

Mr. Coordinator,

Let me congratulate you on your appointment as coordinator for agenda item 1 and 2 with a general focus on the ban of the production of fissile materials for nuclear weapons and other nuclear explosive devices. I would like to thank you for preparing a structured debate which will certainly bring more common understanding of all aspects of the question. You can fully rely on our delegation support and cooperation.

The Czech Republic has been advocating, for more than two decades, for a treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices. We regret that it was not possible to establish relevant ad hoc committee within the Conference on Disarmament to allow for substantive negotiations of this important treaty. Therefore, we welcome the completion of the first session of the Group of Governmental Experts. In our view, it is a useful vehicle to facilitate achieving common ground on technical aspects of the future treaty.

As we have a debate on definitions, I wish to limit my intervention to this aspect. Treaty definitions are closely interlinked with verification and scope. Together they create a fundamental triangle, which the Czech Republic understands as a dynamic concept and a key to an effective and verifiable treaty.

- 1) For the purposes of the future Treaty, three basic terms (or concepts) need to be defined. First, what we understand under the term **fissile material**, second - what constitutes a **fissile material production**, and lastly what are, for the purposes of a Treaty, **fissile material production facilities**. Having clearly defined all three of these definitions is necessary for the future treaty to be practically implementable and verifiable.
- 2) With regard to the **fissile material definitions**, I would like to mention three models:
 - a) First model is based on **Article XX of the IAEA Statute** and its definition of special fissionable material. The benefit of this rather broad definition is its well established legal base, understanding among States and connection to IAEA's Safeguards. This definition also has because of its comprehensiveness the best potential for providing maximum assurance of compliance. Should the IAEA be tasked with the verification of a future Treaty, a lot of effort and IAEA's capacity could be saved by using the IAEA's fissile material definition, as the IAEA's verification mechanisms and provisions are adjusted to it. In our view this option could provide for high efficiency and professionalism coupled with important financial savings.
 - b) Second model is based on un-irradiated direct use material as defined in the **IAEA Safeguards Glossary**. This definition takes into account the materials that are most applicable in nuclear weapon designs and thereby most suited to a Treaty with the goal of prohibiting the production of fissile material for use in nuclear weapons. The benefit of this definition is its straightforwardness. Since it focuses on the materials most applicable

in nuclear weapons, it offers probably the best cost benefit ratio. This definition is not legally binding, but this should not constitute any significant problems for its application in a future Treaty.

- c) The third possible model has a somewhat narrower approach in defining fissile materials and focuses solely on **weapons grade uranium and plutonium**. This means Uranium enriched in isotope 235 above 90 percent and Plutonium enriched in isotope 239 above 90 percent as well. Although this option covers the material currently used in modern nuclear weapons, it creates a potential loophole, for as we know nuclear weapons can be assembled and were in fact successfully detonated with enrichment lower than 90 per cent. For this reason the Czech Republic considers this definition rather insufficient and too narrow.
- 3) Regarding **fissile material production definition**, we believe that a fundamental purpose of the verification mechanism in a future Treaty is to distinguish between production of fissile materials for nuclear weapons (and other explosive devices) that would be prohibited and production for civilian and non-proscribed military uses, like naval propulsion, that would be permitted but potentially verified. In this regard the definition stipulated in the draft FMCT prepared by the International Panel on Fissile Materials (IPFM) offers a reasonable solution for the definition of production.
- 4) The best option for **definition of production facilities** with respect to future verification are, in our view, uranium enrichment and plutonium reprocessing facilities as those are most relevant to the objectives of a future Treaty. A broader definition of fissile material production, encompassing irradiation and other nuclear fuel cycle activities, can offer a more comprehensive foundation for future verification provisions, but such approach would result again in a serious burden in terms of practicality and cost-efficiency.
- 5) It is also necessary that the future treaty will include provisions that allow for definitions to be reviewed and revised based on future scientific and weapons design developments. For the very same reason we should keep in mind that the definitions need to be credible and feasible, as well as practical and simple. The best outcome can be achieved if the definitions of fissile material, production, and production facilities are handled closely connected to each other.

To your questions, Mr Coordinator, we would like to offer following comments:

- **Is it sufficient to use established IAEA definitions or would FMCT specific definitions be required?**

As mentioned above, the IAEA definitions constitute a fairly good basis for FMCT definitions and are very comprehensive. The IAEA definition of “special fissionable material” as stipulated in Art. XX of the IAEA Statute might be too broad for the verification purposes, which would be in this case very costly and would demand a lot of IAEA’s resources. This option, however, does provide the best level of assurance. Another very reasonable option is definition of fissile materials based on IAEA definition of (un-irradiated) “direct use material” from the IAEA Safeguards Glossary,

meaning Plutonium containing less than 80% of isotope 238, high enriched Uranium 235 and Uranium 233. The second option has much better cost-efficiency ratio, while still capturing the most important materials for the purposes of a future Treaty. **Those two options are acceptable for the Czech Republic. Any narrower definition would create potential loopholes.** Transuranic elements can be also considered, but in the view of the Czech Republic Americium does not constitute a serious threat to the purpose of a future Treaty because of the extreme difficulty of weaponization of this material. Americium 241 has very high heat production (comparable to Pu 238) and radiation emission values. Neptunium on the other hand has more significant potential for weaponization and the Czech Republic is open to discussion about inclusion of the Neptunium in a future Treaty.

- **How much of the nuclear fuel cycle needs to be covered by an FMCT?**

The answer to this question depends on the comprehensiveness of proposed definitions. Also cost-effectiveness needs to be kept in mind. There are two different approaches – safeguarding entire nuclear fuel cycle which provides greater level of assurance but will be quite expensive. The other option, which the Czech Republic favours, is to focus on so-called choke points. The focal point of this verification system would be in safeguarding reprocessing plants and enrichment facilities or their input/output respectively. This option has a much better cost-effectiveness ratio while providing almost equal level of assurance as the first option. It should be kept in mind while considering both options, that verification obligations should also follow exported material.

Mr. Coordinator,

In our view, a non-discriminatory FMCT will have a potential to strengthen the NPT non-proliferation and disarmament goals. It will also provide a great opportunity to codify unilaterally declared moratoria into legally binding obligations and commitments. It is our belief that the IAEA safeguards system will be applied more formally to the NPT nuclear-weapon states and nuclear-weapon-possessing states outside the NPT. We are ready to continue our active work in the GGE while supporting the efforts of its chairperson and other like-minded countries. At the same time, we express our hope that this body will succeed in overcoming the current stalemate and will start negotiations of the treaty in order to help create the conditions for implementation of the goals of the Nuclear Non-Proliferation Treaty.

Thank you, Mr. Coordinator.