

Joint Statement on Quadrilateral Cooperation on High-density Low-enriched Uranium Fuel Production

We, the leaders of Belgium, France, the United States and the Republic of Korea gathered in Seoul on the occasion of the Second Nuclear Security Summit, recognize that the ultimate goal of nuclear security is advanced by minimizing highly-enriched uranium (HEU) in civilian use, which is declared in the Washington Communiqué and the Work Plan and is also a key issue on the agenda of the 2012 Seoul Nuclear Security Summit.

In this regard, expressing our strong commitment to achieving the nuclear security objectives and noting the continued use of civilian HEU as research reactor fuel, we are cooperating on utilizing high-density low-enriched uranium (LEU) fuel powder production technology in the following ways as part of an effort to convert research reactors from HEU fuel to LEU fuel.

- The United States will provide by the end of 2012 a sufficient amount of LEU, approximately 110kg, for the Republic of Korea to manufacture 100kg of atomized uranium molybdenum (U-Mo) powder within the year 2013 using the centrifugal atomizing technology developed by the Korea Atomic Energy Research Institute.
- 2. The Republic of Korea will provide this U-Mo powder to the French fabricator AREVA-CERCA for its use in the manufacture of the high-density U-Mo fuel (lead test assemblies).
- 3. France and Belgium will load this U-Mo fuel into their high performance research reactors, once an appropriate form of high-density U-Mo dispersion type of fuel has been qualified.
- 4. Following the loading of U-Mo fuel, our experts will assess the performance of the fuel and other technical aspects of this project, including the function and efficiency of the U-Mo fuel and, if the result proves satisfactory, we intend to further cooperate in sharing adequate information and providing necessary assistance to countries seeking to convert reactors from HEU fuel to LEU fuel.

We express our shared confidence that this project, which is based on international cooperation on high-density LEU fuel production technology developed with the support of the Republic of Korea, the United States, France and Belgium contributes

directly to the ultimate goal of minimizing HEU in civilian use. Stressing that cooperation and support from the international community are crucial for promoting the universal use of LEU-based U-Mo fuel, we agree to work together to share the benefits of this technology.

/End/