# ZANGGER COMMITTEE (ZAC)

Membership: 38 States — Argentina, Australia, Austria, Belgium, Belarus, Bulgaria, Canada, China, Croatia, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Kazakhstan, Republic of Korea, Luxemburg, The Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom and United States of America.

## Permanent Observer: European Commission.

Background: The Committee was formed in 1971, under the chairmanship of Claude Zangger (Switzerland), to draft a "trigger list" of (a) source or special fissionable materials, and (b) equipment or materials especially designed or prepared for the processing, use, or production of special fissionable materials. Under Art. III.2 of the Nuclear Non-Proliferation Treaty (NPT), these items should be subject to International Atomic Energy Agency (IAEA) safeguards if supplied by NPT parties to any non-nuclear weapon States (NNWS). In 1974, the Zangger Committee published a Trigger List, a list of items that would "trigger" a requirement for safeguards and guidelines ("common understandings") governing the export of those items to NNWS not party to the NPT. These guidelines establish three conditions of supply: a nonexplosive use assurance, an IAEA safeguards requirement, and a re-transfer provision that requires the receiving state to apply the same conditions when re-exporting these items. The Trigger List was first published in September 1974 as IAEA document INFCIRC/209 and has been amended several times since then.

The Committee decided that its status was informal and that its decisions would not be legally binding upon its members. The decisions are put into legal effect by unilateral declarations of each member to the other members, with subsequent letters to the Director-General of the IAEA requesting him to publish these unilateral policy declarations in IAEA document INFCIRC/209.

By 1974, the Zangger Committee arrived at a consensus on the basic guidelines, which were set out in two separate memoranda dated 14 August 1974. The first defined the list of source and special fissionable material, and the second defined exports of equipment and non-nuclear material. These are commonly known as the Trigger List, and were published as IAEA document INFCIRC/209 of 3 September 1974. Attached to the original Trigger List was an annex clarifying the items described in the list in some detail. Since then, additional clarification exercises, conducted on the basis of consensus and then transmitted to the IAEA, have taken place. They contain new items on plants for the production of heavy water, technological development in the field of isotope separation by the gas centrifuge process, and fuel reprocessing plants. Other items on the list are currently under review. The IAEA maintains a <u>collection</u> of all past INFCIRC/209 documents. The <u>latest revision of INFCIRC/209</u> took place on 9 March 2000.

Since 1974, the Zangger Committee has continuously reviewed, updated, and amended its Trigger List. Six major revisions have taken place:

- November 1977 heavy water production equipment added, and clarification on zirconium;
- February 1984 isotope separation by gas centrifuge process added;
- · August 1985 clarification on reprocessing plants;
- February 1990 clarification on isotope separation plant equipment from the gaseous diffusion method;
- 1994 further clarification to the enrichment section and a modification of the entry on "primary coolant pumps" (to include water pumps), and the same year an understanding was reached on the safeguards procedural management of bulk quantities of source material for non-nuclear use; and
- 1996 further clarification of the less sensitive Trigger List items (Sections 2 and 5).

The Committee has agreed to exchange information about actual exports or issue of licenses for exports to any NNWS not party to the NPT through its system of "Annual Returns," which are circulated on a confidential basis among its Member States each year in April.

The Committee meets in Vienna twice a year, in May and in October. These meetings are informal and confidential. The members also exchange confidential annual reports in April detailing actual exports and the issuance of any export licenses to any NNWS not party to the NPT.

Inventory of International Nonproliferation Organization and Regimes Center for Nonproliferation Studies Last Update: 7/19/2011 **Verification and Compliance**: This regime is a voluntary association, not bound by a treaty, and therefore has no formal mechanism to enforce compliance. The Committee adopted voluntary measures to strengthen confidence, such as the agreement to exchange information about actual exports or issue of licenses for exports to any NNWS not party to the NPT through its system of "Annual Returns," which are circulated on a confidential basis among its Member States each year in April.

**Chairmanship:** The term of office of the chair of the Committee is indefinite and is for the duration of the professional life (in the nuclear field) of the incumbent. Four chairs have held the office thus far: Professor Claude Zangger of Switzerland from 1971 until 1989, Mr. Ilkka Makipentti of Finland from 1989 to 1993, Dr. Fritz Schmidt of Austria from 1993 to 2005, and Mr. Pavel Klucky since 2006.

# **Developments:**

**2011:** The Zangger Committee finalized the membership procedure for Belarus.

On 2 February Belarus became the 38<sup>th</sup> member of the Zangger Committee after the membership procedure was completed. Already a member of the Nuclear Suppliers Group, the country pledged to commit to strengthening international non-proliferation and compliance to export controls.

**2010:** At the 2010 NPT Review Conference, the Committee submitted a <u>working paper</u> outlining the mission, history, principles, work, and membership of the Committee. The paper also contains statements made during previous <u>NPT</u> review conferences referring to the Committee.

On 9 November the Committee approved the membership of Belarus into the Zangger Committee.

**2009:** In May, the Committee submitted a <u>working</u> <u>paper</u> for the NPT 2009 Preparatory Meeting. This working paper acknowledged that Armenia, Bosnia and Herzegovina, Cape Verde, El Salvador, Iceland, Kazakhstan, Montenegro, Republic of Moldova, former Yugoslav Republic of Macedonia and Timor-Leste joined in sponsoring the language contained in the working paper submitted for the NPT Preparatory Committee in 2008.

**2008:** In February, the IAEA circulated among its Member States a <u>letter from the chairman of the</u> <u>Zangger Committee</u> including the amended Memorandum B of the Trigger List. In May, the Committee submitted a <u>working paper</u> for the NPT 2008 Preparatory Meeting. At its meeting on 18 November, the Zangger Committee accepted Kazakhstan as a new member.

**2007:** The Committee submitted a Trigger List clarification to the IAEA. On 10 May, the chairman of the Zangger Committee, Pavel Klucky, delivered a statement regarding the activities of the Committee to the Cluster II of the first meeting of the Preparatory Committee for the 2010 NPT Review Conference.

**2006:** Croatia joined the Committee on 30 June. On 1 August, Mr. Pavel Klucký of the Czech Republic became the chairman of the Committee.

**2005:** After the passing away of the long-time chair of the Committee, Mr. Fritz Schmidt, the election of a new chair was pending. Until a new chairperson was elected, the United Kingdom Mission to the United Nations in Vienna acted as the Secretariat and interim chair of the Committee.

At the NPT Review Conference, the Joint Member States of the Zangger Committee submitted a document entitled "2005 Multilateral nuclear supply principles of the Zangger Committee." The paper was intended to describe the work of the Committee and further the understandings of its objectives.

**2004:** The Zangger Committee postponed its meeting that had been scheduled for early 2004 to 18-19 October. On 19 October the Zangger Committee welcomed the unanimous adoption of UN Security Council Resolution 1540 and, furthermore, stated that its members stood ready to respond positively to the resolution and to provide any assistance required within the mandate of the Committee.

**2003:** The Committee met on 10 April to discuss plans for updating its "common understandings" for export control, including those relating to physical protection of materials and to the <u>International Atomic Energy Agency</u> Additional Protocol, and to continue to discuss possible outreach activities with nonmember States parties to the <u>NPT</u>. It also considered Belarus' application for membership on the Committee, but did not grant it.

The Committee's second 2003 meeting convened in Vienna on the morning of 14 October, and was directly followed later that day by a "friends of the chair" meeting. Members again addressed the issue of Belarusian membership, but the U.S. would not agree to its admittance, reiterating previously-stated concerns regarding its nonproliferation efforts. Committee members identified Egypt, Mexico, Peru,

Inventory of International Nonproliferation Organization and Regimes Center for Nonproliferation Studies Last Update: 7/19/2011 and Chile as current priorities for outreach efforts. Regarding the Trigger List, the U.S. suggested an amendment to the graphite entry, asking members to address issues related to graphite control and to take a questionnaire on graphite licensing. It was decided that the U.S. would create an updated report on graphite issues and on proposed Trigger List amendments to be distributed to Committee members in the spring of 2004.

Another topic of discussion during the October meeting was the possibility of Zangger Committee States holding a special meeting to formulate a response should Iran be found in noncompliance with its International Atomic Energy Agency safeguards agreements. Some supported this, while others felt that this would be contrary to the Committee's function as a technical rather than a political organization.

**2002:** The Committee held formal meetings in June and October. Issues under consideration included implementation of the NPT 2000 Review Conference recommendations and discussion of where the Zangger Committee should focus its efforts to fulfill its technical role for the NPT to best effect.

**2001:** The Committee held its formal meeting in May. The issues under discussion were updating the Trigger List to include equipment for the separation of plutonium and uranium, IAEA safeguards on nuclear facilities, outreach to non-members, and the NPT 2000 Review Conference recommendations. Regarding outreach, the Committee decided to launch a new program between its members and third countries with the objectives of establishing a "strong and sustainable relationship" with them, increasing the transparency of the Committee's activities by explaining its role, and providing opportunities for dialogue regarding nonproliferation and nuclear export control issues. The program was to be restricted to States parties to the NPT.

**2000:** The October meeting was dedicated to discussion of the results of the 2000 NPT Review Conference. The members reached an agreement to create two informal "friends of the chair" groups to consider preparations for the 2005 NPT Review Conference. The Committee also decided to continue considering possible future adoption of a policy of requiring full-scope safeguards as a condition of supply to NNWS. The members were able to reach agreement not to include americium and neptunium on the Trigger List, while attempts to add equipment used in plutonium enrichment—atomic vapor laser isotope separation has been suggested as a potential plutonium enrichment process—to the Trigger List were not successful.

**1999:** Seeking to update the Trigger List, 32 Zangger Committee member governments communicated with the Director-General of the IAEA in November. The governments clarified their objective to apply certain procedures in cases of export of source or special fissionable material to NNWS not party to the NPT. China and Russia did not send communications to the IAEA at that time. The procedures outlined in the communication were the foundation for INFCIRC/209/Rev.2 of 9 March 2000.

**1998:** China joined the Zangger Committee in the fall and took part in the October meeting. At the Committee's May meeting, members issued a statement deploring the nuclear tests conducted by India and Pakistan, expressing regret at the damaging impact of these tests on global prevention of nuclear proliferation, calling on India and Pakistan to refrain from further testing, and urging them to adhere to the NPT unconditionally.

# **Point of Contact:**

## The Chairman of the Committee

Mr. Pavel Klucky Head of Non-Proliferation and Disarmament Unit United Nations Department

Ministry of Foreign Affairs of the Czech Republic Loretanske Name. 5 118 00 Praha 1 CZECH REPUBLIC Tel: (00420) 22418 2227 Fax: (00420) 22418 2026 E-mail: pavel klucky@mzv.cz

## Secretary of the Zangger Committee:

Mr. Graham Styles First Secretary UK Permanent Mission of the United Kingdom to the United Nations in Vienna Jauresgasse 12 A-1030 Vienna Austria Tel: (43-1) 716 13 – 4232 Fax: (43-1) 716 13 – 4232 Fax: (43-1) 716 13 – 4900 Email: graham.styles@fco.gov.uk http://www.britishembassy.at/direct/ukmis.shtml http://www.zanggerCommittee.org/Zangger/default.h tm

Inventory of International Nonproliferation Organization and Regimes Center for Nonproliferation Studies Last Update: 7/19/2011