Treaty/Convention	Year ratified/acceded
Treaty on the Non-Proliferation of	1991///
Nuclear Weapons (NPT)	
Biological and Toxins Weapons	Ratified 1975
Convention (BTWC)	
Chemical Weapons Convention (CWC)	Ratified 1995
Comprehensive Nuclear-Test-Ban	Ratified 1999
Treaty (CTBT)	
Treaty on the Prohibition of Nuclear	
Weapons (TPNW)	
Other	Year Joined
Zangger Committee	1995
Nuclear Suppliers Group (NSG)	1995
Missile Technology Control Regime	1995
(MTCR)	
Wassenaar Arrangement (WA)	2006

## 5. OBLIGATIONS IN TERMS OF NUCLEAR DUAL-USE CONTROLS

## 5.1. Nuclear Suppliers Group (NSG)

The Nuclear Suppliers Group (NSG), which was established in 1975, seeks to prevent the proliferation of nuclear weapons by harmonising the export control systems of participating countries in relation to trade with nuclear commodities and nuclear-related dual-use materials, equipment, software and technology. The Permanent Mission of Japan to the International Organisations in Vienna serves as the NSG point of contact (POC). The POC receives and distributes NSG documents, schedules meetings and assists with other administrative work. As of 2018, the NSG had 48 participating governments, as referred to within the NSG, that voluntarily agreed to coordinate their export controls through adherence to the NSG Guidelines, which are adopted by consensus to counter nuclear proliferation. South Africa became a participating government of the NSG in 1997.

The NSG aims to prevent nuclear exports that are intended for commercial and peaceful purposes from being used to make nuclear weapons. In order to ensure that their nuclear imports are not used to develop weapons, NSG members are encouraged to forgo nuclear trade with governments that do not subject themselves to the NSG Guidelines. The NSG has two sets of guidelines, each created in response to significant proliferation events that highlighted shortcomings in the export control systems, and listing the specific nuclear materials, equipment and technologies that are subject to export controls. The NSG

Guidelines are also consistent with and complement the various international, legally binding instruments in the field of nuclear non-proliferation.

The first set of NSG Guidelines was published in 1978 and governs the export of materials and technology specifically designed for nuclear use. These guidelines are commonly referred to as NSG Part 1 or the Trigger List. The second set of NSG Guidelines, commonly referred to as NSG Part 2, was published in 1992 and governs the export of nuclear-related dual-use items and technologies with legitimate civilian applications that can also be used to develop weapons. Through these guidelines, the NSG aims to ensure that nuclear trade for peaceful purposes does not contribute to the proliferation of nuclear weapons or other nuclear explosive devices, and that international trade and cooperation in the nuclear field is not hindered unjustly in the process.

In South Africa, the Minister of Energy is responsible for the control of nuclear goods and technologies listed in Part 1 of the NSG Guidelines in terms of the Nuclear Energy Act, 1999 (Act No. 46 of 1999) (Nuclear Energy Act) and the Council is responsible for the control of nuclear dual-use goods and technologies, as listed in Part 2 of the NSG Guidelines.

## 5.1.1. Government Notice No. 492 of 29 March 2019

Government Notice No. 492 was promulgated in terms of the Non-Proliferation Act to control transfers of nuclear dual-use items. In this Government Notice, the nuclear dual-use items as listed in Part 2 of the NSG Guidelines are quoted in total. In terms of this Government Notice, the import, export, re-export, transit and transhipment of the dual-use listed items, equipment, components and technology are subject to permits issued by the Council. The manufacturing and provision of services of items as listed under sections 2.E.1, 3.B.5, 3.E.1, 4.B.1, 4.B.2 and 4.E.1 of the Notice are also subject to a permit issued by the Council.

The Notice is divided into six sections, with each detailing the specific controlled equipment, assemblies and components; test and production equipment; materials; and software and technology. The sections are as follows:

- 1. Industrial equipment
- 2. Material
- 3. Uranium isotope separation equipment and components
- 4. Heavy water production plant-related equipment
- Test and measurement for the development of nuclear explosive devices

## 6. Components for nuclear explosive devices

# 5.1.2. Government Notice No. 493 of 29 March 2019

In 2006, the NSG agreed to control technology related to the isotope separation of other elements. Although the NSG decided to list this item under NSG Part 1, it is also applicable to non-nuclear isotopes and therefore has applicability under NSG Part 2. In South Africa, this technology is controlled by the Minister of Trade and Industry in terms of the Non-Proliferation Act. The Minister therefore promulgated Government Notice No. 493 in terms of the Non-Proliferation Act to control the production, development, import and export of relevant plants, equipment, components and technology related to the isotope separation of other elements. As agreed by the NSG, protocols similar to safeguards also apply to these exports.

# 5.1.3. Manufacturing and services permit requirement

A manufacturing and services permit issued by the Council is required when an entity is involved in the manufacture and provision of services for items as listed under sections 2.E.1, 3.B.5, 3.E.1, 4.B.1, 4.B.2 and 4.E.1 of Notice No. 492. These items are regarded as carrying a higher proliferation risk under this Notice. Furthermore, a manufacturing and services permit should be obtained by individuals whose activities are regulated under Notice No. 493.

# 5.1.4. Other Domestic Chemical Control Structures

The Minister of Energy controls nuclear goods and technologies as listed in Part 1 of the NSG Guidelines. The National Conventional Arms Control Committee (NCACC) also controls some of the items that are listed in Notice No. 492 and should therefore be consulted to ascertain the items.

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#### OVERVIEW OF BIOLOGICAL CONTROLS

#### 1. BACKGROUND

There is a widespread need to prevent the proliferation of nuclear, biological and chemical weapons, also referred to as Weapons of Mass Destruction (WMD). Control over WMD, their specific means of delivery and the associated dual-use ramifications is globally pursued through various treaties, conventions and regimes. South Africa subscribes to, supports and participates in most of these agreements and arrangements.

# 2. SOUTH AFRICAN POLICY ON NON-PROLIFERATION, ARMS CONTROL AND DISARMAMENT

In 1994, the South African Government adopted a policy on non-proliferation, disarmament and arms control. The primary goal was to reinforce and promote the country as a responsible producer, possessor, trader and end-user of dual-use-controlled goods and advanced technologies in the nuclear, biological, chemical and missile delivery system fields. The country therefore promotes the benefits that non-proliferation, disarmament and arms control hold for international peace and security, particularly to other countries in Africa and the Non-Aligned Movement (NAM).

## 3. MANDATE OF THE NON-PROLIFERATION COUNCIL

#### 3.1. Non-Proliferation Act

In South Africa, due regard has been taken to ensure the non-proliferation of WMD through the enactment of the Non-Proliferation of Weapons of Mass Destruction Act, 1993 (Act No. 87 of 1993). The Act, as amended, was promulgated "to provide for control over weapons of mass destruction; and the establishment of a Council to control and manage matters relating to the proliferation of such weapons in the Republic; to determine its objectives and functions; to prescribe the manner in which it is to be managed and controlled; as well as to provide for matters connected therewith."

# 3.1.1. Related Regulations

As contemplated in the Act, the Minister of Trade and Industry publishes by notices in the *Government Gazette* lists of dual-use goods that are controlled. The Minister may on the recommendation of the Council, whenever he deems it necessary or beneficial to the public interest, by notice in the *Government Gazette* declare goods that may contribute to the design, development, production, deployment, maintenance or use of WMD to be controlled goods.

The Act is supported by the following regulations and notices published on 3 February 2010, and updated notices published 29 March 2019.

- a. Registration: Any person who is in control of any activity with regard to controlled goods or who has in his possession controlled goods must register with the Council in accordance with Government Notice No. R16 of 3 February 2010.
- b. Biological: Dual-use microbial or other biological agents, toxins and related equipment and technology that may be used in the manufacture of biological and toxin weapons are declared as controlled goods under the Government Notice No. 494 of 29 March 2019.
- c. Chemicals: Chemical Weapons Convention (CWC) list of chemicals are declared as controlled goods under Government Notice No. 495 of 29 March 2019. The Chemical Weapons Regulations regarding the application of provisions of the CWC was promulgated on 3 February 2010, under Government Notice No. R.17.
- d. Missiles: The Missile Technology Control Regime (MTCR) equipment, technology and related items are declared as controlled goods under Government Notice No. 491 of 29 March 2019.
- e. Nuclear: The nuclear-related dual-use equipment, materials, software and related technology of the Nuclear Suppliers Group (NSG) are declared as controlled goods under Government Notice No. 492 of 29 March 2019. Futhermore, certain nuclear-related dual-use equipment, materials and software and related technology are declared as controlled goods under Government Notice No. 493 of 29 March 2019.

#### 3.1.2. Permit administration

The import, export, re-export, transit and transhipment of these listed goods require a permit issued by the Council. Registered persons who intend to trade in controlled goods need to apply for the relevant type of permits.

#### 3.2. Non-Proliferation Council

The South African Council for the Non-Proliferation of Weapons of Mass Destruction was established in terms of the Non-Proliferation Act. According to the Act, the Council shall, on behalf of the state, protect the interests, carry out the responsibilities and fulfil the obligations of the Republic with regard to non-proliferation, and advise the Minister with regard to any matter that it deems necessary and that falls within the purview of this Act.

#### 3.2.1. Functions of the Council

 To control and manage all activities relating to non-proliferation, and provide guidance, instructions and information in connection therewith.

- To implement matters arising from international conventions, treaties and agreements related to proliferation affairs entered into or ratified by the Government of the Republic.
- To obtain or promote cooperation between government departments and other government institutions; as well as industry.
- d. To identify and indicate to the Minister goods to be declared controlled goods and activities.
- To determine which activities must take place under a permit issued by the Council.
- To administer the registration of persons involved in controlled activities or who are in possession of controlled goods.
- g. To issue and administer permits.
- To take the necessary steps to prevent the contravention of the provisions of the Act.

# 3.2.2. Membership of the Council

The members of the council are appointed by the Minister of Trade and Industry and comprises representatives from various government departments directly involved in issues of non-proliferation as well as industry representatives. The NPC meets at least every six to eight weeks to deliberate on non-proliferation-related issues, assess the activities of its committees and consider permit applications received from industry.

#### 3.2.3. The Non-Proliferation Secretariat

The Non-Proliferation Secretariat to the council are officials of the Department of Trade and Industry (the dti). The Secretariat provides the administrative and secretarial services to the council and its committees.

## 3.2.4. The Committees of the Non-Proliferation Council

The process of control must be integrated, coordinated and administered among the various stakeholders that are involved in the implementation and enforcement of South Africa's legislation on non-proliferation. In this vein, the council has established a number of working committees that are constituted by representatives from different government departments including, in some instances, industry representatives and experts in specific fields related to non-proliferation.

The committees include:

a. Non-Proliferation Control Committee (CC)
 The CC advises the council on non-proliferation issues, permit applications and special investigations.

- b. Biological Weapons Working Committee (BWWC) The BWWC advises the council on issues related to the Biological and Toxin Weapons Convention (BTWC) and the implementation of biological controls.
- c. Chemical Weapons Working Committee (CWWC)
   The CWWC advises the council on issues related to CWC and the implementation of chemical controls.
- d. Nuclear and Missile Dual-Use Committee (NMDUC)
   The NMDUC advises the council on nuclear-related dual-use and missile-related technical issues.
- e. Non-Proliferation Review Committee (NPRC)
   The NPRC advises the NPC on legislative issues such as the amendment of the Non-Proliferation Act.
- f. Project Management Committees (PMCs)

The council has signed Service Level Agreements (SLAs) with various institutions to further enhance South Africa's commitment to non-proliferation obligations. Meetings are held regularly between the Secretariat and these institutions to monitor the implementation of the SLAs:

- the dti, on behalf of the council, has signed the Memorandum of Understanding (MOU) on the enforcement of the Non-Proliferation Act at national ports of entry with SARS Customs
- the dti, on behalf of the council, signed a SLA with Protechnik Laboratories, a division of Armscor for the institution to assist in the implementation of the CWC.
- the dti, on behalf of the council, signed a SLA with the Council for Geosciences (CGS) for the institution to assist in the implementation of the Comprehensive Nuclear Test-Ban Treaty (CTBT).

# I. INTERNATIONAL OBLIGATIONS (TREATIES, CONVENTIONS & CONTROL REGIMES)

South Africa adheres to a number of international treaties, agreements and control regimes that has an impact on its policy on non-proliferation, disarmament and arms control. It is to be noted, however, that although South Africa is not a member of the Australia Group (AG), it has incorporated some of the AG biological and chemical control list into its national regulations.

South Africa is a member of the following legally binding treaties conventions and other informal groups that work together against the threat of the proliferation of weapons of mass destruction: