

**2009 Meeting
Geneva, 7-11 December 2009**

**Meeting of Experts
Geneva, 24-28 August 2009**

Item 5 of the provisional agenda

**Consideration of, with a view to enhancing international
cooperation, assistance and exchange in biological
sciences and technology for peaceful purposes, promoting
capacity building in the fields of disease surveillance,
detection, diagnosis, and containment of infectious diseases**

AMBIT: A CONCEPT FOR ADVANCED MANAGEMENT OF BIOLOGICAL THREATS

Submitted by Germany

1. Biological hazards caused by terrorist activities are linked with major challenges:
 - (i) the difficulty of prompt detection,
 - (ii) little experience with disease patterns,
 - (iii) possibly rapid depletion of human and structural resources,
 - (iv) acute perception in politics and society,
 - (v) insufficient knowledge for risk assessment,
 - (vi) training deficits in first response structures.
2. Structures and activities involved in handling the hazards concentrate on three major areas: detection, situation adapted management and treatment. In all three areas besides public health other agencies like first responders, police, fire brigades and technical disaster control services will be engaged.
3. The AMBIT concept provides a modular multidisciplinary approach to integrated management that focuses on practical and video assisted training, based on recent standard knowledge. The concept is used for training courses at the Robert Koch Institut, which is the federal institution responsible for disease control and prevention as well as the central federal

reference institution for both applied and response-orientated medical research and for the public health sector

4. A multidisciplinary approach for handling biological hazards linked with terrorism was also developed by an informal G8 group of bioterrorism experts. In 2007, the G8 member states conducted a Forensic Epidemiology Workshop in London focusing on problems of close cooperation of public health and law enforcement agencies to satisfy both medical and forensic needs in concrete scenarios. In 2008, the Robert Koch Institut together with the German Bundeskriminalamt (Federal Criminal Police Office), the US Centers for Disease Control and Prevention (CDC), and the US Federal Bureau of Investigation (FBI) prepared a G8 follow-up workshop in Berlin which focused primarily on merging the AMBIT concept with law enforcement and other requirements in a training scenario.

5. The training scenario was broken down in several stages, which required unilateral reaction from individual agencies, exchange of information between agencies, joint reactions and discussion periods for defining requirements, including:

- (i) an outbreak scenario for public health,
- (ii) a threat scenario for law enforcement,
- (iii) joint first response for handling casualties,
- (iv) joint handling of a suspect contagious perpetrator,
- (v) joint interrogation of a contagious perpetrator under time constraints,
- (vi) joint action to safeguard a suspect laboratory site,
- (vii) requirements for joint assessment, response, media work and public relations.

6. The lessons learned from the Berlin exercise include, inter alia,

- (i) the necessity for continuously checking the transmissibility of training to preparedness,
- (ii) the requirement that policies need to provide flexibility for adaptation in operative situations.

The workshop provided a strong impulse for an integrated management of biological hazards in Germany.

7. The AMBIT concept, the scenario and the results of the G8 AMBIT/LEPH workshop 2008 in Berlin provide templates which may assist other countries to improve policies and structures for prevention, situation adapted management and treatment of biological hazards through joint efforts of public health, law enforcement and other relevant agencies. The workshop was observed with interest by representatives of the European Union, Interpol and the World Health Organization, and in this way may contribute to make knowledge and expertise available beyond G8 member states.
