



*Permanent Mission of Italy
to the International Organizations
Disarmament Section
Geneva*

ITALY'S VIEWS ON A TREATY BANNING THE PRODUCTION OF FISSILE
MATERIAL FOR NUCLEAR WEAPONS OR OTHER NUCLEAR EXPLOSIVE
DEVICES

Italy considers that a Fissile Materials Cut-off Treaty is an instrument to foster both disarmament and nuclear non-proliferation and, as such, it is the next logical step in the process towards the objective of a world free of nuclear weapons.

The negotiations in the CD on an FMCT are long overdue and Italy welcomes General Assembly Resolution 67/53 of the 4th January 2013 and the decision on establishing a group of governmental experts that will make recommendations on possible aspects that could contribute to a treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices.

In discussing substantively FMCT, and having in mind the Shannon Mandate (document CD/1299), in our opinion we should address five issues:

1. Definitions. Defining fissile materials is a complex issue but absolutely essential in tackling FMCT. In our opinion, when discussing definitions in the context of an FMCT, especially the definition of fissile materials, we should bear in mind two key principles: feasibility and credibility.

Feasibility has, in its turn, two aspects: feasibility in production and application, and feasibility in verification. By feasibility in production and application, we mean that our definition of fissile materials should include those materials that with current or near-term predictable technology and equipment have a reasonable probability of being used in the manufacture of nuclear explosive: principally the relevant isotopes of uranium and plutonium. We are aware that other elements such as americium and neptunium can technically also be used, but so far, for a variety of reasons, they have found little favour. Keeping the definition as close as possible to real-life conditions, and avoiding theoretical scenarios, the implementation of the FMCT will be greatly facilitated. Feasibility in verification means that the definition we will choose on fissile materials should be such that it allows verification without undue technical complications or excessive expenditure. In the past, at least three proposals on definitions have been tabled in the framework of the CD: from the United States, from the Russian Federation and from Switzerland. Also, a possible baseline is the definition of fissile materials contained in Article XX of the Statute of the International Atomic Energy Agency, bearing in mind that this definition is nearly fifty years old and, hence, likely not up-to-date and needing to be brought in line with present-day scientific and technical knowledge, while keeping it compatible with current IAEA verification procedures.

Credibility, the second principle we should hold to, is easier to explain. Simply put, any solution we find for definitions, especially the definition of fissile materials, should be such that it allows the final product, the FMCT, to be a serious, legally enforceable, verifiable

international instrument which will, in fact, be able to play a visible, concrete role both as a factor of nuclear disarmament and of non-proliferation.

The general goal should be to reach a definition which is broad enough to make an FMCT credible and effective, but not so extensive as to imply unacceptably complex and expensive verification procedures or unnecessary limits to the peaceful uses of nuclear energy.

2. Verification. Provisions on verification are essential to any disarmament and non-proliferation treaty. Here also there is scope for negotiations bearing in mind that the question of verification is one that has consequences and ramifications in the other four main components of the Treaty as described in this paper. An FMCT verification system should aim at both fissile materials and production facilities. As for fissile materials, the purpose should be to verify any discrepancy between actual production and the declared one and the non-diversion of existing fissile material, including that in civil use. With regard to production facilities, it should be ascertain the absence of undeclared production and the irreversible conversion or dismantlement of production facilities formerly used for nuclear weapons purposes. Keeping in mind the need for maximum effectiveness in the application of an FMCT, we believe it preferable that the agency tasked with verifications should be the IAEA, which already has the necessary operational experience, trained personnel and technical knowledge to this end. This is in keeping with the precedent set by the NPT that relies on the IAEA for the same needs. Any other solution, such as the creation of a new verifications body within the FMCT, would require greater human and financial resources, not to mention the time wasted to bring it up to speed.

3. Nuclear Fuel. The navies of at least four Nuclear Weapon States also use highly enriched fissile material as fuel for naval vessels, and not just as explosive for their nuclear warheads. An FMCT negotiation will have to address this problem, to decide whether this fissile material, though comparable chemically and physically to nuclear explosive, should or should not be covered by the provisions of the treaty, and, if it is, how.

4. Production Plants. If we are to have a credible cut-off treaty, we must address the problem of production facilities of weapon-grade fissile material. Do we allow in the treaty their decommissioning or could we envisage their conversion? Is their conversion economically and technically feasible? How do we regulate the matter of inspections of production plants?

5. Stockpiles. Stockpiles are the real stumbling block of any future negotiation on FMCT as it has emerged within the Conference on Disarmament. Should the treaty be a simple cut-off or should it also contain provisions on existing stockpiles, as we would in fact prefer? And, if yes, what kind of provisions, how detailed and intrusive? In other words, when dealing with stockpiles in the Treaty, do we simply insert an obligation to declare them or should we go further and include the duty to gradually draw them down? The views expressed so far in the CD have been radically different, but in this line of work nothing is ever black or white. Thinking it through should lead to possible compromise solutions.

EXECUTIVE SUMMARY

Substantive discussion on FMCT should address five issues:

1. Definitions. Two key principles should apply: feasibility and credibility.

The definition of fissile materials should include those materials that with current or near-term predictable technology and equipment have a reasonable probability of being used in the manufacture of nuclear explosive: principally the relevant isotopes of uranium and plutonium. Keeping the definition as close as possible to real-life conditions, and avoiding theoretical scenarios, the implementation of the FMCT will be greatly facilitated. Furthermore, the definition of fissile materials should be such that it allows verification without undue technical complications or excessive expenditure. In the past, at least three definitions have been tabled in the framework of the CD: from the United States, from the Russian Federation and from Switzerland. Also, a possible baseline is the definition of fissile materials contained in Article XX of the Statute of the International Atomic Energy Agency. Any definition, especially the definition of fissile materials, should be broad enough to make an FMCT credible and effective, but not so extensive as to imply unacceptably complex and expensive verification procedures or unnecessary limits to the peaceful uses of nuclear energy.

2. Verification. Provisions on verification are essential to any disarmament and non-proliferation treaty. Here also there is scope for negotiations bearing in mind that the question of verification is one that has consequences and ramifications in the other four main components of the Treaty. An FMCT verification system should aim at both fissile materials and production facilities. As for fissile materials, the purpose should be to verify any discrepancy between actual production and the declared one and the non-diversion of existing fissile material, including that in civil use. With regard to production facilities, it should be ascertain the absence of undeclared production and the irreversible conversion or dismantlement of production facilities formerly used for nuclear weapons purposes. Keeping in mind the need for maximum effectiveness in the application of an FMCT, it is preferable that the agency tasked with verifications should be the IAEA, already possessing the necessary operational experience, trained personnel and technical knowledge to this end. This is in keeping with the precedent set by the NPT that relies on the IAEA for the same needs. Any other solution, such as the creation of a new verifications body within the FMCT, would require greater human and financial resources, not to mention the time necessary to bring it up to speed.

3. Nuclear Fuel. Highly enriched fissile material is also used as fuel for naval vessels. An FMCT negotiation will have to decide whether this fissile material, though comparable chemically and physically to nuclear explosive, should be covered by the provisions of the treaty, and, if so, how.

4. Production Plants. The problem of production facilities of weapon-grade fissile material is to be addressed. Do we allow in the treaty their decommissioning or could we envisage their conversion? Is their conversion economically and technically feasible? How do we regulate the matter of inspections of production plants?

5. Stockpiles. Stockpiles are the real stumbling block. Should the treaty be a simple cut-off or should it also contain provisions on existing stockpiles? And, if yes, what kind of provisions? The views expressed so far in the CD, unsurprisingly, have been radically different, but in this line of work nothing is ever black or white. Thinking it through should lead to possible compromise solutions.