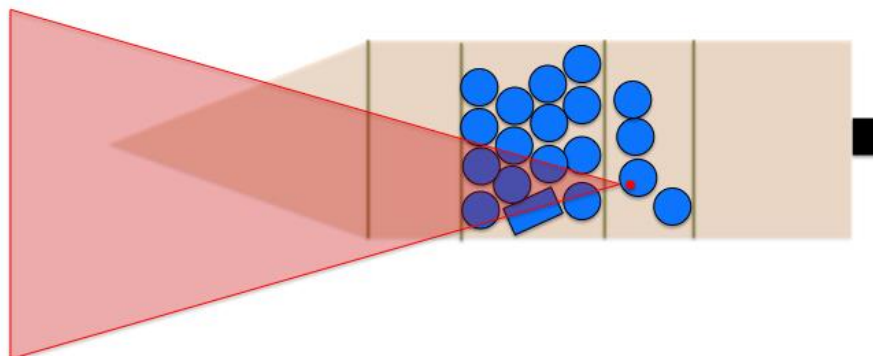


Figure A.58.10  
**Bullet trajectory analysis (plan view)**



11. The Panel finds it unlikely that a surface attack from a weapon mounted on a naval vessel was the cause of the attack based on the analysis of the attack angle estimated in paragraph 8 above, but cannot discount the possibility of a naval vessel being present in the local area. Table A.58.1 shows the distances at which various vessel types would have to have been located for rounds from a weapon on their deck to hit the migrant boat based on the attack angle established in figure A.58.9.

Table A.58.1  
**Bullet trajectory analysis**

Ser	Vessel type	Height (m)	Trajectory angle		Range (m)	Trajectory angle		Range (m)
			Degrees	TAN		Degrees	TAN	
1	Corvette (Deck)	4.2	15	0.268	15.7	20	0.36	11.5
2	Corvette (Bridge roof)	13.1	15	0.268	48.9	20	0.36	36.0
3	Frigate (Deck)	9.4	15	0.268	35.1	20	0.36	25.8
4	Frigate (Bridge roof)	16.3	15	0.268	60.8	20	0.36	44.8
5	Destroyer (Deck)	6.8	15	0.268	25.4	20	0.36	18.7
6	Destroyer (Bridge roof)	14.9	15	0.268	55.6	20	0.36	40.9
7	Aircraft Carrier (Flight deck)	16.5	15	0.268	16.5	20	0.36	45.3
8	Aircraft Carrier (Bridge)	31.7	15	0.268	31.7	20	0.36	87.1
9	VLCC <sup>30</sup> (Deck)	17.1	15	0.268	17.1	20	0.36	47.0
10	VLCC (Bridge wing)	46.4	15	0.268	46.4	20	0.36	127.7

12. This analysis clearly shows that any attack from another vessel would have to have been so close that the passengers could hardly fail to notice it was firing at them.

13. Similarly, the analysis also clearly shows that the shots could not have been fired from the land because the boat would have to have been so close to land (island or coast) that the passengers could not fail to notice their proximity to the land. In this case it is probable that they would have grounded the boat before being shot at based on the firing angle analysis, unless fired at from tall cliffs.

14. The distance/height parameters do allow for an AK47 attack from within the boat, but the Panel has found

<sup>30</sup> Very Large Crude Carrier.

no evidence of this possibility to date.

15. The Panel thus concludes that the attack was from an aerial platform based on the trajectory of the bullet strike as shown in figures A.58.9 and A.58.10 and the analysis of attack angles in table A.58.1.

### C. Weapon type

16. The Panel has discounted the impact of an explosive weapon (including rockets) on the vessel, as there is no indication in any of the imagery of any explosive effects such as fragmentation, deformation or metal shear, on materials.<sup>31</sup> Similarly there is no photographic evidence of traumatic amputation on the casualties, which would be expected if it were an explosive attack.

17. The calibre of the bullet (5.56mm to 7.62mm) indicates that only the following generic weapon types could have been used for this attack: 1) assault rifle; 2) light machine gun; 3) medium machine gun; or 4) minigun.<sup>32</sup> There have been media reports<sup>33</sup> that an AH64 Apache attack helicopter<sup>34</sup> was used for the attack. However the Panel has discounted the Apache as an attack platform as that particular helicopter only carries: 1) 30mm M230 Chain Gun;<sup>35</sup> 2) 70mm Hydra,<sup>36</sup> CRV 7<sup>37</sup> or APKWS<sup>38</sup> air to ground rockets; 3) AIM-92 Stinger;<sup>39</sup> and/or 4) Hellfire<sup>40</sup> anti-tank guided missiles as its weapon systems. It does not mount weapons of 5.56mm to 7.62mm calibre.<sup>41</sup>

18. It is unlikely that an assault rifle (5.56mm or 7.62mm) was the weapon system used, as the inherent instability of the aerial platform would make accuracy difficult. Light machine guns are rarely pintle mounted<sup>42</sup> on airframes, thus the Panel finds it most likely that either a pintle mounted<sup>43</sup> medium machine gun or minigun was the weapon system used. These are commonly mounted on virtually all naval helicopters, and examples of pintle

<sup>31</sup> It is possible that if rockets were used, as reported by an eyewitness, they missed the target and impacted in the sea. The Panel considers this unlikely due to the size of the vessel and the accuracy of close range rocket systems.

<sup>32</sup> The M134D 7.62mm Minigun manufactured by [www.dillonaero.com](http://www.dillonaero.com). This system is in service with Saudi-Arabia-led coalition members; 1) Saudi Arabia and 2) Yemen. The system is also in service with the following members of the Combined Maritime Force; 1) Australia; 2) Canada; 3) Iraq; 4) Italy; 5) Jordan; 6) Republic of Korea; 7) Malaysia; 8) Norway; 9) Pakistan; 10) The Philippines; 12) Spain; 13) Thailand; 14) Turkey; 15) United Kingdom; and 16) United States.

<sup>33</sup> For example: 1) [www.theguardian.com/world/2017/mar/17/somali-refugees-killed-helicopter-attack-off-yemen-coast](http://www.theguardian.com/world/2017/mar/17/somali-refugees-killed-helicopter-attack-off-yemen-coast); 2) <http://www.independent.co.uk/news/world/middle-east/yemen-refugees-killed-helicopter-attack-on-ship-somali-injured-government-houthi-rebel-unhcr-women-a7634751.html>; and 3) [www.middleeasteye.net/news/dozens-somali-refugees-killed-yemen-helicopter-attacks-boat-1163813622](http://www.middleeasteye.net/news/dozens-somali-refugees-killed-yemen-helicopter-attacks-boat-1163813622).

<sup>34</sup> [www.boeing.com/defense/ah-64-apache/](http://www.boeing.com/defense/ah-64-apache/).

<sup>35</sup> [www.orbitalatk.com/defense-systems/armament-systems/automatic-cannons-chain-guns/docs/109493\\_10\\_M230LF\\_Chain\\_Gun.pdf](http://www.orbitalatk.com/defense-systems/armament-systems/automatic-cannons-chain-guns/docs/109493_10_M230LF_Chain_Gun.pdf).

<sup>36</sup> Air Intercept Missile. [www.gd-ots.com/armament\\_systems/rw\\_hydra.html](http://www.gd-ots.com/armament_systems/rw_hydra.html).

<sup>37</sup> Canadian Rocket Vehicle. [www.magellan.aero/product/rockets/](http://www.magellan.aero/product/rockets/).

<sup>38</sup> Advanced Precision Kill Weapon System. [www.baesystems.com/en-us/product/apkws-laser-guided-rocket](http://www.baesystems.com/en-us/product/apkws-laser-guided-rocket).

<sup>39</sup> [www.raytheon.com/capabilities/products/stinger/](http://www.raytheon.com/capabilities/products/stinger/).

<sup>40</sup> [www.lockheedmartin.com/content/dam/lockheed/data/mfc/pc/longbow-fcr-and-longbow-hellfire-missile/mfc-longbow-fcr-pc.pdf](http://www.lockheedmartin.com/content/dam/lockheed/data/mfc/pc/longbow-fcr-and-longbow-hellfire-missile/mfc-longbow-fcr-pc.pdf).

<sup>41</sup> 1) Major General Ahmed al-Asiri, during a visit to London on 30 March 2017, distanced Saudi Arabia as a potential perpetrator by claiming that Saudi helicopters “did not hold the ammunition found at the site”. [www.theguardian.com/world/2017/mar/31/saudi-arabia-yemen-military-campaign-general-ahmed-aisir-clashes-with-critics](http://www.theguardian.com/world/2017/mar/31/saudi-arabia-yemen-military-campaign-general-ahmed-aisir-clashes-with-critics). 2) This statement was in relation to the initial reports that an AH64 Apache was the attack platform. At no point did Major General Ahmed al-Asiri specifically deny that the attack platform belonged to another member State of the Saudi Arabia-led coalition. Source: Attendee at the press conference.

<sup>42</sup> A pintle mount is a fixed mount that allows the gun to be freely traversed and/or elevated while keeping the gun in one fixed position.

<sup>43</sup> There are also Moveable Weapons Mounts (MWMS) that clamp to the doorframe of a helicopter.

mounts are shown in figures A.58.11 and A.58.12.

Figure A.58.11  
Example of a pintle mount (minigun)<sup>44</sup>



Figure A.58.12  
Example of a pintle mount (7.62mm MMG)<sup>45</sup>



19. Based on the analysis above the Panel concludes that the damage caused in this attack was highly likely a result of rounds fired from a medium machine gun or minigun of 7.62mm calibre mounted on a helicopter. It is likely that this was a naval helicopter operating off a warship as: 1) the potential position of the targeted vessel in the Red Sea at the time of the attack means that it is highly unlikely that land based assets were used; and 2) there were reports of sightings of a large vessel in the immediate area at the time of the attack (see paragraph 3). The only party directly engaged in the conflict in Yemen that has this capability is the Saudi Arabia-led coalition, although many of the warships operating in the Red Sea as part of the Combined Maritime Forces (CMF), or independently, would also have armed naval air assets.

#### IV. Analysis of violations of international humanitarian law<sup>46</sup>

##### A. Violation of principle of distinction

20. IHL requires that a party carrying out an attack distinguish between civilians and fighters, and civilian objects and military objectives.<sup>47</sup> Parties are prohibited from directing attacks against civilians.<sup>48</sup> None of the parties to the conflict have advanced any claims that the vessel or its occupants had become legitimate military targets. The UAE state media has quoted an UAE official as saying that the UAE recognized the civilian nature of this boat prior to the incident.<sup>49</sup>

22. At the time of the incident, the vessel was carrying over 140 individuals, including women and children, and some of whom the UNHCR had classified as refugees.<sup>50</sup> The Panel has found no evidence as of yet to demonstrate that these individuals, or the vessel, had lost its immunity from direct attack at the time of the incident. Yet, the fact that the gunfire was repeatedly and directly aimed at the vessel and its passengers, demonstrate that this vessel and its occupants were indeed the direct target of the attack.

<sup>44</sup> [www.ytimg.com/vi/HWjQnxlvwa0/maxresdefault.jpg](http://www.ytimg.com/vi/HWjQnxlvwa0/maxresdefault.jpg). Included for illustrative purposes only.

<sup>45</sup> Credit. Taken by Technical Sergeant Dennis J. Henry Jr, USAF. © USAF. Released to public domain for fair use as ID 121129-F-PM120-898. Included for illustrative purposes only.

<sup>46</sup> Yemen and all members of the Saudi Arabia-led coalition who have contributed air assets to military operations in Yemen are parties to the Geneva Conventions of 1949, the Protocol Additional to the Geneva Conventions of 12 August 1949 and relating to the Protection of Victims of International Armed Conflicts (Additional Protocol I), and Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of Non-International Armed Conflicts (Additional Protocol II) of 8 June 1977. Customary IHL is binding on all parties to the conflict in Yemen. See [www.icrc.org](http://www.icrc.org) for the ratification status of treaties by parties to the conflict.

<sup>47</sup> Common Article 3 (CA3) to the Geneva Conventions of 1949 (GC 1949), Article 13 to the Additional Protocol II (AP II) and ICRC Customary IHL Rules 1 – 10.

<sup>48</sup> CA3 to GC 49, Article 13 to the AP II and ICRC Customary IHL Rules 1 and 7.

<sup>49</sup> [www.wam.ae/en/details/1395302603973](http://www.wam.ae/en/details/1395302603973).

<sup>50</sup> [www.unhcr.org/news/press/2017/3/58cfe9824/unhcr-condemns-refugee-deaths-yemen-calls-inquiry.html](http://www.unhcr.org/news/press/2017/3/58cfe9824/unhcr-condemns-refugee-deaths-yemen-calls-inquiry.html).

23. Thus, given that: 1) there is no demonstrable evidence that the vessel or the occupants had lost their civilian protection; and 2) the attack was clearly directed against the vessel and the occupants, there are very strong indications that the party that carried out the attack violated the IHL principles relating to distinction.

## **B. Violation of principles relation to precautions and proportionality**

24. IHL requires that military commanders and those responsible for planning and executing decisions regarding attacks take all feasible precautions to avoid, and in any event to minimize, incidental loss of civilian life, injury to civilians and damage to civilian objects.<sup>51</sup> IHL also imposes an obligation on parties to the conflict to cancel or suspend an attack if it becomes clear that its attack is likely to cause excessive civilian damage.<sup>52</sup>

26. It is not clear if and what effective advance precautionary measures were taken to minimize civilian casualties or damage to civilian objects. It is highly likely that the vessel requested the boat to stop, and when it failed to do so, fired rockets in its direction. It is not clear if these rockets were fired as warning shots, or were intended to destroy the boat. However, evidence collected thus far demonstrates that the gunfire was directed deliberately at the occupants of the boat as demonstrated in the deaths of nearly one third of the vessel's passengers, and serious injuries to others.

27. The Panel has found readily available public information that demonstrates that the area around the Yemeni 'Red Sea' ports are regular migration routes for many migrants and refugees in the region. For example, 967 migrants from Ethiopia and Somalia arrived at the Red Sea coast in January 2017 and 1,135 in February 2017 by similar boats.<sup>53</sup> It is reasonable to presume that the parties engaged in the conflict in Yemen were aware of these migratory patterns and should have, thus, taken extra precautions to ensure that harm to these individuals was minimized.

28. Additionally, the fact that the vessel was headed away from Yemen, and was full of passengers, also significantly lessens the likelihood that the vessel was carrying weapons or fighters towards Yemen. Even if it was suspected that this specific vessel, or vessels of this size or nature, had previously engaged in arms smuggling into Yemen, the attack on the vessel, at the time and in circumstances where the boat was filled with passengers, including women and children, was extremely unlikely to be proportionate response. The Panel also highlights that even if the vessel were engaged in human smuggling at the time of the incident,<sup>54</sup> this would not absolve the parties involved in the conflict from their IHL obligations.

29. The Panel takes full cognizance of the recent maritime security incidents experienced by Saudi Arabia-led coalition and United States' naval vessels in the Strait of Bab al Mandab and Red Sea. Yet, this would not exempt any party to the conflict in Yemen, from their obligations under IHL to ensure that a target is a legitimate military objective prior to attack.

## **C. Violations of obligations relating to those wounded at sea**

30. IHL requires that "whenever circumstances permit, and particularly after an engagement, each party to the conflict must, without delay, take all possible measures to search for, collect and evacuate the wounded, sick and shipwrecked without adverse distinction".<sup>55</sup> It also requires that those wounded at sea must receive medical care "to the fullest extent practicable" and "with the least possible delay".<sup>56</sup>

<sup>51</sup> Rules 15 and 18 of the ICRC Customary Study.

<sup>52</sup> Rule 19 of ICRC Customary Study.

<sup>53</sup> Report of the Danish Refugee Council, [www.reliefweb.int/sites/reliefweb.int/files/resources/RMMS Mixed Migration Monthly Summary February 2017.pdf](http://www.reliefweb.int/sites/reliefweb.int/files/resources/RMMS_Mixed_Migration_Monthly_Summary_February_2017.pdf).

<sup>54</sup> The Panel understands that at least one crew-member was arrested for human smuggling following the incident.

<sup>55</sup> Emphasis added. ICRC Customary Law Study, Rule 109. See also CA3 to the Geneva Conventions and Article 8 of AP II.

<sup>56</sup> ICRC Customary Law Study, Rule 110. See also CA 3 to the Geneva Conventions and Articles 7 - 8 of AP II.

31. While there is some evidence to suggest that the party conducting the attack, desisted from further attacks, after the civilian nature of the vessel became evident,<sup>57</sup> there is no demonstrable evidence to suggest that they took any measures to assist the dead or wounded. There were no distress calls made on behalf of the vessel, nor was there any attempt to rescue the wounded. According to witnesses, it took the targeted vessel at least another six hours to reach a safe port with the wounded after the incident.

32. The Panel notes a report published in the UAE state news agency.<sup>58</sup> The statement is attributed to a UAE official who stated that the UAE “clearly recognized the non-military nature of the boat which was carrying a large number of civilians... in the light of this information, the UAE Armed Forces adhered to the strict engagement rules preventing them from targeting any non-military targets”. This statement, if accurate, indicates that the UAE had naval assets with a surveillance capability in the area and thus either visual or radar visibility of the vessel around the time of, or prior to, the incident. It is therefore, highly unlikely, that UAE naval assets in the vicinity remained unaware of the incident.<sup>59</sup> It is thus possible that they would have been in a position to assist the wounded and even more likely that they could have evidence as to the perpetrators of the incident. The Panel has engaged with the UAE to obtain further information surrounding the event, including if any attempts were made to rescue those wounded at sea, but has not received a response.

## V. Obligation to investigate the incident

33. UAE state media has reported that the UAE has launched an investigation into this incident. The article stated, “investigations indicate the possibility that the boat was targeted by the Houthi rebel forces operating in the region”.<sup>60</sup> The Panel does not discount the possibility of another vessel being involved in the incident, but given the technical and forensic evidence documenting the almost certain involvement of air assets in this incident, it is highly unlikely that the Houthi-Saleh forces were responsible for this incident. This is because 1) Houthi-Saleh forces do not have the technical capacity to launch small arms attacks from the air, 2) there is no evidence, thus far, of external parties with such air assets, using those air assets in support of the Houthi-Saleh alliance; and 3) the only forces with such a capability are those opposing the Houthi-Saleh forces.

34. Given the allegations that the incident may amount to a war crime,<sup>61</sup> parties have an obligation under international humanitarian law to investigate.<sup>62</sup> This obligation is particularly incumbent upon the Government of Yemen. Saudi Arabia,<sup>63</sup> the UAE,<sup>64</sup> and the United States<sup>65</sup> have all independently denied their involvement in the incident. The Panel notes that other Member States also have the right to vest universal jurisdiction in their national courts over alleged war crimes.<sup>66</sup> There are no requirements that the identity of the offender be known to initiate an investigation, only that there is reliable and credible information that a violation may have happened.<sup>67</sup>

<sup>57</sup> Some reports from eyewitnesses indicate that the firing stopped after they shone the lights of the vessel on themselves to show that they were civilians.

<sup>58</sup> <http://wam.ae/en/details/1395302603973>, <http://gulfnnews.com/news/uae/government/uae-denies-targeting-boat-carrying-somali-refugees-1.1997104>, <http://www.emiratesnews247.com/uae-not-target-somali-refugee-boat-off-coast-yemen/>. This is the only statement from the UAE on the incident. The Panel is not aware if the UAE government has refuted this statement.

<sup>59</sup> The Panel notes recent media statements that the UAE is leading the operations on behalf of the Saudi Arabia-led coalition in and around Hudaydah port. <http://english.alarabiya.net/en/News/gulf/2017/03/27/White-House-considering-potential-attack-to-liberate-al-Hudaydah-port.html>.

<sup>60</sup> [www.wam.ae/en/details/1395302603973](http://wam.ae/en/details/1395302603973).

<sup>61</sup> [www.hrw.org/news/2017/03/26/yemen-attack-refugee-boat-likely-war-crime](http://www.hrw.org/news/2017/03/26/yemen-attack-refugee-boat-likely-war-crime).

<sup>62</sup> See in particular, Article 158 of the ICRC Customary IHL Study.

<sup>63</sup> <http://uk.reuters.com/article/uk-yemen-security-refugees-idUKKBN17112I?il=0>.

<sup>64</sup> [www.wam.ae/en/details/1395302603973](http://wam.ae/en/details/1395302603973).

<sup>65</sup> <http://uk.reuters.com/article/uk-yemen-security-refugees-idUKKBN17112I?il=0>.

<sup>66</sup> ICRC Customary IHL Rule 157.

<sup>67</sup> Schmitt, M. “Investigating Violations of International Law in Armed Conflict”, p.39 Volume 2 Harvard National Security Journal 2011.



## VI. Attribution of responsibility

35. The Panel finds that the perpetrators could have only come from Member States that have the capability to operate armed helicopters in the area, highly probably from naval assets. The Panel does not consider it a coincidence that three vessels were reportedly attacked on 16 and 17 March 2017 off the coast of Hudaydah, all allegedly being subject to helicopter gunfire or attacks from a naval vessel. A fourth boat also disappeared on 16 March 2017, with debris found subsequently and all ten on board were missing (see table 1.X.2).

36. The Panel finds it is extremely unlikely that an unidentified naval vessel and a military aircraft could enter the Bab al-Mandab strait without triggering the radar systems of the naval entities that conduct surveillance of the strait. It is also extremely unlikely that such a military vessel and helicopter would be able to launch an assault without triggering the same radar systems. The Member States that have these capabilities in the area include those belonging to the Saudi Arabia led-coalition and the Combined Maritime Forces (CMF).

37. The Panel regrets that the UAE, the Saudi Arabia-led coalition, and the CMF have not cooperated with the Panel and responded to Panel requests for information. It also regrets that the Houthi-Saleh alliance, which has attributed responsibility for this attack to the Saudi Arabia-led coalition, denied the Panel access to Hudaydah to investigate this incident.<sup>68</sup>

## E. Similar attacks

38. The Panel notes that this incident was only one of several incidents reported in that period that occurred off the coast of Hudaydah. Five of these incidents were recorded by the UN and Mwatana Organization. The following incidents in table A.58.2 are presented for information purposes only, as the Panel did not independently verify the same:

Table A.58.2

### Incidents of fishing vessels (FV) being attacked

<i>Ser</i>	<i>Date</i>	<i>Coastal Location</i>	<i>Alleged Incident</i>	<i>Comments</i>
1	3 Feb 2017	Island off the coast of Hudaydah	A helicopter fired on the tents and boats of fishermen gathered on the Island.	Killed six and injuring seven individuals.
2	15 Mar 2017	Al-Durayhimi. (15 miles off Turfah Island)	A helicopter seen taking off from a warship, shot at the occupants of the FV without warning.	Killed two and injured five individuals. The injured remained afloat on the fishing boat at sea until late afternoon on 16 March 2017 when volunteers pulled them to a fishing port in Hudaydah. No notice was issued by any party prohibiting access to this fishing area.

<sup>68</sup> Letter dated 23 March 2017.

<i>Ser</i>	<i>Date</i>	<i>Coastal Location</i>	<i>Alleged Incident</i>	<i>Comments</i>
3	15 Mar 2017	Al-Durayhimi. (15 miles off Turfah Island)	A FV was struck by a warship missile almost immediately after the above attack.	Killed five and injured three individuals. The occupants witnessed the previous boat (serial 2) being shot by a helicopter. The survivors stated that there were no indications that they had entered a restricted zone.
4	16 Mar 2017	North of Hudaydah	Ten fishermen were reported as missing.	Parts of the boat were found burned 20 miles away from Al Teir Mount, west to the Eritrean waters.
5	5 Apr 2017	Off the coast of Hudaydah	Fishing boat was shot by helicopter gunfire.	Four killed.

## VII. Humanitarian considerations

39. Immediately after the incident, most survivors were accommodated by the local authorities in the Hudaydah prison because, it was said that there was no other facility in Hudaydah where they could be accommodated. While the authorities confirmed to the UN that the survivors were not in detention in the true sense of the word, the survivors were not allowed to leave the prison. In May 2017, the authorities transferred the survivors from the Hudaydah Central Prison to the Immigration, Passports and Naturalization Authority detention center in Sana'a. As at November 2017, some of those affected in this incident returned to Somalia, while some others sought refugee status in Aden.

## Appendix B to Annex 58: Air strike on civilian residential area in Faj Attan, Sana'a (25 August 2017)

### I. Background

1. At approximately 02:00 hours on 25 August 2017, explosive ordnance dropped from a military aircraft detonated on several residential buildings in Faj Attan in Sana'a.<sup>69</sup> The explosions killed 16 individuals, including seven children and injured 17 other individuals, which included eight children.<sup>70</sup> The Saudi Arabia-led coalition claimed that the strike was a result of a "technical mistake". This was the third time that explosive ordnance has been delivered to this area, the delivery of which is attributed to the Saudi Arabia-led coalition, and that affected some of the same buildings.<sup>71</sup>

### II. Technical Analysis

2. Post blast analysis of the image at figure B.58.1 to B.58.4 shows damage that is typically characteristic of the detonation of a significant quantity of high explosive, and is fully consistent with the blast damage resulting from air strikes using high explosive aircraft bombs.

Figure B.58.1  
Post-blast damage<sup>72</sup>



Figure B.58.2  
Post-blast damage



<sup>69</sup> Approximate location: 15°19'18.04"N, 44°10'42.4"E.

<sup>70</sup> Information provided by sources on the ground and verified through media reports. See "Yemen: Hiding Behind Coalition's Unlawful Attacks" <https://www.hrw.org/news/2017/09/08/yemen-hiding-behind-coalitions-unlawful-attacks>. In one incident, eight members of the same family died with the only survivor being a 6-year-old child. One of the residential buildings destroyed had no occupants, as they had left following a previous air strike on that building (see paragraph 2). The other building had four families, some of whom were displaced persons from Ta'izz.

<sup>71</sup> These strikes on 28 January 2016 and 20 April 2015 in Faj Attan documented by (S/2016/73), p 153 (recorded 25 deaths and 400 injuries in April 2015), and Human Rights Watch Report, "Yemen: War Crimes Not Addressed" recorded six deaths in January 2016.

<sup>72</sup> Photos contained in this case study were obtained from two confidential sources in the area.

Figure B.58.3  
Post-blast damage



Figure B.58.4  
Post-blast damage



### III. Response of the Saudi Arabia-led coalition

3. Following the incident, the Saudi Arabia-led coalition spokesperson stated that a “*technical mistake*” had resulted in the incident, without providing further substantive or convincing details. He added that “... all procedures (related to operational planning and implementation) were correct... there was no direct targeting of the alleged house”.<sup>73</sup> The target point (TP) was an alleged Houthi-Saleh Command, Control and Communication (C3) centre at Faj Attan, Sana’a.<sup>74</sup> Media released imagery,<sup>75</sup> attributed to the Saudi Arabia-led coalition, provided further details on the TP (figure B.58.5). Panel imagery is at figure B.58.6 to B.58.9.

Figure B.58.5  
Imagery attributed to the Saudi Arabia-led coalition<sup>76</sup>



The inset shows the legitimate target – a Houthi military site. The small box shows the site that was struck as a result of a technical error.

<sup>73</sup> <http://www.arabnews.com/node/1151086/middle-east>.

<sup>74</sup> Around the vicinity of 15°19'20.50"N, 44°10'53.08"E.

<sup>75</sup> <http://www.arabnews.com/node/1151086/middle-east>, <https://uk.reuters.com/article/uk-yemen-security-strike/saudi-led-force-admits-strike-in-yemens-capital-hit-civilians-idUKKCN1B60L8>.

The Panel requested the Saudi Arabia-led coalition to confirm the authenticity of the image on September 2017; the Saudi Arabia-led coalition declined to respond. Letter from the Kingdom of Saudi Arabia dated 10 October 2017.

<sup>76</sup> <http://www.arabnews.com/node/1151086/middle-east>.

Figure B.58.6  
Imagery on 18 August 2017<sup>77</sup>



Figure B.58.7  
Imagery on 27 August 2017<sup>78</sup>



<sup>77</sup> Satellite imagery obtained by Panel.

<sup>78</sup> Ibid.

Figure B.58.8 and B.58.9

**Enhanced imagery of the TP before and after the strike<sup>79</sup>****IV. Analysis of violations of international humanitarian law (IHL)**

4. In the absence of a response from the Saudi Arabia-led coalition, the Panel analyzed the applicable law in relation to this incident based on facts gathered through its own independent investigations.<sup>80</sup>
5. The Panel finds that in respect of the stated “technical mistake”,
  - (a) While it is possible for precision guided munitions to malfunction resulting in a target error, the Saudi Arabia-led coalition has refused to provide sufficient technical detail to enable such a judgement to be independently reached, reiterating that “*Coalition forces are committed to implementing...international humanitarian law*” and that “*the coalition’s activities fall outside the scope of that (Panel of Expert’s) mandate*”.<sup>81</sup>
  - (b) The Panel finds that by refusing to respond the Saudi Arabia-led coalition is effectively denying the opportunity for an independent confirmation of the Saudi Arabia-led coalition’s position that a “technical malfunction” resulted in the deaths of 17 civilians. An independent assessment is particularly relevant considering that the TP in satellite imagery demonstrates a broken-down wall, which remained undisturbed post-strike.
6. In the media, the Saudi Arabia-led coalition spokesperson, Colonel Turki al-Maliki, defended the strike as having “*a legitimate military target*”, which he said was a Houthi command and control centre (C3). Satellite imagery shows a “damaged man-made wall type structure with debris” at the TP<sup>82</sup> (see figures B.58.6 - B.58.9).

<sup>79</sup> Source: Ibid. At the TP the presence of a damaged man-made wall type structure with debris is observed. The visual changes as seen before and after the air strikes for the TP is mainly due to satellite camera view angle difference when the images were taken, which can be observed from the different appearance of the high-rise building in the images. There are no major changes observed for the TP from the two images.

<sup>80</sup> This included photos and videos obtained from three sources, multiple open source imagery, statements of five sources, which included eyewitnesses; satellite imagery, and other documentation including death certificates.

<sup>81</sup> Letter to Panel dated 10 October 2017.

<sup>82</sup> UN.

7. The Panel continues to welcome any information from the Saudi Arabia-led coalition that can be used to independently verify that the TP was a C3 centre and further detailed information on the nature of the technical mistake that resulted in the civilian deaths and damage to civilian infrastructure.

## Appendix C to Annex 58: Air strike on residential buildings (al-Maqadhi house) in Farah Village, Washa, Hajjah (2 September 2017)

### I. Background

1. At approximately 13:30 hours on 2 September 2017, two items of explosive ordnance dropped from a military aircraft detonated within three minutes of each other. The EO hit several residential buildings of the al-Maqadhi tribe<sup>83</sup> in Washa, Hijjah Governorate.<sup>84</sup> The first explosion affected residential buildings, but did not cause any casualties. The second explosion killed two women and one child and injured 13 others, which included one woman and ten young children. Witnesses informed the Panel that the reason that 14 of the 16 affected were women and children was because after the first strike, the men and the older children managed to flee to safety. The second strike did not leave enough time for the women and the young children to escape. The casualties were also high because 2 September 2017 was the second day of Eid - the annual day of gathering for the al- Maqadhi tribe for celebrations and resolution of tribal conflicts.

Figure C.58.1  
Remote location of the al-Maqadhi houses<sup>85</sup>



<sup>83</sup> The residents in this complex belong to the Al Maqhdhi tribe. They are led by Sheif Mohamah Yahyah Maqhdhi and Sheik Ali Yahyah Maqhdhi. They are said to be aligned to the legitimate Government.

<sup>84</sup> At approximately 16°19'39.7"N, 43°25'10.1"E.

<sup>85</sup> Google Earth Pro imagery of 29 January 2017.



## II. Technical analysis of physical evidence

2. The imagery at figure C.58.2 to C.58.5 shows damage that is highly indicative of the detonation of precision-guided aircraft bombs on structures.

Figure C.58.2<sup>86</sup>

### Paveway tail fin



Figure C.58.3

### Crater al-Maqadhi houses (first strike)



Figure C.58.4

### Damage to al-Maqadhi houses (second strike)



Figure C.58.5

### Damage to al-Maqadhi houses



3. The Panel finds that:

- (a) Technical analysis of imagery (figure C.58.2) of the fragment recovered from the explosion indicates that one explosive device was fitted with a Paveway guidance unit for a high explosive (HE) aircraft bomb. The fragment is the remnants of the rear fin from a Paveway guidance unit;
- (b) Photogrammetry of the imagery at figure C.58.3 estimates that the crater diameter was 3.4 m in sandy soil, and thus from crater analysis the explosive mass is estimated to be in the region of 940kg (TNT equivalent). This equates to the explosive content of a Mark 84 2000lb aircraft bomb;
- (c) The only military entity operating the type of aircraft in the area that has the capability to aerially deliver such precision-guided munitions is the Saudi Arabia-led coalition; and

<sup>86</sup> All images in this annex were obtained from residents in the complex or human rights investigators who visited in the aftermath.

(d) The Panel is concerned that the damage to the top of the building shown in figure C.58.4 may be an entry points (hole) initially caused by the kinetic energy from a third unexploded aircraft bombs. These bombs have hardened weapons grade steel cases, which would have easily penetrated the thin-skinned roofs before it should have detonated on the floor of the building. The lack of damage the rest of the building is an indicator that there may be an unexploded bomb (UXO) under the floor of that building. The Saudi Arabia-led coalition has been asked if they would respond on humanitarian grounds to confirm, or otherwise, whether a third aircraft bomb was used in this strike.

#### IV. Response of the Saudi Arabia-led coalition

4. The Saudi Arabia-led coalition was provided the opportunity to respond, but chose not to citing that “the coalition’s activities” fall outside the mandate of the Panel of Experts.<sup>87</sup>

#### V. Analysis of violations of international humanitarian law (IHL)

5. In the absence of a response from the Saudi Arabia-led coalition, the Panel analysed the applicable law in relation to this incident based on facts obtained during its own independent investigations.<sup>88</sup> The Panel finds that:

(a) Based on the use of precision-guided weapons, the remote location of the target site, and the repeated strikes, the al-Maqadhi residential complex was almost certainly the intended target of the two air strikes;

(b) The Panel found no explanation in the public domain as to why this residential area, which is *prima facie* a civilian object immune from direct attack, was considered by the Saudi Arabia-led coalition to be a legitimate military objective;

(c) The Panel also found no demonstrable evidence that the occupants of the house, who as civilians were *prima facie* immune from attack, had lost their civilian protection;

(d) While the Panel is not convinced that the Saudi Arabia-led coalition directed its air strike against a legitimate military target,<sup>89</sup> even if it had, the Panel finds that there are serious concerns whether it respected IHL principles of proportionality and precautions in attack given that 14 of the 16 affected were women and children. Any proportionality assessment should have taken into consideration that given the celebrations of the day there was a high likelihood that civilians, including women and children would be in the complex; and

(e) The cumulative effect on civilians and the civilian object also demonstrates that if precautionary measures were taken, they were largely inadequate and ineffective. If precautionary measures were not taken, it is incumbent on the Saudi Arabia-led coalition to demonstrate why in those circumstances, such precautionary measures were not feasible.<sup>90</sup>

<sup>87</sup> Letter to Panel dated 10 October 2017.

<sup>88</sup> This included photographs obtained from two sources, statements of four sources, and an investigation report issued by the National Commission of Inquiry of Yemen (document with Panel).

<sup>89</sup> See Article 13 (1) and (2) of [Protocol II Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of Non-International Armed Conflicts](#) (AP II) and Article 13 (3) on the loss of protection. See also CIHLR 1, 5 and 6. [Prosecutor v Dario Kordic and Mario Cerkez](#) (2005), para. 54.

<sup>90</sup> For example, if the target were some of the male occupants or guests, it is possible that they could have been targeted outside this highly residential area.

## Appendix D to Annex 58: Air Strike on a night market, Sa'dah (1 November 2017)

### I. Background to Events

1. At approximately 02:00 hours on 1 November 2017, explosive ordnance dropped from a military aircraft detonated in or close to a hotel in the busy night market in Saher district of Sa'dah governorate.<sup>91</sup> The explosion resulted in 31 deaths and 26 injured in Sahar district, Sa'dah governorate, and of these at least eight were children.<sup>92</sup>

2. The Saudi Arabia-led coalition admitted striking the market and stated that *"the target was the gathering point for some armed Houthi militants"*.<sup>93</sup>

3. One witness informed the Panel, that while there is was a regular presence of two vehicles belonging to Houthi fighters, approximately 1,000m from the market, all sources confirmed that the market was civilian in nature, composing of hotels, restaurants, and coffee shops. The hotel that was affected by the airstrike was identified as an overnight lodging used by Qat farmers and their families who regularly visited the market.

### II. Technical Analysis

4. The imagery at figure D.58.1 to D.58.2 shows damage that is highly indicative of the detonation of precision-guided aircraft bombs.

Figure D.58.1  
Post strike damage in outer night market area<sup>94</sup>



Figure D.58.2  
Post strike damage in outer night market area<sup>95</sup>



<sup>91</sup> United Nations, See <https://reliefweb.int/report/yemen/statement-humanitarian-coordinator-yemen-jamie-mcgoldrick-continued-violence-affecting>.

<sup>92</sup> A local hospital informed the Panel that it received 29 dead and 26 injured: 2 children were recorded as having died, and six others were injured. Three bodies were burnt beyond recognition.

<sup>93</sup> The Saudi Arabia-led coalition says that the strike hit a legitimate target in Yemen, see <https://www.reuters.com/article/us-saudi-yemen/saudi-led-coalition-says-strike-hit-a-legitimate-target-in-yemen-idUSKBN1D40OE>. Initial statement on the incident: "Coalition to Restore Legitimate Government of Yemen: We closely follow up media outlets' allegations on targeting market in Sa'dah" <http://www.spa.gov.sa/viewfullstory.php?lang=en&newsid=1683445>.

<sup>94</sup> Confidential source.

<sup>95</sup> Confidential source.

Figure D.58.3  
EO impact crater<sup>96</sup>



3. The Panel finds from photogrammetry of the imagery at figure D.58.3 that the crater diameter was approximately 3.6 m in sandy soil, and thus from crater analysis the explosive mass is estimated to be in the region of 940kg (TNT equivalent). This equates to the explosive content of a Mark 84 2,000lb aircraft bomb.

4. The only military entity operating the type of aircraft in the area that has the capability to aerially deliver such precision-guided munitions is the Saudi Arabia-led coalition.

### III. Response of the Saudi Arabia-led coalition

5. The Saudi-led coalition accepted responsibility for this airstrike, but justified it as a “gathering point” for Houthi fighters (see paragraph 2 above).

### IV. Analysis of violations of international humanitarian law (IHL)

6. In the absence of a timely response from the Saudi Arabia-led coalition to the Panel, the Panel analyzed the applicable law in relation to this incident based on facts obtained during its own independent investigations.<sup>97</sup>

7. It is possible that some individual fighters may have been present amongst civilians, as Houthi fighters frequent the market to buy Qat and other commodities. However, there was no information on the public domain or from witnesses that supported a finding that the market was a “gathering point” for Houthi fighters at the time of the air strike, but a gathering point for civilians.

8. Even if the Saudi Arabia-led coalition targeted Houthi fighters, the Panel is not convinced that the Saudi Arabia-led coalition respected relevant principles of IHL, including those relating to proportionality,<sup>98</sup> for the following reasons:

- (a) There is no evidence to support a finding that:

<sup>96</sup> Credit: Naif Rahma, Reuters.

<sup>97</sup> This included photographs obtained from two sources, interviews with three sources, and a report issued by a local hospital. Open source images were verified by witnesses. Information from the UN.

<sup>98</sup> Under IHL “launching an attack which may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, *which would be excessive in relation to the concrete and direct military advantage anticipated*”, is prohibited”. (Emphasis added). See CIHLR 14.

- (i) There were Houthi-Saleh fighters in the market; and
  - (ii) Those fighters were of sufficient military value to justify collateral damage to the civilians and civilian objects and consequently, the Saudi Arabia-led coalition met its obligations relating to proportionality.
- (b) The Saudi Arabia-led coalition did not provide the Panel with information that demonstrated that a significant number of those who died or injured were Houthi fighters or that the effects on civilians and civilian objects were not excessive in relation to the concrete and direct military advantage anticipated.
- (c) This likelihood of excessive harm to civilians and civilian objects could have reasonably been anticipated in the circumstances because:
- (i) The market place was a civilian object *prima facie* immune from attack;
  - (ii) It was also a civilian gathering point;
  - (iii) The market was functional on the night of the air strike; and
  - (iv) The timing of the attack would be such as to cause a disproportionately high number of civilian casualties given that it was a night market.

9. IHL requires military commanders and those responsible for planning and executing decisions regarding attacks to take all feasible precautions to avoid, and in any event to minimize, incidental loss of civilian life, injury to civilians and damage to civilian objects. The fact that the Saudi Arabia-led coalition knew that this was a market place and thus a civilian location where there would ordinarily be a congregation of civilians, meant that they should have been particularly vigilant when undertaking a proportionality assessment and making use of all feasible precautionary measures to minimize the incidental loss of civilian life and damage to civilian property.<sup>99</sup> It is reasonable to expect that the Saudi Arabia-led coalition should have taken into account these factors given that the fact that information that the target location was a civilian night market was readily available.<sup>100</sup>

10. The Panel remains concerned that the Saudi Arabia-led coalition continues to justify air strikes in civilian gathering areas by referring to it as “Houthi gatherings”, without providing any further information that may assist an independent verification if the relevant IHL principles were met (see also [S/2017/81](#) for Khamees Mustaba market).

<sup>99</sup> See [commentary to CIHLR 14](#), and the [United States Department of Defense Law of War Manual \(2015\)](#), p.1033, which requires combatants to assess in good faith the information that is available to them, when conducting attacks.

<sup>100</sup> See [CIHLR 14](#).

## Annex 59: Joint Incident Assessment Team findings and recommendations

1. The establishment of JIAT is a positive step given that it is possibly the only entity outside the Joint Force Command that has access to sensitive information on military operations. Yet, the Panel finds that there is a lack of transparency in the implementation of JIAT recommendations, which may undermine JIAT's credibility.
2. The JIAT found that of the 43 air strikes that were attributed to the Saudi Arabia-led coalition<sup>1</sup>:
  - (a) 11 air strikes did not take place against the identified targets;
  - (b) In 30 incidents, the Saudi Arabia-led coalition did not violate IHL; and
  - (d) In two incidents, the Saudi Arabia-led coalition violated IHL.
3. The Panel has, based on public information and its investigations, observed that there needs to be a further examination of some of these cases to eliminate any doubts relating to violations of IHL by the Saudi Arabia-led coalition. In this context, the Panel highlights the different findings of the Panel and JIAT and the contradictions between statements of the Saudi Arabia-led coalition and the JIAT on the Saudi Arabia-led coalition's responsibility and rationale for some air strikes.

Table X.1

### JIAT and Panel findings on the same investigations

<i>Date</i>	<i>Location</i>	<i>JIAT findings<sup>2</sup></i>	<i>Panel findings</i>
15 Mar 2016	Khamis Market, Hijjah	Intelligence indicated a large gathering of Houthi recruits near the market. Market has no activity except on Thursday. Strike was on Tuesday. The gathering was 34 km from the Saudi border.	This Panel concluded in S/2016/81 that the market was active on that date and while it was possible that some fighters (10) were present, it was unconvinced that IHL on proportionality and precautionary measures were respected.
9 Aug 2016	Al Aqil Food factory, Sana'a.	The factory was not targeted on 9 August 2016. The closest target point was 7 km from the factory	The Panel concluded in S/2016/81 that an HE bomb delivered from air caused the damage. It concluded that the only known entity capable of carrying out the air strike was the Saudi Arabia-led coalition.
15 Aug 2016	Abs Hospital, Hajjah	Pilot followed a vehicle, which had left a site of an air strike and struck it next to a building that does not bear any marks that would indicate before the strike that it is a hospital. The vehicle was a legitimate military target.	The Panel concluded in S/2016/81 that there were 43 casualties, while JIAT concluded 20. The Panel concluded that the vehicle was a civilian vehicle carrying a wounded civilian, MSF shared hospital coordinates and coalition was aware of the hospital's location and that it violated IHL.
13 and 22 Sep 2016	Alsonidar Complex	Between 4 – 23 September 2016, six ballistic missiles were launched towards Saudi Arabia from northern Sana'a. Three trucks and an armed military vehicle entered factory complex. Targeted complex because of continued use of the complex "in supporting the war effort".	The coalition spokesperson stated that the complex "is now becoming a military manufacturing unit specialized in producing pipes Houthis use to assemble local-made missiles..." <sup>3</sup> The Panel reviewed evidence but could not find evidence to support the conclusions of JIAT.

<sup>1</sup> The press released related to the 43 air strikes were provided by JIAT to the Panel.

<sup>2</sup> JIAT findings are summarized in this annex. Full press releases have been shared by JIAT with the Panel for 41 of the 43 cases.

<sup>3</sup> <http://www.reuters.com/article/us-yemen-security-idUSKCN11J27V>.

<i>Date</i>	<i>Location</i>	<i>JIAT findings<sup>2</sup></i>	<i>Panel findings</i>
24 Sep 2016	Ibb residential house	The actual target, a military HQ, was 1070 meters from the residential complex. The coalition did not strike the residential complex.	The Panel concluded in S/2016/81 that the factory complex was targeted using a precision-guided HE aircraft bomb and only party to the conflict with the known capability to deliver precision guided HE aircraft bombs is the Saudi Arabia-led coalition.
8 Oct 2016	Funeral Hall, Sana'a	The Air Operations Centre in Yemen did not operate in accordance with Coalition command and control regulations, nor rules of engagement and procedures. The coalition aircraft wrongly targeted the location, resulting in civilian deaths and injuries.	The Panel found in S/2016/81 that the Saudi Arabia-led coalition violated several principles of IHL, including those protecting hors de combat, in this double tap attack. The Panel has requested, but not received, information on the measures taken to implement JIAT's recommendations.

Table X.2  
**JIAT and Saudi Arabia-led coalition's findings on the same incidents**

<i>Date</i>	<i>Location</i>	<i>JIAT findings</i>	<i>Coalition statements in the immediate aftermath of the incident</i>
30 Aug 2015	Al-Sham Water Factory	The Saudi Arabia-led coalition executed a (close air support mission), on an anti-air artillery (AAA), stationed in proximity to the factory. Due to weather effect and clouds over the target, the bomb deflected from its path and hit warehouse of the factory, destroying it and resulting in some deaths and injuries.	On 30 August 2015, the "Coalition spokesman Brigadier General Ahmed Asseri denied the strike had hit a civilian target, saying it was a location used by the Houthis to make IEDs and to train African migrants whom they had forced to take up arms." <sup>4</sup>
6 Oct 2015	Wedding, Dhammar	There were no air operations on the said date, but on 7 October 2015, the Saudi Arabia-led coalition targeted a group of armed vehicles in the same area.	On 08 Oct 2015, the Saudi Arabia-led coalition stated that it did not conduct any air strikes in Dammar. <sup>5</sup>
26 Oct 2015	Haydan Hospital, Sa'dah	The building was a medical facility used as a military shelter. MSF should have been informed of the withdrawal of protection.	The coalition denied hitting the hospital. <sup>6</sup>

<sup>4</sup> <https://www.reuters.com/article/us-yemen-security/saudi-led-coalition-air-strike-kills-36-yemeni-civilians-residents-idUSKCN0QZ09P20150830>.

<sup>5</sup> "Death toll from air strike on Yemen wedding party rises above 130: medics" at <https://www.reuters.com/article/us-yemen-security/death-toll-from-air-strike-on-yemen-wedding-party-rises-above-130-medics-idUSKCN0RT0XT20150929>, and <http://www.aljazeera.com/news/2015/10/deadly-air-strike-reported-yemen-wedding-party-151008073704528.html>.

<http://www.gulf-times.com/story/457994/Air-strike-kills-13-at-Yemen-wedding-coalition-den>.

<sup>6</sup> "Yemeni MSF hospital bombed, Saudi-led coalition denies responsibility" at <http://www.reuters.com/article/us-yemen-security/yemeni-msf-hospital-bombed-saudi-led-coalition-denies-responsibility-idUSKCN0SL0VK20151027>.

<i>Date</i>	<i>Location</i>	<i>JIAT findings</i>	<i>Coalition statements in the immediate aftermath of the incident</i>
2 Dec 2015	Mobile Clinic, Ta'izz	High value military target close to clinic. The clinic should have been removed "so as not to be expose it to any incidental effects."	MSF informed Saudi Arabia of the location. One hour before the strike, Saudi Arabia stated, "be sure that we will not approach those locations and your team has to stay there for the time being". <sup>7</sup>
13 Aug 2016	Al Fadhil school, Sa'dah	The school was not targeted. The closest targets that day were "warehouses and weapons' storage" located 10 km from the school.	On 14 August 2016, the Saudi Arabia-led coalition spokesman stated that the strikes hit a Houthi training camp, killing militia fighters, including the leader Yehya Munassar Abu Rabua; " <i>The site that was bombed... is a major training camp for militia... Why would children be at a training camp?</i> ", " <i>When jets target training camps, they cannot distinguish between ages</i> " and that Yemen's government had confirmed to the coalition that " <i>there is no school in this area</i> ". <sup>8</sup> UNICEF confirmed that 7 children were killed and 21 injured, who were studying at the school during the strike. <sup>9</sup> The other recorded strike that day was a house of a head of a school.

<sup>7</sup> MSF, "MSF incident report: airstrike on the Ta'izz health clinic, Houban District, Taiz City, Yemen, 2 December 2015" at

[https://reliefweb.int/sites/reliefweb.int/files/resources/Yemen\\_Taiz\\_investigation\\_summary\\_final.pdf](https://reliefweb.int/sites/reliefweb.int/files/resources/Yemen_Taiz_investigation_summary_final.pdf).

<sup>8</sup> "Saudi-led coalition strikes militant training camp in Yemen" <https://www.saudiembassy.net/press-release/saudi-led-coalition-strikes-militant-training-camp-yemen>, "At least 10 children have been killed in an airstrike on school in Yemen" at <http://www.thejournal.ie/yemen-airstrike-children-killed-2927896-Aug2016/>, "Coalition says strike hit militant training camp in Yemen"

<http://gulfnews.com/news/gulf/yemen/coalition-says-strike-hit-militant-training-camp-in-yemen-1.1878902>, "Saudi-led coalition strikes militant training camp in Yemen"

<https://www.saudiembassy.net/press-release/saudi-led-coalition-strikes-militant-training-camp-yemen>.

<sup>9</sup> "UNICEF Statement on the killings of children in Sa'dah, Northern Yemen" at [https://www.unicef.org/media/media\\_92095.html](https://www.unicef.org/media/media_92095.html).



## Annex 60: Case studies of airstrikes documented by the Panel in 2016 and the JIAT findings

1. The Panel takes note of the Joint Incident Assessment Team (JIAT) findings that differ from Panel findings in 2016 on the case study summaries contained in serials 5, 7, 8, and 9 of [S/2017/81](#). The Panel, after evaluating the information placed by the JIAT in the public domain, attaches the full case studies of those incidents in the following appendices to enable an independent assessment of the IHL violations attributed to the Saudi Arabia-led coalition. The case studies were not included in [S/2017/81](#) to maintain brevity of that report. After careful consideration of the findings of JIAT, the Panel continues to find that:

- (a) The Saudi Arabia-led coalition was responsible for the following air strikes; and
- (b) The evidence strongly demonstrates that the Saudi Arabia-led coalition violated IHL.

Table 60.1  
Air strikes affecting civilians and civilian infrastructure documented in 2016

<i>Appx</i>	<i>Date</i>	<i>Location</i>	<i>Type of EO</i>	<i>Civilian fatalities</i>	<i>Civilian injured</i>	<i>Effect on civilian objects</i>
A	9 Aug 2016	Nahda, Sana'a	High Explosive (HE) aircraft bomb	10	13	Snack factory destroyed.
B	13 Sep 2016	Ban al-Hareth, Sana'a	Mk 82 HE bomb / Paveway IV	0	0	Alsonidar factory complex severely damaged.
C	22 Sep 2016	Ban al-Hareth, Sana'a	GBU-24 / Paveway IV	0	0	Alsonidar factory complex severely damaged.
D	24 Sep 2016	Mafraq Jiblah, Ibb	Mk 82 HE bomb / Paveway	9	7	Civilian house destroyed.

2. The Panel will also provide in brief its findings in two further investigations in 2016 that were also not enclosed in full in [S/2017/81](#) to enable full disclosure of the Panel's findings and to assist further independent investigations into these incidents.

Table 60.2  
Air strikes affecting civilians and civilian infrastructure documented in 2016

<i>Appx</i>	<i>Date</i>	<i>Location</i>	<i>Type of EO</i>	<i>Civilian fatalities</i>	<i>Civilian injured</i>	<i>Effect on civilian objects</i>
E	25 Mar 2016	T'baisha, Ta'izz	Not confirmed	10	0	Civilian house destroyed.
F	25 May 2016	Mahala, Lahj	Mk 82 HE bomb / Paveway	0	2	Water bottling factory destroyed.

## Appendix A to Annex 60: Al Aqil Factories, Nahda District, Sana'a (Food Snack Factories) (9 August 2016)

1. The JIAT concluded that the Saudi Arabia-led coalition did not target the Al Aqil factory complex.<sup>1</sup>
2. The Panel finds that a technical analysis of evidence demonstrates beyond a reasonable doubt that the factory complex was targeted using a precision-guided high explosive (HE) aircraft bomb. The only party to the conflict with the known capability to deliver such precision guided HE aircraft bombs is the Saudi Arabia-led coalition. This case study contains the Panel's findings of 2016.

### I. Background

3. On 9 August 2016, at approximately 10:00 hours, explosive ordnance dropped from a military aircraft detonated on a factory complex that produces food snacks in Nahda District, Sana'a.<sup>2</sup> The explosion and the resultant fire killed ten civilians and injured 13, and destroyed the factory and the production equipment.<sup>3</sup> There was a military maintenance centre adjacent to the factory (figure A.60.1), yet it was not affected by air strikes that day.<sup>4</sup>

4. On 19 January 2016, another factory in the same complex was damaged by an air strike (see image A.60.3).<sup>5</sup>

Figure A.60.1

**Locations of the military maintenance camp (red outline) and the factory complex (green outline)**



Figure A.60.2

**Pre-air strike factory complex (10 January 2016)**



<sup>1</sup> Press release with Panel.

<sup>2</sup> Around 15°23'42.0"N, 44°11'41.9"E.

<sup>3</sup> For example, see video at "Saudi-Led Coalition Resumes Bombing of Yemeni Capital After Talks Collapse" at [http://www.nytimes.com/2016/08/10/world/middleeast/yemen-sana-airstrikes.html?\\_r=0](http://www.nytimes.com/2016/08/10/world/middleeast/yemen-sana-airstrikes.html?_r=0).

<sup>4</sup> Google Earth.

<sup>5</sup> Owner stated that a subsidiary branch of the factory in Damrah was also hit by air strikes on 25 January 2016.

Figure A.60.3  
First strike damage (29 February 2016)



Figure A.60.4  
Second strike damage (Post August 2016)



## II. Technical analysis of physical evidence

5. The damage to the factory was indicative of that caused by the detonation of a large quantity of high explosive. There was clear evidence of the destruction of structural components of the building that equate to the damage to be expected from the shockwave of an explosion. The entry points (holes) (figures A.60.5 and A.60.6) and the damage to the concrete floor at the impact point of the explosive ordnance were both caused by the kinetic energy from the EO, which have hardened weapons grade steel cases. The aircraft bombs easily penetrated the thin-skinned roofs before detonating on the concrete floor of the factories.

Figure A.60.5  
Damage at impact point of EO<sup>6</sup>



Figure A.60.6  
Damage at impact point of EO



6. The only party to the conflict with the known capability to deliver precision-guided HE aircraft bombs is the Saudi Arabia-led coalition.

## III. Response of the Saudi Arabia-led coalition

7. On 8 December 2016, the JIAT denied the involvement of the Saudi Arabia-led coalition. It stated:

“The Embassy of the Kingdom of Sweden has claimed that the food factory of Swedish honorary consul Mr. Abdullah Ahmed al-Aqil in (Sana’a) city suffered aerial bombardment on 9 August 2016 resulting in the death of 16 workers. Having investigated the facts and circumstances of the claim, (JIAT) found that, the coalition forces have struck two targets that day; the first target is a telecommunication antenna used

<sup>6</sup> All imagery was obtained from individuals working in the factory.

for military purposes in (Ayban) mountain, western (Sana'a), 7 km away from the subject factory. The second target is a cave used for military purposes in eastern (al-Nahdyan) mountain, southern Sana'a, 10 kilometers away from the subject factory. Thus, the said two locations are considered legitimate military targets according to the rules of engagement and the rules of the international humanitarian law. In light of that, (JIAT) did not find evidence that the coalition forces struck the said factory. Thus, the coalition forces are not responsible for the alleged attack on the factory".<sup>7</sup>

8. The Panel has not yet received a response to a request for information made to the Saudi Arabia-led coalition.<sup>8</sup>

#### IV. Analysis of violations of IHL

9. The Panel finds that the Saudi Arabia-led coalition was responsible for this air strike (paragraphs 5 and 6), and that the use of precision-guided weapons demonstrates that the factory complex was the intended target of these air strikes. In 2016, the Panel found that there was no evidence to support a finding that the complex had become a legitimate military objective.

10. Thus, the Panel concludes that the factory complex was *prima facie* a civilian object, immune from direct attack and that individuals within the factory had not lost their civilian protection.<sup>9</sup> Therefore, unless the Saudi Arabia-led coalition provides information to the contrary, evidence strongly demonstrates that the Saudi Arabia-led coalition violated IHL principles, including those relating to distinction, proportionality,<sup>10</sup> and precautions in attack.<sup>11</sup>

11. The Panel will continue to welcome a clarification from the Saudi Arabia-led coalition.

<sup>7</sup> Press statement with Panel. Minor spelling mistakes were corrected. See also Saudi Arabia coalition spokesperson's response here, "14 killed at food factory in first Saudi strikes on Yemen in three months" at <http://www.middleeasteye.net/news/14-dead-saudi-led-strikes-yemen-factory-medics-1702399607>.

<sup>8</sup> Letter dated 21 November 2016.

<sup>9</sup> IHL requires that the civilian population, as well as individual civilians, shall not be the object of attack. Article 13(2) of the [Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of Non-International Armed Conflicts \(Protocol II\)](#), 8 June 1977 (AP II) and ICRC Customary International Humanitarian Law Study Rule (CIHLR) 1.

<sup>10</sup> An attack is disproportionate if it may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated.

<sup>11</sup> IHL requires that all feasible precautions must be taken to avoid, and in any event to minimize, incidental loss of civilian life, injury to civilians and damage to civilian objects. Article 13(1) of AP II. CIHLR 15. This obligation is particularly incumbent on those who plan and decide on the air strikes. See William Boothby, "The Law of Targeting", OUP (2012), p. 72.

## Appendix B to Annex 60: Alsonidar Factory complex, Ban al-Hareth District, Sana (13 September 2016)

1. In November 2017, the JIAT provided the following justification in November 2017 for the two air strikes. It found that:

“... during 4 – 23 September 2016, six ballistic missiles were launched towards Saudi Arabia from northern Sana’a. The coalition forces carried out Aerial Surveillance and Reconnaissance Missions on these areas. A convoy consist(ing) of three trucks accompanied by an armed military vehicle were spotted and tracked until they entered Al Senidar (sic) factory complex located north of Sana’a city. Coalition forces targeted the warehouses inside the complex on 12 September 2016 and were targeted again on 22 September 2016 because of continued use of the complex in supporting the war effort, which is considered a legitimate military target.”<sup>12</sup>

2. The Panel reexamined and solicited further evidence<sup>13</sup> and continues to solicit further information from the Saudi Arabia-led coalition that supports JIAT’s conclusions. The JIAT statement is disjointed in that it makes three separate points without direct attribution:

(a) From 4 – 23 September 2017 six ballistic missiles were fired launched from northern Sana’a to Saudi Arabia. Note that the only link in this respect made to the factory is that the factory is located in northern Sana’a;

(b) The JIAT finds that the coalition forces carried out surveillance in these areas (northern Sana’a) and tracked a convoy of three trucks accompanied by an armed military vehicle until they entered the factory complex. In the statement, there is no information on what was suspected to be in the trucks. It is not clear if the possibility was considered that the trucks were carrying production material for the functioning factory within the complex.<sup>14</sup> It is also not clear as to whether the armed vehicle that is said to have been accompanying the vehicle also entered the factory, a fact that the factory owners contest, or indeed if the armed vehicle is another vehicle that was taking the same path – given that the capital Sana’a is full of these types of armed vehicles. In any event, at the time of the air strikes there were no evidence of the presence of any trucks or military vehicles in the compound; and

(c) The JIAT’s third point is that the factories were targeted because of “the continued use of the complex in the war effort”, without any articulation of what that might be.

3. Previously, the Saudi Arabia-led coalition justified the strikes on the basis that the complex “is now becoming a military manufacturing unit specialized in producing pipes Houthis use to assemble local-made missiles”. In January 2017, the Panel provided evidence to the Committee as to the reasons that it believed that the factory was incapable of specializing in producing pipes to assemble missiles. The Panel continues to welcome verifiable information that demonstrates the military advantage sought to be achieved in these strikes.

4. The Panel declassifies and updates its findings in 2016 to enable an independent assessment to be made in view of the JIAT’s findings.

<sup>12</sup> Press statement by the JIAT on Coalition forces targeted Alsonidar complex in Sana’a. Document with Panel.

<sup>13</sup> The Panel requested, and received, 18 videos, some taken in the immediate aftermath of the two incidents.

<sup>14</sup> The factory employees informed the Panel that regular deliveries of raw materials are made to the factory. They provided the Panel with information, including invoices, supplier information, and shipping details of raw and auxiliary material transportation that was ordered and that entered the factory in September 2016.

## I. Background

5. On 13 September 2016, at around 12:45 hours, military aircraft dropped four items of explosive ordnance on the Alsonidar factory complex in the Ban al-Hareth District of Sana'a.<sup>15</sup> This complex contains the Caprari Water Pump factory, the Alsonidar Steel Pipe factory, and the Alsonidar Red Brick factory. The explosive ordnance impacted on all three factories.<sup>16</sup> There were no civilian casualties. The water pump factory was salvageable after the first strike, but the other two factories were destroyed.

6. At the time of the attack, only the water pump factory was functional. Those producing bricks and steel pipes were not operational.<sup>17</sup> The Panel found no evidence to suggest that there were military personnel or equipment in, or in the vicinity of the strike, immediately before, or during the strike. There was a second strike on 22 September 2016, which is examined in more detail in the case study at appendix C to annex 60.

Figure B.60.1  
**Alsonidar complex (15 May 2015) prior to attack<sup>18</sup>**

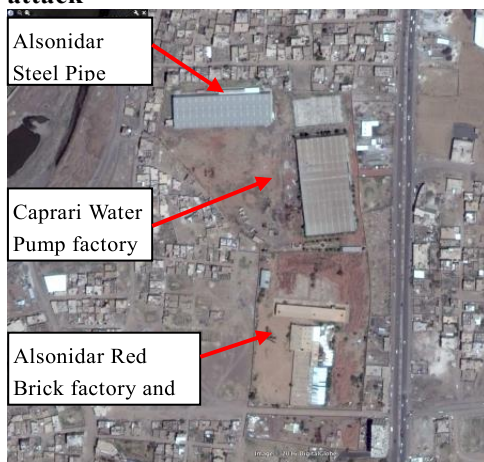


Figure B.60.2  
**Alsonidar complex (3 October 2016) post attack**



Figure B.60.3  
**Steel and Water Pump factories (3 October 2016) post attack**



Figure B.60.4  
**Red Brick factory (3 October 2016) post attack**



<sup>15</sup> 15°27'05.09"N 44°13'36.9"E.

<sup>16</sup> Sources informed that a fourth factory, the Alsonidar Galvanizing Plant, which was being installed inside the pipe factory, was also affected.

<sup>17</sup> The Brick Factory has been non-operational for approximately the last 20 years and the Steel Factory, since 2014.

<sup>18</sup> Source: Google Earth, as are all other aerial images in this appendix.

## II. Technical analysis of physical evidence

7. Panel finds that:

- (a) Technical analysis of imagery of fragmentation recovered from the explosion indicates that one explosive device was fitted with a Paveway IV laser guidance unit for a high Mark 82 explosive (HE) aircraft bomb (figures B.60.5 and B.60.6).

Figure B.60.5  
**Component from a Paveway laser guidance system fin<sup>19</sup>**



Figure B.60.6  
**Paveway IV laser guidance fin<sup>20</sup>**



- (b) At least one of the bombs used to destroy part of the Alsonidar factory complex was a Mark 82 HE aircraft bomb fitted with a Paveway IV GPS/INS and laser guidance unit;
- (c) The crater at figure 2.X.7 is highly indicative of that cause by the detonation of a significant quantity of high explosives on impacting with a concrete floor; and
- (d) The only party to the conflict with the known capability to deliver the Mark 82 HE aircraft bomb with the Paveway IV GPS/INS is the Saudi Arabia led coalition.

Figure 2.X.7  
**Crater from explosion of A/C bomb**

<sup>19</sup> Images in this annex were provided by those working in the factory.

<sup>20</sup> The Commercial and Government Equipment (CAGE) Code displayed on the part means that it was manufactured by EDO MBM Technology Limited, UK. The parent company is the Harris Corporation, <https://www.harris.com>.



### III. Response of the Saudi Arabia led coalition

8. The Saudi Arabia led coalition stated in the media that it targeted the Alsonidar factory complex because it:

"is now becoming a military manufacturing unit specialized in producing pipes Houthis use to assemble local-made missiles...This strike was necessary to protect Saudi border cities and eliminate the use of such missiles in Houthis attacks against the Yemeni national army and Yemeni citizens...The coalition takes its responsibilities under international humanitarian law seriously, and is committed to the protection of civilians in Yemen".<sup>21</sup>

9. The Panel has not yet received a response to a request for information made to the Saudi Arabia-led coalition.<sup>22</sup>

10. In January 2017, the Panel provided evidence to the Committee as to the reasons that it believed that the factory was incapable of specializing in producing pipes to assemble missiles.

### IV. Panel findings on Saudi Arabia-led coalition's justification relating to the air strikes

#### A. Technical observations

11. The Saudi Arabia-led coalition argues that it targeted the Alsonidar complex because it "is now becoming... specialized in producing pipes Houthis use to assemble local-made missiles".<sup>23</sup> The Panel, based on available information,<sup>24</sup> finds this rationale unconvincing as:

(a) The Caprari Water Pump factory had machine tools installed to make relatively short lengths of 3" and 4" flanged pipes. Such pipes would require considerable reverse engineering to remove the flanges to make plain hollow pipes suitable for main missile bodies. The Panel finds that they would be unsuitable for use as main missile bodies due to the piping being too short and the degree of reverse engineering required to remove the flanges;

(b) The Alsonidar Steel Pipe factory was still in the development and commissioning phase and had only produced test samples of 50mm and 75mm diameter steel pipes with a wall thickness

<sup>21</sup> <http://www.reuters.com/article/us-yemen-security-idUSKCN11J27V>.

<sup>22</sup> Letter dated 21 November 2016.

<sup>23</sup> <http://www.reuters.com/article/us-yemen-security-idUSKCN11J27V>.

<sup>24</sup> The Panel had access to video and imagery of the steel pipe factory taken prior to and after the airstrikes, installation manuals, investigators who visited the site after the incident, and other documentation, including letters from the Caprari Company dated 7 October 2016, Addar Fer, Italy dated 7 October 2016 and the Yemen Chamber of Commerce dated 14 September 2016.



of 2.9mm. The Italian contractors left before the factory could become operational, and thus mass production would not be possible. The factory has been effectively closed since late 2014;

(c) The type of steel pipes the factory was designed to produce would not be ideal for use as the main missile bodies<sup>25</sup> of a free flight rocket (FFR), although it would be theoretically possible. The wall thickness would make them heavy for a missile main body (at 1.74 and 2.45 kg/m<sup>2</sup>), requiring a significant amount of propellant to just launch the missiles, let alone give them any credible range;

(d) The factory does not have the machine tools necessary to manufacture the fins that FFR require for stability in flight, although these could be manufactured in a light engineering facility elsewhere and then taken to an assembly and filling facility;

(e) The factory does not have the machine tools necessary to manufacture the specialist nozzles that FFR rockets require to direct the propellant gases to produce thrust, although these could be manufactured in a light engineering facility elsewhere and then taken to an assembly and filling facility;

(f) The Panel has seen no evidence of any explosive manufacturing capability in Yemen to manufacture the double-based tubular propellant normally used in FFR. A single based propellant, such as black powder, could be used to produce a very crude FFR system similar to a large firework;

(g) Improvised FFR would still require fuzes to initiate them on impact. Use of fuzes from the artillery or mortar ammunition currently known to be available to Houthi or Saleh forces would not work as: 1) the calibres of the ammunition are different from the pipes produced in the factory; 2) the forces induced by the firing of artillery or mortar ammunition are different to those induced by a FFR, meaning that many fuze types would not arm; and 3) there would be a degradation in operational capability in taking fuzes from more effective purpose designed ammunition to use on much less effective improvised weapons;

(h) The only evidence seen by the Panel of the use of improvised FFR by the Houthi showed missile main bodies of different diameters to the piping manufactured in these factories;

(i) Saudi Arabia led coalition has not produced any evidence of the use of improvised FFR to the Panel;

(j) The Houthi or Saleh forces probably still have access to sufficient quantities of 107mm Type 63 and 122mm BM-21 GRAD FFR from the old Yemen Army stockpiles for their current operational needs; and

(k) If the Houthi or Saleh forces were producing improvised FFR they would need an assembly and filling facility. Such a facility would be the more natural target as it would contain all of the equipment and materials<sup>26</sup> necessary for the manufacture of improvised FFR.

12. The Panel finds that, even if the factory had been at the production stage, whilst the pipes manufactured at the Alsonidar Steel Pipe factory could theoretically be used as a crude main missile body for an improvised FFR, consideration of all the other factors make such a use extremely unlikely.

## B. Legal observations

<sup>25</sup> A main missile body being effectively a long, very thin pipe made of an appropriate material such as steel or composite materials.

<sup>26</sup> Such materials being: 1) main missile bodies; 2) nozzles; 3) fins; 4) propellant; 5) high explosive for the warhead; and 6) fuzes.

13. There is insufficient evidence to support the Saudi Arabia-led coalition's justification that the factory complex was a military objective because it "is now becoming a military manufacturing unit":

(a) A military objective is limited to those objects which by *their nature, location, purpose or use* make an effective contribution to military action and whose partial or total destruction, capture or neutralization, in the circumstances ruling at the time, offers a definite military advantage.<sup>27</sup> The "purpose" in these criteria relates to a future use, while "use", to its current functions.<sup>28</sup> The Saudi Arabia-led coalition's justification appears to be purpose-based;

(b) The common view is that in using the purpose-based criteria there must be a certain reasonable probability the object may be used for a military purpose<sup>29</sup> and an attack should not be based on mere speculation.<sup>30</sup> It is not possible to base an attack of an otherwise entirely civilian object merely "on the intention to deny its potential use to an adversely."<sup>31</sup> Yet, as demonstrated in the technical analysis above, it is extremely unlikely that the factory, which was not functional, could have been converted into a "military unit" producing the type of weapons that the Saudi Arabia-led coalition alleges; and

(c) The Panel finds it difficult to accept the Saudi Arabia-led coalition's justification on the basis on which this factory complex became a military objective.<sup>32</sup>

## V. Panel conclusions in 2016 on violations of IHL

14. The Panel finds that the use of precision guided weapons and repeated strikes, both on 13 and 22 September 2016, suggests that the factory complex was the intended target of these air strikes. This is further supported by the statement of the Saudi Arabia-led coalition.

15. There is insufficient evidence to demonstrate that the factory complex was a legitimate military objective, as elaborated above.

16. Thus, the Panel is unconvinced that the Saudi Arabia-led coalition complied with IHL principles relating to distinction.<sup>33</sup> It is also not convinced that it respected principles relating to distinction when it targeted the factory complex as a single military unit - there is no demonstrable evidence to suggest the Water Pump and Red Brick factories could manufacture the pipes specified.<sup>34</sup>

17. The Panel further finds that any reasonable intelligence review undertaken by the Saudi Arabia led coalition, prior to the air strike, should have taken into consideration that: 1) two of the three factories were not functional at the time of the air strike; 2) that two of these factories lacked the technical capacity

<sup>27</sup> CIHLR 8.

<sup>28</sup> Commentary to Article 52 of Protocol Additional to the Geneva Conventions of 12 August 1949 and relating to the Protection of Victims of International Armed Conflicts (Protocol I) of 08 June 1977 at <https://ihl-databases.icrc.org/applic/ihl/ihl.nsf/1a13044f3bbb5b8ec12563fb0066f226/5f27276ce1bbb79dc12563cd00434969>.

<sup>29</sup> Report on the Expert Meeting "Targeting Military Objectives", University Centre for International Humanitarian Law, Geneva (2005) p. 7 - 8.

<sup>30</sup> Yoram Dinstein, "The Conduct of Hostilities under the Law of International Armed Conflict" (2010), Cambridge University Press, p. 100.

<sup>31</sup> William Boothby, "Law of Targeting", (2012), Oxford University Press, pp. 103-105.

<sup>32</sup> The Panel reiterates that in situations where more than one inference may be drawn from military intelligence, purpose should be "predicated on intentions known to guide the adversary, and not those figured hypothetically in contingency plans based on a worst case scenario." Yoram Dinstein, "The Conduct of Hostilities under the Law of International Armed Conflict", p. 100.

<sup>33</sup> CIHLR 7. The Panel reiterates that while the pipes that the Alsonidar Steel Pipe factory is designed to produce, could theoretically be used as main missile bodies, this is highly unlikely considering the technical and tactical factors set out above. The Alsonidar Steel Pipe factory has not been operational since 2014.

<sup>34</sup> The red brick factory was not operational since 1995.

to manufacture the specific pipes; 3) that the only factory with the technical capacity, the Alsonidar steel factory, was not functional since 2014; and 4) even if it were to become functional, it would have been highly unlikely to produce the type of pipes specified (see technical analysis).<sup>35</sup>

18. Even if the steel factory had become a legitimate military objective for reasons unknown to, or shared with, the Panel, the Panel is unconvinced that the Saudi Arabia-led coalition complied with the relevant IHL principles relating to proportionality. Two of the factories that were also subjected to air strikes had no technical capacity to produce or contribute to the production of the types of weapons specified.

19. The Panel finds that the Saudi Arabia-led coalition took some measures to minimize civilian casualties by undertaking the air strike in early morning hours when the water pumps factory was not operational. There were no reported civilian casualties.

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<sup>35</sup> IHL requires that in case of doubt whether a civilian object is a military objective, a careful assessment has to be made as to whether there are sufficient indications to warrant an air strike. CIHLR 10.

## Appendix C to Annex 60: Alsonidar Factory complex, Ban al-Hareth District, Sana (22 September 2016)

### I. Background

1. On 22 September 2016, at around 01:00 hours, a military aircraft dropped explosive ordnance on the Alsonidar factory complex in Ban al-Hareth District, Sana.<sup>36</sup> The air strikes completely destroyed the Caprari Water Pump factory, the Alsonidar Steel Pipe factory, and the Alsonidar Red Brick factory.<sup>37</sup> There were no civilian injuries or deaths. Air strikes first targeted the complex on 13 September 2016.
2. At the time of the attack, none of the factories were functional partly due to the first air strike.

Figure C.60.1  
Alsonidar complex (15 May 2015) prior to attack<sup>38</sup>



Figure C.60.2  
Alsonidar complex (3 October 2016) post attack



Figure C.60.3  
Steel and Water Pumps Factories (3 October 2016) post attack



Figure C.60.4  
Red Brick factory (3 October 2016) post attack



<sup>36</sup> 15°27'05.09"N 44°13'36.9"E.

<sup>37</sup> Sources informed the Panel that a fourth factory - Alsonidar Galvanizing Plant, which was being installed inside the pipe factory, was also affected.

<sup>38</sup> Source: Google Earth, as are all other aerial images in this appendix.

## II. Technical analysis of physical evidence

4. The Panel finds that:

- (a) Technical analysis of imagery of fragmentation recovered from the explosion indicates that one explosive device was certainly fitted with a Paveway IV laser guidance unit for a high Mark 82 explosive (HE) aircraft bomb (figures C.60.5 and C.60.6);

Figure C.60.5

**Component from a Paveway laser guidance system wing**



Figure C.60.6

**Paveway IV laser guidance fin<sup>39</sup>**



- (b) At least one of the bombs used to destroy the Alsonidar factory complex was a Mark 82 HE aircraft bomb fitted with a Paveway IV GPS/INS and laser guidance unit;

(c) The entry points (holes) into the factories<sup>40</sup> were initially caused by the kinetic energy from aircraft bombs, which have hardened weapons grade steel cases. The aircraft bombs easily penetrated the thin-skinned roofs before detonating on the concrete floor of the factories; and

(d) The only party to the conflict with the known capability to deliver the Mark 82 HE aircraft bomb with the Paveway IV GPS/INS is the Saudi Arabia-led coalition.

## III. Response of the Saudi Arabia-led coalition

5. The Saudi Arabia-led coalition made no public statements on the second set of airstrikes. It made a statement on 19 September 2016 after the first air strikes on the factory claiming responsibility for the strikes (see Annex 1). The JIAT also referred to this air strike in its statement above mentioned.

6. The Panel has not yet received a response to a request for information made to the Saudi Arabia-led coalition.<sup>41</sup>

## IV. Analysis of violations of IHL

7. The Panel finds that the use of precision guided weapons and repeated strikes, both on 13 and 22 September 2016, suggests that the factory complex was the intended target of these air strikes. This is further supported by the statement of the Saudi Arabia-led coalition on 19 September 2016 (see appendix

<sup>39</sup> The Commercial and Government Equipment (CAGE) Code displayed on the part means that it was manufactured by EDO MBM Technology Ltd, UK. The parent company is the Harris Corporation, <https://www.harris.com>.

<sup>40</sup> See imagery at Appendix B.

<sup>41</sup> Letter dated 21 November 2016.

B to annex 60).

8. There is insufficient evidence to demonstrate that the factory complex had become a legitimate military objective or that the Saudi Arabia-led coalition complied with IHL principles relating to distinction for the reasons specified in appendix B to annex 60.

10. The Panel further finds that any intelligence review undertaken by the Saudi Arabia-led coalition, prior to the air strike, should have taken into consideration that: 1) the facts mentioned in appendix B to annex 50; and 2) that the only factory that was not destroyed beyond immediate repair by the airstrikes was the water pump factory, which did not have the technical capacity to produce the types of pipes specified. It is reasonable to expect that intelligence gathered prior to the strike would have covered these aspects.<sup>42</sup>

11. Even if the steel factory had become a legitimate military objective for reasons unknown to the Panel, the Panel is unconvinced that the Saudi Arabia-led coalition complied with the relevant IHL principles relating to proportionality. It was the water pump factory that was destroyed beyond immediate repair during this second strike.

15. The Panel finds that the Saudi Arabia-led coalition took some measures to minimize civilian casualties by undertaking the air strike in early morning hours when the water pumps factory was not operational. There were no reported civilian casualties.

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<sup>42</sup> IHL requires that in case of doubt whether a civilian object is a military objective, a careful assessment has to be made as to whether there are sufficient indications to warrant an air strike. CIHLR 10.

## Appendix D to Annex 60: Residential complex, Mafrak Jiblah, Ibb (24 September 2016)

1. The JIAT concluded that the Saudi Arabia-led coalition did not target the residential complex on 24 September 2016.<sup>43</sup>
2. The Panel finds that technical analysis of evidence demonstrates beyond a reasonable doubt that the residential complex was targeted using a Mark 82 high explosive aircraft bomb fitted with a Paveway laser guidance system. The only party to the conflict with the known capability to deliver precision guided HE aircraft bombs is the Saudi Arabia-led coalition.

### I. Background

3. At approximately 22:00 hours on 24 September 2016, explosive ordnance dropped from a military aircraft detonated on the top floor of a three-story residential apartment complex in the Mafrak Jiblah area, Ibb.<sup>44</sup> The residents of the complex consisted of nine families.<sup>45</sup> The explosion killed nine occupants, which included seven women and children, and injured, at least, seven others, mostly women and children.<sup>46</sup> The complex was located within a heavily congested residential area.<sup>47</sup> Thus, the air strike partially destroyed this complex and seriously damaged several adjacent residential buildings.<sup>48</sup> It also destroyed several civilian vehicles.<sup>49</sup>
4. At the time of the air strikes, there was an armed “locality defence team” composed of civilians in the area.<sup>50</sup> This team usually assembles following air strikes to prevent opportunistic looting and vandalism.<sup>51</sup> Some witnesses stated that the intended target of the air strikes may have been a civilian technical training centre located 46m from the residential complex.<sup>52</sup>

<sup>43</sup> Press release with Panel.

<sup>44</sup> 13°56'42.47"N, 44°10'34.59"E

<sup>45</sup> The heads of households of the nine families consisted of 1 teacher, 1 veterinarian, 1 doctor, 1 medical assistant, 1 manager of the building, 1 widow, 1 administrative officer, 1 nurse and 1 woman whose husband was abroad.

<sup>46</sup> The Panel found it difficult to verify the number of injured persons as: 1) families in the building had scattered following the air strikes; and 2) it was not possible to obtain comprehensive numbers of those injured in other buildings. Death certificates with Panel.

<sup>47</sup> Imagery available with Panel.

<sup>48</sup> Ibid.

<sup>49</sup> Ibid.

<sup>50</sup> Civilians are protected from direct attack unless and for such time as they take a direct part in hostilities. Article 13 of AP I.

<sup>51</sup> There were reports of some air strikes in the area preceding the attack on the Ibb house.

<sup>52</sup> Some stated that they felt that the training centre was a target because they knew that the Saudi Arabia led coalition targeted these institutions. Others stated that they felt it would be targeted because it was guarded by armed men. A majority denied that the institute was used in any way to contribute to military action. The website of the technical institute is <http://t.oasyemen.net/portal/index.php>.

Figure D.60.1  
Relative locations of apartment complex and training centre <sup>53</sup>



## II. Technical analysis of physical evidence

5. Technical analysis of imagery of fragmentation recovered from the explosion at the civilian house finds that:

- (a) The explosive device was almost certainly fitted with a Paveway laser guidance unit. Such units are usually designed to be paired with Mark 82 high explosive aircraft bombs (figures D.60.2 and D.60.3);

<sup>53</sup> Google Earth. (12 July 2016).



Figure D.60.2  
**Post-explosion guidance wing from a Paveway laser guidance system**



Figure D.60.3  
**Post-explosion adapter flange from a Paveway laser guidance system**



(b) The damage to civilian apartment complex was highly indicative of that caused by the detonation of a large quantity of high explosive. There was clear evidence of the destruction of structural components of the building that equate to the damage to be expected from the shock and blast waves of an explosion (figures D.60.4 and D.60.5);

Figure D.60.4  
**Civilian apartment complex post blast**



Figure D.60.5  
**Civilian apartment complex post blast**



(c) The civilian apartment complex was almost certainly destroyed by a Mark 82 high explosive aircraft bomb fitted with a Paveway laser guidance system; and

(d) The only military entity operating the type of aircraft in the area that has the capability to deliver high explosive ordnance of this type is the Saudi Arabia-led coalition.

### III. Response of the Saudi Arabia led coalition and findings of the JIAT

6. The Panel has not yet received a response to a request for information made to the Saudi Arabia led coalition.<sup>54</sup>

7. The JIAT stated in November 2017 that the Saudi Arabia-led coalition did not target this residential complex. It stated:

“on 24 September 2016 Coalition forces targeted a building at bin Laden resort in Ibb governorate which was used as a military headquarters by the Armed Houthi Militia, which represents a legitimate military target, the target is located at a distance of 1070 meters from the claimed residential building. *JIAT concludes that the Coalition did not target the residential building*” (emphasis added).<sup>55</sup>

### IV. Analysis of violations of IHL<sup>56</sup>

8. The Panel finds that the Saudi Arabia-led coalition was responsible for this air strike (paragraph 4) and that the use of precision-guided weapons demonstrates that the residential complex was the intended target of these air strikes. In 2016, the Panel found that there was no evidence to support a finding that the complex had become a legitimate military objective.

9. The Panel concluded that the residential complex was a *prima facie* civilian object, immune from direct attack and that the occupants had not lost their civilian protection.<sup>57</sup> Therefore, unless the Saudi Arabia-led coalition provides information to the contrary, evidence strongly demonstrates that the Saudi Arabia-led coalition violated principles of IHL, including those relating to distinction, proportionality and precautions in attack.

10. The Panel will continue to welcome a clarification from the Saudi Arabia-led coalition.

<sup>54</sup> Letter dated 21 November 2016.

<sup>55</sup> Press statement by the JIAT, Coalition forces claim to bomb residential building in Ibb governorate (document with Panel).

<sup>56</sup> In the absence of a response from the Saudi Arabia led coalition, the Panel analyzed the applicable IHL law in relation to this incident on the basis of its own independent investigations including: 1) witness testimonies; 2) technical analysis of weapon fragments; 3) satellite imagery; 4) examination of investigation reports of international and non-international organizations; 5) examination of medical reports; and 6) open source imagery and documentation. For open sources see “Raids kill nine in central Yemen - medical official, residents” <http://www.reuters.com/article/us-yemen-security-idUSKCN11V04U>, “Arab coalition airstrikes kill 10 civilians in Yemen's Ibb city” [http://news.xinhuanet.com/english/2016-09/25/c\\_135712446.htm](http://news.xinhuanet.com/english/2016-09/25/c_135712446.htm), “Gulf of Aden Security Review - September 26, 2016” <http://www.criticalthreats.org/gulf-aden-security-review/gulf-aden-security-review-september-26-2016>, “Yemen – Conflict (Health Cluster, media) (ECHO Daily Flash of 26 September 2016)”, <http://reliefweb.int/report/yemen/yemen-conflict-health-cluster-media-echo-daily-flash-26-september-2016>.

<sup>57</sup> IHL requires that the civilian population, as well as individual civilians, shall not be the object of attack. Article 13(2) of AP II. and CIHLR 1.

## Appendix E to Annex 60: Civilian house, T'baisha', Jebel Habshi, Ta'izz (25 March 2016)

### I. Background to events

1. At approximately 07:00 hours on 25 March 2016, explosive ordnance dropped from a military aircraft detonated on a civilian two story house in the village of T'baisha', Ta'izz.<sup>58</sup> The blast and fragmentation from the explosion killed all ten occupants of the house, which included three women and five children from the same family. The closest military location was a Houthi base located on a mountain, which was a significant distance from the village. There was no reported presence of armed fighters near the house.

Figure E.60.1  
Remote location of house<sup>59</sup>



Figure E.60.2  
Post blast damage



### II. Technical analysis of physical evidence

4. The Panel finds that post blast analysis of imagery of the explosion is highly indicative of damage consistent with the detonation of a high explosive aircraft bomb (figure E.60.2). This is corroborated by eye-witness statements that report the presence of a military aircraft preceding the explosion and a document issued by the ministry of justice stating the same;<sup>60</sup>

5. The steel strengthening bars within the concrete have been sheared, due to the power of the shock wave close to an explosion, whereas further away from the point of explosion the steel strengthening bars have been deformed due to the power of the blast wave. Such damage mechanisms are highly indicative of that typically caused by the detonation of high explosives; a gas explosion, for example, would not have the power to shear steel strengthening bars; and

6. The only military entity operating the type of aircraft in the area that has the capability to deliver high explosive ordnance of this type is the Saudi-led coalition.

7. The house was highly likely to be the intended target of the air strike. The Panel is not convinced that the Saudi Arabia led coalition directed its air strike against a legitimate military target. Yet, even if it had, the Panel is not convinced that the forces respected IHL principles relating to proportionality and precautions in attack.

<sup>58</sup> 13°33'56.2"N, 43°54'03.4"E.

<sup>59</sup> Google Earth.

<sup>60</sup> Document with Panel.

## Appendix F to Annex 60: Radfan Mineral Water-Bottling Factory, al-Mahala, Lahj (25 May 2016)

### I. Background to events

1. At around 04:00 hours, on 25 May 2016 military aircraft dropped multiple items of explosive ordnance on a water bottling plant in al-Mahala, Lahj.<sup>61</sup> There were no civilian fatalities reported.<sup>62</sup> The factory employed over 300 people at the time of the air strikes.<sup>63</sup>
2. The Panel found no evidence to suggest that there were fighters or their equipment in or in the vicinity of the factory preceding or at the time of the air strikes. The closest military installation is a base under the control of the Hadi-led government of Yemen, which is located 15.3 km northwest of the factory. In the two weeks preceding the air strike, soldiers from this base had twice entered the water bottling plant.<sup>64</sup>

Figure F.60.1  
Radfan Factory (27 October 2013) prior to attack<sup>65</sup>



Figure 6.X.2  
Radfan Factory (8 June 2016) post attack<sup>66</sup>



<sup>61</sup> 13°05'09.07"N, 44°51'54.83"E.

<sup>62</sup> At the time of the attacks, there were approximately ten civilians guarding the factory.

<sup>63</sup> Owner of the factory. See also <http://reliefweb.int/report/yemen/bombing-businesses-saudi-coalition-airstrikes-yemen-s-civilian-economic-structures-enar>.

<sup>64</sup> The Yemen armed forces conducted search operations and forcefully removed and relocated several factory on the basis that they were “Northerners”. See S/2017/81 para 153 for reference to this forced removal.

<sup>65</sup> Source: Google Earth.

<sup>66</sup> Ibid.

Figure F.60.3  
Al Anad Air Force Base<sup>67</sup>



Figure 6.X.4  
Air Force Base relational to Factory



## II. Technical analysis of physical evidence

3. Technical analysis of imagery of fragmentation recovered from the explosions at the factory (figures F.60.5 and F.60.6) demonstrates that the explosive device was almost certainly fitted with a Paveway<sup>68</sup> laser guidance unit.<sup>69</sup> Such units are designed to be paired with Mark 82 high explosive (HE) aircraft bombs;

Figure F.60.5  
Guidance fin and component  
from a Paveway laser guidance  
system



Figure F.60.6  
Paveway laser guidance fin



4. The water bottling plant was almost certainly destroyed by a Mark 82 HE aircraft bomb fitted with a Paveway laser guidance system, resulting in extensive damage; and

5. The only party to the conflict with the known capability to deliver the Mark 82 HE aircraft bomb with the GBU-12 PAVEWAY II guidance unit is the Saudi Arabia-led coalition.

<sup>67</sup> 13°10'53.13" N 44°45'46.42" E.

<sup>68</sup> It was not possible to determine from just the fin whether it was a GBU-12 Paveway II (US manufactured) or Paveway IV (UK manufactured) laser guidance unit.

<sup>69</sup> The Enhanced GBU-12 (EGBU-12) has a dual mode laser guided and GPS inertial navigation system. The Panel cannot determine if this was fitted to this bomb from the available evidence.

6. The Panel finds that the factory that was the intended target of the air strikes. The Panel is not convinced that IHL principles relating to distinction and proportionality were met. The Yemen Armed Forces had entered and searched the factory on two occasions within the two weeks that preceded the air strikes, and had not, according to witnesses, made any claim or confiscated any material or arrested any person that could have demonstrated that the factory or its workers were making an effective contribution to military action.<sup>70</sup>

7. The Panel finds that the Saudi Arabia-led coalition took certain precautions measures to successfully avoid civilian fatalities, in that it conducted its air strikes at night when the factory was not operational. It is also relevant that the first air strikes did not impact on the sleeping quarters of the workers, thus enabling them to seek protection from the effects of the strikes.

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<sup>70</sup> Panel interviews with four persons who interacted with the Yemen Armed Forces.

**CONFIDENTIAL ANNEX NOT FOR PUBLIC DISSEMINATION**

**Annex 61: Case studies and other information on UAE detentions**

## Annex 62: IHL and HR violations relating to detentions by UAE military forces

### I. Terminology

1. In this annex, the terms “arrest”, “detention”, and “detainee” are used to describe the act of depriving an individual of his liberty, the consequential deprivation of liberty, and those subjected to the deprivation of liberty, respectively, without prejudice to the lawfulness of those acts and irrespective of whether detainees are subjected to internment<sup>1</sup> or criminal detention.<sup>2</sup> The Panel received information from former and current detainees, but because of veritable threats against detainees and their families, the Panel will refrain from providing more information on their current situation. The Panel defines the terms arbitrary arrest and detention,<sup>3</sup> torture,<sup>4</sup> enforced disappearance,<sup>5</sup> and sexual violence<sup>6</sup> in accordance with international law and jurisprudence.

2. In this annex, unless otherwise stated, the term Yemeni forces refers only to the Security Belt in Aden, Hadrami Elite Force, and the Shabwani Elite Force.

### II. Legal justification for UAE involvement

3. The primary legal justification for the UAE’s involvement in the armed conflict in Yemen is based on the invitation issued by the legitimate Government of Yemen.<sup>7</sup> The UAE’s obligations are analyzed herein under both IHL and IHRL regimes, as both are binding on the UAE in respect of its obligations in Yemen.<sup>8</sup> Under IHL and/or IHRL and norms, the following are prohibited at all times: arbitrary arrest and deprivation of liberty of individuals,

<sup>1</sup> The term ‘internment’ refers to detention for security reasons in situations of armed conflict, i.e. the non-criminal detention of a person based on the serious threat that his or her activity poses to the security of the detaining authority in relation to an armed conflict. See [Commentary to Common Article 3](#).

<sup>2</sup> Detention related to a criminal process. The Panel is only investigating those detentions linked to the conflict in Yemen and where IHL and/or IHRL violations can be established.

<sup>3</sup> The Panel considers an arrest, and consequent detention to be arbitrary when, inter alia; 1) it is clearly impossible to invoke any legal basis justifying the deprivation of liberty; and 2) when the total or partial non-observance of the international norms relating to the right to a fair trial is of such gravity as to give the deprivation of liberty an arbitrary character. See Working Group on Arbitrary Detention, Report, [A/HRC/16/47](#) of 19 January 2011, paragraph 8.

<sup>4</sup> Article 1 of the [Convention against Torture and Other Cruel Inhuman or Degrading Treatment or Punishment](#) (CAT).

<sup>5</sup> The Panel considers that enforced disappearances occur when; 1) persons are arrested, detained or abducted against their will or otherwise deprived of their liberty; 2) followed by a refusal to disclose the fate or whereabouts of the persons concerned; or 3) a refusal to acknowledge the deprivation of their liberty; and 4) which places such persons outside the protection of the law. See the Declaration on the Protection of All Persons from Enforced Disappearance ([A/Res/47/133](#)).

<sup>6</sup> Sexual violence includes any act of a sexual nature, which is committed on a person under circumstances which are coercive. See International Criminal Tribunal for Rwanda, *Prosecutor v. Jean-Paul Akayesu*, Case No. ICTR-96-4, Judgment (Trial Chamber), 2 September 1998, para. 688, (3).

<sup>7</sup> [S/2015/217](#).

<sup>8</sup> The UAE is a party to the [Geneva Conventions of 1949](#) (10 May 1972) and the [Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of Non-International Armed Conflicts](#) (Protocol II), 8 June 1977 (Additional Protocol II) (09 March 1983). The UAE has not ratified the [International Covenant on Civil and Political Rights](#) (ICCPR), but is a party to, inter alia, CAT (19 July 2012) and the [Convention on the Rights of the Child](#) (CRC) (03 January 1997). The UAE is bound by provisions of the ICCPR, in so far as it reflects existing customary international law, and the [Universal Declaration of Human Rights](#). The UAE military forces are bound by the State’s human rights obligations in times of armed conflict and “in respect of acts done by a State in the exercise of its jurisdiction outside its own territory”. See *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion*, I.C.J. Reports 2004, pp. 178-181, paras. 106 – 113 and *Case Concerning Armed Activities on the Territory of the Congo (Democratic Republic of Congo v. Uganda)*, Judgment of 19 December 2005, para. 216.



non-adherence to certain due process rights, violence to life and person, torture and ill treatment, sexual violence, outrages upon personal dignity, and threats to commit the above acts, and enforced disappearances.<sup>9</sup> The following paragraphs outline the Panel's main findings and conclusions, based on its independent investigations.

### III. UAE detention sites in Yemen

4. The UAE denies maintaining detention facilities in Yemen.<sup>10</sup> It informed the Panel that all detainees are kept in "facilities and prisons under the authority of the legitimate Government".<sup>11</sup> In 2016 and 2017, the Panel investigated violations relating to eighteen detainees held in detention facilities administered and supervised exclusively by the UAE (see table 62.1).

Table 62.1  
Summary of UAE detentions investigated (2016 - 2017)

<i>Serial</i>	<i>Date</i>	<i>Bureiqa UAE base</i>	<i>al-Rayyan UAE base</i>	<i>Shabwah Belhaf port</i>
1	Number of detentions investigated 2016 <sup>12</sup>	0	6	0
2	Number of detentions investigated 2017	7	3	1

5. The persons documented in the above sites fell within the exclusive jurisdiction of the UAE military forces, while at the detention site.<sup>13</sup> Yemeni official sources informed the Panel that the Government of Yemen does not have any authority over them once they are under UAE custody.<sup>14</sup>

<sup>9</sup> The relevant provisions can be found, inter alia, in Geneva Conventions Common Article 3 and Additional Protocol II articles 4 and 5 and the CAT. See also ICRC Customary IHL rules, inter alia, rules 90, 93, 98, 99, 100, 105, 117, 118, 123, 125 and 126 for an elaboration of relevant IHL principles. See also Chatham House and ICRC, Expert meeting on procedural safeguards for security detention in non-international armed conflict, December 2009.

<sup>10</sup> Previously UAE held that "... the UAE, as a part of the Arab Coalition (sic), does not administer or supervise any prisons in Yemen... This is within the jurisdiction of the Yemeni legitimate authorities. The Coalition forces provide training to Yemeni cadres in accordance with the best legal practices...". <https://www.thenational.ae/world/foreign-ministry-denies-existence-of-uae-run-secret-prisons-in-yemen-1.92640>, 23 June 2017.

<sup>11</sup> UAE letter to Panel 2017/578 of 8 November 2017.

<sup>12</sup> Paras. 133 and 134, S/2016/81.

<sup>13</sup> Three detainees witnessed/ or was informed by UAE officials of a "western presence" in Bureiqa. United States troops are reported to be present in al-Rayyan detention site. See <https://www.apnews.com/4925f7f0fa654853bd6f2f57174179fe>. The Panel requested confirmation from the United States on presence of its forces in al-Rayyan; their involvement in UAE-related detentions; and knowledge of detention-related abuses. The United States informed the Panel that it was "unable to share additional information with the Panel at this time." Email dated 13 December 2017.

<sup>14</sup> In addition to confidential Panel sources, the following documents also refer to UAE detentions; 1) letter dated 31/07/ 2017 sent to HRW by the 2nd Military Regional Command, which states that "Some of the assertions (on abuses associated with detentions) are biased, intended to slander Coalition forces and especially the United Arab Emirates. Everyone knows the honorable role played by this country... as well as the ethical treatment of prisoners where much is done to facilitate communication with their families", (emphasis added); 2) a previous iteration of the above letter, signed by Brigadier General Farag Salemeen al-Bahsani, Commander of the 2<sup>nd</sup> Military Regional Command. This letter states that allegations on abuses in detention were made to tarnish the reputation of the UAE, but that al-Bahsani "confirm(s) that they (UAE) have dealt with detainees in a civil and humane manner" including by facilitating communications between the detainees and their families and by allowing one detainee to visit his mother's funeral; and 3) Report of group of human rights activists in Hadramawt who visited "secret detention facilities" in July 2017 concluded that "They (sic) are around 175 detained at al-Rayyan that are being held for

6. The Panel identified the location of the detention facility inside the Bureiqa UAE base, based on drawings and descriptions provided by six detainees (annex 61). Satellite imagery shows, what is now being identified as, solitary cells being built in 12 April 2016. The Bureiqa base was under the exclusive control of UAE forces in April 2016 and thus, they alone were responsible for the construction of this site. Imagery on 7 November 2017 shows a further expansion of the base (annex 61). The location of the UAE detention facility in al-Rayyan was identified by AP.<sup>15</sup>

#### IV. Joint arrest activities between UAE and Yemeni forces

7. The UAE informed the Panel that all arrests are undertaken exclusively by Yemen security forces, and that the UAE does not arrest any civilians.<sup>16</sup> The Panel has documented three incidents where UAE and Yemeni forces conducted joint arrest operations. In two operations in Shabwah and Mukalla, UAE air assets were deployed during the arrest operation and in the other, in Mukalla, UAE forces acted as observers. These detainees were then directly transferred to UAE custody.

8. The Panel finds that while the UAE has engaged in joint arrest operations with Yemeni forces that resulted in the UAE taking individuals into its custody, in most cases investigated by the Panel, the UAE military forces received detainees whom the Yemeni Forces had arrested.

#### V. Transfer of detainees between UAE and Yemeni forces

9. In the incidents investigated, the Hadrami Elite Forces, the Director of General Security of Aden, the Security Belt in Aden, and Shabwani Elite Forces transferred detainees, whom they had arrested, to UAE custody (for individuals responsible for these forces see annex 65). Eye-witnesses informed the Panel that UAE forces also removed detainees out of Yemeni custody from Bir Ahmed I. Other transfers documented include three detainees transferred from the UAE site in Bureiqa to Bir Ahmed I. An identified UAE official also transferred detainees from Bir Ahmed I to Bir Ahmed II on 12 November 2017 (figure 62.2).

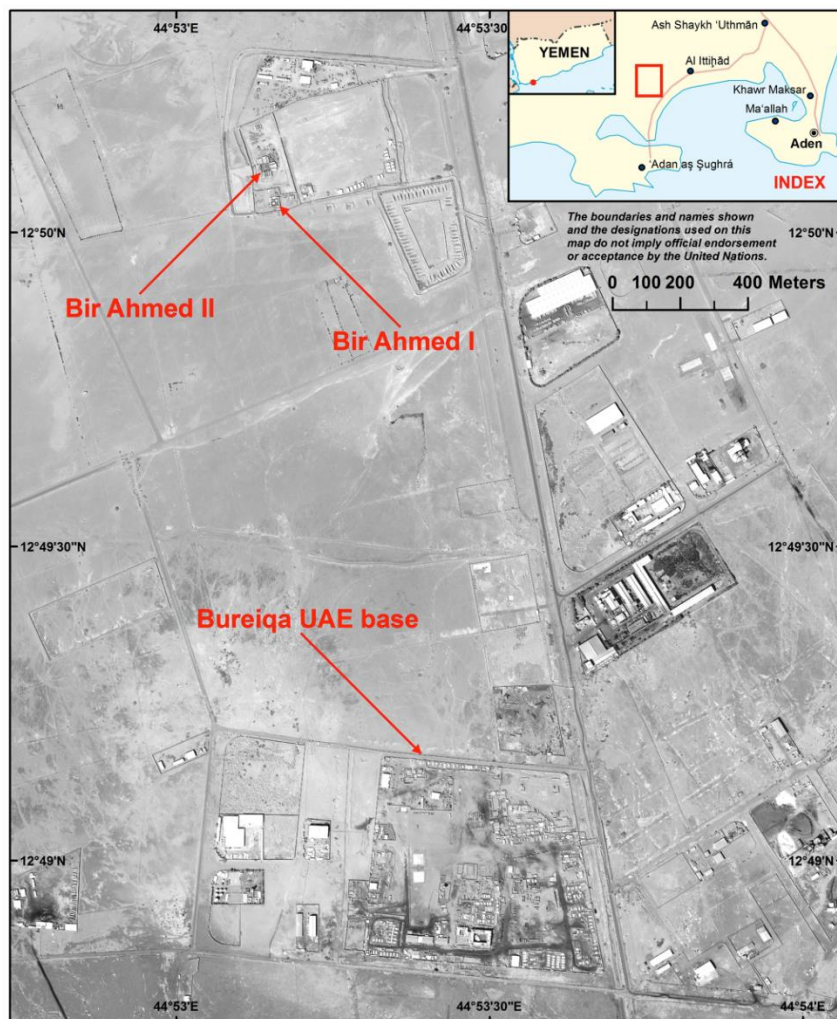
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terrorism charges. The area that they are being held in (al-Rayyan) it is an old location that is not in the possession of the government (unofficial Panel translation).” Open sources include <https://www.hrw.org/news/2017/06/22/yemen-uae-backs-abusive-local-forces> (HRW), <https://www.apnews.com/4925f7f0fa654853bd6f2f57174179fe> (AP), and <http://www.echr.org.uk/news/details-secret-prisons-yemen-under-supervision-uae> (SAM Organization for Rights and Liberties).

<sup>15</sup> <https://www.apnews.com/4925f7f0fa654853bd6f2f57174179fe>. At 14°40'9.92"N 49°22'28.49"E. The UAE informed the Panel that “*Riyan (sic) Airport is used (by the UAE) in providing the local authorities in Hadramaut (sic) with the necessary support to control the security situation ...in coordination with ...the governor*”. UAE letter to Panel 2017/578 of 8 November 2017.

<sup>16</sup> UAE letter to Panel 2017/578 of 8 November 2017.

Figure 62.1  
Relative locations of Bir Ahmed site I and II and the UAE Bureiqa site<sup>17</sup>



10. The lack of transparency for these transfers, combined with official denials of the presence of individual detainees and/or detention sites at certain locations, create an environment conducive for enforced disappearances. For example, families said that they were aware of detainees being present in some sites, for example, al-Rayyan UAE base or Bureiqa UAE base, based on information received from former detainees or Yemeni officials who were involved in the transfers, but the UAE had not, to date, provided identification information on detainees held in these detention sites to families.<sup>18</sup> The Panel also met with fourteen families who were informed that their disappeared relatives were in UAE administered or controlled prisons.<sup>19</sup>

11. The Panel finds that is no evidence that the UAE and/or Yemeni forces are taking the appropriate

<sup>17</sup> Image: Panel of Experts. Bir Ahmed I was described by detainees, while Bir Ahmed II was located using satellite imagery, based on descriptions provided by detainees and open source images.

<sup>18</sup> Interviews with multiple family members who directly engaged with the Saudi Arabia-led coalition forces in Aden and Mukalla on seeking information on the fate of their loved ones. Initially, these forces were cooperative with families (for example, in Mukalla, in December 2016, coalition forces requested families to provide detainee lists), but later, they refused to engage, according to these families.

<sup>19</sup> Information provided to the families by other former detainees or security personnel. One detainee was witnessed by a relative entering the Bureiqa UAE base, his whereabouts are since unknown.

precautions required under international law, when engaging in the transfer of control of detainees into each other's authority and custody to prevent detention related abuses, including enforced disappearances.<sup>20</sup> For example, the Panel has identified torture and ill treatment of the same detainees by both the UAE and Yemen forces (see annex 61).

## VI. UAE military forces' control and influence over Yemeni forces

12. The Governments of Yemen and the UAE state that the Security Belt, Aden, and the Elite Forces are under the exclusive authority of the Government of Yemen.<sup>21</sup>

13. This is denied by official Yemeni sources, who informed the Panel that the Government of Yemen does not have complete operational control over these forces and their leadership. These forces carry out operations independently of the Government, and are, sometimes, tasked by the UAE forces themselves.<sup>22</sup> The Panel was also informed by official Yemeni sources that:

- (a) Salaries of the Security Belt, for example, are paid directly by the UAE to the Security Belt forces, and the salary paid exceeds significantly from what is paid to regular forces operating under the Government of Yemen (see annex 65);
- (b) Government of Yemen does not have information on all names and other details of detainees arrested by the above Yemeni forces, and handed to UAE custody; and<sup>23</sup>
- (c) There have been clashes between some of these Yemeni forces, and those under the control of the legitimate government demonstrating the Government of Yemen's inability to exert full operational control over them.<sup>24</sup>

14. The Panel has identified the Elite Forces and Security Belt as proxy forces of the Saudi Arabia-led coalition.

15. Despite the level of control exercised by the UAE over the Security Belt and Elite Forces, there is no demonstrable evidence that the UAE has acted to prevent violations by the Yemeni forces. For example, the Panel investigated a case where a detainee was physically abused by the Security Belt, immediately prior to the transfer of that detainee to the UAE, and finds it is unlikely that the UAE military forces assuming custody would have failed to notice the abuse. Given, however, that the UAE military forces then physically abused the same detainee, the Panel can only conclude that there is collusion between the forces on measures adopted to collect information from detainees. This pattern of detainee abuse by multiple authorities was also observed with other detainees transferred to the UAE from the custody of the Director of General Security, Aden (see annex 61).

16. The fact that the UAE military forces themselves engage in violations with impunity (see paragraph 19) creates an environment conducive to violations. It then enables the Yemeni forces operating with the UAE, also to engage in the same violations with enhanced impunity. See appendix A for levels of influence exerted by the Saudi

<sup>20</sup> See paras. 708 and 714 of the [Commentary to Common Article 3](#) on obligations relating to *non-refoulement* when detainees are transferred to the custody of one State by another State. There is clearly an information exchange between the Yemeni forces and the UAE officials interrogating the detainees as demonstrated by the questions asked by detainees by both entities.

<sup>21</sup> Panel meeting with Ministry of Interior, Aden, 2 October 2017. UAE letter to Panel 2017/578 of 8 November 2017. [S/2017/81](#), para 134. Both the UAE and the Government of Yemen's official positions are that the UAE provides, inter alia, training and other logistical support to these forces. <http://arabfhr.org/2017/06/27/yemeni-human-rights-minister-denies-secret-prisons-in-aden-southern-yemen/?lang=en>.

<sup>22</sup> Yemeni official sources, including those dealing with security.

<sup>23</sup> Ibid. Thus far, the Government of Yemen has not responded to any Panel requests for information on UAE detentions.

<sup>24</sup> See UAE-backed fighters take Aden airport from Hadi forces, *Middle East Eye*, May 31, 2017 at <http://www.middleeasteye.net/news/uae-backed-fighters-yemen-take-over-aden-airport-ally-hadi-report-1568338746>

Arabia-led coalition on Yemeni forces.

## VII. Legal authority for the UAE detentions in Yemen

17. The Panel has asked, but not yet received, from Saudi Arabia, the UAE or Yemen, relevant information on the relevant legal authority under which the UAE engage in arrests and deprivation of liberty in Yemen. The invitation to GCC countries intervening in the Yemeni conflict, presented by the Government of Yemen is broad,<sup>25</sup> but, in the absence of a response from the Government of Yemen for a clarification, it is not for the Panel to conclude that this invitation provides the relevant legal authority for UAE to detain individuals, especially given that the Government consistently fails to acknowledge UAE detentions or detention sites maintained by the UAE.<sup>26</sup>

18. Similarly, in the absence of a response by the Government of Yemen on the relevant position in its domestic law or on the existence of a bilateral/multilateral agreement on the same, the Panel is not able to conclude that the relevant legal basis can be found in those instruments.<sup>27</sup> The UN Security Council resolutions on Yemen do not provide the requisite legal authority. There are no standard operating procedures regulating the arrest and transfer of detainees and their conditions of detention in respect to UAE detentions.

19. Thus, the Panel finds that the legal authority under which the UAE engages in arrests and detentions in Yemen is unclear, as neither country would provide the relevant clarification. The Panel finds that this is presumably because neither UAE nor Yemen acknowledges UAE detentions in Yemen, and to provide a clarification on UAE authority would invariably necessitate an acknowledgement of UAE detentions.

## VIII. UAE violations of IHL and HR of detainees

20. Detainees informed the Panel of the following violations at the Bureiqa detention site:<sup>28</sup>

(a) Torture, including beatings, electrocution, constrained suspension, imprisonment in a metal cell ('the cage') in the sun and sexual violence (annex 61).<sup>29</sup> UAE soldiers and officials inflicted these abuses to obtain information or to punish individuals;

(b) Denial of appropriate medical treatment, including for torture and prevailing medical conditions;<sup>30</sup>

<sup>25</sup> S/2015/217.

<sup>26</sup> One may argue that the transfer of detainees, arrested by individuals and entities said to be under the "de jure control" of the Government of Yemen, to UAE custody, may constitute an implicit authorization on the part of the Government of Yemen for UAE to detain these individuals. It is not for the Panel to infer implicit authority especially given the low-level of control the Government of Yemen exercises over these Forces.

<sup>27</sup> It is unclear if Common Article 3 to the Geneva Conventions or AP II alone provides a basis for detention. See ICRC, "[Internment in Armed Conflict: Basic Rules and Challenges, Opinion Paper](#)", November 2014, p.8. It is recognized that in a non-international armed conflict additional authority may be required as a legal basis for foreign forces to detain individuals. This may include authorizations under a Chapter VII Security Council resolution, domestic legislation, or an international agreement between the detaining State and host State. See also ICRC, "[Strengthening international humanitarian law: protecting persons deprived of their liberty: Concluding report](#)", [32IC/15/19.1](#), October 2015.

<sup>28</sup> In accordance with Panel methodology, all the information in this section (and this annex) was provided by, at minimum, two sources. For this section, the sources were either eye-witnesses or victims.

<sup>29</sup> Five detainees witnessed torture and sexual violence being committed against other detainees and, at least, four, interviewed by the Panel, stated that they were tortured. Medical records verified the occurrence of torture in two cases, but circumstances of other detainees did not allow for medical verification.

<sup>30</sup> Two detainees. Yet, another detainee was provided medical treatment, for torture that occurred immediately before he entered the Bureiqa base, as the UAE concluded that his arrest and

(c) Enforced disappearance. The detainees investigated by the Panel were at the Bureiqa detention site from a few days to over six months. With a few exceptions, families were unaware of their whereabouts. A significant majority of detainees were not allowed to communicate with their families;

(d) The families of detainees, their legal representatives, or the representatives of international organizations, including the ICRC, have not had access to detainees;<sup>31</sup> and

(e) While there were regular interrogations of detainees, including the allocation of case officers for each detainee, detainees had no access an impartial body to challenge their detention.

21. The Panel finds that the UAE military forces have engaged in violations of IHL and IHRL when it engaged in arbitrary arrest and detention,<sup>32</sup> torture, ill treatment, enforced disappearances and threats to commit the above acts, and other violations of fundamental guarantees of detainees.<sup>33</sup>

## IX. Acts of intimidation and threats by UAE forces and other groups

22. There is widespread intimidation practiced by the UAE and their local collaborators to maintain secrecy of these detentions and associated abuses. The Panel considers that the following documented acts of intimidation are extremely grave in that they deprive families the right to know the fate of their relatives, prevent any accountability for the violations, and facilitate denials of continued violations:

(a) A detainee was threatened with sexual abuse if he informed anyone of the detention and consequent abuses suffered at the hands of the UAE;

(b) Another former detainee was warned not to discuss his detention with the UAE, but when he did, he was immediately rearrested and remains in UAE custody;<sup>34</sup>

(c) The Panel observed widespread fear during its discussions with former detainees, families of detainees, and activists that there will be repercussions on those who speak of the UAE detentions, in Mukalla and Aden. In both Mukalla and Aden, protestors who demonstrated against these detentions were, on two occasions, subjected to verbal harassment and physical abuse.<sup>35</sup> They were sufficiently intimidated to discontinue their protests at the same locations; and

(d) In one case, a letter sent to HRW by the UAE Ministry of Defence, following its findings on detentions in Mukalla, threatened the “prosecution” of those involved in reporting detention-related violations.<sup>36</sup>

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detention was ill conceived and there was no reason for him to be detained. Yet, the detainee was not released.

<sup>31</sup> Source: families and detainees.

<sup>32</sup> For example, in one case, an individual was arrested, taken to al-Rayyan and was shown a list and asked to identify a specific unknown individual in that list as responsible for a recent security incident, and when he refused to do so, he was detained for several months. In another unrelated case, an individual, whose relative had recently been imprisoned in al-Rayyan, was requested to come to the base, asked to identify an individual on the list as AQAP, and he identified the individual despite knowing full well that he was not linked to AQAP. The Panel was informed he identified the individual to prevent being detained himself.

<sup>33</sup> See Article 4 and 5 of AP II and CA 3. ICRC, “Strengthening international humanitarian law: protecting persons deprived of their liberty: Concluding report”, [32IC/15/19.1](#), October 2015. Jelena Pejic, Internment in armed conflict and other situations of violence, [87 \(835\) IRR](#), June 2005.

<sup>34</sup> Specific details are omitted to protect detainee.

<sup>35</sup> Panel meetings with the protestors.

<sup>36</sup> Documents with Panel. See footnote 14. Following the release of HRW report on UAE detentions, the lead researcher’s passport was circulated in the media stating that she was a Qatari affiliate.

23. The Panel finds that UAE forces, the Yemeni Ministry of Defence, and other unidentified groups have engaged in intimidation and threats against detainees and those representing them.

## X. Government of Yemen's complicity in abuses

24. The Government of Yemen is instrumental in, and is facilitating, continued violations by UAE military forces, in Yemen, by:

- (a) The continued failure to acknowledge UAE detentions in Yemen,<sup>37</sup> even though forces under its supposed de jure control continues to engage in and facilitate such detentions and/or conduct joint arrest operations with the UAE;
- (b) The failure to clarify the legal authority under which the UAE military forces, as an international force, continue to arrest and detain individuals in Yemen;
- (c) The failure to assert jurisdiction and to control abuses in detention sites maintained by the UAE;
- (d) The non-payment of salaries to its forces, which is essential in establishing its de facto authority over those forces, and by allowing the Saudi Arabia led-coalition to directly pay salaries or incentives to some of these forces operating with the UAE; and
- (e) The failure to conduct a credible inquiry into its own forces alleged to have committed violations;<sup>38</sup> failure to conduct an inquiry into the UAE's conduct and curtail its conduct in so far as it relates to abusive practices; and failure to ensure safeguards when engaging in detainee transfers between the UAE and forces under its supposed de jure control.

25. The Government of Yemen has, during several meetings with the Panel, sought to distance itself from the legal responsibility accruing on the Government of Yemen for acts and omissions committed by the Saudi Arabia-led coalition in Yemen.<sup>39</sup> Yet, the Panel finds that:

- (a) The Government of Yemen continues to be responsible for any internationally wrongful acts committed by the Saudi Arabia-led coalition and individual members of the Saudi Arabia-led coalition in Yemen;
- (b) Saudi Arabia-led coalition member States are present and operating in Yemen, at the invitation of, and with the consent of, the Government of Yemen. The Government has full discretion to revoke or limit this consent, or to clarify the boundaries of its consent, to further the compliance of these forces with

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<http://m.sahafah.net/show2924701.html>. Even if this is not attributed to the UAE by the Panel, this demonstrates undue interference and lack of protection afforded to those reporting on violations.

<sup>37</sup> The Minister of Human Rights stated that "reports...about secret prisons in the south are baseless". <http://arabfhr.org/2017/06/27/yemeni-human-rights-minister-denies-secret-prisons-in-aden-southern-yemen/?lang=en>. The spokesman of the Aden police "acknowledged that the UAE played a positive and supportive role for many prisoners who were released by the security services in Aden and Hadramawt, pointing out that the role of the UAE "was limited to providing support to the Department of Aden security..." <http://arabfhr.org/2017/06/27/yemeni-human-rights-minister-denies-secret-prisons-in-aden-southern-yemen/?lang=en>.

<sup>38</sup> According to the media, the Government of Yemen established a Commission, in June 2017, to "consider the allegations of violations of human rights in liberated areas and propose possible responses to those allegations and establish a mechanism to address and resolve any future problems in this regard." This Commission's findings are not yet public. <http://arabfhr.org/2017/06/27/yemeni-human-rights-minister-denies-secret-prisons-in-aden-southern-yemen/?lang=en>.

<sup>39</sup> Meetings with Yemeni officials.

IHL and IHRL,<sup>40</sup> and

(c) The Government of Yemen is responsible for the consequent treatment and wellbeing of all detainees, especially those who have been transferred to UAE by forces under its de jure control.<sup>41</sup>

## XI. Involvement of other States

26. As far as the Panel is aware, the UAE, in carrying out these operations, is working as a part of the Saudi Arabia-led coalition.<sup>42</sup> Thus, the following member States, especially, have responsibilities under Common Article 1 of the Geneva Conventions, that requires all parties to “ensure respect” for IHL: Bahrain, Djibouti, Jordan, Kuwait, Malaysia, Morocco, Saudi Arabia, Senegal and Sudan.<sup>43</sup>

27. To the extent, that the UAE detentions are being undertaken to gather information on AQAP or ISIS or other terrorist groups, partners of the UAE should take proactive steps to inquire and ensure that the information that it receives on the basis of partnership agreements or otherwise, is not obtained by torture, not only because such information is unreliable, but also because it violates these member States international obligations.<sup>44</sup> These member States also have a special responsibility under Common Article 1 of the Geneva Conventions to ensure respect for IHL. The United States and Europol<sup>45</sup> work with the UAE on countering terrorism, with the United States actively engaged with the UAE in Yemen.<sup>46</sup>

## XII. Conclusions

28. The Panel finds that:

(a) It is unlikely that UAE military forces in Yemen are conducting arrest and detention operations without the knowledge of the Governments of the UAE and Yemen;

(b) The lack of public acknowledgement of the UAE’s engagement in detention, by both governments, contribute to violations occurring with impunity by both UAE forces and its Yemeni collaborators. For the Yemeni forces, this denial guarantees the ability to operate without any foreseeable consequences for illegal conduct;

<sup>40</sup> See Common Article 1 of the Geneva Conventions on the Government of Yemen’s obligations. For consent related matters see *Democratic Republic of Congo v Uganda*.

<sup>41</sup> The Government of Yemen can absolve itself of its responsibility of internationally wrongful acts, if UAE forces in Yemen are classified as an occupying force (See *Democratic Republic of Congo v Uganda*. Although the President of Yemen did allege that the UAE is acting as an occupying force in Yemen, this was not repeated. <http://www.middleeasteye.net/news/exclusive-yemeni-president-says-emiratis-acting-occupiers-1965874493>.

<sup>42</sup> The UAE justified its presence in Yemen to the invitation made by President Hadi. UAE letter to Panel of 8 November 2017. The Panel notes that the United States provides that “the UAE deployed forces in Yemen to counter the spread of AQAP and ISIS in Yemen at the same time as it partnered with the Saudi-led Islamic Military Alliance to Fight Terrorism... UAE forces remained in Yemen to support local forces in counterterrorism operations.” See <https://www.state.gov/j/ct/rls/crt/2016/272232.htm>. The Panel continues to welcome any clarifications provided by the UAE on the legal basis under which it maintains detention sites, in Yemen.

<sup>43</sup> For the list of States identified as partners in the Saudi Arabia-led coalition, see <http://www.spa.gov.sa/1682071>.

<sup>44</sup> For example, obligations under CAT.

<sup>45</sup> <https://www.state.gov/j/ct/rls/crt/2016/272232.htm>. The UAE has a strategic cooperation agreement on countering serious crime and terrorism for exchange of information and expertise between UAE and Europol.




<sup>46</sup> <https://www.uae-embassy.org/about-uae/foreign-policy/uae-counterterrorism>, <http://www.hedayahcenter.org/media-details/49/news/51/latest-news/829/uae-maintains-robust-counter-terrorism-stance--us-state-department-country-reports-on-terrorism-for-2016>.



(c) That this and other information available in the public domain on UAE detentions should be sufficient for the Governments of Yemen and UAE to reconsider their respective public positions that the UAE does not maintain any detention facilities in Yemen; to comply with their obligations under international law to call for an immediate investigation on the involvement of their armed forces and state organs in these violations; and to take appropriate action as required under domestic and international law to prevent further abuses;<sup>47</sup> and


(d) Those who are in command and control of the UAE forces that engage in detention-related abuses in Yemen certainly fall within the designation criteria under paragraphs 17 and 18 of resolution 2140 (2014).

### Appendix A to Annex 62: Summary information on individuals and entities that engaged with the UAE on detentions

<i>Ser</i>	<i>Entity</i>	<i>Name of Leader</i>	<i>Area of Responsibility</i>	<i>Image</i> <sup>48</sup>	<i>Relationship with the UAE</i>
1	Security Belt, Aden	Brigadier General Wadha Omar Abdulaziz Commander of Security Belt	Aden		<ul style="list-style-type: none"> <li>The transfer of detainees.</li> <li>UAE pays salaries to Security Belt forces.</li> <li>UAE supports training, intelligence and logistics.</li> </ul> <p><b>Analysis:</b></p> <ul style="list-style-type: none"> <li>Collaborative relationship that goes beyond training, intelligence sharing and logistical support.</li> </ul>
2	Aden Police Force	Major General Shallal Ali Shaye, Director of General Security Aden	Aden		<ul style="list-style-type: none"> <li>The transfer of detainees.</li> <li>UAE provides logistical support and provision of other resources to Aden Police.</li> </ul> <p><b>Analysis:</b></p> <ul style="list-style-type: none"> <li>Collaborative relationship.</li> <li>Unknown if his work with the UAE on detainee transfers is undertaken in his personal capacity or on behalf of the Government of Yemen.</li> </ul>
3	Shabwani Elite Forces	Lieutenant Colonel Mohammed al-Buhar al-Qumayshi Commander Shabwani Elite Forces	Shabwah		<ul style="list-style-type: none"> <li>Engaged in joint UAE arrest operations.</li> <li>The transfer of detainees.</li> </ul> <p><b>Analysis:</b></p> <ul style="list-style-type: none"> <li>There is a collaborative relationship between the UAE and the Shabwani Elite Forces on arrest and detentions.</li> </ul>

<sup>47</sup> The Panel notes that in this respect, that the JIAT informed the Panel that it did not have the necessary mandate to investigate UAE detention related violations. Meeting in June 2017 in Saudi Arabia.

<sup>48</sup> Images from @demolinari at <https://twitter.com/search?q=demolinari%20andsrc=typd>.

<i>Ser</i>	<i>Entity</i>	<i>Name of Leader</i>	<i>Area of Responsibility</i>	<i>Image<sup>48</sup></i>	<i>Relationship with the UAE</i>
4	Hadrami Elite Forces		Hadramawt		<ul style="list-style-type: none"> <li>• Joint UAE arrest operations</li> <li>• Transfer of detainees.</li> <li>• UAE provides training, intelligence and other logistical support.</li> </ul> <p><b>Analysis:</b></p> <ul style="list-style-type: none"> <li>• Collaborative relationship that goes beyond training, intelligence sharing and logistical support.</li> </ul>
5	20 <sup>th</sup> Military Camp	Imam al-Nubi, Former commander 20 <sup>th</sup> Military Camp	Aden		<ul style="list-style-type: none"> <li>• UAE facilitated the release of detainee from al-Nubi.</li> </ul> <p><b>Analysis:</b></p> <ul style="list-style-type: none"> <li>• There is no collaborative relationship between UAE and al-Nubi on detentions.</li> <li>• Operated with relative independence from UAE.</li> </ul>

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**Annex 63: Detentions by ‘PSO’, ‘NSB’, and other Houthi officials**

## Annex 64: Case studies on the indiscriminate use of explosive ordnance against civilian populated areas in Yemen and Saudi Arabia (2017)

### I. Violations by Houthi-Saleh Forces

1. In 2017, the Panel received information on 163 reported<sup>1</sup> cases of the indiscriminate use of explosive ordnance (EO) against civilian populated areas in Ta'izz and Ma'rib, Yemen, and one case in Riyadh, Saudi Arabia, that are attributable to Houthi-Saleh forces. The Panel investigated ten potential indiscriminate attacks.<sup>2</sup> Full case studies for three incidents are included as shown in table 64.1, and case study summaries for six incidents are included in table 64.2. These incidents demonstrate that parties to the conflict continue to engage in the apparent indiscriminate use of EO in proximity to the civilian population.

2. The Panel arrived at its conclusions and findings, in respect of its findings, based on its own independent investigations and information available in the public domain. If the Houthi-Saleh political or military leadership can provide verifiable information on the military objectives sought to be achieved that may counter the Panel's conclusions and findings, then the Panel stands ready to review them.

3. The Houthi-Saleh political and military leadership has not responded to Panel requests for information.

Table 64.1

#### Full case studies of the indiscriminate use of EO against civilian populated areas

<i>Appx</i>	<i>Date</i>	<i>Location</i>	<i>Incident and target</i>	<i>Type of explosive ordnance</i>	<i>Civilian casualties</i>
A	29 May 2017	Al-Nour, Ta'izz	Civilian neighbourhood	▪ 120mm high explosive (HE) mortar bomb	1 dead 7 injured
B	6 Sept 2017	Al-Rawda, Ma'rib	Civilian neighbourhood	▪ 120mm HE mortar bomb	3 injured
C	11 Nov 2017	Riyadh, Saudi Arabia	Civilian airport	▪ Short-range ballistic missile	0
D	2 Nov 2017	Onsowa, Ta'izz	Civilian neighbourhood	▪ 120mm HE mortar bomb	5 dead 2 injured

4. In the ten incidents investigated by the Panel it finds that:

(a) The damage observed in the available imagery is consistent with the type of damage caused by land service ammunition (for example, motor bombs and artillery shells);

(b) In some cases, although the Panel was unable to exactly identify the type of explosive ordnance based on the available information, the Panel is almost certain that the explosions were not due to gas explosions, the initiation of improvised explosive devices (IED), the initiation of unexploded ordnance (UXO) or the initiation of abandoned explosive ordnance (AXO). The locations of the explosions were in areas of conflict and within the range of weapons from known enemy positions of the military forces participating in the conflict;

<sup>1</sup> These cases were documented and verified by Panel sources. The Panel can share further information with the Committee, with the consent of its sources.

<sup>2</sup> The Panel selected these 18 cases based on the availability of technical evidence, imagery, witnesses, medical records, GPS coordinates, and the ability of Panel investigators to reach the area. Yet, in only 10 did technical evidence confirm the use of explosive ordnance.

(c) In all the cases investigated, there was no demonstrable evidence that the civilians in, or near these objects, who are *prima facie* immune from attack, had lost their civilian protection;

(d) Even if in some of the cases that follow, the Houthi-Saleh fighters, or the Abu al-Abbas group (for incident in appendix D), have targeted legitimate military objectives, the Panel finds that it is highly unlikely that IHL principles of proportionality, and precautions in attack were respected in these incidents; and

(e) The cumulative effect on civilians and the civilian object demonstrates that even if precautionary measures were taken, they were largely inadequate and ineffective.

5. The Panel also concludes that:

(a) In the absence of any verifiable information from Houthi-Saleh forces, the evidence gathered strongly demonstrates that Houthi-Saleh forces engaged in the indiscriminate use of EO in densely populated civilian areas, in violation of the principles of IHL;<sup>3</sup>

(b) In their use of SRBM, Houthi-Saleh forces failed to take account of the inherently indiscriminate nature of the weapon in that:

(i) SRBM are specifically designed to be area weapons, as precision accuracy cannot be guaranteed;

(ii) Since the blast and fragmentation danger areas are primarily based on the size and design of the explosive warhead, this missile's likely impact on civilians was foreseeable, especially when directed at civilian populated areas; and

(iii) As such weapons have a known Circular Error Probability (CEP)<sup>4</sup> of up to 1,000m, they should not be used against targets within 1,000m of the civilian population.

6. The Panel stands ready to provide the Committee with further information if requested, but in the interest of brevity, provides only summaries of the cases in table 64.2 below.

Table 64.2

**Summary case studies of the indiscriminate use of EO against civilian targets**

<i>Ser</i>	<i>Date</i>	<i>Location</i>	<i>Incident and target</i>	<i>Type of explosive ordnance</i>	<i>Civilian casualties</i>
E	18 Jan 2017	Al-Nour, Ta'izz	Residential area	120mm HE mortar bomb	9 dead 8 injured
F	21 May 2017	Al-Jahmila, Ta'izz	Residential area	HE EO TBC	2 dead
G	21 May 2017	Tha'baat, Ta'izz	Residential area	HE EO TBC	3 dead 3 injured
H	21 May 2017	Al-Hamaira, Ta'izz	Commercial area	HE EO TBC	2 dead 5 injured

<sup>3</sup> Customary international law, which binds Houthi-Saleh forces, requires parties to conflicts to distinguish between civilians and combatants. The International Court of Justice (ICJ) has held that "indiscriminate shelling is in itself a grave violation of humanitarian law" Case Concerning Armed Activities on the Territory of the Congo (Democratic Republic of Congo v. Uganda), Judgment of 19 December 2005, para. 208.

<sup>4</sup> The CEP is a measure of a weapon system's precision. It is defined as the radius of a circle, centered on the mean, whose boundary is expected to include the landing points of 50% of the missiles fired.

<i>Ser</i>	<i>Date</i>	<i>Location</i>	<i>Incident and target</i>	<i>Type of explosive ordnance</i>	<i>Civilian casualties</i>
I	30 Jun 2017	Al-Jumhuri, Ta'izz	Residential area	106mm RCL <sup>5</sup>	1 dead 9 injured
J	21 Sep 2017	Senei, Ta'izz	Residential area	RPG-7 variant	0

7. IHL requires military commanders and those responsible for planning and executing decisions regarding attacks to take all feasible precautions to avoid, and in any event to minimize, incidental loss of civilian life, injury to civilians and damage to civilian objects.<sup>6</sup> Unless Houthi-Saleh military or political forces provide evidence to the contrary, the Panel finds that there is compelling evidence that the commanders of the forces involved failed to take all feasible precautions to avoid or to minimize, incidental loss of civilian life, injury to civilians and damage to civilian objects.

8. The Panel also documented the use of indiscriminate use of EO against civilian houses. The Panel received 161 reported cases where Houthi-Saleh forces have allegedly used explosive ordnance to intentionally damage or destroy houses (figures 64.1 and 64.2).

Figure 64.1

**Example of damage to house in Ta'izz caused by indiscriminate use of EO**



Figure 64.1

**Example of damage to house in Ta'izz caused by indiscriminate use of EO**



9. The indiscriminate use of explosive ordnance against civilian locations in Yemen and Saudi Arabia committed by the Houthi-Saleh forces, falls within paragraph 17 and/or paragraph 18 of resolution [2140 \(2014\)](#). Member States should consider the continued occurrences of widespread civilian casualties, including children, because of the indiscriminate use of EO is a veritable threat to peace, security, and stability in Yemen.

10. Given that this regular and routine occurrence of use of EO cannot occur without at least the continued acquiescence of its leadership, the Security Council should consider expanding the narrative summary of the reasons for the listing of Abdulmalik al-Houthi (YEi.004) to reflect the threats to peace, security, and stability associated with this indiscriminate use of EO. In this context, the Council should also consider:

- (a) The threats issued by the leadership of the Houthi-Saleh forces, including the chairman of the supreme revolutionary committee, Mohammad Ali al Houthi, who threatened further attacks on oil installations in Saudi Arabia, and commercial ships carrying oil, as reprisals, which are

<sup>5</sup> Recoilless Rifle.

<sup>6</sup> See Article 13(1) of Additional Protocol II to the Geneva Conventions and CIHLR 15 - 22.

prima facie civilian objects immune from attack.<sup>7</sup> Saleh al Samad, head of the supreme political council, also referred to targeting of “capitals” of countries as reprisals;<sup>8</sup> and

(b) The political office also reportedly issued a statement that “*All airports, ports, border crossings and areas of any importance to Saudi Arabia and the UAE will be a direct target of our weapons, which is a legitimate right*”.<sup>9</sup> These statements do not distinguish between civilian objects and military objectives. Intentionally launching attacks against civilians and civilian objects violates IHL.<sup>10</sup> As far as the Panel is aware, these statements were not denounced by Abdulmalik al-Houthi (YEi.004).<sup>11</sup>

11. The Panel finds:

(a) That after such a prolonged period of conflict, Abdulmalik al-Houthi (YEi.004) would be aware of the ballistic performance of the weapons systems used by their forces and their target effects. Yet, as the Panel reported in S/2017/81, and has identified in this report, multiple incidents of the indiscriminate use of EO against the civilian population of Ta’izz and Ma’rib have continued during 2017. These incidents attributable to the Houthi-Saleh forces, are violations of IHL and constitute a threat to peace, security and stability of Yemen;

(b) That in respect of the missiles fired at Saudi Arabia, even if one allows for the possibility that Abdulmalik al-Houthi (YEi.004) did not consent to each individual missile strike against Saudi Arabia, he is responsible for a policy adopted by the Houthi-Saleh leadership that allows for the continued use of these missiles against Saudi Arabia; and

(c) Given the foreseeable political and military repercussions, it is inconceivable that the missile launched on 4 November 2017 at King Khalid International Airport, could have taken place without the knowledge and prior consent of Abdulmalik al-Houthi (YEi.004). The Panel finds that this missile strike violated IHL and constituted a threat to peace, security and stability of Yemen.

## II. Violations by anti-Houthi forces (including the Abu al-Abbas group)

12. Anti-Houthi forces also violate IHL when it establishes military installations in densely populated civilian areas as they are exposing civilians to the dangers arising out of conflict.<sup>12</sup> If done intentionally and systematically, then it is likely that civilians and civilian objects are being used as shields to avoid attack, which is in violation of IHL.<sup>13</sup> In four incidents in which EO detonated within the civilian population, anti-Houthi forces had established their checkpoints in densely residential areas within 700m of the impact points. The Panel has also investigated one case of use of explosive ordnance where, based on technical evidence, it appears that the a 120mm high explosive mortar bomb was fired from an area under the control of anti-Houthi forces, probably areas under the control of Abu al-Abbas.<sup>14</sup> On 2 November 2017, this mortar bomb detonated in al-Onsowa neighbourhood, Ta’izz, killing five children and injuring two others, highly likely by Abu al-Abbas group (appendix D).

<sup>7</sup> [https://www.facebook.com/permalink.php?story\\_fbid=163853657542656&id=149354595659229](https://www.facebook.com/permalink.php?story_fbid=163853657542656&id=149354595659229).

<sup>8</sup> <http://www.ansarollah.com/archives/124112>.

<sup>9</sup> <https://www.alaraby.co.uk/english/news/2017/11/8/houthis-threaten-to-attack-uae-and-saudi-airports>.

<sup>10</sup> Common Article 3 to the Geneva Convention, CIHLR 1- 10.

<sup>11</sup> In at least one televised speech al-Houthi is reported to have stated that “*his ballistic missiles were capable of reaching the United Arab Emirates' capital of Abu Dhabi and anywhere inside Saudi Arabia... If the Saudi regime and with a green light from the US attack Hodeidah then we have to take steps that we haven't taken before*”. See <http://www.arabnews.com/node/1161156/middle-east>.

<sup>12</sup> See for example, CIHLR Rules 22 and 23.

<sup>13</sup> See for example, CIHLR 97.

<sup>14</sup> al-Onsowa, 2 November 2017.

**Appendix A to Annex 64: Mortar bomb strike on civilian area, al-Nour, Ta'izz, (29 May 2017)**

1. At approximately 23:00 hours on 29 May 2017, one 120mm HE mortar bomb detonated in al-Nour, Ta'izz, killing one civilian and injuring seven others, including four children.
2. Analysis of imagery of fragmentation (figures A.64.1 and A.64.2) recovered from the explosion indicates that the explosive ordnance used was a 120mm HE mortar bomb. All parties to the conflict have access to this type of weapon and ammunition.<sup>15</sup>
3. Given that the nearest anti-Houthi forces checkpoint was approximately 500m from the house and anti-Houthi forces control the area, it is highly likely that the perpetrators were Houthi-Saleh forces.

Figure A.64.1  
**Post explosion - Tail fragment**



Figure A.64.2  
**Post explosion - Tail fragment**



4. This civilian, neighbourhood has now been hit over three times since the beginning of the conflict.

<sup>15</sup> Similar in design to the round shown here: <http://www.armaco.bg/en/product/mortar-bombs-c19/120mm-mortar-rounds-p474>. The Panel does not, however, suspect this company of any involvement in the conflict. It is for illustrative purposes only.



**Appendix B to Annex 64: Mortar strike on a residential building, al-Rawda, Mar'ib, (6 September 2017)**

(c)

1. At approximately 12:00 hours on 6 September 2017, one 120mm HE mortar bomb detonated in a residential building in al-Rawda, Ma'rib, injuring three children.
2. Analysis of imagery of fragmentation (figures B.64.1 and B.64.2) recovered from the explosion indicates that the explosive ordnance used was a 120mm HE mortar bomb. All parties to the conflict have access to this type of weapon and ammunition.

**Figure B.64.1  
120mm HE mortar bomb fragment**



**Figure 2.B.64  
Impact point**



3. The building is in a neighbourhood controlled by the Government of Yemen. The closest government establishment is a police station located approximately 700m from the impact point. The Panel finds, based on the evidence, it is highly likely that the perpetrators were Houthi-Saleh forces.

**Appendix C to Annex 64: SRBM missile on King Khalid International Airport, Riyadh, Saudi Arabia (4 November 2017)**

1. At 20:07 hours (local time) on 4 November 2017 a short-range ballistic missile (SRBM) was launched against King Khaled International Airport (KKIA) in Riyadh.<sup>16</sup>
2. The Panel finds it almost certain that Houthi-Saleh forces were responsible for launching the attack based on:
  - (a) Media reports quoting Houthi-Saleh officials, who stated that their target was KKIA;<sup>17</sup>
  - (b) No denial in the public domain by the Houthi-Saleh forces;
  - (c) Technical analysis of the SRBM (see annex 36); and
  - (d) The flight path of the SRBM.<sup>18</sup>
3. The Panel finds it almost certain that Houthi-Saleh forces targeted the KKIA, which is a civilian airport, with some military equipment and installations. While the Houthi-Saleh forces insisted after the missile launch that the target was the military installations within the airport, the Panel notes that the Houthi-Saleh commanders should have reasonable grounds to know the weapons unpredictable effects when directed at a civilian establishment.
4. The Panel finds that SRBM is not capable of precision targeting at the 1,065km range this missile travelled as it has a Circular Error Probability of 750m to 1,000m. SRBM are specifically designed to be area weapons, as precision accuracy cannot be guaranteed. Since the blast and fragmentation danger areas are primarily based on the size and design of the explosive warhead, this missile's likely impact on civilians was foreseeable, especially when directed at civilian populated areas.<sup>19</sup>
5. Consequently, the commanders who authorized the launch of the missile were reckless and failed to take into consideration, or wilfully disregarded, the fact that a disproportionately number of civilians and civilian objects could be affected by targeting KKIA.

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<sup>16</sup> 24°57'29.5272"N, 46°42'2.8044"E.

<sup>17</sup> <https://www.sabanews.net/ar/news478520.htm>.

<sup>18</sup> "The General Authority of Civil Aviation said some remnants of the missile landed inside the airport perimeter". <http://www.arabnews.com/node/1188336/saudi-arabia>. Another remnant landed in a civilian house in a populated area in Riyadh.

<sup>19</sup> Over 40 airlines operate from KKIA and according to the latest statistics (2015) over 20 million passengers used the airport in 2015. The airport is 35km from the densely-populated city of Riyadh. <https://www.riyadh-airport.com>.

## Appendix D to Annex 64: Mortar strike on al-Onsowa, Ta'izz (2 November 2017)

1. On 2 November 2017, a 120mm high explosive mortar bomb detonated in al-Onsowa neighbourhood, Ta'izz, killing five children and injuring two others.
2. Analysis of imagery of fragmentation (figures D.64.1 and D.64.2) recovered from the explosion indicates that the explosive ordnance used was a 120mm high explosive mortar bomb. All parties to the conflict have access to this type of weapon and ammunition.

Figure D.64.1  
120mm HE mortar bomb tail unit



Figure D.64.1  
120mm HE mortar bomb tail unit



3. The distinctive fragmentation pattern (figure D.64.3) provides evidence as to the direction the mortar bomb was fired from. The Panel finds that the firing point was to the South East of the impact point (overview at figure D.64.4).

Figure D.64.3  
82mm HE mortar bomb tail unit<sup>20</sup>



Figure D.65.4  
Target area overview<sup>21</sup>

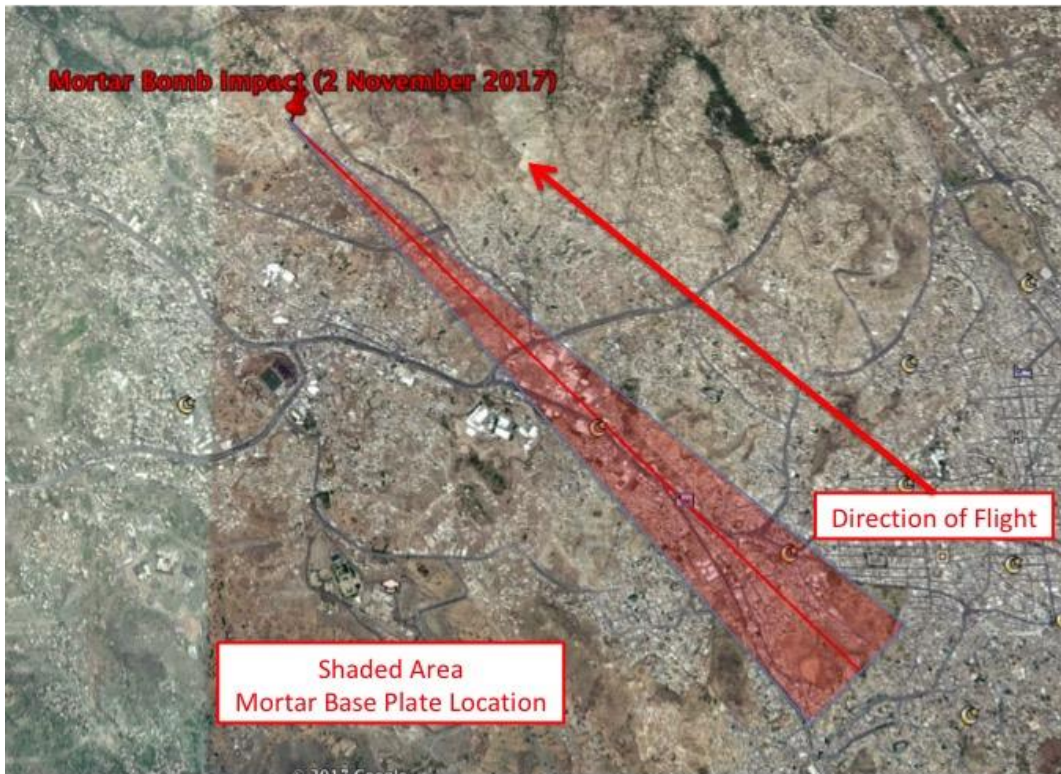


4. Abu al-Abbas forces are the only armed group operating in the area where the mortar firing point was located (see figure D.65.5).

<sup>20</sup> The top of the image is North.

<sup>21</sup> Ibid.

Figure D.65.5  
Mortar base plate location<sup>22</sup>









<sup>22</sup> The Mortar Base Plate is the term used to describe the geo-position of the mortar from where the rounds originated.

## Appendix E to Annex 64: Imagery supporting findings for case studies E to J – 9

Table E.64.1

### Imagery supporting findings for case studies E to J<sup>23</sup>

<i>Case</i>	<i>Date</i>	<i>Location</i>	<i>Image</i>	<i>Type of explosive ordnance</i>	<i>Civilian casualties</i>
E	18 Jan 2017	al-Nour, Ta'izz		▪ 120mm HE mortar bomb	9 dead 8 injured
F	21 May 2017	Jamila		▪ HE based on crater and fragmentation splatter	2 dead
G	21 May 2017	Thabaat, Ta'izz		▪ HE based on crater and fragmentation splatter	3 dead 3 injured
H	21 May 2017	al-Himaira, Ta'izz		▪ HE based on crater and fragmentation splatter	2 dead 5 injures
I	30 Jun 2017	al-Jumhuri, Ta'izz		▪ RCL tail unit	1 dead 9 injured
J	21 Sep 2017	Senei, Ta'izz		▪ RPG tail unit	-

<sup>23</sup> Imagery for this annex was provided by residents, human rights investigators and other confidential sources who were in the area or who visited the area in its immediate aftermath. This imagery can be made available to the Committee for further examination.

## Annex 65: IHL and HR violations relating to detentions by Yemeni military and security forces in Yemen

### I. Terminology

1. In this annex, the terms “arrest”, “detention”, and “detainee” are used to describe the act of depriving an individual of his liberty, the consequential deprivation of liberty and those subjected to the deprivation of liberty, respectively, without prejudice to the lawfulness of those acts and irrespective of whether detainees are subjected to internment<sup>1</sup> or criminal detention.<sup>2</sup> The Panel received information from both former and current detainees, but because of veritable threats against detainees and their families, the Panel will refrain from providing more information on their current situation. The Panel defines the terms arbitrary arrest and detention, torture, enforced disappearance, and secret detentions, in accordance with international law and jurisprudence and, where such is unavailable, in line with standards adopted by UN treaty bodies. See annex 62 for an elaboration of these terms.

### II. Yemeni military and security forces associated with violations

2. This annex contains information with respect to individuals and leaders who have committed or who hold command responsibility over individuals and entities that have committed violations of IHL and IHRL. These violations include arbitrary arrest and detention, failure to respect due process, torture, ill treatment, enforced disappearance, and arbitrary deprivation of life (table 65.1). The Government of Yemen identifies these individuals and entities as organs of the State (table 65.2 and 65.3).<sup>3</sup>

Table 65.1  
Violations summary<sup>4</sup>

<i>Serial</i>	<i>Organization / individual</i>	<i>No of individuals investigated<sup>5</sup></i>	<i>Arbitrary arrest / detention</i>	<i>Enforced disappearance</i>	<i>Deaths</i>	<i>Ill treatment</i>	<i>Torture</i>	<i>Denial of medical assistance</i>	<i>Detainee transfers with UAE</i>
1	Shallal Ali Shaye	5	✓	✓		✓	✓	✓	✓
2	Abdul Ghani Shaalan	7		✓	✓		✓	✓	
3	Ali Abdullah Taher	2		✓					
4	Ghassan al-Aqrabi	100+		✓			✓	✓	✓
5	Imam al-Nubi	5	✓	✓	✓	✓	✓		
6	Security Belt in Aden	6	✓	✓		✓	✓		✓
7	Security Belt in Lahij	7	✓	✓	✓				
8	Shabwani Elite Forces	2	✓	✓					✓
9	Hadrami Elite Forces	3	✓	✓					✓

<sup>1</sup> The term ‘internment’ refers to detention for security reasons in situations of armed conflict, i.e. the non-criminal detention of a person based on the serious threat that his or her activity poses to the security of the detaining authority in relation to an armed conflict. See [Commentary to Common Article 3](#).

<sup>2</sup> This means detention related to a criminal process. The Panel is only concerned those detentions linked to the conflict in Yemen and where IHL and HR violations can be established.

<sup>3</sup> Meeting with Ministry of Interior, 2 October 2017. The conduct of any State organ is considered an act of that State under international law. See Article 4 of [Articles on State Responsibility](#).

<sup>4</sup> 1, 4, 6, 8 and 9, in their joint operations with the UAE, highly likely operated outside the Government of Yemen’s command and control.

<sup>5</sup> Some of the same individuals are affected by more than one listed perpetrator.



Table 65.2  
**Summary of entities investigated (2017)**

<i>Location</i>	<i>Entity</i>	<i>Leader</i>	<i>De jure responsibility</i>	<i>De facto responsibility</i>
Aden	Security Belt	Brigadier General Wadha Omar Abdulaziz	Government of Yemen	UAE
Lahij	Security Belt	Colonel Hader al-Shukatry	Government of Yemen	UAE
Hadramawt	Elite forces	TBC.	Government of Yemen	UAE
Shabwah	Elite forces	Lieutenant Colonel Mohammed Salem al-Buhar al-Qomaishi	Government of Yemen	UAE

Table 65.3  
**Summary of individuals investigated (2017)**

<i>Location</i>	<i>Individual</i>	<i>Role</i>	<i>De jure responsibility</i>	<i>De facto responsibility</i>
Aden	Major General Shallal Ali Shaye	Director of General Security, Aden	Government of Yemen	Unknown if his work with UAE in detainee transfers are undertaken in his personal capacity or clandestinely on behalf of the Government of Yemen.
Aden	Ghassan al-Aqrabi	Supervisor of Bir Ahmed I and II	Unknown. <sup>6</sup>	UAE and Security Belt, Aden.
Aden	Ayman Tariq	Manager of Bir Ahmed I	Unknown. <sup>7</sup>	UAE and Security Belt, Aden.
Aden	Imam al-Nubi <sup>8</sup>	Former Commander of Camp 20	Government of Yemen. <sup>9</sup>	NA
Marib	Brigadier General Ali Abdullah Taher	Former Director of Security, Marib	Government of Yemen	Investigations continue.
Marib	Colonel Abdul Ghani Shaalan	Special Forces Commander, Marib	Government of Yemen	Investigations continue.

#### A. Major General Shallal Ali Shaye

3. The Government of Yemen continues to consider Major General Shallal Ali Shaye, the Director of General Security in Aden, as an official of the Government of Yemen. He falls under the responsibility of the Ministry of Interior. He continues to receive orders directly from President Hadi. Shallal Ali Shaye supervises:

<sup>6</sup> It is possible that no entity would claim de jure responsibility as Bir Ahmed I was a secret detention site in that authorities, until late October 2017, denied its existence to families, and those in that facility were forcefully disappeared until their relocation to Bir Ahmed II.

<sup>7</sup> Ibid.

<sup>8</sup> Imam Ahmed Muhammed Abdu al-Salwy.

<sup>9</sup> Camp 20 was under the oversight of the Security Belt and the Director of General Security, Aden.



- (a) Aden Police<sup>10</sup> and
- (b) Security Belt of Aden.<sup>11</sup>

4. While Major General Shallal Ali Shaye maybe under de jure command and control of the Government of Yemen, he also continues to work simultaneously with the UAE on detentions. For example,

- (a) At least four individuals detained at a house under his control in at-Tawahi were subsequently transferred to the UAE, where they were subjected to enforced disappearance for a prolonged period;<sup>12</sup> and
- (b) Major General Shallal Ali Shaye facilitated the release of other detainees from the custody of the UAE.<sup>13</sup>

5. Arbitrary arrests and deprivations of liberty, torture, enforced disappearance and other due process violations also occur in a house under the control of Major General Shallal Ali Shaye in At-Tawahi.<sup>14</sup> Those detained in this house were kept between 12 to 72 hours and were then transferred elsewhere, including to Bir Ahmed I and the UAE detention site in Bureiqqa.

6. The Panel finds that the deprivations of liberty in the house under his control occur outside the legal framework of arrests and detentions established by the Yemeni legal system.

7. The Panel continues to investigate the role and influence of the UAE on the Aden Police outside its interaction with Major General Shallal Ali Shaye.<sup>15</sup>

## B. Security Belt of Aden

8. The Security Belt in Aden was established by President Hadi. The Government of Yemen considers the Security Belt as an organ of the State under the responsibility of the Ministry of Interior.<sup>16</sup> The Security Belt of Aden work closely with the UAE in respect of deprivations of liberty. For example:

- (a) There were multiple detainees transferred between UAE and the Security Belt custody;<sup>17</sup>

<sup>10</sup> The Aden Police receive their salaries from the Government of Yemen, although as at October 2017, they had not received them for 8 months. Panel meeting with the Deputy Police Chief of Aden on 2 October 2017.

<sup>11</sup> Confidential official sources. The Security Belt forces receive salaries from the UAE. Panel meeting with Brigadier General Wadha Omar Abdulaziz on 2 October 2017.

<sup>12</sup> Sources: detainees and family members. Three of the detainees were interrogated on the basis they were supportive/members of AQAP.

<sup>13</sup> Sources: detainee and family members.

<sup>14</sup> Detainees and their families. One detainee informed the Panel that UAE soldiers also participated in interrogations at this house. The Panel continues to investigate. Media reports on detention-related abuses undertaken by Shallal Ali Shaye include <http://hournews.net/news.php?id=79051>, <https://www.hunaaden.com/news41410.html>, <https://theyemen.net/-وفاة-معتقل-في-سجن-سري-لشلال-شايح-بعد>.

<sup>15</sup> Aden police state that the UAE had played a positive and supportive role for many prisoners who were released by the security services in Aden and Hadramawt. The UAE provided the “Department of Aden security, cars and vehicles, and the rehabilitation and furnishing of police stations.” See also <http://www.emirates247.com/news/emirates/uae-offers-further-support-to-aden-police-2017-08-09-1.657318>.

<sup>16</sup> Meeting with Ministry of Interior and the Panel on 2 October 2017.

<sup>17</sup> In all cases documented by the Panel in Aden, the Security Belt was identified as the entity that arrested individuals, whether those individuals were then transferred to Major General Shallal Ali Shaye’s custody, to the UAE, or the Mansoor Central Prison.

- (b) The Security Belt facilitated the arrest and release of detainees in UAE custody;<sup>18</sup>
- (c) In Bir Ahmed I, while it is said to be under the control of the Security Belt, UAE officers exerted significant amount of control, for example by removing detainees from the site (figure X.1);
- (d) In one incident investigated the same detainee was tortured by the Security Belt, then handed over to the UAE, where the UAE continued to torture him, demanding the same information.

9. Yemeni official sources (military and civilian) informed the Panel that the Security Belt in Aden is not under the de facto control of the Government of Yemen, but the UAE. The salaries of the Security Belt are paid by the UAE. One military source informed the Panel that while an officer of General Staff rank level receives around YER 30,000 (US\$120) every 2 – 3 months as salary from the Government, the basic salary for a soldier in the Security Belt is SAR 3,500 (US\$934) per month from the UAE. Thus, official confidential sources state that the Government is therefore unable to exercise operational control over these forces.

### C. Ghassan al-Aqrabi and Ayman Tariq

10. The Panel finds that Ghassan Abdul Aziz al-Aqrabi and Ayman Tariq<sup>19</sup> were responsible for the continued arbitrary deprivation of liberty of over 100 detainees who were in Bir Ahmed I, which was established around August 2016 (figure 65.1 and 65.2).

11. These persons were detained without access to their families or legal representation. They had no access to any entity, judicial or administrative, to challenge their detention. They were not provided reasons for their continued detention, and all individuals investigated by the Panel had previously been subjected to detention-related abuses and torture by identified authorities (annex 61).<sup>20</sup>

Figure 65.1  
Bir Ahmed detention location (21 July 2016)<sup>21</sup>



Figure 65.2  
Bir Ahmed detention location (07 November 2017)<sup>22</sup>



12. In October 2017, the detainees commenced a hunger strike calling for their release or referral to a judicial

<sup>18</sup> In Aden, the Panel did not document any joint arrest operations with UAE. It has, to date, not found any individuals released by the UAE directly, without the Security Belt's participation.

<sup>19</sup> The rationale for their selection as detention facility administrators seems to be that the detention facility is established within an area under the control of the al-Aqrabi family. The Panel continues to investigate the activities of this family.

<sup>20</sup> Information withheld to protect detainees.

<sup>21</sup> Source: Imagery obtained by the Panel. Detainees and families of detainees assisted the Panel to identify the location.

<sup>22</sup> Source: Imagery obtained by the Panel. Those visiting the detention center assisted the Panel to identify the location. It is also based on information provided by the detainees of a new detention site being built next to Bir Ahmed I and confirmed by satellite imagery.

process. On 12 November 2017, they were transferred to Bir Ahmed II, a detention site funded by UAE, located close to Bir Ahmed I (figure 65.1), also said to be administered and supervised by Ghassan al-Aqrabi. On 13 November 2017, their case files were handed to the Attorney General of Yemen, Ahmed al-Awash. In December 2017, some detainees had access to their families and some others were released around the last week of December 2017.

Figure 65.3

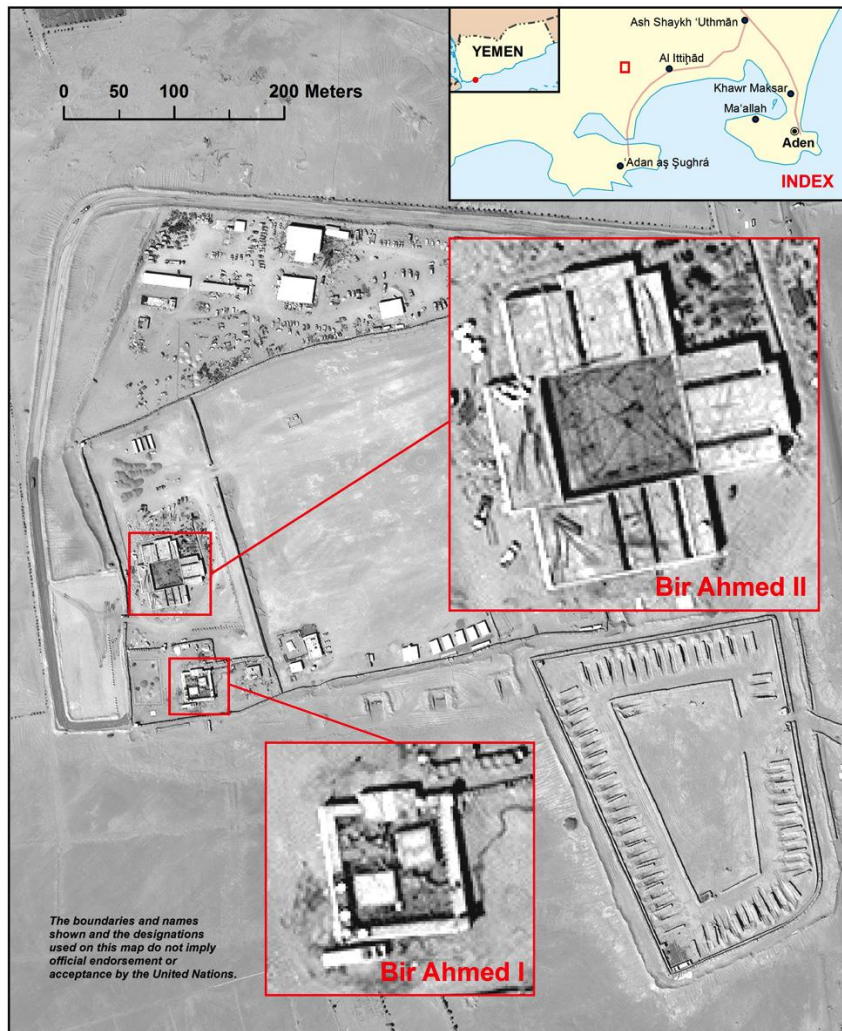
**Visit of Attorney General and Major General Shallal Ali Shaye to Bir Ahmed II<sup>23</sup>**



13. The Panel cannot confirm that all detainees in Bir Ahmed I were transferred to Bir Ahmed II given that the identities of the detainees in Bir Ahmed I were not made available by the detaining authorities and the Government of Yemen.

<sup>23</sup> <https://twitter.com/demolinari/status/930092238117380096>. The Attorney General is third from right. Brigadier General Wadha Omar is behind the Attorney General to the left. Major General Shallal Ali Shaye is second from right.

Figure 65.4  
**Bir Ahmed I and Bir Ahmed II**<sup>24</sup>



Location source: Panel of Experts for Yemen, United Nations Security Council Sanction Committee  
 Prepared by Geospatial Information Section, ICTD, DFS, United Nations. December 2017.  
 Imagery source: WV1 acquisition date 2017-11-07 (C) DigitalGlobe

#### D. Security Belt of Lahij

14. The Government of Yemen considers the Security Belt as an instrument of the State under the responsibility of the Ministry of Interior.<sup>25</sup> In detention related investigations, the Panel has not yet identified any detainee transfers between the UAE and the Security Belt in Lahij.

15. The Panel finds that in 2017, the Security Belt in Lahij was responsible for the death of a 16-year-old, enforced disappearance of another individual, and four extra-judicial executions. The Security Belt in Lahij was also involved in the death of a 14-year-old child whose younger brother was alleged to be an AQAP affiliate. For Colonel Hader al-Shukhaty is the Commander of the Security Belt in Lahij (see annex 6)

<sup>24</sup> Source: Imagery obtained by the Panel. 7 November 2017.

<sup>25</sup> Meeting with Ministry of Interior and the Panel on 2 October 2017. The Security Belt in Lahij is under the supervision of Saleh al-Subaihi, Director of General Security, Lahij. Official confidential UAE sources.

Figure 65.5  
Colonel Hader al-Shukhaty<sup>26</sup>



**E. Colonel Abu Mohammad Abdul Ghani Shaalan<sup>27</sup>**

15. The Special Forces Commander is a formal position of the Government of Yemen, established prior to the conflict and is under the operational command and control of the Government of Yemen.

16. The Panel investigated the involvement of Colonel Abu Mohammad Abdul Ghani Shaalan, the Special Forces Commander of Ma'rib and his forces, in an incident relating to the death of a 15-year old child and injuries to an 11-year old child.<sup>28</sup> These incidents occurred when the Special Forces attempted to disperse a demonstration in Ma'rib, in October 2017, for which prior security approval was obtained.<sup>29</sup> A clash broke out between the protesters and the Special Forces following the death of the 15-year-old.<sup>30</sup> The Special Forces refused access of the families to the injured child in the hospital for a week, refused to release the body of the dead child for a prolonged period, and forcefully disappeared five individuals for prolonged periods, four of whom were subsequently released. The release of the other is pending tribal negotiations.<sup>31</sup>

<sup>27</sup> Originally from Hajjah Governorate. [https://web.facebook.com/-محبي-العقيد-عبدالغني-شعلان-قائد-قوات-1836740393277690-الأمن-الخاصة-مارب-/?\\_rdc=land\\_rdr](https://web.facebook.com/-محبي-العقيد-عبدالغني-شعلان-قائد-قوات-1836740393277690-الأمن-الخاصة-مارب-/?_rdc=land_rdr).

<sup>28</sup> Eye-witnesses identified Shaalan at the site of the incident.

<sup>29</sup> Document with Panel.

<sup>30</sup> The events surrounding the death of the child is unclear. It is possible that the child resisted arrest. It is also clear that there was an armed exchange as one officer died and another was seriously injured (medical sources).

<sup>31</sup> Information as at 10 December 2017. The Panel was informed of other serious detention related abuses undertaken by the Special Forces in Ma'rib, which are not documented here to protect individuals.

Figure 65.6

Colonel Abu Mohammad Abdul Ghani Shaalan<sup>32</sup>

#### F. Brigadier General Ali Abdullah Taher

17. Ali Abdullah Taher was the Director for General Security in Ma'rib. This is an official post under the control of the Government of Yemen. During his tenure, he was directly involved in one incident where he demanded a "suitable exchange" for the release of a detainee in his custody, Mustafa Hussain al-Mutawakel.<sup>33</sup> No other reasons were provided for the refusal to release al-Mutawakel.

18. Mostafa Huseain al-Mutawakel was at the time of his arrest the President for the General Authority for Investment of Yemen and a Professor at the University of Sana'a. He was arrested on 27 April 2017 at Bab-al-Falej checkpoint in Ma'rib.<sup>34</sup> The checkpoint is under the control of security forces loyal to the Government of Yemen. Al-Mutawakel was travelling from Sayun to Sana'a on board a civilian bus. His family is unaware of his whereabouts since his arrest.<sup>35</sup> There is no evidence that al-Mutawakel had lost his civilian status or protection at the time of arrest (see annex 66). IHL allows civilians to be detained if they pose an imminent security threat and then, only for as long as that threat is existent. Any attempt to detain a civilian until a suitable prisoner exchange can take place may also amount to hostage taking.

18. The Panel documented another arrest and detention at Bab-al-Falej checkpoint, where the detainee was also forcefully disappeared after the detention, but was subsequently released following tribal negotiations. There were no reasons provided for his arrest other than that he was related to a prominent family aligned with the Houthis.

<sup>32</sup> Image: [https://web.facebook.com/-/الخاصة-مأرب-قوات-الأمن-شعلان-قائد-العقيد-عبدالغني-شعلان-قائد-قوات-الأمن-الخاصة-مأرب-1836740393277690/?\\_rdc=1and\\_rdr](https://web.facebook.com/-/الخاصة-مأرب-قوات-الأمن-شعلان-قائد-العقيد-عبدالغني-شعلان-قائد-قوات-الأمن-الخاصة-مأرب-1836740393277690/?_rdc=1and_rdr).

<sup>33</sup> The name is divulged with the consent of the family.

<sup>34</sup> At approximately 15°21'25.48"N, 45°19'45.12E.

<sup>35</sup> In the latter half of 2017, the Panel was informed by official sources that Mustafa Hussain al-Mutawakel had been transferred to an as yet unidentified detention facility in Saudi Arabia. The Panel continues to investigate.

Figure 65.7  
Ali Abdullah Taher<sup>36</sup>



<sup>36</sup> Image: [https://web.facebook.com/-الخاصة-مأرب-قوات-الأمن-شعلان-قائد-قوات-الأمن-الخاصة-مأرب-1836740393277690/?\\_rdc=land\\_rdr](https://web.facebook.com/-الخاصة-مأرب-قوات-الأمن-شعلان-قائد-قوات-الأمن-الخاصة-مأرب-1836740393277690/?_rdc=land_rdr).

**CONFIDENTIAL ANNEX NOT FOR PUBLIC DISSEMINATION**

**Annex 66: Case study on relating to detentions by the Government of Yemen**



**CONFIDENTIAL ANNEX NOT FOR PUBLIC DISSEMINATION**

**Annex 67: Assassination of a patient and attacks against medical personnel at Revolution Hospital, Ta'izz (24 March - 5 April 2017)**

## Annex 68: Houthi-Saleh recruitment of children

1. The Panel conducted investigations aiming to identify individuals and networks operating in Yemen that engage in child recruitment.<sup>1</sup> In Houthi-Saleh controlled areas, there are local networks of former and current fighters and Houthi-Saleh loyalists that continue to recruit children. The Panel has identified two individuals who recruited a total of five children; four subsequently returned to their families and one returned to fighting. Details are contained in confidential annex 69. Of the two recruiters, one was a fighter forced to retire due to injury, the other is a current fighter. The Panel finds that there is a systematic network of recruitment within the Houthi-Saleh forces. Recruiters are deployed to their own residential areas, as they are known to the local population, which enhances the recruitment process.

2. These five cases represent only a fraction of children who have been recruited into Houthi-Saleh forces, sent to the front lines, and then being injured, maimed, or killed in the conflict.<sup>2</sup> The Panel finds that there is prevailing impunity associated with child recruitment. For example, in one incident documented by the Panel, the officers of the '14th October' Police Station in Sana'a initially refused to record a complaint of the abduction of children removed from the parents' custody without their consent, because the children had been recruited (i.e. they were not missing).

3. On 19 October 2017, Hassan Mohamed Zaid, the Sana'a based minister for youth and sports, and the head of the al-Haq party, called for the closure of schools with students being sent to battle-fronts. He stated on social media:

*"What if school study stops one year and all the youths and their teachers go for military service?"*

*Is not this going to feed the fronts with hundreds of thousands for decisive battle?"*

*High school students used to be forced to stop study for one year waiting for documents.*

*What is the difference then?"*

5. He added: "Wouldn't we be able to reinforce the ranks with hundreds of thousands (of fighters) and win the battle?", and then criticized those who complained about his proposal stating that: "People close the schools under the pretext of a strike and when we think about how to take advantage of this situation, they take offence".<sup>3</sup> The Panel notes that on 21 October 2017, after widespread public criticism, he changed his statement to say that he originally referred to university students.

6. On 6 November 2017, the Saudi Arabia-led coalition issued a statement listing Hassan Mohamed Zaid as one of the forty men "responsible for planning, executing and supporting various terrorist activities by the Houthi terrorist group".<sup>4</sup> It is not clear what 'terrorist activities' were undertaken by the said individual. The Panel continues to investigate.

<sup>1</sup> In this annex, individuals are considered to be children when they were under 18 years of age at the time of their recruitment. The "Optional Protocol to the Convention on the Rights of the Child on the involvement of children in armed conflict", to which Yemen is a party (2 March 2007), states that armed groups that are distinct from the armed forces of a State should not, under any circumstances, recruit persons under the age of 18 years. See Article 4(1).

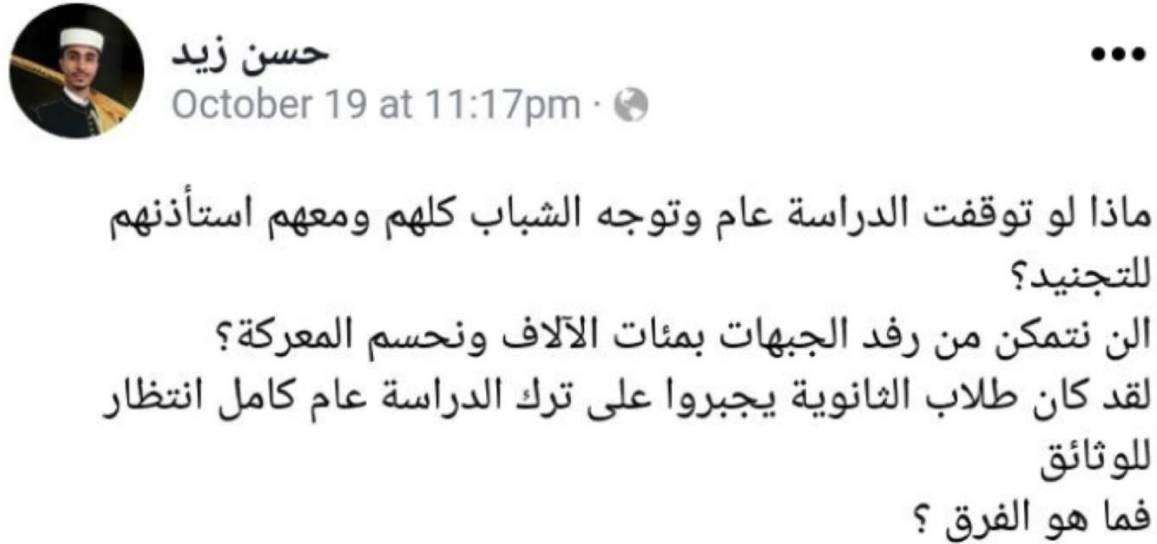
<sup>2</sup> See S/2017/821. The United Nations verified 517 cases of the recruitment in Aden, Abyan, Amran, Sana'a and Ta'izz. 359 verified cases of recruitment and use were attributed to the Houthis and affiliated forces. Other perpetrators included the anti-Houthi forces, Ansar al-Sharia, AQAP and the Yemeni Armed Forces.

<sup>3</sup> <https://www.theguardian.com/world/2017/oct/20/yemen-minister-send-our-children-to-war>. All relevant tweets are with the Panel.

<sup>4</sup> <https://english.alarabiya.net/en/News/gulf/2017/11/06/Saudi-Arabia-announces-millions-of-dollars-in-bounty-for-40-wanted-in-Yemen-.html>.

Figure X.1

Original tweet by the minister for youth and sports, 19 October 2017



7. The fact that a minister in the Houthi-Saleh forces openly advocated for the closure of schools and recruitment of children/students is particularly problematic in a context where students, parents, and teachers alike, are feeling the effects of the economic crisis, are struggling to continue education of children, and are resisting proactive child recruitment networks in their villages. This type of statement, from a person in authority, may be construed as implicit authority and encouragement for the continuing Houthi-Saleh recruitment and use of children in conflict. The Panel finds that this type of incitement is a threat to the peace, security, and stability in Yemen.

8. The Panel finds that the following also contributes to increased recruitment of children:

- (a) The non-payment of salaries results in children being compelled to search for economic alternatives on behalf of their families. The only well-paid employment opportunities for children are with the Houthi-Saleh forces (the children are paid approximately 15,000 – 20,000 Yemeni Riyal (60 – 80 US\$));
- (b) The disruption to education means that children often have little to do, this making them vulnerable to street level recruitment;
- (c) Parents cannot offer financial or lifestyle alternatives to induce the children to return to families after they have been recruited;
- (d) As families continue to live in areas controlled by the Houthi-Saleh forces, they are afraid to speak out against the recruitment, thus allowing recruitment to continue unchallenged; and
- (e) For parents with financial means, the airport closure and visa restrictions means that these parents cannot send or take the children out of the country for their own protection.

9. There are also parents whom willingly, or are forced to, allow their children to be recruited because of financial considerations or loyalty to the cause.<sup>5</sup>

<sup>5</sup> Multiple human rights activists.

10. The Panel finds that Houthi-Saleh leadership also incurs command responsibility for these continuing violations,<sup>6</sup> and underscores that in current prevailing circumstances of regular and widespread recruitment and use, such recruitment and use of children in conflict is, at minimum, a war crime.<sup>7</sup>

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<sup>6</sup> Under customary IHL, commanders and other superiors are criminally responsible for war crimes committed by their subordinates if they knew, or had reason to know, that the subordinates were about to commit or were committing such crimes and did not take all necessary and reasonable measures in their power to prevent their commission, or if such crimes had been committed, to punish the persons responsible. See, for example, ICRC Customary IHL Rule 153. The Panel highlights that not only military personnel but also civilians can be liable for war crimes based on command responsibility.

<sup>7</sup> See Statute of the International Criminal Court Article 8 (e) (vii). See also ICRC Customary IHL Rules 136 and 137.

**CONFIDENTIAL ANNEX NOT FOR PUBLIC DISSEMINATION**

**Annex 69: Confidential case studies of Houthi-Saleh recruitment of children**

## Annex 70: IHL violations relating to Sana'a airport closure

### I. Introduction

1. The Saudi Arabia-led coalition closed Sana'a airport to all commercial traffic on 9 August 2016. On 6 November 2017, the Saudi Arabia-led coalition announced that it would temporarily close "all Yemeni ground, air, and sea ports... while taking into consideration the continuation of the entry and exit of humanitarian supplies and crews"<sup>1</sup> On 23 November 2017 the Saudi Arabia-led coalition announced the opening of the airport to UN flights and by 29 November 2017, ICRC, MSF and UN flights had resumed operations into the airport.

2. Yet, the airport has continued to be inaccessible to commercial flights since August 2016. This has created significant humanitarian issues for those who are chronically ill, who cannot leave the country to seek medical treatment by alternative routes, and whose access to medical care has been affected by the conflict;<sup>2</sup> and for those with protection concerns or who are fleeing persecution and cannot travel via other means.

### II. IHL and HR violations relating to patients seeking medical care abroad

3. According to the Sana'a based ministry of health, as at August 2017 approximately 10,000 Yemenis are estimated to have died from health conditions for which they were seeking medical treatment abroad.<sup>3</sup> The Panel was provided details on two cases where patients have died, where the closure of the airport potentially contributed to their inability to obtain timely medical treatment.<sup>4</sup>

4. Because of the conflict, many patients in need of immediate medical treatment do not have access to the requisite medical assistance within Yemen, which may necessitate seeking treatment abroad. For example, the conflict has resulted in:

- (a) Limited medical resources due to the non-payment of salaries and lack of hospital operational funds;
- (b) Closure or destruction of hospitals;
- (c) Attacks against hospitals and health care workers;
- (d) Prioritized treatment for fighters and war wounded in some hospitals; and
- (e) Lack of medical supplies, equipment, and specialists.

5. On one occasion, a team of doctors was cleared by the Saudi Arabia-led coalition to arrive at Sana'a International Airport to treat the former President of Yemen,<sup>5</sup> but this option is not available for others seeking medical treatment unavailable in Yemen. Thus, the options for civilians seeking treatment aboard are currently as follows:

<sup>1</sup> <http://www.spa.gov.sa/viewfullstory.php?lang=en&newsid=1684682#1684682>.

<sup>2</sup> A person's medical condition or access to treatment may be said to be affected by the conflict when, for example, a medical facility on which their treatment depends has been destroyed, when they do not have access to medical personnel or facilities on which they depend owing to the conflict, or where they do not have access to medicines vital for their ongoing treatment for reasons related to the conflict. See *Commentary to the Common Article 3 of the Geneva Conventions*.

<sup>3</sup> See <https://www.nrc.no/news/2017/august/yemen-airport-closure-killed-more-people-than-airstrikes/>.

<sup>4</sup> Confidential sources.

<sup>5</sup> <https://uk.reuters.com/article/uk-yemen-security-saleh/yemens-ex-president-saleh-stable-after-russian-medics-operate-idUKKBNICJ0FS>.

- (a) Leave through Sayun, which takes 24 hours by public transport from Sana'a, or by private transport at a cost of approximately US\$ 200;<sup>6</sup>
- (b) Leave through Aden, which takes 12 hours by public transport from Sana'a, or by private transport at a cost of USD approximately US\$ 280 – 350;<sup>7</sup> or
- (c) Leave by boat, often using human smuggling and trafficking routes.

6. The fact that many countries have recently imposed stringent visa restrictions on Yemenis also compounds the difficulties for patients seeking medical treatment abroad.

7. Common Article 3 of the Geneva Convention - which is binding on Saudi Arabia and the other Saudi-Arabia-led coalition member States authorizing and enforcing the air blockade over Sana'a - provides that civilians and other persons who do not take part in hostilities, who are sick or wounded shall, in all circumstances be protected and cared for. This protection given to the wounded and the sick is meaningless without access to requisite medical assistance, including medical supplies and medical personnel. Article 7 of Additional Protocol II further strengthens that right of the wounded and sick.

8. Under IHRL the obligation to ensure the right to health of individuals is also binding on Saudi Arabia-led coalition member States.<sup>8</sup> States are legally bound under IHRL to ensure that their policies create an enabling environment for available and accessible health care for all in the shortest possible time,<sup>9</sup> including allowing patients have access healthcare in other countries.<sup>10</sup>

9. The Saudi Arabia-led coalition has not exercised its discretion to impose restrictions and conditions on travel through the Sana'a International Airport, as may be required by military necessity,<sup>11</sup> while also allowing those requiring immediate treatment abroad the opportunity to do so. Instead it has exercised a blanket ban since August 2016 on travel to obtain medical services, except for the temporary lifting of the ban on selected medical flights immediately following the Sana'a Funeral Hall air strike and, more recently, for the flight carrying medical personnel that treated former president Ali Abdullah Saleh (YEi.003).

10. In this context, the Panel concludes that the complete and unconditional closure of Sana'a International Airport to those genuinely seeking immediate medical treatment abroad, particularly those

<sup>6</sup> Sources organizing "medical tourist" visits.

<sup>7</sup> Ibid.

<sup>8</sup> See for example, the Universal Declaration of Human Rights, Article 25; International Covenant on Civil and Political Rights (ICCPR), Articles 6 and 12; and International Covenant on Economic, Social and Cultural Rights (ICESCR), Article 12.

<sup>9</sup> World Health Organization (WHO), Right to Health: Crossing barriers to access health in the occupied Palestinian territory, 2014 - 2015. See also Additional Protocol II, Article 7(2), and ICRC Study on Customary International Humanitarian Law (2005), Rule 110.

<sup>10</sup> Committee on Economic, Cultural, and Social Rights, General Comment No. 14, The right to the highest attainable standard of health (article 12 of the International Covenant on Economic, Social and Cultural Rights), 11 August 2000, UN Doc. E/C.12/2000/4. "To comply with their international obligations in relation to article 12, States parties have to respect the enjoyment of the right to health in other countries, and to prevent third parties from violating the right in other countries...".

<sup>11</sup> The Saudi Arabia-led coalition spokesperson stated that "closing Sana'a airport and limiting it to relief efforts came as a precaution to ensure the safety of all inbound commercial and cargo flights, due to the Huthi (sic) armed militia's attempts to smuggle arms into the country. As a result, we have assigned airports in liberated, and safe cities as alternatives at the request of the Yemeni government. Thus, these precautionary measures should not be stigmatized as cause of suffering for Yemeni people". He added, "should airport management and security be conducted properly, insuring the safety of all inbound flights and stopping arms smuggling, Joint Forces Command is prepared to restore normal flight activity".

<http://www.spa.gov.sa/viewfullstory.php?lang=en&newsid=1655689#1655689>.

who do not have any other meaningful alternatives, is an infringement of Common Article 3. The WHO has held that denying access to medical care in some circumstances could constitute a war crime.<sup>12</sup>

11. Although the Saudi Arabia-led coalition appears to justify the measures taken in respect of the Sana'a International Airport by referring to resolution 2216 (2015),<sup>13</sup> there is no provision in that resolution that supports a complete blockade on commercial flights into Sana'a International Airport. Additionally, the Saudi Arabia-led coalition is not currently complying with paragraph 17 of resolution 2216 (2015) on its reporting requirements. Since the resolution came into effect, the Saudi Arabia-led coalition has only issued one report to the Committee, which related to ten inspections.<sup>14</sup>

### III. Conclusion

12. The Panel does not dispute that the Saudi Arabia-led coalition may take such legitimate measures it deems appropriate, as required under military necessity, to control air traffic into geographical areas controlled by the Houthi forces. Yet, the Panel finds that:

- (a) The Saudi Arabia-led coalition has not demonstrated the military necessity for the closure of the airport to persons genuinely seeking immediate medical treatment abroad, particularly when there are no real alternative travel routes; and
- (b) That it is the responsibility of the member States of the Saudi Arabia-led coalition, and not the United Nations, to ensure that the Saudi Arabia-led coalition member States comply with their obligations under IHL and IHRL.

13. The Panel notes that the Saudi Arabia-led coalition has offered to open the airport under the supervision of the United Nations;<sup>15</sup> an offer not taken up by the United Nations.<sup>16</sup>

### III. IHL violations relating to persons seeking protection abroad

14. The Panel investigated five situations relating to six individuals who wished to leave Yemen, on the basis that there were immediate threats against their life and liberty in Houthi-Saleh controlled areas. These individuals had all been subjected to arrest, detention, abuse, and/or persecution and other human

<sup>12</sup> World Health Organization (WHO), Right to health: Crossing barriers to access health in the occupied Palestinian territory, 2014-2015. United Nations Office of the High Commissioner of Human Rights (OHCHR), Freedom of Movement: Human rights situation in the Occupied Palestinian Territory, including East Jerusalem, Report of the Secretary-General to the United Nations Human Rights Council, February 2016. OHCHR and WHO examined the issue on the right of patients to receive treatment abroad when it considered the right of Palestinians to cross the Rafah border crossing between the Gaza Strip and Egypt to seek medical treatment. The OHCHR has held that "Any exception (to freedom of movement) must comply with international law, which means that restrictions are justified only for imperative reasons of security and only in response to a specific security threat".

<sup>13</sup> <http://www.spa.gov.sa/viewfullstory.php?lang=en&newsid=1655689#1655689>. The Saudi Arabia-led coalition spokesperson stated in August 2017 that "the coalition command had and is still working to its best efforts to ensure the safe arrival of all commercial, cargo and relief flights to all Yemeni airports in Sana'a, Aden, Al Hudaydah, Seiyun, Mukalla and Socotra through issuing proper flight permits for all incoming requests, and assigning Bisha National Airport for air traffic management in accordance with UNSCR 2216".

<sup>14</sup> A/AC.56/2015/COMM.28 (KSA ref no UN/SC/378) dated 12 June 2015.

<sup>15</sup> <https://www.nytimes.com/2017/08/10/world/middleeast/saudi-arabia-yemen-houthi-rebels-sana-airport.html> and <http://www.spa.gov.sa/viewfullstory.php?lang=en&newsid=1655689#1655689>.

<sup>16</sup> The UN stated that "the parties to the conflict have the responsibility to ensure the protection of civilians and their access to humanitarian relief, including through the use of airspace and airport". See <https://www.reuters.com/article/us-yemen-security-airport/u-n-signals-not-responsible-for-controlling-yemens-main-airport-idUSKBN1AR22Y>.



rights violations by Houthi-Saleh forces/officials, but feared for their physical safety in Government controlled territory.

14. UNHAS flights do not transport civilians fleeing persecution,<sup>17</sup> compelling individuals fleeing Houthi-Saleh controlled territory to travel through the South of the country. The risk of arrest and subsequent disappearance in the south and in Ma'rib, which are increasingly being reported in the south, compounds fear that individuals traveling between the north and the south can be targeted in those areas because of their family names, family history, or tribal affiliations.

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<sup>17</sup> UN sources.

**CONFIDENTIAL ANNEX NOT FOR PUBLIC DISSEMINATION**

**Annex 71: Obstructions to the delivery of humanitarian aid**

**CONFIDENTIAL ANNEX NOT FOR PUBLIC DISSEMINATION**

**Annex 72: Obstructions to humanitarian access and the distribution of humanitarian assistance (2017)**

**Annex 73: Full list of abbreviations**<sup>758</sup>

a/c	Aircraft
AED	Arab Emirati Dinar
AES	Arms and Ammunition Search
a.k.a	Also Known As
AGM	Air-to-Ground Missile
AIO	Iran Aircraft Industries Organization
AIS	Automatic Identification System (maritime)
AK	<i>Avtomatik Kalishnikov</i> (assault rifle)
AP	Amended Protocol
APKWS	Advanced Precision Kill Weapon System
AQ	Al-Qaida
AQAP	Al-Qaida in the Arabian Peninsula
ASL	Above Sea Level
ATGM	Anti-Tank Guided Missile
ATGW	Anti-Tank Guided Weapon
ATO	Air Tasking Order
AUAV	Armed Unmanned Aerial Vehicle
AXO	Abandoned Explosive Ordnance
BAT	British American Tobacco
BCP	Border Crossing/Control Point
BMP	Best Maritime Practices
CA	Common Article (to Geneva Conventions of 1949)
CAGE	Commercial and Government Entity (Code)
CBD	Commercial Bank of Dubai
CBY	Central Bank of Yemen
CEP	Circular Error Probability
CFD	Computational Fluid Dynamics
CHA	Coalition Holding Area
CIFOR	Civil Forum for Asset Recovery
CIHL	Customary International Humanitarian Law
CIHLR	Customary IHL Study Rules (ICRC)
CMF	Combined Maritime Force
CN	Peoples' Republic of China
CP	Checkpoint
CRC	Convention on the Rights of Children
DADP	Di-Acetone Di-Peroxide
DC	Direct Current
DIO	Defence Industries Organization (Iran)
DoB	Date of Birth
DPRK	Democratic People's Republic of North Korea
DRC	Danish Refugee Council
DWT	Dead Weight Tonnage (Tonnes)
E	East

<sup>758</sup> Including footnotes and annexes.

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EGBU	Enhanced Guidance Bomb Unit
EO	Explosive Ordnance
ER	Extended Range
ER-SRBM	Extended Range Short Range Ballistic Missile
ESH	Explosive Storehouses
EUC	End Use Certificates
F	Foreign Investor Stake / Fuel
FAE	Fuel Air Explosion
FFR	Free Flight Rocket
FFV	Fuel Filling Valve (SCUD)
FFDV	Fuel Filling and Drainage Valve
FOB	Free On Board
F of I	Figure of Insensitiveness
FR	France
FS	French Ship
FV	Fishing Vessel
FZC	Free Zone Company
g	Gravity (9.81m/s)
GBP	Great Britain Pounds (sterling)
GBU	Guidance Bomb Unit
GC	Geneva Conventions
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GE	Germany
GGE	Group of Governmental Experts (GGE)
GIS	Geographical Information System
GLC	Global Logistics Cluster
GPC	General People's Congress
GPS	Global Positioning System
GT	Gross Tonnage
GWT	Gross Weight Tonnage
H	Height
HE	High Explosive
HEAT	High Explosive Anti-Tank
HESA	Iran Aircraft Manufacturing Industries
HMTD	Hexa-Methylene Triperoxide Diamine
HRW	Human Rights Watch
HSV	High Speed Vessel
IAIO	Iranian Aircraft Industries Organization (HESA)
ICC	International Criminal Court
ICJ	International Court of Justice
ICRC	International Committee of the Red Cross
ICU	Intensive Care Unit
IDP	Internally Displaced Person(s)
IED	Improvised Explosive Device
IHL	International Humanitarian Law
IHRL	International Human Rights Law
IMC	International Medical Corps

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IMO	International Maritime Organization
IMS	Inertial Measurement System
INS	Inertial Navigation System
IPO	Initial Public Offering
IR	Iran
IRFNA	Inhibited Red Fuming Nitric Acid
IRGC	Iranian Revolutionary Guards Corps
ISIL	Islamic State in Iraq and the Levant ( <i>Daesh</i> )
ISTAR	Intelligence, Surveillance, Targeting and Reconnaissance
IT	Italy
JIAT	Joint Investigation and Assessment Team (Saudi Arabia-led coalition)
KE	Kinetic Energy
KIIC	Kamaran Industry and Investment Company
KKIA	King Khaled International Airport
km	Kilometre(s)
KR	Republic of Korea
L	Litres Length
LAWS	Lethal Autonomous Weapons System
LC	Letters of Credit
Li-Ion	Lithium Ion
LLC	Limited Liability Company
LLI	Lloyds List Intelligence
LNG	Liquefied Nitrogen Gas
LTTE	Liberation Tigers of Tamil Eelam
m	Metres
m <sup>3</sup>	Cubic Metres
MARAD	Maritime Administration (US Department of Transport)
MCCB	Moulded Case Circuit Breaker
MEKP	Methyl Ethyl Ketone Peroxide
MG	Machine Gun
mm	Millimetre(s)
‘MoPIC’	ministry of planning and international cooperation
MOU	Memorandum of Understanding
MRBM	Medium Range Ballistic Missile
MSA	Mine Safety Appliances Limited (USA)
MSN	Manufacturer’s Serial Number
MSR	Main Supply Route
MT	Mega-Tonne(s) / Merchant Tanker
MV	Merchant Vessel
MWMS	Moveable Weapon Mount System
N	North / Newton(s)
NATO	North Atlantic Treaty Organization
NBD	National Bank of Dubai
NEQ(C)	Net Explosive Quantity (Content)
NFP	National Focal Point
NGO	Non-Governmental organization
NK	Not Known
NL	Netherlands

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nm	Nautical Mile
NO	Norway
NRC	Norwegian Refugee Council
NSB	National Security Bureau
'NSB'	Sana'a based national security bureau
NSN	NATO Stock Number
O	Oxidiser
OCHA	Office for Coordination of Humanitarian Affairs (UN)
OFAC	Office of Foreign Assets Control (US Treasury)
OFV	Oxidiser Filling Valve (SCUD)
OFDV	Oxidiser Filling and Drainage Valve
P	Private Investor Stake
PDRY	People's Democratic Republic of Yemen
PBIED	Person-Borne IED ('suicide bomber')
PCB	Printed Circuit Board
PIL	Pacific International Lines Limited
POE	Panel of Experts
PRV	Pressure Relief Valve
PSO	Political Security Organization
'PSO'	Sana'a based political security organization
PWA	Port Waiting Anchorage
QAR	Qatari Riyal
QNB	Qatar National Bank
RCIED	Radio Controlled Improvised Explosive Device
RCL	Recoilless Rifle
RDX	Hexogen or Cyclotrimethylenetrinitramine
RPG	Rocket Propelled Grenade
RSADF	Royal Saudi Air Defence Forces
RSAF	Royal Saudi Air Force
RSN	Royal Saudi Navy
SAA	Small Arms Ammunition
SAM	Surface-to-Air Missile
SAR	Saudi Riyal
SEMG	Somalia and Eritrea Monitoring Group
SBI	Shahid Bagheri (Bakeri) Industries (Iran)
SBIG	Shahid Bagheri (Bakeri) Industrial Group (Iran)
SGBV	Sexual and Gender-Based Violence
SHIG	Shahid Hemat Industrial Group (Iran)
SLOC	Sea Lines of Communication
SMC	Security and military committee (Houthi-Saleh)
SOLAS	International Convention for the Safety of Life at Sea
SPC	supreme political council
SPM	Ships Protection Measures
SRBM	Short Range Ballistic Missile
SRC	supreme revolutionary council
STC	Southern Transitional Council
STCO	Shaher Trading Company Limited
SVIED	Suicide Vehicle IED

TAN	Tangent
TATP	Tri-Acetone Tri-Peroxide
TBC	To Be Confirmed
TCBM	Transparency and Confidence Building Measures
TCC	Trilateral Coordination Committee
TFTC	Terrorist Financing Target Centre
TNT	Tri-Nitro Toluene
TR	Turkey
UAE	United Arab Emirates
UAV	Unmanned Aerial Vehicle
UK	United Kingdom
UN	United Nations
UNCT	UN Country Team
UNESCO	UN Educational, Scientific and Cultural Organization
UNHAS	UN Humanitarian Air Service
UNHCR	UN High Commission for Refugees
UNICEF	United Nations Children's Fund
UNVIM	UN Verification and Inspection Mechanism
USA	United States of America
USAF	United States Air Force
USDA	United States Department of Agriculture
USN	United States Navy
USS	United States Ship
US\$	United States Dollar(s)
VHF	Very High Frequency
VLCC	Very Large Crude Carrier
UXO	Unexploded Ordnance
W	Width
WBIED	Water-Borne Improvised Explosive Device
WFP	World Food Programme
WSS	Weapon Storage Sites
YAF	Yemen Armed Forces
'YCA'	Sana'a based Yemen customs authority
YEITI	Yemen Extractive Industries Transparency Initiatives
YER	Yemeni Riyal
YPC	Yemen Petroleum Company