Fighting the spread of chemical and biological weapons

Strengthening global security

The Australia Group

www.australiagroup.net

Overview

The Australia Group is an informal forum of countries created in 1985 when a group of sixteen states met to consider how to prevent Iraq from diverting otherwise legitimate trade in chemicals and equipment to the production of chemical weapons. Since its inception, the Group has proved to be an important instrument in ongoing international efforts to impede the proliferation of chemical and biological weapons.

Cooperation among Australia Group participants aims to prevent would-be proliferators from exploiting differences or ambiguities in national export control regimes to obtain materials and technology for the production of chemical or biological weapons.

Coordination of national export control measures plays a major role in enabling participants to fulfil their obligations under the Biological Weapons Convention (BWC) and the Chemical Weapons Convention (CWC) to the fullest extent possible.

At the same time, the Group's participants are committed to expanding trade in chemical and biological items for peaceful purposes and maintaining active chemical and biotechnological industries.

The Australia Group's licensing measures are consistent, transparent and publicly available, helping industry to understand licensing arrangements and the reasons for them. The Group encourages non-participants to adopt similar measures, thereby broadening compliance with the BWC and CWC and limiting the spread of chemical and biological weapons.

The Australia Group strengthens global security by making it harder, more expensive and time-consuming for would-be proliferators to obtain the materials and technology to develop chemical or biological weapons.

Participants

Argentina	Republic of Korea
Australia	Latvia
Austria	Lithuania
Belgium	Luxembourg
Bulgaria	Malta
Canada	Netherlands
Croatia	New Zealand
Republic of Cyprus	Norway
Czech Republic	Poland
Denmark	Portugal
Estonia	Romania
European Commission	Slovak Republic
Finland	Slovenia
France	Spain
Germany	Sweden
Greece	Switzerland
Hungary	Republic of Turkey
Iceland	Ukraine
Ireland	United Kingdom
Italy	United States
Japan	

Objective

Participants in the Australia Group aim to ensure that exports from their countries do not contribute to the development of chemical or biological weapons. They do this by licensing the export of certain chemicals, biological agents, and dual-use chemical and biological manufacturing equipment which can be used in chemical or biological weapons programs. The Group also encourages non-participating governments to implement similar national measures and facilitates consultations aimed at preventing the proliferation of such weapons.

Origins

In 1984, the United Nations Secretary General established a special investigatory commission to determine whether chemical weapons had been used in the Iran-Iraq War. The conclusions of the first, and subsequent, reports were alarming: they confirmed that Iraq had used chemical weapons against Iran, and that Iraq had obtained much of the material for these weapons from Western countries. Sixteen states responded to these revelations by adopting licensing measures which increased their ability to ensure that their domestic chemical industries were not purposely or inadvertently helping other states to develop chemical weapons. In so doing, they sought to strengthen the 1925 Geneva Protocol, which had been violated by Iraq's use of chemical weapons.

However, these measures varied in scope or application, and attempts were made to exploit differences to circumvent the controls. Australia proposed that the countries which had introduced export licensing measures meet for the purpose of harmonising their controls and enhancing cooperation among themselves, and the first meeting took place in Brussels in June 1985. All participating countries agreed there was benefit in continuing cooperation, and meetings are now held in Paris at least once per year. The name of the Group reflects Australia's initiation of the original Brussels meeting.

Chemical weapons

Chemical weapons were used widely in the twentieth century with devastating consequences. The first use of chemical weapons in modern warfare took place in Belgium in April 1915. By the end of the First World War, 113,000 tons of chemical warfare agents had been used resulting in 1.2 million casualties and 100,000 fatalities. The use of chemical weapons during the First World War led to the negotiation in 1925 of the Geneva Protocol which prohibited the use of chemical weapons but did not prohibit their acquisition or stockpiling. It was this omission which permitted states to continue to develop chemical weapons legally.

Allegations of CW use increased during the 1970s and 1980s, culminating in the Iran-Iraq War in which Iraq attacked Iranian forces and its own civilian population with chemical weapons. These chemical attacks are estimated to have caused 60,000 Iranian casualties, including 10,000 fatalities. An estimated 5,000 civilians in the Iraqi town of Halabja died from CW attacks in March 1988. The international reaction to Iraq's use of chemical weapons in the 1980s created impetus to move forward with the long-stalled negotiations for an international treaty stronger than the Geneva Protocol to ban chemical weapons, leading to the Chemical Weapons Convention (CWC).

Chemical weapons, as defined by the CWC, include 'any chemical which through its chemical action on life processes can cause death, temporary incapacitation, or permanent harm to humans or animals', as well as munitions, devices or equipment specifically designed for use in connection with such chemicals as weapons.

Chemical weapons injure and kill indiscriminately, harming combatants and non-combatants alike. They kill and disable in particularly cruel ways: blistering, blinding and asphyxiating their victims. Chemicals agents fall into two broad categories – harassing agents which are intended to inconvenience or temporarily diminish the effectiveness of an enemy, and casualty agents which are intended to kill or incapacitate an enemy over a longer period.

There are a small number of countries suspected of possessing chemical weapons programs, and evidence that some companies, both knowingly and unwittingly, have been involved in assisting these programs. Most of these programs are located in politically volatile regions, which have led to fears of rapid escalation of crises, as military planners might contemplate pre-emptive strikes against production and storage facilities.

Biological weapons

Biological weapons are either living pathogens (for instance, disease-causing viruses and bacteria) or toxins (poisons produced by living organisms) used to kill or incapacitate people or animals, or to damage crops or plants.

The deliberate spread of disease for military purposes has occurred since at least the Middle Ages, when bodies infected with plague were catapulted into enemy fortresses. In the twentieth century, biological weapons became more sophisticated as extensive research and development was carried out in several countries. Numerous diseases and toxins have been deployed as weapons, including plague, anthrax, ricin, botulinum and smallpox.

Modern biological weapons can be produced in liquid or powder form and can be delivered in a variety of ways, including by spraying from a plane or in artillery shells. The usual route of infection is via the inhalation of airborne particles, although other routes, such as ingestion, are also possible.

The Biological Weapons Convention (BWC) entered into force in 1975, banning the development, production, stockpiling or other acquisition of biological agents or toxins, and their means of delivery, for hostile purposes. Nonetheless, offensive biological weapons programs continued. International inspections in Iraq, conducted as part of the cease-fire agreement ending the 1990-91 Gulf War, uncovered a vast and advanced biological warfare program. In 1992 Russian President Boris Yeltsin admitted that the Soviet Union had conducted a massive biological weapons program over the previous twenty years. Reports suggest that several countries continue to conduct offensive biological weapons research and development.

Biological weapons, however rudimentary, constitute a significant threat to international security. A relatively small amount of agent has the potential to harm large numbers of people. In addition, as demonstrated by the anthrax attacks in the United States in 2001, biological weapons can cause widespread panic and economic dislocation even when they cause relatively few casualties. The threat of biological weapons comes from illicit state programs. However, there is growing international concern regarding the threat of terrorists acquiring, developing or using biological materials for hostile purposes.

Infectious diseases represent a particular threat because they can spread quickly from person to person well beyond the locality of an attack. The potentially catastrophic consequences of a major attack with biological weapons mean that prevention is the only viable form of protection.

Biological weapons can be refined and tested in small laboratories and produced in a range of legitimate facilities including commercial and university laboratories, pharmaceutical plants, breweries, food production plants and dairies. This means that many legitimate facilities can be readily converted from their legitimate functions to the production of lethal agents for weapons (and back again). The comparative ease of concealment makes detection of illicit programs especially difficult.

Fortunately, while producing rudimentary biological weapons does not require great technical sophistication, the production of military grade agents poses significant technological challenges.

National sovereignty and international law

The Australia Group draws its legitimacy to act against the proliferation of chemical and biological weapons both from the sovereign rights of states to control exports from their territory and from international law prohibiting the development of such weapons.

Since their emergence in the sixteenth century, modern states have possessed sovereign rights to control the movement of goods across their borders. Australia Group participants are committed to exercising those sovereign rights to prevent exports from their countries contributing to the development of chemical or biological weapons. An increasing number of countries which are not participants in the Group exercise similar controls. By exerting control over relevant exports, the Group's participants seek to protect their own security, and international security generally, by obstructing the development of weapons of mass destruction which could be used against them.

Australia Group participants are also acting to fulfil their obligations in international law when they implement national export controls over materials relevant to the proliferation of chemical and biological weapons. The BWC and the CWC prohibit the development of biological and chemical weapons, and place obligations on States Parties to implement appropriate national measures governing exports.

The BWC requires each State Party not to transfer to any recipient, and not to assist any country to manufacture, biological weapons-related agents, toxins or equipment (Article III). The CWC requires each State Party to adopt necessary measures to ensure toxic chemicals are not produced or transferred for prohibited purposes (Articles I and VI).

The implementation of these CWC obligations by the Organisation for the Prohibition of Chemical Weapons (OPCW) is limited to monitoring and reporting, while the BWC has no institutional apparatus. Harmonisation of national measures among Australia Group participants enhances the effectiveness of those measures and the conventions.

Obstacles to proliferation

The Australia Group's work contributes to international efforts to prevent the proliferation of chemical and biological weapons. The participants' export licensing arrangements have made it more costly and time-consuming for would-be proliferators to develop a chemical or biological weapons capability.

In a number of cases, these barriers have obliged states and individuals seeking a chemical or biological weapons capability to explore other, less efficient, avenues of production. Australia Group participants have thereby raised the financial and other costs of proliferation to a level where such actions are no longer tenable for proliferators. Where such states have persisted in the pursuit of such capabilities, they have resorted to engaging a variety of front companies and agents together with other subterfuges to avoid detection. Furthermore, the threat of legal action can serve as a deterrent to any persons willing to profit from such activities.

Common control lists

The Australia Group participants harmonise their export controls through the use of common control lists, which specify items that participants undertake to control through their respective export licensing procedures. Licensing procedures allow governments to consider whether a particular export could contribute to chemical or biological weapons and therefore breach the government's obligations under the BWC and/or CWC.

There are presently six control lists covering:

- chemical weapons precursors;
- dual-use chemical manufacturing facilities and equipment and related technology;
- dual-use biological equipment;
- biological agents;
- plant pathogens; and
- animal pathogens.

The common control lists are adjusted as needed to ensure their continued effectiveness. Important considerations for the Group, when developing or adjusting the lists, are that:

- the measures should be effective in impeding the production of chemical and biological weapons;
- they should be practical and reasonably easy to implement; and
- they should not impede the normal trade of materials and equipment used for legitimate purposes.

In practice the control lists constitute monitoring and licensing arrangements for exports. Every export licence application is examined by the national authority on a case-by-case basis, with the decision about whether to supply the requested items resting solely with the country approached. An export is denied only if there is particular concern about potential diversion for chemical or biological weapons purposes.

The effectiveness of the control lists derives from their collective application. For this reason, Australia Group participants encourage all exporting and transshipment countries to implement similar measures. Participants have also committed to consult before exporting material which another participant has denied due to proliferation concerns. This commitment to consult is described as a ‘no-undercut policy’. It does not constitute a binding ban.

CWC controls

Some chemicals produced or used for every day industrial, medical or research activities can also have applications in the manufacture of chemical weapons. The chemicals on the Group's Chemicals Weapons Precursors list were included on the basis of actual attempts to procure them for chemical weapons purposes. Accordingly, the list contains many additional dual-use chemicals which are not on the CWC schedules. The CWC scheduled chemicals represent the maximum which could be agreed by negotiators of the Convention in the early 1990s.

The CWC has recognised that the CWC schedules are not exhaustive and that other toxic chemicals and their precursors can constitute chemical weapons under the Convention. For example, in the 1980s, Iraq sought a number of non-scheduled chemicals for its chemical weapons program, including sodium cyanide for tabun production and sodium fluoride for sarin production (tabun and sarin are nerve agents). The application of controls on non-scheduled chemicals can therefore be a vital means of fulfilling the CWC's obligation never to assist, in any way, in the manufacture of chemical weapons.

BWC controls

In the early 1990s, the Australia Group extended the common control lists to cover materials and technology relevant to biological weapons proliferation. Given the absence of an international organisation to facilitate implementation of the BWC, the Australia Group's licensing requirements for pathogens and equipment relevant to biological weapons represent the only harmonised form of control over these items.

The effect of export controls on international law

The export controls applied by Australia Group participants contribute to creating a more benign and secure environment for legitimate chemical and biological trade. Group participants ensure that the private sector is informed of the dangers inherent in the uncontrolled export of chemical and biological materials and equipment, sensitising industry to its role in the pursuit of a world safe from the spectre of such weapons of mass destruction.

Chemical and biotechnology companies conscious of their public image and corporate responsibilities welcome the assurances provided by the controls implemented by Australia Group participants. The transparency generated by the Group's activities increases confidence, creating an environment more conducive to the normal flow of commercial goods, equipment and technology.

In applying export controls, Australia Group participants seek to ensure that international trade in chemical and biological products for peaceful purposes is not impaired. Both the BWC and CWC require States Parties not to restrict peaceful trade.

The CWC (Article XI) recognises that the eradication of illicit trade is necessary for the unfettered development of legitimate trade, thereby acknowledging that export measures instituted and maintained solely to implement obligations under the convention are valid.

Similarly, Article III of the BWC specifies that States Parties not transfer agents or materials for purposes contrary to the Convention. Article X establishes that the Convention 'shall be implemented in a manner designed to avoid hampering the economic or technological development of States Parties to the Convention'. Australia Group participants take this obligation seriously. To this end, they have implemented their obligations under the Convention through export controls which do not inhibit fair and transparent trade for peaceful purposes.

Outreach

Since 1992, the Australia Group has maintained a practice of briefing a large number of non-participants on the outcome of its meetings. Every year, participants conduct outreach activities in over 50 countries. These briefings include making available lists of chemicals, biological agents, and related equipment and technologies which are of proliferation concern. These outreach measures have resulted in some countries exploring the possibility of participating in the Australia Group or adopting similar export control measures. The result over the last decade has been a significant strengthening of export controls and an expansion of the number of countries employing such controls to inhibit illicit weapons programs.

Further Information

Further information about the Australia Group can be found at the Australia Group website at **www.australiagroup.net.** The website has the latest information on AG Participants, control lists and activities. The website is available in English, Arabic, Chinese, French, German, Russian and Spanish.

Guidelines

The Government of xxx has, after careful consideration and consistent with its obligations under the BTWC and the CWC, decided that, when considering the transfer of equipment, materials, and technology that could contribute to chemical and biological weapons activities, it will act in accordance with the following Guidelines.

1. The purpose of these Guidelines is to limit the risks of proliferation and terrorism involving chemical and biological weapons (CBW) by controlling tangible and intangible transfers that could contribute to CBW activities by states or non-state actors, consistent with Article III of the Biological Weapons Convention, Article I of the Chemical Weapons Convention, and all relevant United Nations Security Council Resolutions. In accordance with Article X of the Biological Weapons Convention and Article XI of the Chemical Weapons Convention, these Guidelines are not intended to impede chemical or biological trade or international cooperation that could not contribute to CBW activities or terrorism. These Guidelines, including the attached Australia Group (AG) control lists and subsequent amendments thereto, form the basis for controlling transfers to any destination beyond the Government's national jurisdiction or control of materials, equipment, and technology that could contribute to CBW activities. The Government will implement these Guidelines in accordance with its national legislation.

2. These Guidelines will be applied to each transfer of any item in the AG control lists. However, it is a matter for the Government's discretion to determine whether and to what extent to apply expedited licensing measures in the case of transfers to destinations it judges possess consistently excellent non proliferation credentials. Vigilance will be exercised in the consideration of all transfers of items on the AG control lists. Transfers will be denied if the Government judges, on the basis of all available, persuasive information, evaluated according to factors including those in paragraph 3, that the controlled items are intended to be used in a chemical weapons or biological weapons program, or for CBW terrorism, or that a significant risk of diversion exists. It is understood that the decision to transfer remains the sole and sovereign judgment of the Government.

3. In fulfilling the purposes of these Guidelines, national export control legislation, including enforcement and sanctions for violations, plays an important role.

4. To fulfil the purposes of these Guidelines, the evaluation of export applications will take into account the following non-exhaustive list of factors:

    a) Information about proliferation and terrorism involving CBW, including any proliferation or terrorism-related activity, or about involvement in clandestine or illegal procurement activities, of the parties to the transaction;

    b) The capabilities and objectives of the chemical and biological activities of the recipient state;

    c) The significance of the transfer in terms of (1) the appropriateness of the stated end-use, including any relevant assurances submitted by the recipient state or end-user, and (2) the potential development of CBW;

    d) The role of distributors, brokers or other intermediaries in the transfer, including, where appropriate, their ability to provide an authenticated end-user certificate specifying both the importer and ultimate end-user of the item to be transferred, as well as the credibility of assurances that the item will reach the stated end-user;

    e) The assessment of the end-use of the transfer, including whether a transfer has been previously denied to the end-user, whether the end-user has diverted for unauthorized purposes any transfer previously authorized, and, to the extent possible, whether the end-user is capable of securely handling and storing the item transferred;

    f) The extent and effectiveness of the export control system in the recipient state as well as any intermediary states;

    g) The applicability of relevant multilateral agreements, including the BTWC and CWC.

5. In a manner consistent with its national legislation and practices, the Government should, before authorizing a transfer of an AG-controlled item, either (a) satisfy itself that goods are not intended for reexport; (b) satisfy itself that, if reexported, the goods would be controlled by the recipient government pursuant to these guidelines; or (c) obtain satisfactory assurances that its consent will be secured prior to any retransfer to a third country.

6. The objective of these Guidelines should not be defeated by the transfer of any non-controlled item containing one or more controlled components where the controlled component(s) are the principal element of the item and can feasibly be removed or used for other purposes. (In judging whether the controlled component(s) are to be considered the principal element, the Government will weigh the factors of quantity, value, and technological know-how involved and other special circumstances that might establish the controlled component or components as the principal element of the item being procured.) The objective of these Guidelines also should not be defeated by the transfer of a whole plant, on any scale, that has been designed to produce any CBW agent or AG-controlled precursor chemical.

7. The Government reserves the discretion to: (a) apply additional conditions for transfer that it may consider necessary; (b) apply these guidelines to items not on the AG control lists; and c) apply measure to restrict exports for other reasons of public policy consistent with its treaty obligations.

8. In furtherance of the effective operation of the Guidelines, the Government will, as necessary and appropriate, exchange relevant information with other governments applying the same Guidelines.

9. The Government encourages the adherence of all states to these Guidelines in the interest of international peace and security.

Further provisions applicable to Australia Group Participants

In addition, participants in the Australia Group, consistent with their obligations under the BTWC and CWC and in accordance with their national legislation have, after careful consideration, decided also to give equal respect to the following provisions.

Catch-All

1. Participant states will ensure that their regulations require the following:

    (a) an authorisation for the transfer of non-listed items where the exporter is informed by the competent authorities of the Participant State in which it is established that the items in question may be intended, in their entirety or part, for use in connection with chemical or biological weapons activities;

(b) that if the exporter is aware that non-listed items are intended to contribute to such activities it must notify the authorities referred to above, which will decide whether or not it is expedient to make the export concerned subject to authorisation.

2. Participant states are encouraged to share information on these measures on a regular basis, and to exchange information on catch-all denials relevant for the purpose of the AG.

No Undercut Policy

3. In accordance with the Group's agreed procedures, a license for an export that is essentially identical to one denied by another AG participant will only be granted after consultations with that participant, provided it has not expired or been rescinded. Essentially identical is defined as being the same biological agent or chemical or, in the case of dual-use equipment, equipment which has the same or similar specifications and performance being sold to the same consignee. The terms of the Group's 'no undercut policy' do not apply to denials of items under national catch-all provisions.

Common Approaches

4. AG participants implement these Guidelines in accordance with the Group's agreed common approaches on end-user undertakings and chemical mixtures.

Intra EU Trade[1]

5. So far as trade within the European Union is concerned, each member State of the European Union will implement the Guidelines in the light of its commitments as a member of the Union.

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1. This provision applies to members of the European Union.

Image credits

Cover: UN workers seal leaking Iraqi 122mm rockets for destruction, which were reportedly filled with the chemical nerve agent Sarin, destroyed by Iraq after the Gulf war. (AAP Image/AP Photo/UK Ministry of Defence)

Page 1: The 2005 Plenary of the Australia Group, held in Sydney. (Photo: Dominique B. Werner)

Page 4: Firefighters in biochemical protective gear carry a dummy victim in a mock exercise in bioterrorism in Tokyo on October 23, 2000. (AAP Image/AP Photo/Itsuo Inouye).

Page 5: A microscopic view of the Ebola virus as discovered in the German town of Marburg. (AAP Image/AFP)

Page 11: Shipping containers at the P&O container yard at Sydney's Port Botany. (AAP Image/Mick Tsikas)

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