Preparatory Committee for the 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons

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"TO ENSURE ACCESS TO NUCLEAR FUEL SUPPLY AND ENRICHMENT SERVICES"

MULTILATERAL ENRICHMENT SANCTUARY PROJECT (MESP)

Working Paper submitted by Germany

- 1. At the occasion of the 1. Preparatory Committee in May 2007 in Vienna the EU working paper on "Multilateralisation of the Nuclear Fuel Cycle / Guarantees of Access to the Peaceful Uses of Nuclear Energy " reminded us that the Nuclear Non-Proliferation Treaty (NPT) rests on three pillars: non-proliferation, disarmament and the peaceful uses of nuclear energy. The three are interdependent, yet each faces its own challenges in today's security, political and technological environment. Proliferation concerns, including current issues related to the nature of nuclear fuel cycle technology programs, as well as disarmament and peaceful uses of nuclear energy, remain high on the international agenda. Germany, one of the holders of the most advanced enrichment technology feels a special obligation to consider the question of guaranteed fuel supply also within the framework of the NPT.
- 2. Enrichment technology is the basis for the production of fuel for the most modern and common nuclear reactors. Its inherent capability for the production of weapons grade highly enriched uranium presents a critical non-proliferation concern. Enrichment technology therefore should remain under special scrutiny and its applications under strict safeguards. Germany is currently developing a concept how to make enrichment services available on a non-GE.08-61191

discriminatory basis to all NPT member states that require it for nuclear power generation, full compliance with their obligations deriving from the NPT provided.

- 3. The concept had to take into account the following considerations:
 - (a) High capital investment for NPP and relatively low costs for fuel make NPP especially sensitive to fuel supply interruptions.
 - (b) Efficient fuel supply can be and is currently organised through a functioning market; it should not be subsidized directly or indirectly. The currently functioning market could also integrate additional suppliers.
 - (c) In comparison it is more cost-efficient to construct enrichment facilities on the basis of existing technology than to independently develop and implement the enrichment technology.
 - (d) Technology holders in principal are reluctant to sell their enrichment technology. Nevertheless technology holders have shown their willingness to sell enrichment equipment under certain circumstances with the consent of their supervising Governments.
 - (e) The construction of new NPP will take more time than the construction of the necessary enrichment capacity for these NPP. Enrichment services are based on longterm commercial contracts which allow for the necessary time to develop schemes of a new framework for enrichment services.
 - (f) Buffer-stocks or fuel banks would bind capital over time.
 - (g) Virtual fuel banks, based on guarantee schemes might be not sufficient in times of a major crisis.
 - (h) The geography of nuclear power is about to change. Adapting the distribution of enrichment facilities to these new realities might increase the level of security of supply.
- 4. As a result Germany has launched the proposal of a "Multilateral Enrichment Sanctuary Project", MESP. It was circulated by INFCIRC 704 in May 2007 and presented by the German Government on 19th of February 2008 to the Member states of the IAEA in more detail. It includes:

- (a) A commercially run enrichment plant,
- (b) owned by interested states or their industry,
- (c) situated in a special territory, controlled and administered by the IAEA, where a host state transfers functional immunities to the IAEA to such an extent that the operation of the enrichment plant will be protected from any potential interference by the host state or others.
- 5. In discussions with IAEA experts we have refined the concept of MESP. We are currently drafting two model agreements, which could serve as legal basis for MESP. A Host State Agreement between the IAEA and a host state; a Multilateral Framework Agreement between the IAEA and a Group of States interested in participating in MESP. The draft model agreements would be made available to interested parties in due course. It was discussed to include a (small) revolving buffer stock, which, put under the direct control of the DG of the IAEA, could serve as additional crisis mechanism in case of (non-commercial, non-technical) interruptions of supply.
- 6. Germany is of the opinion that this concept fits well into the set of criteria the European Union presented in its paper to the 1. Preparatory Commission in May 2007:
 - Proliferation resistance
 - <u>Assurance of supply</u> including a predetermined and transparent decision-making mechanism and reliable guarantees for delivery.
 - Consistency with the equal rights and obligations paradigm
 - <u>Market neutrality</u>, both in the sense of not interfering with a functioning market and in maintaining a level playing field between various sources of energy.
- 7. Germany considers MESP economically advantageous for those who would not feel comfortable to rely on the international fuel market. MESP could be seen as a more economical way of assuring supply than embarking on complicated national development of enrichment technology. Membership in the Group of Interested States does not mean to give up rights enshrined in Article IV of the NPT. Members of the Group of Interested States remain free to develop their own enrichment technology, if they choose to do so and circumstances require.

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8. Germany invites all interested parties to engage in consultations and an open dialog on the general question of nuclear fuel supply security and welcomes all ideas which could further develop the MESP concept.
