

**Third Meeting  
Geneva, 5-9 December 2005**

**Meeting of Experts  
Geneva, 13-24 June 2005**

## **REPORT OF THE MEETING OF EXPERTS**

### Introduction

1. The Final Document of the Fifth Review Conference of the States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction (BWC/CONF.V/17), in the section dealing with Decisions and Recommendations, contained the following decision:

“The Conference decided, by consensus, as follows:

- (a) To hold three annual meetings of the States Parties of one week duration each year commencing in 2003 until the Sixth Review Conference, to be held not later than the end of 2006, to discuss, and promote common understanding and effective action on:
  - i. the adoption of necessary national measures to implement the prohibitions set forth in the Convention, including the enactment of penal legislation;
  - ii. national mechanisms to establish and maintain the security and oversight of pathogenic microorganisms and toxins;
  - iii. enhancing international capabilities for responding to, investigating and mitigating the effects of cases of alleged use of biological or toxin weapons or suspicious outbreaks of disease;
  - iv. strengthening and broadening national and international institutional efforts and existing mechanisms for the surveillance, detection, diagnosis and combating of infectious diseases affecting humans, animals, and plants;
  - v. the content, promulgation, and adoption of codes of conduct for scientists.

- (b) All meetings, both of experts and of States Parties, will reach any conclusions or results by consensus.
- (c) Each meeting of the States Parties will be prepared by a two week meeting of experts. The topics for consideration at each annual meeting of States Parties will be as follows: items i and ii will be considered in 2003; items iii and iv in 2004; item v in 2005. The first meeting will be chaired by a representative of the Eastern Group, the second by a representative of the Group of Non-Aligned and Other States, and the third by a representative of the Western Group.
- (d) The meetings of experts will prepare factual reports describing their work.
- (e) The Sixth Review Conference will consider the work of these meetings and decide on any further action.”

2. In accordance with the decision of the Fifth Review Conference, the 2003 Meeting of States Parties was convened in Geneva from 10 to 14 November 2003, and was preceded by a Meeting of Experts held in Geneva from 18 to 29 August 2003. The 2004 Meeting of States Parties was convened in Geneva from 6 to 10 December 2004, and was preceded by a Meeting of Experts held in Geneva from 19 to 30 July 2004. The 2004 Meeting of States Parties approved the nomination by the Western Group of Ambassador John Freeman of the United Kingdom as Chairman of the Meeting of Experts and Meeting of States Parties in 2005. The 2004 Meeting of States Parties decided that the 2005 Meeting of Experts would be held in Geneva from 13 to 24 June 2005, and that the 2005 Meeting of States Parties would be held in Geneva from 5 to 9 December 2005.<sup>1</sup>

3. By resolution 59/110, adopted without a vote on 10 December 2004, the General Assembly, *inter alia*, requested the United Nations Secretary-General to continue to render the necessary assistance to the depositary Governments of the Convention and to provide such services as may be required for the implementation of the decisions and recommendations of the Review Conferences, including all necessary assistance to the annual meetings of the States Parties and the meetings of experts.

#### Organization of the Meeting of Experts

4. In accordance with the decisions of the Fifth Review Conference and the 2004 Meeting of States Parties, the 2005 Meeting of Experts was convened at the Palais des Nations in Geneva from 13 to 24 June 2005, under the Chairmanship of Ambassador John Freeman of the United Kingdom.

5. At its first meeting, the Meeting of Experts adopted its agenda (BWC/MSP/2005/MX/1) and programme of work (BWC/MSP/2005/MX/2) as proposed by the Chairman. The Chairman also drew the attention of delegations to four background papers prepared by the Secretariat (BWC/MSP/2005/MX/INF.1, /INF.2, /INF.3 and /INF.4).

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<sup>1</sup> See BWC/MSP/2004/3.

6. At the same meeting, following a suggestion by the Chairman, the Meeting of Experts adopted as its rules of procedure, *mutatis mutandis*, the rules of procedure of the Fifth Review Conference, as contained in Annex II of the Final Document of the Review Conference (BWC/CONF.V/17).

7. Mr. Valère Mantels, Political Affairs Officer, United Nations Department for Disarmament Affairs, was in charge of the BWC issues in the Department for Disarmament Affairs. Mr. Richard Lennane, Political Affairs Officer, served as Secretary of the Meeting of Experts. Ms. Melissa Hersh and Mr. Piers Millett, Associate Political Officers, served in the Secretariat.

#### Participation at the Meeting of Experts

8. Eighty-two States Parties to the Convention participated in the Meeting of Experts as follows: Afghanistan, Algeria, Argentina, Australia, Austria, Azerbaijan, Bahrain, Bangladesh, Belgium, Benin, Bolivia, Brazil, Bulgaria, Cambodia, Canada, Chile, China, Colombia, Croatia, Cuba, Cyprus, Czech Republic, Denmark, Estonia, Ethiopia, Finland, France, Georgia, Germany, Greece, Guatemala, Holy See, Hungary, India, Indonesia, Iran (Islamic Republic of), Iraq, Ireland, Italy, Japan, Jordan, Kenya, Kuwait, Latvia, Libyan Arab Jamahiriya, Lithuania, Luxembourg, Malaysia, Malta, Mauritius, Mexico, Morocco, Netherlands, New Zealand, Nicaragua, Nigeria, Norway, Pakistan, Peru, Philippines, Poland, Portugal, Qatar, Republic of Korea, Romania, Russian Federation, Saudi Arabia, Serbia and Montenegro, Singapore, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Thailand, Turkey, Ukraine, United Kingdom of Great Britain and Northern Ireland, United States of America, Viet Nam and Yemen.

9. In addition, three States that had signed the Convention but had not yet ratified it participated in the Meeting of Experts without taking part in the making of decisions, as provided for in rule 44, paragraph 1 of the rules of procedure: Egypt, Madagascar, Syrian Arab Republic.

10. One state, Israel, neither Party nor Signatory to the Convention, participated in the Meeting of Experts as an observer, in accordance with rule 44, paragraph 2 (a).

11. The United Nations, including the United Nations Department for Disarmament Affairs (UNDDA), the United Nations Institute for Disarmament Research (UNIDIR) and the United Nations Monitoring, Verification and Inspection Commission (UNMOVIC), attended the Meeting of Experts in accordance with rule 44, paragraph 3.

12. The Food and Agriculture Organization of the United Nations (FAO), the International Centre for Genetic Engineering and Biotechnology (ICGEB), the International Committee of the Red Cross (ICRC), the Organisation for Economic Co-operation and Development (OECD), the Organization for the Prohibition of Chemical Weapons (OPCW), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the World Health Organization (WHO), and the World Organization for Animal Health (OIE) were granted observer status to participate in the Meeting of Experts in accordance with rule 44, paragraph 4.

13. In addition, at the invitation of the Chairman, in recognition of the special nature of the topic under consideration at this Meeting and without creating a precedent, 23 scientific, professional, academic and industry bodies participated in informal exchanges in the open sessions as guests of the Meeting of Experts.

14. Sixteen non-governmental organizations and research institutes attended the Meeting of Experts under rule 44, paragraph 5.

15. A list of all participants in the Meeting of Experts is contained in document BWC/MSP/2005/MX/INF.6.

#### Work of the Meeting of Experts

16. The Meeting of Experts held two public meetings, on 13 and 24 June respectively, six open sessions, and seven working sessions. In accordance with the programme of work (BWC/MSP/2005/MX/2), on 13 June the Meeting of Experts heard introductory statements from 12 States Parties during the first open session, and presentations from seven international intergovernmental organizations and one State Party during the second open session. On 14 June, two open sessions were devoted to consideration of government science, during which the Meeting heard a total of 19 presentations and statements from States Parties and one presentation from a guest of the meeting. The three remaining open sessions, held between 15 and 20 June, were devoted to expert contributions, including from universities, funders, research, publishers, industry and professional bodies. During these sessions, the Meeting heard 10 presentations and statements from States Parties and 20 presentations and statements from guests of the Meeting.

17. The three working sessions held between 15 and 20 June were devoted to discussion of issues relating to universities, funders, research, publishers, industry and professional bodies. During these sessions, the Meeting heard 10 presentations and statements from States Parties. The three working sessions held on 21 and 22 June were devoted to, respectively, issues relating to the content of codes of conduct; issues relating to the promulgation and adoption of codes of conduct; and other issues relating to codes of conduct. During these sessions, the Meeting heard 14 presentations and statements from States Parties.

18. The Chairman, under his own responsibility and initiative, prepared a paper listing considerations, lessons, perspectives, recommendations, conclusions and proposals drawn from the presentations, statements, working papers and interventions on the topics under discussion at the Meeting. The Meeting of Experts noted that this paper had no status; that it had not been discussed; that it could not be considered as being complete; that the appearance of any consideration, lesson, perspective, recommendation, conclusion or proposal in the paper did not in any way indicate or imply that States Parties agreed with it; and that it should not necessarily form a basis for future deliberations. The Meeting of Experts noted that it was the Chairman's view that the paper could assist delegations in their preparations for the Meeting of States Parties in December 2005 and in its consideration of how best to "discuss, and promote common understanding and effective action on" the topic in accordance with the decision of the Fifth Review Conference.

19. The paper prepared by the Chairman is attached as Annex I to this Report.

20. In the course of its work, the Meeting of Experts was able to draw on a number of working papers submitted by States Parties, as well as on statements and presentations made by States Parties, Observer Organizations and guests of the Meeting, which were circulated in the Meeting.

#### Documentation

21. A list of official documents of the Meeting of Experts, including the working papers submitted by States Parties, is contained in Annex II to this Report. All documents on this list are available on the United Nations Official Document System (ODS), accessible on the internet at <http://documents.un.org>.

#### Conclusion of the Meeting of Experts

22. At its closing meeting on 24 June 2005, the Meeting of Experts noted that the Chairman would prepare the provisional agenda and programme of work for approval and adoption at the Meeting of States Parties to be held from 5 to 9 December 2005.

23. At the same meeting, the Meeting of Experts adopted its Report by consensus, as contained in document BWC/MSP/2005/MX/CRP.1, as orally amended, to be issued as document BWC/MSP/2005/MX/3.

Annex I

CONSIDERATIONS, LESSONS, PERSPECTIVES, RECOMMENDATIONS,  
CONCLUSIONS AND PROPOSALS DRAWN FROM THE PRESENTATIONS,  
STATEMENTS, WORKING PAPERS AND INTERVENTIONS ON THE  
TOPIC UNDER DISCUSSION AT THE MEETING

The following tables relating to agenda item 5 (Consideration of the content, promulgation, and adoption of codes of conduct for scientists) were prepared by the Chairman.

(NOTE: “Pres” = Presentation; “Stat” = Statement; “Int” = Intervention)

Source	Text
<b>United States</b> Pres 20/6 PM	Potential benefits (include) Increased Public Confidence through better Accountability Trigger to Streamline Policies and Procedures Better Awareness of the Dual-use Applications of Science Improved Public Communications
<b>United States</b> Pres 20/6 PM	Key benefit of a code would be to create a value-driven social norm
<b>Japan</b> Pres 20/6 AM	(Beneficial)...effects... (derived from the) coding process (include) To raise public awareness of this issue To encourage active discussion on how to strike the right balance between healthy development of science and preventing security risk To help to reduce the distance between scientists and the general public (building sense of trust for scientists) To build the public’s sense of reassurance that a certain mechanism is being prepared to prevent science abuse
<b>Australia</b> Pres 21/6 AM	Benefits arising from incorporating environmental values into codes of conduct (include) encouragement to scientists to disclose discoveries of potentially harmful effects of their research codes of conduct pay heed to environmental issues and incorporate appropriate risk management or precautionary strategies structures are more likely to be created that assist in preventing intentional or unintentional release of dangerous materials Codes of conduct could implicitly or explicitly take into account the impact of research on non-human species, again reflecting the broadening of environmental values to incorporate both human and non-anthropocentric concerns A broadening of methods to secure compliance - from those of regulation and sanctions to one trust Intrinsic or actual rewards of public trust in scientists (e.g. greater public support for funding research) The value of a relationship between the community and scientists based on trust

<b>United States</b> Pres 14/6 AM	<p>Analysis of Representative Codes of Conduct</p> <ul style="list-style-type: none"> <li>• Provide an overview of trends in the development of codes</li> <li>• Identify common and distinguishing features among different codes</li> <li>• Identify factors that may influence a code's utility or success</li> </ul>
<b>United States</b> Pres 14/6 PM	Codes can create a culture of responsibility and accountability and can train the current and future scientific community in best practices.
<b>Republic of Korea</b> WP.33	<p>Codes of Conduct/Code of Ethics</p> <ul style="list-style-type: none"> <li>• Recognition of individual responsibility, and biosafety and biosecurity aspects are core elements for codes of conducts/codes of ethics.</li> <li>• Codes should be evolving instruments that can be adjusted on a continual basis in their application and interpretation reflecting international security situations and development in life sciences and biotechnology.</li> <li>• Codes do not provide a complete solution for countering bioproliferation and bioterrorism. They can contribute to achieving such objectives only in conjunction with other measures.</li> <li>• Widespread adoption of codes of conduct/codes of ethics may serve as a basis for best practices that government agencies, university labs and institutions can take into consideration when they update their instruments and procedures.</li> </ul>
<b>Malaysia</b> Stat 13/6 AM	The establishment of an international code of conduct for those engaged in the life sciences would certainly make a significant and effective contribution in combating the present and future security threats of biological weapons and bio-terrorism
<b>Nigeria</b> Stat 13/6 PM	There is need to establish an international code of conduct for those engaged in life sciences as part of efforts to prevent present and future threats from biological weapons and bioterrorism
<b>Russia</b> Pres 14/6 AM	...introduction of ethical standards of conduct for scientists could turn out to be an effective auxiliary measures in terms of... BTWC compliance. Meanwhile... the task of strengthening the Convention through the development of a legally binding verification Protocol remains relevant
<b>International Union of Biochemistry and Molecular Biology (IUBMB)</b> Pres 15/6 AM	Codes of conduct for scientists are important for setting general standards of acceptable scientific behaviour. Alone however they will not deter states or individuals prepared to carry out bioterrorist attacks and it is therefore important to restrict access to potential bioterrorism agents.
<b>Cuba</b> Stat 16/6 AM	...need to have a set of ethical principles which are educational, or precautionary, or philosophical, which show the ethical dimension and which should be present in all aspects of biological sciences
<b>United States</b> Int 16/6 PM	Codes of conduct are both awareness raising and useful for establishing norms

<b>Japan</b> Pres 21/6 AM	The primary and direct objective of codes... (is) to reduce the risk of sciences causing negative effects on human beings and society through establishing specific rules, principles of guidelines as written documents that scientists should respect
<b>Australia</b> Pres 21/6 AM	Codes of conduct provide scientists with an opportunity to (re)gain public trust
<b>Germany</b> WP.12	A Code of Conduct for the Life Sciences could represent an effective element in preventing the hostile use of biological agents, if it is designed to promote awareness of the complex dual use dilemma and at the same time pro-actively obligate the research scientist to engage in reflective activities such as risk assessments and consideration of alternative approaches during the research process.
<b>International Centre for Genetic Engineering and Biotechnology (ICGEB)</b> Pres 13/6 PM	(Codes of conduct) should provide the essential ethical framework for a Code to assure that the benefits of the most powerful life sciences are not utilised for spreading disease or other harmful outcomes towards human, animal and plant welfare
<b>Cuba</b> Int 20/6 AM	...ensure a more transparent functioning of investigations being carried out by scientists... it is important to ensure the global dimension of this discussion and, in this respect, codes of conduct can play a very important role
<b>Japan</b> Pres 21/6 AM	Significance of Codes of Conduct (includes) To ensure scientists realize the potential risks inherent in their activities To raise scientists' awareness of their ethical and social responsibility To help scientists understand the national and international rules, regulations and frameworks To ensure biosafety and biosecurity To prevent dual-use research results from being abused by criminals and terrorists
<b>China</b> Pres 14/6 AM	...code of conduct or ethic regulations should be adopted and implemented to educate, supervise and regulate scientists' behavior to prevent the accomplishments in their research from being abused or misused intended or unintended. Thus the beneficial integration between discipline and self-discipline could be realized.
<b>China</b> WP.20	...code of conduct or ethic regulations should be adopted and implemented to educate, supervise and regulate scientists' behavior to prevent the accomplishments in their research from being abused or misused intended or unintended. Thus the beneficial integration between discipline and self-discipline could be realized.
<b>Canada</b> Pres 22/6 AM	Codes of Conduct: <ul style="list-style-type: none"> <li>• can act as a warning signal, indicating that while an activity can still proceed, nevertheless one must proceed, nevertheless one must proceed with the utmost caution;</li> <li>• can also indicate the boundary between that which is permitted and prohibited under legislation</li> </ul>

<b>Canada</b> Pres 22/6 AM	Codes can provide warnings in a number of areas not explicitly covered by legislation including: <ul style="list-style-type: none"> <li>• Careless transfers of Intangible Technology</li> <li>• Work where risks outweigh benefits</li> <li>• Compromising professional integrity through: <ul style="list-style-type: none"> <li>- Use of false data</li> <li>- Conflicts of interest</li> <li>- Lack of due diligence</li> </ul> </li> </ul>
<b>United States</b> Pres 14/6 AM	Why a Code of Conduct for Dual Use Research? <ul style="list-style-type: none"> <li>• Government cannot oversee all scientists and experiments across the nation</li> <li>• Offers greatest opportunity for improving security of research at the level of individual scientists <ul style="list-style-type: none"> <li>-Increases understanding of biosecurity</li> <li>-Persistent reminder of moral and ethical responsibilities</li> <li>-Creates a “culture of responsibility and accountability</li> </ul> </li> <li>• Sets professional standards that may have legal implications</li> </ul>
<b>Russia</b> Pres 14/6 AM	...codes of conduct for biologists, should the decision to elaborate them to be adopted, have to be worked out on a multilateral basis at meetings which have to be initiated in the framework of the BTWC.
<b>Nigeria</b> Stat 15/6 PM	There is need to draw up (a) national/ international code of conduct for those engaged in life sciences as part of efforts to minimize present and future threats from biological weapons and bioterrorism.
<b>Cuba</b> Int 20/6 AM	...it is necessary to recognise that the most appropriate body to ensure the provisions of activities that do not serve peaceful purposes is indeed with the Biological Weapons Convention
<b>Cuba</b> Int 20/6 AM	(There is a) need to carry out a dialogue at the national level to adopt measures that would contribute to our fight against the ill use of biological agents... this is a dialogue that (was)... within the framework of the Biological Weapons Convention... compliance protocol and... include(d) various procedures that... are quite useful
<b>United Kingdom</b> WP.16	Further consideration would be needed to determine how best to introduce BTWC issues and responsibilities into education.
<b>Japan</b> Int 15/6 PM	Should consider codes of conduct in the context of the Biological Weapons Convention, for instance Article IV
<b>Algeria</b> Stat 13/6 AM	...the elaboration of these codes should be based on the norms established by the Convention and should be consistent with the legislative and regulatory framework adopted by the States Party
<b>United States</b> Pres 20/6 PM	A code would extend responsibility for helping implement the provisions of BWC to the level of individual scientists
<b>Indonesia</b> WP.24	... capacity building is an important element in the empowerment of bioethics and of codes of conduct for scientists... in order to support the national implementation of BTWC

<b>Center for Deterrence of Biowarfare and Bioterrorism (CDBB)</b> Pres 20/6 AM	Codes of Conduct that are built upon strong bioethical principles are critical for: Promoting compliance with the provisions of the Biological and Toxin Weapons Convention Helping to protect the life sciences against misuse by terrorists Enhancing national and global security
<b>Italy</b> WP.34	Scientists should be aware that biological agents and toxins that are capable of causing temporary or permanent damage, harm or deaths by humans, animals, plants, materials of any kind or the environment are permitted only for protective or other peaceful purposes
<b>Italy</b> WP.34	Scientists should be aware that the design, construction or possession, for any purpose, of delivery mechanisms designed to use biological agents or toxins for hostile purposes or in armed conflict is prohibited by the Biological and Toxin Weapons Convention. There is no exemption for protective purposes

<b>Malaysia</b> Pres 14/6 PM	There is a lack of a formal code for scientists in the biomedical and biological scientists
<b>Malaysia</b> Pres 14/6 PM	Those that conduct, fund, administer and regulate biosciences and biomedicine have an ethical, social responsibility and obligation to actively deliberate measures necessary to minimize risk that their work could be employed for hostile ends
<b>American Medical Association (AMA)</b> Pres 15/6 AM	Risks of some research may warrant regulatory oversight physician-researchers should work with key stakeholders to promulgate global standards for research governance
<b>International Council for the Life Sciences (ICLS)</b> Pres 15/6 PM	The challenge is to manage the risks
<b>Canada</b> Int 15/6 PM	Guidance is required to prevent a conflict between: Senior, tenured scientific staff and their post-doctoral researchers; The concept of 'publish or perish' and security requirements; and Research funding and ethics.
<b>Association of the British Pharmaceutical Industry (ABPI)</b> Pres 16/6 AM	International oversight will be very difficult
<b>Cuba</b> Stat 16/6 AM	...good intentions cannot be used to justify negligence and for allowing the non-peaceful use of results of... scientific work
<b>Poland</b> Pres 16/6 PM	Bills of law, biosafety regulations in the labs, etc., are not ethical rules themselves but as other human activities are subjected to moral judgement
<b>South Africa</b> Int 16/6 PM	Legal controls remain the most important element

<b>The Royal Society</b> Pres 20/6 AM	A possible set of minimum safety requirements are described in the WHO laboratory biosafety manual (WHO 2004). International harmonisation would also make it harder for a scientist to undertake an unsafe activity by simply moving from one country to another.
<b>World Medical Association (WMA)</b> Pres 20/6 AM	Writing a code... (the) key remains getting 'buy-in'
<b>United States</b> Pres 20/6 PM	Provide clear evidence that there is a need/ problem that a code of ethics could help solve
<b>United States</b> Pres 20/6 PM	Demonstrate the benefits derived from formulating and adopting a code
<b>United States</b> Pres 20/6 PM	Need further discussion regarding impact of code on stakeholders
<b>Japan</b> Pres 21/6 AM	It is possible and meaningful for relevant international organizations to develop examples of codes e.g. international ethical guidelines
<b>Iran</b> Pres 21/6 AM	Ethical and responsible behavior by scientists complements States Parties' national obligations towards fostering international security
<b>Iran</b> Pres 21/6 AM	...any code as devised by States shall ultimately be applied to their subjects, it remains the prerogative to States Parties to decide on the content, promulgation and adoption of codes. However, the development and adoption of such codes of conduct could be effective and useful, when complemented with the involvement and assistance of national scientific community
<b>Iran</b> Pres 21/6 AM	... the close linkage and relationship of different branches of bio sciences have made clear the need for the States to review their codes applicable in different areas of relevant activities
<b>Canada</b> Pres 21/6 AM	Compelling need (for action) from the scientific communities and public
<b>Canada</b> Pres 21/6 AM	Cannot legislate ethics (it is) descriptive not prescriptive
<b>Australia</b> Pres 21/6 AM	Environmental values reflect fundamental shifts in social values. Capturing some of these shifts in values in codes of conduct could render the codes much more relevant to scientists
<b>Argentina</b> WP.1	...the relationship between ethical codes for science and, for example, educational strategies and laws are relevant
<b>Germany</b> WP.14	It is necessary to control exchange of material, which includes pathogens of high-pathogenic potency. This is especially true for the methods of weaponization. A quick and unbureaucratic exchange of material across borders, however, is still necessary.
<b>Germany</b> WP.14	An international framework, probably under the umbrella of the UN, should develop regulations for activities in the field of infectious agents research including biosafety and biosecurity.
<b>Russia</b> WP.18	A professional community needs to solve its ethic problems independently by introducing restrictions based on law before they are introduced by the bureaucracy through a rigorous regulatory system
<b>Argentina</b> Int 14/6 AM	... avoid elaborating on general restrictions that unfairly restrict or limit scientific work and biotechnology development in an indiscriminate manner.

<b>Bulgaria</b> Stat 14/6 AM	...we need all national and international institutions, organizations, medical universities and etc. involved in life sciences research and manufacturing activities, supported strongly by the governments, to combine their efforts and to reach by consensus reasonable acceptable for all of us codes of conduct for people working in this field.
<b>American Association for the Advancement of Science (AAAS)</b> Pres 20/6 PM	Establishing an ethical climate for research cannot be imposed by external regulation; it must be fostered from within the professional community
<b>Australia</b> Stat 15/6 PM	Well established values and principles from medical research relating to human health and safety and animal welfare also apply to GMOs
<b>Japan</b> Pres 21/6 AM	Suspension of the publication of research results should be considered only in cases (where): <ul style="list-style-type: none"> <li>• The security risk is clear and present</li> <li>• (it is) accompanied by fully convincing reasons</li> </ul>
<b>China</b> Pres 15/6 PM	...important to strengthen the adoption and implementation of code of conduct in educational community, conducive to helping scientists to devote themselves to human peace and progress from their student hood, and implementing code of conduct in a benign.
<b>China</b> Pres 15/6 PM	...guidelines also prescribe concrete punishment mechanisms, punishing those behaviours in violation of scientific ethics, hence realizing the integration of discipline and self-discipline.
<b>Libya</b> Int 21/6 PM	...Member States have got to act in perfect transparency...
<b>Libya</b> Int 21/6 PM	...it is also necessary for fruitful cooperation to exist for defensive purposes and for warding off danger amongst all Members.
<b>Libya</b> Int 21/6 PM	...it could also be necessary for a protocol to be devised in order to strengthen the Convention and it could be also that we could reach a code of conduct, which is the focus of our discussions...
<b>Argentina</b> Stat 22/6 AM	(On the international level) measures intended to promote responsible, secure and appropriate science to achieve humanitarian ends can nonetheless produce results that undermine the equity, the right of all peoples to health and well-being, if their implementation divides countries between those who can and those who cannot fund the norms of security and the necessary conditions of work
<b>Canada</b> Pres 22/6 AM	Codes of Conduct, Codes of Practice and Legislation can all be seen to play a complimentary role in guiding the “traffic” of scientific research and behaviour
<b>Canada</b> Pres 22/6 AM	Creating codes of conduct and explaining their contents can make legislative provisions easier to comprehend
<b>Canada</b> Pres 22/6 AM	The warning function of codes can act as an indicator of where legislative restrictions begin, and enables researchers/scientists to better grasp the implications of the “grey areas” inherent in their research
<b>Pakistan</b> Stat 22/6 AM	Codes should be used as evolving benchmarks with targeting precision and efficiency

<b>Italy</b> WP.34	Secrecy in biodefense programs, in general, causes suspicions and should be avoided as much as possible
<b>Italy</b> WP.34	Scientists should be aware that weaponisation of active biological agents for defensive purposes violates the spirit of the BWC and should be avoided. Aerosolisation or other dissemination of active biological agents should be performed only in confined and small-scale environments and only for purposes of detection, prophylaxis or medical treatment
<b>Italy</b> WP.34	Life scientists must be constantly aware of the fact that the extraordinary opportunities made available by the knowledge and technologies recently developed or foreseeable in the near future, may have dual use effects

<b>Indonesia</b> Pres 14/6 PM	Review and adapt ethics in line with the development of science and technology, particularly in the field of the life sciences
<b>AAAS</b> Pres 20/6 PM	...a code should be viewed as a 'living document' subject to review and modification over time as knowledge, conditions, or perspectives change. There should be a process in place for evaluating the effectiveness of any code, especially as it relates to the attitudes and behaviours it is intended to influence
<b>United States</b> Pres 20/6 PM	Code should be assessed periodically and revised as necessary
<b>Canada</b> WP.6	...codes, like legislation, have to be treated as living documents with the flexibility to respond to changing circumstances as required.
<b>United States</b> Int 22/6 AM	...need something self-enforcing rather than imposed. This is not something that we believe we are going to be able to look at in the short time frame. To generate the cultural awareness we need to get the generational change of having that becoming a way of life

<b>Japan</b> Pres 14/6 PM	The improvement of the sense of ethics of the researcher is necessary to prevent the intentional action. The following matters are necessary for the purpose. The noble idea of the organization The definition of the research purpose The feeling of the social responsibility The regulation by the law The education to deny biological weapons
<b>Nuclear Threat Initiative (NTI)</b> Pres 15/6 AM	(It is important to:) Increase awareness, understanding and education; Create institutional culture of ethos and responsibility; Engage individual scientists and institutions in self-governance measures; Need innovative strategies for oversight and responsible stewardship; (and) Create framework for harmonization of national and international rules, regulations, agreements and laws.
<b>Germany</b> Pres 15/6 AM	To minimize the risk of 'dual use' (activities, efforts could include:) Careful education of students Offensive and special training of graduate students and postdocs Achievement of generally accepted guidelines Codes of conduct Self control of science and scientists (local, national and global level)

<b>AAAS</b> Pres 20/6 PM	The first... step in developing a code of conduct is to define the core values the code is intended to promote... If there is no agreement on the core values that should underlie dual-use research in biology, it will be very difficult to know whether one is travelling in the desired direction... for researchers the core values must make sense in light of their real-world experiences if they are to believe in and live by them... Any attempt to forge a set of core values inconsistent with the values of the larger society will inevitable fuel public anxiety and lead others to question the ability and willingness of researchers to self-regulate themselves
<b>United States</b> Pres 20/6 PM	Need to provide sufficient details about scope, approach, and implementation of a code to enable realistic estimates of costs
<b>United States</b> Pres 20/6 PM	Key components of code development process include: <ul style="list-style-type: none"> <li>• Defining scope and goals of code</li> <li>• Stakeholder communication and education</li> <li>• Public communication and education</li> <li>• Developing institutions and infrastructure to support and maintain code</li> </ul>
<b>Canada</b> Pres 21/6 AM	A code in the biodefense context (should) <ul style="list-style-type: none"> <li>• attach (an) ethical review to a local group with related duties</li> <li>• (utilise a) national oversight group attached to a national body of similar purpose</li> <li>• (be) accomplished under a national code of ethics and conduct - voluntary not legislated</li> </ul>
<b>United Nations Educational, Scientific and Cultural Organization (UNESCO)</b> Pres 13/6 PM	Questions (to facilitate the consideration of codes) <ul style="list-style-type: none"> <li>• What kind of code would be feasible</li> <li>• The contents, scope, focus and character</li> <li>• Consensus building</li> <li>• Political support</li> <li>• Strategies of implementation</li> </ul>
<b>AAAS</b> Pres 20/6 PM	...very basic description(s) of various code functions (include as an) <ul style="list-style-type: none"> <li>• Enabling document</li> <li>• Public evaluation</li> <li>• Professional socialization</li> <li>• Public trust</li> <li>• Deterrent</li> <li>• Support system</li> <li>• Adjudication</li> </ul>
<b>Argentina</b> Stat 22/6 AM	The formulation and adoption of codes of conduct for scientists and institutions must take into account and harmonize four levels of conceptual analysis, ethical intervention and positive action

<b>Argentina</b> Stat 22/6 AM	(Guidelines for codes for scientific institutions) should create conditions that are favourable for the integrity of research, transmit to researchers coming into working life the values and principles for ethical conduct, and ensure conditions of biosecurity and apply codes of practice that adhere to norms fixed at the national and international levels; also permit public investigations both of laboratories and of projects and ensure that the inflow of all biological material is undertaken in keeping with local, regional and international legislation
<b>Australia</b> Int 21/6 PM	There should be three layers of codes: at the top, a universal code describing the ethical norms and principles; in the middle, more detailed codes developed or adapted by scientific societies; and at the bottom, operational codes specific to a particular workplace or institution.
<b>Ukraine</b> Stat 22/6 PM	A System (or infrastructure) of implementation of Codes has to be established at three levels: <ul style="list-style-type: none"> <li>• The first level (local or institutional. Operation through education in Universities, in Institutions and other research centers where the research is conducted (by peer reviewing and supervision) and in scientific journals where the results are published;</li> <li>• The second level (National). Operation through the National Councils for Bioethics, Biosafety and Biosecurity, and via financing Bioresearch;</li> <li>• The third level (International)-control on BWC, and operation through general recommendations (e.g. International Ethical Guidelines). The latter rises the necessity to create an International Forum on Biosecurity and Biosafety.</li> </ul>
<b>Pakistan</b> Stat 22/6 AM	A code should, however, form part of a broader “matrix of codes” applicable to decision makers, bioscientists, researchers and administrators handling life sciences
<b>United States</b> Pres 14/6 AM	What is a “Code of Conduct”? <ul style="list-style-type: none"> <li>• Formal statement of values and professional practices of a group of individuals with a common focus, either an occupation, academic field, or social doctrine</li> <li>• Defines the expectations and directs the actions of a group</li> </ul>
<b>United States</b> Pres 14/6 AM	Findings: Social and Professional Contexts <ul style="list-style-type: none"> <li>• Most codes addressed relationships between professionals and: <ul style="list-style-type: none"> <li>-The public, environment, and/or society</li> <li>-Colleagues</li> <li>-Constituencies served</li> </ul> </li> <li>• Fewer codes addressed relationships with trainees</li> </ul>
<b>India</b> Pres 15/6 PM	A bottom up approach in formulation and implementation of bio-safety and bio-security policies through direct involvement of scientists
<b>ABPI</b> Pres 16/6 AM	Self regulation and participation is key
<b>Japan</b> Pres 21/6 AM	Due consideration should be given to the discussion at other international organizations, such as UNESCO, OECD, ICRC etc

<b>Indonesia</b> WP.24	Although the codes of conduct published by several UN specialized agencies do not refer specifically to Biological and Toxin Weapons... in view of the fact that BTWC is related to a broad range of sciences, the codes of conduct of scientists involved in these activities should take account of the prohibition of biological and toxin weapons
<b>Sweden</b> Int 16/6 PM	Bring in the pharmaceutical industry in the process related to any future negotiations over codes of conduct
<b>AAAS</b> Pres 20/6 PM	To avoid the risk that the code will be divorced from the very real concerns expressed by non-scientists, there must be broad consultation with affected communities... we must be careful not to burden codes with such unrealistic expectations
<b>United States</b> Pres 20/6 PM	Involve scientists and representative organizations early on and throughout the process.
<b>United States</b> Pres 20/6 PM	Get the assistance and support of organizations to whom scientists look for leadership (e.g., American Society for Microbiology).
<b>United States</b> Pres 20/6 PM	Including other stakeholders, such as industry, NGOs, and the public, is necessary to enable (a) decision on whether and how to move forward with a code
<b>United States</b> Pres 20/6 PM	Need stakeholder buy-in early in the code development process
<b>United States</b> Pres 20/6 PM	Need to test conclusions with other stakeholders
<b>Japan</b> Pres 21/6 AM	The core people to formulate Codes of Conduct should be... scientists themselves. Involvement by people concerned in various fields is also necessary and productive, (including) security, public health, medicine, judiciary, publishing sector, funding, government etc.
<b>Japan</b> Pres 21/6 AM	(For the) coding process... regular discussion among experts and working-level officials in various fields would be necessary
<b>Iran</b> Pres 21/6 AM	The involvement of scientists and scientific community in preparation of codes of conduct would both strengthen and highlight the role and responsibility of the relevant individuals in this field, and guarantee that such codes would not endanger the scientific nature of their activities and use of scientific achievements for peaceful purposes
<b>Japan</b> WP.21	Scientists should be the core people to formulate Codes of Conduct for Scientists, but involvement by other people concerned are also necessary
<b>Algeria</b> Stat 13/6 AM	(Codes of conduct) should be done by all the actors in this area, in particular researchers and scientists
<b>Japan</b> Int 16/6 PM	Include the pharmaceutical industry in the coding process
<b>South Africa</b> Pres 14/6 AM	Ethical codes (should be) developed by professional groups, industry, academia, etc.
<b>United States</b> Pres 20/6 PM	Frame the code around responsibility in the biological sciences
<b>United States</b> Pres 20/6 PM	Avoid alienating scientists by implying they need to be convinced to conduct responsible research

<b>United States</b> Pres 20/6 PM	Important to introduce scientists to a code of conduct by describing the potential scope of a code and presenting a well-formulated rationale regarding the benefits scientists might receive from a code
<b>United States</b> Pres 20/6 PM	A systematic process for developing a code may not be well-accepted
<b>Japan</b> Pres 21/6 AM	(It) should be promulgated that (a) 'Code is a measure to prevent conscientious scientists from receiving unnecessary restrictions on their research activities'
<b>Iran</b> Pres 21/6 AM	Codes of conduct should not leave individuals and scientists with the impression that codes are designed against them or their scientific activities. Due respect should be extended to the scientific community as members of the society who serve the noble objectives of humanity through the advancement of science. Wider contributions by the scientists in promotion, establishment and adoption of codes would effectively remove any such misunderstandings and would enhance the implementation of codes
<b>Canada</b> WP.6	(Being) adequately compensated for... work, and... the benefits of continuing to undertake legitimate activities outweighs the perceived greater benefits, and associated risks, of engaging in more dubious work.
<b>United Kingdom</b> WP.16	It was considered important to address the purpose of codes of conduct and demonstrate that the costs of development, promulgation and adoption did not outweigh the benefits.

<b>United States</b> Pres 20/6 PM	Implementation of (a) code should be via existing professional scientific societies as opposed to government
<b>Malaysia</b> Pres 14/6 PM	Ensure guidance and advocate mechanism inclusive of a robust education and training programmes to achieve the desired objectives before embarking on a National legislation
<b>Center for Biosecurity, University of Pittsburgh Medical Center (CB)</b> Pres 15/6 AM	A web of approaches are needed in order to increase biodefense/ medical understanding as well as constrain malignant applications
<b>Islamic World Academy of Sciences (IAS)</b> Pres 15/6 AM	Notwithstanding the important roles of other stakeholders, academies of sciences perhaps should shoulder a primary responsibility in the development, promulgation and adoption of codes of conduct for scientists
<b>ABPI</b> Pres 15/6 AM	Codes of conduct will be more readily accepted if they build upon existing institutional guidelines and principles and are developed in collaboration with the scientists to whom they will be directed
<b>United Kingdom</b> WP.16	...work on codes of conduct should build on existing frameworks, procedures and practices.
<b>United States</b> Pres 20/6 PM	Ensure organizational and individual accountability
<b>United States</b> Pres 20/6 PM	Ensure accountability for the principles of the code – without undermining support for the code

<b>United States</b> Pres 20/6 PM	...a code of ethics, as opposed to a code of conduct, is needed
<b>United States</b> Pres 20/6 PM	Social norm would not strictly enforce or regulate scientific research; it would be similar to the physician's Hippocratic Oath
<b>Japan</b> Pres 21/6 AM	(A) mutual check system (is) <ul style="list-style-type: none"> <li>• difficult due to human resources constraints and highly sophisticated expertise</li> <li>• can possibly hamper beneficial research activities</li> <li>• promoting transparency of research contents should be considered as an alternative</li> </ul>
<b>Iran</b> Pres 21/6 AM	...all necessary precautionary measures need to be taken to avoid hampering the economic or technological development of States Parties to the Convention or international cooperation in the field of peaceful bacteriological (biological) activities, while devising national codes of conduct
<b>Iran</b> Pres 21/6 AM	No attempt thus should be made to impose on States Parties any particular form or format for codes of conduct
<b>Canada</b> Pres 21/6 AM	Is it easier to follow the spirit of a code versus technical regulations <ul style="list-style-type: none"> <li>• spirit respects the variation between communities</li> <li>• technical regulations often limit flexibility</li> </ul>
<b>Australia</b> Pres 21/6 AM	Incorporating environmental values into codes of conduct (could be accomplished by focusing on) <ul style="list-style-type: none"> <li>• post-materialist values</li> <li>• deep ecology and the Gaia hypothesis</li> <li>• stewardship</li> <li>• sustainable development</li> <li>• the precautionary principle</li> <li>• quality of life</li> </ul>
<b>Australia</b> Pres 21/6 AM	Environmental values provide a different and fertile vocabulary for capturing the range of motivations for scientific discovery and contribution
<b>Australia</b> Pres 21/6 AM	Sustainable development has the potential to forge links and resolve tensions between economic and environmental concerns... the same logic of incorporating environment, development and social concerns could be applied to codes of conduct.
<b>Algeria</b> Pres 13/6 AM	...the matrix could cover a table of various types of possible codes. These would be tools of a legal nature and different rules: codes of conduct, of ethics and practices, with a view to achieving the maximum objectives for various publics: political decision makers, researchers, jurists and all other persons involved both in the defense sector and others
<b>France</b> Pres 13/6 AM	Drafting by each State of a charter for biological researchers which can serve as the basis for an international text
<b>Cuba</b> Stat 16/6 AM	...any proposal for a code should provide for a combination of ethical, behavioural and practical aspects
<b>United States</b> Pres 20/6 AM	...a code should not be regulatory in nature – a code should raise the individual's awareness of ethical issues
<b>Japan</b> Int 15/6 PM	Address the internet throughout the consideration of universities, researchers and funders.

<b>China</b> Int 15/6 PM	We should facilitate a high-level code of conduct for scientists engaged in life sciences world-wide
<b>Russia</b> Pres 14/6 AM	... codes must be universal; it would be inappropriate to apply different moral and ethic(al) standards to scientists in different countries
<b>Nigeria</b> Stat 21/6 PM	... adopting a universal code should be practicable
<b>Australia</b> Pres 14/6 AM	...possible outcomes... a new universally agreed Code of Conduct based on a consensus-decision of all States Parties
<b>United Kingdom</b> Int 22/6 AM	A universal code of ethics could be a code that applies to all but it does not necessarily mean there will be a single code; there could be other codes and practices that lie below it.

<b>United States</b> Stat 13/6 AM	There is no 'one size fits all' approach to codes of conduct... a universal code of conduct is not... feasible
<b>Cuba</b> Stat 13/6 AM	There is no universal recipe for a code of conduct
<b>Australia</b> Pres 14/6 AM	No one size fits all - a range of regional, national, society, workplace codes
<b>Indonesia</b> Pres 14/6 PM WP.24	Although there is no 'one size fits all' in this domain and a universal code of conduct is not practically feasible at the present stage, we believe that existing codes of conduct should be harmonized. There are at least three main characteristics to bioethics, namely it is interdisciplinary, international, and pluralistic.
<b>NTI</b> Pres 15/6 AM	Codes of conduct will be more readily accepted if they build upon existing institutional guidelines and principles and are developed in collaboration with the scientists to whom they will be directed
<b>United Kingdom</b> WP.16	...work on codes of conduct should build on existing frameworks, procedures and practices.
<b>United States</b> Pres 20/6 PM	A code cannot be applied uniformly across all life science disciplines and across all countries
<b>United States</b> Pres 20/6 PM	Process of code development and implementation may differ
<b>Japan</b> Pres 21/6 AM	It is not practical to try to develop 'a universal code of conduct'
<b>Iran</b> Pres 21/6 AM	A universal code of conduct is neither achievable nor practical. The success of this process lies in providing the States Parties with the most objective understanding of the possibilities to strengthen the implementation of the Convention through active interaction with the national scientific and professional community
<b>Algeria</b> Stat 13/6 AM	...efforts to elaborate codes specific to the Convention could consist of a matrix code which would enable States Parties to base themselves on it at the appropriate time and this takes into account the view... there was no single code which might be applied to everyone

<b>Iran</b> Pres 21/6 AM	Content of particular codes may necessarily vary depending on their individual context and objectives and the way in which the codes are intended to be applied by organizations or professional bodies
<b>Republic of Korea</b> Stat 13/6 AM	(Codes of Conduct) should adopt a balanced approach so as to not unduly limit the legitimate research activities of life scientists
<b>Malaysia</b> Pres 14/6 PM	A code should be comprehensive enough to combat the inadvertent use of science and at the same time encourage the expansion of rigorous scientific research
<b>Pakistan</b> Pres 14/6 PM	Balance between freedom for scientists to work independently for the welfare of mankind (and) to develop a culture of responsibility within the institutions employing scientists and funding research in the life sciences
<b>Cuba</b> Stat 16/6 AM	...there should be clear establishment of the incompatibility of scientific work in biotechnology with a hostile use of results in armed conflict or towards other objectives which are not directly linked with sustainable development or the benefit of humanity
<b>China</b> Pres 16/6 PM	Scientists (working) on... animal disease have the obligation to peacefully use pathogenic microorganisms. They also have the responsibility both to prevent and stop research and production that may jeopardize... humankind, and to prevent the spread of disease and pollution of the environment
<b>Germany</b> Pres 20/6 PM	The need to find cures, diagnostic tools, and preventative measures against these agents is therefore aimed at fighting not only bioterrorism, but also naturally occurring dangerous infections
<b>United States</b> Pres 20/6 PM	Code should not impede scientific discovery while addressing national security needs
<b>United Kingdom</b> WP.8	...it is important that codes are formulated so as not to undermine legitimate scientific exchange.
<b>Germany</b> WP.15	Additional regulations will hamper research in the field of biomedicine, biology and biotechnology. Experimental results should be made available to the scientific community as precise as possible. An open information exchange between scientists will allow a better understanding of risks arising from the handling of infectious or toxic material or genetic modifications of organisms. This will lead to generally accepted recommendations for risk management of dangerous pathogens and toxins.
<b>Nigeria</b> Stat 21/6 PM	The code of Conduct will... have to take into consideration, the aspirations for scientific development of all States Parties, particularly those from the developing world
<b>Algeria</b> Stat 13/6 AM	These codes should not hinder scientific research or constitute a hindrance to the exercise of the legitimate rights of State to acquire biological equipment, substances and technology
<b>France</b> Pres 13/6 PM	There should be encouragement to the foreign researchers in laboratories to ensure varying approaches while ensuring protection from trainees from countries which do not provide security guarantees
<b>Pakistan</b> Stat 22/6 AM	Codes of conduct should prevent potential proliferation, not stymie scientific research

<b>Italy</b> WP.34	Avoiding any possible hostile use of research must take precedence over any duty derived from other commitments
<b>Italy</b> WP.34	Scientists should communicate and share information about biotechnology and its derived products and services in a balanced manner, taking into account both benefits and risks
<b>United States</b> Pres 14/6 AM	Life Sciences: New Considerations <ul style="list-style-type: none"> <li>• “Dual use” potential of certain life sciences research requires consideration of new processes and procedures designed to minimize the likelihood that biological research will be misused to threaten public health and/or national security.</li> </ul>
<b>United States</b> Pres 14/6 AM	Life Sciences: Striking a Balance <ul style="list-style-type: none"> <li>• Goal is to enhance protections for life sciences research while ensuring that any impact on the free flow of scientific inquiry is minimized.</li> </ul>

<b>Argentina</b> WP.1	...investigate if it is possible to find smallest common denominators that might form the basis for an international agreement.
<b>Australia</b> Pres 14/6 AM	...possible outcomes... agreement of States Parties of certain elements or themes that may subsequently be drafted into appropriate language by various biological organizations/ associations/ societies and incorporated into existing Codes of Conduct.
<b>Japan</b> Pres 21/6 AM	It is possible and meaningful for the BWC States Parties to agree on generally important elements of Codes of Conduct
<b>Canada</b> Pres 21/6 AM	Core guidelines (must be) agreeable to all national participants with institutional adaptation
<b>ICGEB</b> Pres 13/6 PM	Propose a set of ‘building blocks’ aimed at establishing codes of conduct for scientists, either as individual researchers or as individuals responsible for the direction, evaluation or monitoring of scientific projects in the life sciences
<b>Ukraine</b> Stat 22/6 PM	(There is a) possibility to reach an agreement to create a document at least in the form of general guidelines on the matters discussed during our meeting.

<b>United States</b> Pres 20/6 PM	Signing the code would be voluntary; living according to its principles would not be because the code would create a set of social and scientific standards
<b>Nigeria</b> Stat 21/6 PM	Code of conduct is voluntary
<b>India</b> Int 15/6 PM	Codes of conduct should be voluntary at all levels
<b>United States</b> Pres 20/6 PM	Code should be voluntary at the national level; no mandatory enforcement
<b>ABPI</b> Pres 16/6 AM	Voluntary codes do not achieve much

<b>United States</b> Pres 20/6 PM	Expand focus from biology to (the) ‘life sciences’
<b>Sweden</b> Int 15/6 PM	Codes of conduct for Universities, Funders, Research and Publishers are necessary

<b>Malaysia</b> Pres 14/6 PM	Guide those not only involved in scientific research but also funding bodies to be appreciative and reflect on the dual use of research applications and its inadvertent use
<b>Georgia</b> Int 14/6 AM	Codes of conduct should incorporate representatives of mass media.
<b>South Africa</b> Int 16/6 PM	Codes of conduct should address a wider range of persons than just scientists

<b>Japan</b> Stat 13/6 AM	We should bear in mind the variety of existing rules and regulations among countries and organizations relating to the 'codes of conduct for scientists' as well as the importance of the BWC context of our deliberations
<b>Australia</b> Pres 14/6 AM	Review existing codes - it may be better to further develop existing codes rather than developing new codes
<b>South Africa</b> Int 16/6 PM	Advantages in adapting existing codes to cover these issues
<b>The Royal Society</b> Pres 20/6 AM	Existing guidelines and principles should be used as the basis for any codes where possible, rather than starting from first principles.
<b>United States</b> Pres 20/6 PM	Identify existing structures which could be used to develop and maintain a code
<b>United States</b> Pres 20/6 PM	Code should use existing infrastructure to implement code when feasible
<b>Algeria</b> Stat 13/6 AM	...initiatives aimed at the elaboration of codes of conduct specific to the Biological Weapons Convention should be based on existing codes, as well as on efforts under way with those referred to in the Convention, as those in other areas
<b>NTI</b> Pres 15/6 AM	Codes of conduct will be more readily accepted if they build upon existing institutional guidelines and principles and are developed in collaboration with the scientists to whom they will be directed
<b>United Kingdom</b> WP.16	...work on codes of conduct should build on existing frameworks, procedures and practices.

<b>China</b> Pres 14/6 AM	Scientific activities... should strictly comply with and safeguard the ethics related to national security, ecological, environmental and health safety
<b>Nigeria</b> Stat 15/6 PM	Scientists should use knowledge and abilities for the protection and enrichment of life in addition to respecting human rights and the dignity and importance of all forms of life
<b>Nigeria</b> Stat 15/6 PM	Scientists should be truthful and subject the assumptions, methods, findings and goals of their work including possible impacts on humanity and on the environment, to open and critical discussion
<b>Cuba</b> Stat 16/6 AM	...the content of any code should consist of general guidelines to be upheld in new situations whose results have a doubtful benefit for humanity
<b>InterAcademy Panel (IAP)</b> Pres 20/6 AM	Scientists... should... refuse to undertake research that has only harmful consequences for human kind

<b>Iran</b> Pres 21/6 AM	The need to draft, promote and adopt code of conduct should be concluded by the States Parties on the basis of the necessity felt to dissuade scientists and scientific community from the hazards posed by the effects of accidental or intentional activities which run contrary to the obligations undertaken by the States Parties
<b>China</b> Stat 13/6 AM	Scientists should firmly oppose the research, production and use of biological weapons, and should not participate in and assist such activities. They also have the responsibility to prevent and stop research and production, which may jeopardize the humankind.
<b>China</b> Pres 14/6 AM	...should scrupulously abide by scientific ethics, always put the interests of the nation, people and humankind on primacy and insistently make science to serve the human civilization, peace and progress.
<b>China</b> WP.20	...should scrupulously abide by scientific ethics, always put the interests of the nation, people and humankind on primacy and insistently make science to serve the human civilization, peace and progress.
<b>Italy</b> WP.34	Scientists and institutions must address questions and controversies surrounding the use of biotechnology and make choices that will best serve humanity
<b>Nigeria</b> Stat 15/6 PM	Scientists should not be involved in research that is to the detriment of humanity
<b>China</b> Int 21/6 PM	All those who conduct scientific research and the technological development in the life sciences or the related fields should comply with the basic guidelines for any scientists, i.e., any scientific activity should be based on serving the people, serving the society and between human beings and society, and between human beings and nature.

<b>Canada</b> Stat 13/6 AM	Codes and legislation is juxtaposed so that the two instruments can complement each other to the maximum degree possible
<b>South Africa</b> Pres 14/6 AM	Code of Compliance with non-proliferation legislation being contemplated... would be required to be implemented by any institution required to register in accordance with... legislation.
<b>China</b> Stat 13/6 AM	...laws and regulations provide a solid legal basis in regulating the public, including the scientific personnel's conduct
<b>IAP</b> Pres 20/6 AM	Scientists should be aware of, disseminate and teach national and international law and regulations, as well as policies and principles aimed at preventing the misuse of biological research
<b>IAP</b> Pres 20/6 AM	Scientists who become aware of activities that violate the Biological and Toxin Weapons Convention or international customary law should raise their concerns with appropriate people, authorities and agencies
<b>Canada</b> WP.6	...backing a code up with the threat of a sanction... will help to counter... economic pressure (to pursue prohibited activities).
<b>AAAS</b> Pres 20/6 PM	Increase knowledge about the laws, regulations and policies - governments and institutional - and professional guidelines that govern the conduct of research

<b>Canada</b> Pres 22/6 AM	There are however “niche” roles where codes can potentially fit in neatly with legislation
<b>Pakistan</b> Stat 22/6 AM	The scientific community dealing with life sciences and biological weapons should abide by local, national and international laws
<b>France</b> Pres 13/6 PM	There should be an element of transparency among peers without revealing scientific or economic secrets
<b>United Kingdom</b> Pres 14/6 AM	<p>Ethical codes (could require scientists to)...</p> <ul style="list-style-type: none"> <li>• Act with skill and care in all scientific work. Maintain up to date skills and assist their development in others;</li> <li>• Take steps to prevent corrupt practices and professional misconduct;</li> <li>• Be alert to the ways in which research derives from and affects the work of other people, and respect the rights and reputations of others;</li> <li>• Ensure that your work is lawful and justified;</li> <li>• Minimise and justify any adverse effect your work may have on people, animals and the natural environment;</li> <li>• Seek to discuss the issues that science raises for society. Listen to the aspirations and concerns of others;</li> <li>• Do not knowingly mislead, or allow others to be misled, about scientific matters. Present and review scientific evidence, theory or interpretation honestly and accurately.</li> </ul>
<b>Nigeria</b> Stat 15/6 PM	Research associations, institutions and individual researchers should maintain generally accepted standards for good laboratory and manufacturing practice, and take action against ‘bad science’
<b>IAP</b> Pres 20/6 AM	Scientists... should... always bear in mind the potential consequences - possibly harmful - of their research and recognise that individual good conscience does not justify ignoring the possible misuse of their scientific endeavor
<b>American Biological Safety Association (ABSA)</b> Pres 20/6 AM	Include and require all individuals in an organization act with honesty, integrity and objectivity and promote openness... on a day to day work basis
<b>Australia</b> Pres 20/6 PM	<p>Responsibilities of researchers (include)</p> <ul style="list-style-type: none"> <li>• ‘to society, funding agencies, their discipline/field, their colleagues and those whom they supervise or train’</li> <li>• approval by ‘a human or an animal ethics committee, or by other safety or regulatory committees’</li> <li>• ‘report cases of suspected misconduct’</li> <li>• ‘in a responsible, timely and appropriate manner as directed by institutional procedures’</li> </ul>
<b>China</b> Pres 15/6 PM	...physicians should hold high professional ethics, have enough medical capacity and protect the health of public in the spirit of humanitarianism...should timely report the infectious diseases to designated organizations.

<b>Italy</b> WP.34	Personal benign intent does not justify neglect of the possible hostile utilization of available technologies, while the use of good and safe laboratory procedures must also be a part of the moral duties of scientists, particular involved in the work with highly pathogenic microorganisms or with dangerous toxins, so that also the risk of unintentional damage be eliminated
<b>Australia</b> Int 22/6 AM	Good leadership will turn a weak code or ethos into something highly effective. Leadership which can change culture and change values will be critical to any degree of success (of a code of conduct)
<b>United States</b> Pres 14/6 AM	A code of conduct offers the greatest opportunity for improving the security or research at the level of the individual scientist.

<b>Organisation for Economic Co-operation and Development (OECD)</b> Pres 13/6 PM	Promoting responsible stewardship in the biosciences (necessitates efforts to) identify and document common concerns regarding the oversight of the biosciences; develop a common vocabulary; help broker and ingrate the concerns of the constituent stakeholder communities into the development of codes; (and) help develop mechanisms to render codes and other oversight tools operational.
<b>Australia</b> Pres 14/6 AM	...ethical considerations, including scientific responsibility when working on certain research projects that may lead to discoveries that could make BW more effective
<b>Det Norske Veritas (DNV)</b> Pres 16/6/AM	Ensure that explanations are identified, incorporated into working practices and monitored for effectiveness
<b>DNV</b> Pres 16/6 AM	Responsibility lies with the operator to meet expectations and role of independent third party is to ensure this has been done in an effective and transparent manner
<b>IAP</b> Pres 20/6 AM	Scientists working with agents such as pathogenic organisms or dangerous toxins, have a responsibility to use good, safe and secure laboratory procedures, whether codified by law or by common practice
<b>Australia</b> Pres 20/6 AM	Responsibilities of institutions (include) <ul style="list-style-type: none"> <li>• promoting awareness of other relevant national guidelines</li> <li>• ‘research climate of open exchange of ideas and mutual cooperation’</li> <li>• ‘formal induction process regarding its policies and procedures for research staff, students and research trainees’</li> <li>• ‘open presentation and discussion of results with peers</li> </ul>
<b>Italy</b> WP.34	Scientists must collect and store in a retrievable form all information regarding studies and experiments performed, including the source of biological samples and pathogens used
<b>Italy</b> WP.34	The authorities in charge at the single institution of management of scientific issues must define a policy for internal evaluation of scientific products and for the availability of the above mentioned information

<b>China</b> Pres 14/6 AM	Bio-scientists must have a clear understanding about the content and purposes of their research, conscientiously analyze and evaluate the consequences of the achievements in their research and try their best to prevent the potential negative impact brought by such achievements
<b>Australia</b> Pres 14/6 PM	Responsibilities of Scientists (include)... Not to knowingly participate in or provide assistance to the development of biological weapons (and) Consider the potential for their work to be misused in a BW programme
<b>Australia</b> Pres 14/6 PM	Responsibilities of Scientists (include)... Ensure that materials, equipment and data that have a clear potential BW application are stored and transported securely (and) Ensure that in transferring materials or knowledge to scientists in other institutions, appropriate consideration is given to the use to which the materials or knowledge will be put
<b>Australia</b> Pres 14/6 PM	Responsibilities of Scientists (include)... Comply with relevant code(s) of conduct and relevant national legislation and international conventions; For overseas transfers, comply with import or export control legislation where applicable (and) Where risks of diversions are identified, ensure that the risks are adequately managed to minimise the potential for misuse
<b>Australia</b> Pres 14/6 PM	Responsibilities of Scientists (include)... Ensure that only suitable cleared and qualified staff have access to materials, equipment or data that are assessed as being of high risk of diversion to a BW programme (and) Ensure that only staff who are trained in the necessary safety procedures are allowed to handle hazardous materials
<b>Australia</b> Pres 14/6 PM	Responsibilities of Scientists (include)... Submit research proposals for risk assessment by the institutional review body, where such exists; Periodically reassess the potential applications and implications of their research to a BW programme. Where research throws up unexpected results leading to the appearance of previously unidentified risks of misuse, and that risk is deemed to be significant, the relevant authorities should be informed (and) Notify the appropriate authorities if they become aware of suspicious activities undertaken by other scientists.
<b>Nigeria</b> Stat 15/6 PM	Scientists must investigate thoroughly and take into account the social and environmental consequences of any research about to be conducted
<b>IAP</b> Pres 20/6 AM	Scientists have the obligation to do no harm. They should always take into consideration the reasonably foreseeable consequences of their own activities.
<b>Australia</b> Pres 20/6 PM	Conflicts of interest (requires a consideration of) <ul style="list-style-type: none"> <li>• ‘a divergence between the individual interests of a person and their professional obligation to the institution</li> <li>• such that an independent observer might reasonably question whether the professional actions or decisions of that person are influenced by their own interests’.</li> <li>• ‘private benefits significantly dependent on research outcomes and significant personal or professional advantage’</li> </ul>
<b>Japan</b> Pres 21/6 AM	Whistle blowing may work effectively in some particular cases, but... to distinguish false information is very difficult (and we) have to recognise possible abuse of whistle blowing

<b>United Kingdom</b> WP.8	...codes should make provision where necessary to protect the individuals reporting concerns, and, indeed, to protect those who might be maliciously or mistakenly accused. In making such provision, however, codes must be compatible with, and take cognisance of, all relevant national legislation covering disclosure.
<b>National Institute of Animal Health (Japan)</b> Int 16/6 AM	Biosafety and biosecurity measures are required in the industrial sector, and education and training, including codes of conduct for researchers, is important.
<b>Australia</b> Pres 14/6 PM	(Recurring) themes or principles... (include) Introducing biosecurity measures appropriate to the level of risk associated with a particular line of scientific work.”
<b>Australia</b> Pres 14/6 PM	Ensure that materials, equipment and data that have a potential BW application are securely stored and transported. This would include ensuring that scientists have adequate facilities for safe handling and storage of hazardous materials and that staff are trained in the appropriate safety and security procedures
<b>CDBB</b> Pres 20/6 AM	Codes of conduct must provide for biosafety, biosecurity and bioethics
<b>CDBB</b> Pres 20/6 AM	Research in the life sciences, including biodefense research must be conducted safely, securely and ethically
<b>Japan</b> WP.21	Elements required in codes of conduct (include) formulating specific procedures and/or rules for handling such agents and information (measures for management and control)
<b>China</b> Pres 16/6 AM	...requiring the scientists and related personnel in laboratories dealing with pathogenic microorganisms to abide by the operational rules so as to prevent the leak of pathogenic microorganisms and protect the public health.
<b>China</b> Pres 16/6 AM	They must comply with national laws and regulations, comply with the disease reporting system and scrupulously abide by the technical guidelines on biosafety and biosecurity.
<b>China</b> Pres 16/6 AM	Environmental protection should be carefully considered in any scientific research to prevent the disposal or leakage of any toxic materials or pathogenic microorganisms to the environment. Appropriate disposal measures of any of these materials should be highly regulated.
<b>Pakistan</b> Stat 22/6 AM	Government institutions, semi-autonomous organizations, industry, universities and laboratories should make development of codes of conduct for biosafety and biosecurity part of their organizational Standard Operating Procedures
<b>ICGEB</b> Pres 13/6 PM	(Codes should be) Addressed to the individual conscience of the scientist... (with) no judicial implications; Focus on individual responsibility of scientists and on the principle that ethical values shall overcome hierarchy; Life scientist(s) is in a position to follow the complete procedure related to the potential misuse of the experiment; Not a definition of permissible or forbidden experiments but the concept of acceptable or unacceptable intents of the research; (and) Not aimed at establishing principles of self-censorship but example of self-governance by the scientific community

<b>ICGEB</b> Pres 16/6 AM	(Codes of conduct) should specifically call on the individual scientist to be clearly aware of the likely or possible misuse of the outcome of his/her work for health and the environment, regardless of his/her hierarchical position, keeping in mind the moral obligations to denounce any misuse of biotechnology he/she detects in the fulfilment of his/her duties.
<b>IUBMB</b> Pres 15/6 AM	To be accepted universally a code of conduct... should be: <ul style="list-style-type: none"> <li>• Short</li> <li>• Easily understandable to both scientists and the general public</li> <li>• Acceptable to scientists coming from a variety of backgrounds and cultures</li> <li>• Endorsed by national and international scientific professional organizations with especial emphasis on those in the life sciences</li> <li>• Agreed to by both public and private funding bodies</li> <li>• Applicable also to scientists in industrial labs</li> </ul>
<b>Center for Strategic and International Studies (CSIS)</b> Pres 16/6 AM	Mechanisms necessary (include)... <ul style="list-style-type: none"> <li>• Working with authorities is essential to... improve protection against deliberate exposure to pathogens</li> <li>• develop governance mechanisms to address contentious research' - research with weapons implications that raises questions concerning how, or whether, it should be conducted and disseminated</li> <li>• Implementing prior review of proposals to conduct 'contentious research'</li> <li>• Offering 'last resort' guidance for editors, publishers, and researchers to deal with research that raises security concerns</li> <li>• Raising awareness of dual-use concerns</li> <li>• Maintaining dialogue with security, law enforcement and biodefense communities</li> </ul>
<b>Cuba</b> Stat 16/6 AM	Principles... (include): <ul style="list-style-type: none"> <li>• humans as supreme beings...</li> <li>• avoidance of negative impact from scientific knowledge...</li> <li>• promotion of debate...</li> <li>• objective polemic in a freedom of discussion...</li> <li>• assessments of scientific discussions and social impact in connection with research...</li> <li>• the upholding of autonomy and dignity of human beings under inquiry...</li> <li>• the protection of the environment and</li> <li>• the promotion of sustainable development</li> </ul>
<b>IAP</b> Pres 20/6 AM	...principles to guide individual scientists and local scientific communities (include)... <ul style="list-style-type: none"> <li>• Awareness...</li> <li>• Safety and Security...</li> <li>• Education and Information...</li> <li>• Accountability... (and)</li> <li>• Oversight of Research</li> </ul>

<b>WMA</b> Pres 20/6 AM	<p>Making a code work (necessitates efforts to)...</p> <ul style="list-style-type: none"> <li>• Make it relevant</li> <li>• Make it simple</li> <li>• Make it clear</li> <li>• Ensure it is taught</li> <li>• Ensure it is understood</li> <li>• Engage those who need to use it/ follow its principles</li> </ul>
<b>AAAS</b> Pres 20/6 PM	<p>Four major elements to consider when planning how to embody those responsibilities in a code of conduct for scientists... are:</p> <ul style="list-style-type: none"> <li>• The relationship between a code, the experience of scientists, and the core values of science;</li> <li>• The specific functions that codes of conduct perform and the implementations of those functions for how scientists and others will interpret the code;</li> <li>• The importance of reinforcing whatever code is adopted with follow-up activities; and</li> <li>• The need for evaluation of the code's impact on knowledge, attitudes and behaviour</li> </ul>
<b>United States</b> Pres 20/6 PM	<p>Suggestions for Code Content (include)</p> <ul style="list-style-type: none"> <li>• Ensure science benefits mankind/does no harm</li> <li>• Ensure right to advance scientific knowledge</li> <li>• Obligate individuals to identify/call out unethical behavior</li> <li>• Obligate individuals to know the quantity and content of material and knowledge they possess and who should be granted access</li> <li>• Consider dual use implications before dissemination of information, knowledge, materials and technology</li> <li>• Ensure peer review for safety, security and ethical implications</li> <li>• Obligate individuals to abide by applicable U.S. laws and regulations, and international treaty requirements</li> <li>• Enable individual's right to refuse participation in unethical science</li> <li>• Communicate the code and code precepts</li> <li>• Ensure code reassessment and reevaluation</li> </ul>
<b>Australia</b> Pres 20/6 PM	<p>Principles (include)</p> <ul style="list-style-type: none"> <li>• respect for human beings</li> <li>• justice</li> <li>• research merit and integrity</li> <li>• balancing benefits and risks in research</li> <li>• consent to participation in research</li> </ul>
<b>Japan</b> Pres 21/6 AM	<p>Significance of Codes of Conduct (includes)</p> <p>To ensure scientists realize the potential risks inherent in their activities</p> <p>To raise scientists' awareness of their ethical and social responsibility</p> <p>To help scientists understand the national and international rules, regulations and frameworks</p> <p>To ensure biosafety and biosecurity</p> <p>To prevent dual-use research results from being abused by criminals and terrorists</p>

<b>Japan</b> Pres 21/6 AM	Possible elements for codes of conduct <ul style="list-style-type: none"> <li>• Ethics/ morals (including) ethics for scientists (and) social/ professional responsibilities</li> <li>• Risk awareness (including)... efforts to reduce risks... increasing awareness (and) open debate</li> <li>• Education/ promulgation (including)... training... promoting promulgation (and the) observance of treaties, regulations, etc.</li> <li>• Control of biological agents (including) biosafety (and) biosecurity</li> <li>• Control of information (including) publication of research results/ information control</li> <li>• Research funding (including a) consideration for research contents in funding</li> <li>• Oversight of research contents (including) ensuring transparency of research contents (and) oversight and supervision of research activities</li> </ul>
<b>Canada</b> Pres 21/6 AM	Codes of conduct and practice (should contain) <ul style="list-style-type: none"> <li>• Systematic collection(s) of unambiguous guidelines</li> <li>• (a statement of a) group intent to adhere to defined culture</li> <li>• unequivocal... clarity and intent</li> <li>• support (for) ongoing guidelines, education, assessment, positive feedback, alternative solutions to problems, affirmation</li> <li>• ...individual accountability within the culture</li> <li>• (a) process (which) must start small and enlarge - a generational work</li> </ul>
<b>Argentina</b> WP.1	Such code of conduct could include, <i>inter alia</i> , a statement that scientists will use their knowledge and skill for the advancement of human, animal, and plant welfare and will not conduct activities directed towards the use of micro-organisms or toxins or other biological agents for hostile purpose or in armed conflicts.
<b>Germany</b> WP.11	Codes of conducts will do no harm, but will have no effect on those who have bad intentions. Some recent developments are unacceptable, however, because they violate central rules of scientific research. These include: <ul style="list-style-type: none"> <li>• Censorship of scientific publications, even if it comes under the label stewardship;</li> <li>• Incrimination of certain research topics, such as studies aiming at altering pathogenicity, transmissibility, and host range of an infectious agent;</li> <li>• impeding the exchange of biological material by non-transparent and non-matching shipping regulations; and</li> <li>• restrictions of free international exchange of scientists.</li> </ul>

<b>Germany</b> WP.12	<p>...scientists participating in biomedical and bioscience research should agree:</p> <ul style="list-style-type: none"> <li>• not to engage knowingly in research for the production of biological agents for the purpose of their use in hostile conflicts.</li> <li>• This is a necessary element of a code, however, it does not address the real problem of dual use research and the inadvertent production of dangerous biological agents. Therefore, another element that should be included is the obligation:</li> <li>• to become informed and be aware of possible dual use aspects of biomedical and bioscience research, to carry out risk assessments at each stage of the research process as a reflective action and to consider alternative approaches as the risks demand.</li> </ul>
<b>Argentina</b> Stat 22/6 AM	<p>...suggest the following five recommendations that we feel should be taken into account in the drafting, promulgation and adoption of codes of conduct:</p> <ul style="list-style-type: none"> <li>• greater awareness of the ethics in practical investigation, ethics and sciences</li> <li>• should go hand-in-hand with codes for science institutions that promote the creation of appropriate conditions for the integrity of research and for an ethical frame for implementation of security and oversight measures.</li> <li>• support coordinating actions with countries in the region</li> <li>• should establish security thresholds that should be adopted by institutions and individuals, avoiding measures that might unnecessarily, however, restrict the work of responsible research</li> <li>• support the establishment of an international fund that will ensure that those countries that are not in a financial position to meet the guidelines established and adhere to the established thresholds should receive the necessary financial assistance to ensure such compliance</li> </ul>
<b>Ukraine</b> Stat 22/6 PM	<p>On the Code(s) itself, which may be different in size, details and contents depending on goals and other factors but which must have general features (or, in other words, must be harmonized):</p> <ul style="list-style-type: none"> <li>• code(s) has to be based upon the principles of the BWC and Geneva Protocol of 1925;</li> <li>• code(s) has to be easy for understanding and not permitting double interpretation;</li> <li>• code(s) of conduct linked to the Biosafety has to cover all scientists involved in the research concerned and the same time to protect these people from biohazards;</li> <li>• code(s) has to be reviewed from time to time in accordance to the relevant changes in life sciences.</li> </ul>
<b>Japan</b> Int 15/6 PM	Should consider codes of conduct in the context of the Biological Weapons Convention, for instance Article IV
<b>France</b> Pres 13/6 PM	There should be willingness to provide warnings, whilst also protecting the whistle blower.
<b>Iran</b> Pres 21/6 AM	Codes of conduct should avoid any restrictions on exchange of scientific discoveries in the field of biology for prevention of disease and other peaceful purposes. Subjecting scientific research and the free flow of scientific information to undue restrictions, may amount to violation of obligations undertaken under Article X of the BWC.

<b>United Kingdom</b> WP.8	...the content of such codes, where they relate to core principles and responsibilities enshrined within the BTWC...fall ...under three broad themes: The raising of awareness of the Convention and its Articles, key objectives and prohibitions; Undertakings to adhere to its prohibitions and to responsibilities aimed at preventing the misuse of science (whilst encouraging scientific exchange for peaceful purposes); and, Reporting concerns relating to breaches of the prohibitions
<b>China</b> Int 21/6 PM	All those who conduct the scientific research and the technological development in life sciences or the related fields should be fully aware of the purposes and objectives of the Biological Weapons Convention and abide by its provisions. They should firmly oppose the research, production, use, storage or transfer of the biological weapons and should not assist or participate in such activities.
<b>Italy</b> WP.34	Biological weapons are unacceptable under any circumstance and any event: scientists must be determined not to participate in any work or activity that will bring to the production or the use of biological agents aimed at causing harm to human and animal health or to the natural environment

<b>China</b> Int 15/6 PM	We need to find the threshold for criteria for acceptable/ unacceptable research
<b>Canada</b> WP.7	Certain actions that might be constrained under a code of conduct may not actually be illegal in of themselves, but can come very close to crossing that line. Examples of this might include conflicts of interest or the irresponsible dissemination of knowledge, neither of which are directly prohibited under legislation, but can lead in short measure to activity that is in contravention of the laws of the land.
<b>United Kingdom</b> WP.17	Consideration might be given to distinctions, if any, between scientific misconduct and misuse of science; or how to incorporate misuse of science into existing codes, identified principles of scientific practice, or excellence in the UK Government Science.
<b>China</b> Int 21/6 PM	Any risk caused by scientific research to the public health and social development should be avoided in its best efforts. Such work as trying to increase the pathogenicity, virulence or drug resistance of pathogenic microorganisms, to construct non-naturally-existing or artificially made severelyyy infective pathogens (e.g. poliovirus, variola poxvirus etc.) or reactivate/restore the extinct pathogenic microorganisms should not be conducted.
<b>China</b> Int 21/6 PM	In every step of the whole research process, data should be analyzed, assessed and evaluated to foresee any possible negative consequences to public health, nature and the society to prevent scientific accomplishments to be misused to harm the nature and the public health. In any case this negative effect is being seen, the research should be stopped immediately and the scientific community should be notified at the same time.
<b>United States</b> Pres 20/6 PM	Need (an) efficient mechanism for judging what is dual-use

<b>Canada</b> Pres 21/6 AM	Amber light words and combinations (which may help in distinguishing between permitted and prohibited science include) environmental persistence, resistant to, altered incubation period or host range, modification of host immune response, no immunity, very stable in the environment, become highly virulent or infectious
<b>Sweden</b> Int 21/6 PM	Issues like development of new pathogenic agents for assessment of vulnerability should be considered in developing codes of conduct for research funders.

<b>France</b> Pres 13/6 PM	Excluding from the scientific community any individual who violates his obligations for political or economic reasons
<b>Australia</b> Pres 14/6 PM	...a one line statement that encapsulates the key message in an easy to recall format would achieve widespread awareness of the existence of the Code and its basic principles.
<b>CB</b> Pres 15/6 AM	To be effective, training/ codes should be organic to the culture/ practice of science
<b>Australia</b> Stat 15/6 PM	Environmental ethics may promote a regional and, perhaps ultimately, a global perspective to ethical debate, which is important in relation to the BWC... environmental ethics provides an alternative frame of reference that is well placed to help resolve associated dilemmas. In this context, environmental ethics has a place in discussions relating to ethical conduct under the BWC.
<b>Poland</b> Pres 16/6 PM	Ethical arguments should be considered in their (codes of conduct) formulation and implementation
<b>South Africa</b> Int 16/6 PM	Combined codes of conduct covering all weapons of mass destruction may be worth considering
<b>South Africa</b> Int 16/6 PM	Codes, where needed, should be short and broad
<b>The Royal Society</b> Pres 20/6 AM	...producing guidance for referees on dual use issues would be helpful, to help referees take them into consideration when assessing both funding proposals and publications.
<b>Japan</b> WP.21	Elements required in codes of conduct (include) measures to improve awareness of scientists who handle potentially dangerous agents and material (measures for ethical aspects)
<b>China</b> Int 21/6 PM	Any activity related to bio-defense research should be transparent to prevent any non-peaceful activities to be conducted under the name of bio-defense.
<b>Italy</b> WP.34	Especially in the field of agriculture, researchers, when defining protocols deriving from their activities, for the production of agents potentially usable as biological weapons, should include, whenever possible, advices on how to trace, reduce or neutralize the effects of such agents
<b>Sweden</b> Int 21/6 PM	Important to consider that patent applications also can contain technical and scientific information that could be misused.

<b>France</b> Pres 13/6 PM	Research laboratories to be brought into networks creating the feeling of collective responsibility
<b>China</b> Pres 14/6 AM	Exchanges and cooperation with... foreign counterparts with the aim to learn from each other and make progress together

<b>IUBMB</b> Pres 15/6 AM	International exchange is a great way to broaden the outlook of future scientific leaders and may also be of help in reaching a consensus on a global code of conduct for scientists.
<b>India</b> Int 15/6 PM	Sharing experience is important for those countries and scientists that are not aware of these dilemmas
<b>Germany</b> WP.14	It is necessary to strengthen the international contacts of scientists working in the field of infectious disease research. Despite the fact that the new situation regarding biosafety and biosecurity makes it necessary to control persons working at least with category-A-infectious agents, the international contact between scientists should be strengthened rather than being restricted.
<b>Japan</b> Int 16/6 PM	Consider how Governments, public sector, third parties and outsiders can be engaged
<b>France</b> Pres 13/6 PM	There should be symposia and conferences organized at the level of individual laborator(ies), they should be continuing training in ethics of responsibilities
<b>France</b> Pres 13/6 PM	Reference and principles should be inculcated in the researcher through using neutral for a, so that everyone can dare, without greater risk, to alert as to abuses.
<b>South Africa</b> Pres 14/6 AM	Provision of education, training, etc. to promote the norm against BTW (could include)... Road shows; Information; Newspaper, journals, etc. articles; Inclusion in curriculae; Seminars; (and) Presentations
<b>China</b> Pres 14/6 AM	Recommends... opening a required course on scientific ethics for postgraduates, strengthening the moralities education for young students and setting up supervising networks against improper research activities
<b>Australia</b> Pres 14/6 AM	Promulgation and adoption of codes (should incorporate) a combination of : <ul style="list-style-type: none"> <li>• Seminars conducted in workplaces</li> <li>• Specific courses at undergraduate and postgraduate level including the use of case studies and the development of problem-based learning</li> <li>• Mentoring by staff</li> </ul>
<b>Australia</b> Pres 14/6 PM	Educational institutions should be encouraged to include components addressing ethical issues in scientific study programmes.
<b>Australia</b> Pres 14/6 PM	Include in undergraduate and/or graduate training programmes an element addressing ethical issues in science
<b>Australia</b> Pres 14/6 PM	...it is not enough simply to put such Codes in place. Without effective measures to educate scientists about the existence and importance of such Codes, attitude and awareness will remain largely unchanged.
<b>Australia</b> Pres 14/6 PM	...any education campaign has to be a continuous process. The information needs to be presented regularly and through multiple channels involving both bottom-up and top-down approaches.
<b>Australia</b> Pres 14/6 PM	...targeting high school or secondary school students may constitute an effective method of reaching the whole scientific community with a general message outlining the key issues. Incorporating the message into school curricula will provide coverage of a broad cross section of the community...
<b>NTI</b> Pres 15/6 AM	A code of conduct should be the end point in a process of education and awareness-raising
<b>AMA</b> Pres 15/6 AM	Ethical principles should be part of the education and training of all physicians involved in biomedical research

<b>India</b> Pres 15/6 PM	Development of training programmes and materials for educating scientists on bio-safety and bio-security issues
<b>Sweden</b> Int 15/6 PM	Encourage the inclusion of BWC awareness and the dual-use dilemma in graduate student curriculae
<b>Cuba</b> Stat 16/6 AM	...the inclusion in textbooks and training programmes for the military (scientists)... of the prohibitions included in the Convention
<b>The Royal Society</b> Pres 20/6 AM	...the consideration of ethical and social implications of advanced technologies (such as nanotechnology) should form part of the formal training of all research students and staff.
<b>IAP</b> Pres 20/6 AM	Scientists with responsibility for oversight of research or for evaluation of projects or publications should promote adherence to these principles by those under their control, supervision or evaluation and act as role models in this regard
<b>AAAS</b> Pres 20/6 PM	Goals for research ethics education should include <ul style="list-style-type: none"> <li>• Enhance understanding of what constitutes the range of accepted practices in research;</li> <li>• Heighten sensitivity to and appreciation for the ethical issues associated with doing dual-use research;</li> <li>• Improve abilities for reflecting independently on ethical issues and thinking creatively about possible solutions;</li> </ul>
<b>United States</b> Pres 20/6 PM	Dual-use education of those pursuing careers in the life sciences must begin at the university level and be continually reinforced.
<b>United States</b> Pres 20/6 PM	Develop programs for training, education and outreach
<b>Australia</b> Pres 20/6 PM	Supervision of students & research trainees (necessitates) <ul style="list-style-type: none"> <li>• 'structured formal training in research ethics, research methods and research governance'</li> <li>• 'Researchers acting as supervisors must provide guidance in all matters of research conduct to those whom they supervise'</li> <li>• 'Researchers must not put research students or junior researchers at risk. Risks can include chemical hazard, infectious disease and psychological trauma'</li> </ul>
<b>Japan</b> Pres 21/6 AM	...ethical education should be given at an early stage e.g. foundation course in universities
<b>Japan</b> Pres 21/6 AM	Education... for corporate researchers and scientists (should be) <ul style="list-style-type: none"> <li>• before they are assigned to the job</li> <li>• (part of) regularly continuous education after they begin working</li> </ul>
<b>Iran</b> Pres 21/6 AM	Training programs and materials on bio-safety should also be improved and inserted in university curricula
<b>Germany</b> WP.12	Governments should therefore encourage universities to place such instruction into their biomedical and bioscience curricula as required courses. Special incentives should be offered to those universities that do so.
<b>Germany</b> WP.13	The only solution: careful education of students from the very beginning, promote special training of graduate students and postdocs, achievement of generally accepted guidelines and selfcontrol of science and scientist on local, national and global levels.

<b>Russia</b> WP.19	...to raise public awareness of the BTWC goals and objectives, administrative and criminal responsibility for violations of its provisions by...supplementing the textbooks and curricula of higher education medical, chemical and biological institutes with a lecture course on the subject
<b>Japan</b> Int 16/6 PM	Consider the significance of education and training
<b>Nigeria</b> Stat 15/6 PM	Life science students should be educated in ethics of science
<b>Argentina</b> Stat 22/6 AM	For individual researchers, codes of ethics for scientists must be seen as an instrument both for teaching ethics to researchers in training and for their training when they are hired as young researchers by scientific institutions. Codes thereby contribute to building an ethical conduct on the part of scientists and also boosting confidence of society in science
<b>Canada</b> Pres 22/6 AM	Codes can also act as teaching tools, bringing legislative provisions into the lab or classroom
<b>Pakistan</b> Stat 22/6 AM	Raising awareness should start at schools and universities and culminate into scientific institutions
<b>Italy</b> WP.34	Scientists must strive to know, diffuse and teach the knowledge of national and international regulations aimed at abolishing the harmful use of biological agents, including, in particular, the Biological Weapons Convention
<b>Italy</b> WP.34	Appropriate codes of conduct should be included in ethics courses in university and high school curricula

<b>France</b> Pres 13/6 PM	All researchers in the course of the studies and throughout their careers must be conscious of the potential misuse of their work
<b>France</b> Pres 13/6 PM	Make researchers aware of the potential hazards resulting from failure to respect basic rules in laboratories... with respect to security and safety
<b>South Africa</b> Pres 14/6 PM	Personnel in institutions to be informed of, and to comply with, the content of the Code of Compliance
<b>South Africa</b> Pres 14/6 PM	Provision of education, training, etc. to promote the norm against BTW (could include)... Road shows; Information; Newspaper, journals, etc. articles; Inclusion in curriculae; Seminars; (and) Presentations
<b>Australia</b> Pres 14/6 AM	...full awareness of the scientific community of national laws related to biological activities, and full compliance with all such laws
<b>Australia</b> Pres 14/6 AM	Effective outreach is essential - this is a continuing process, cannot just do once
<b>Australia</b> Pres 14/6 PM	(Recurring) themes or principles... are: <ul style="list-style-type: none"> <li>• Raising awareness of the possibility amongst scientists, to ensure that they do not inadvertently assist in a biological weapons programme;</li> <li>• Raising awareness of relevant legislation to ensure that scientists do not fail to comply through ignorance of the existence or scope of the legislation;</li> </ul>
<b>Australia</b> Pres 14/6 PM	States should work to promote awareness amongst research institutions, the biotechnology sector and other scientific institutions of their obligations under international conventions and treaties, of relevant national legislation, and of the existence of the Code and its implication for their work.
<b>Australia</b> Pres 14/6 PM	Promote awareness amongst scientific staff of the existence of the Code and their obligations under it

<b>Australia</b> Pres 14/6 PM	Raise awareness amongst staff of relevant code(s) of conduct and relevant national legislation, including important and export regulations, and of international conventions governing materials and equipment with BW applications
<b>Pakistan</b> Pres 14/6 PM	Awareness raising among scientific community about BTWC provisions (could include)... Seminars to sensitize the scientists and the management of laboratories, industry and research facilities
<b>Pakistan</b> Pres 14/6 PM	Awareness raising among scientific community about BTWC provisions (could include)... Management of each organization/establishment is responsible for the safety and security of biological agents within and in the use of their respective establishment
<b>Pakistan</b> Pres 14/6 PM	Awareness raising among scientific community about BTWC provisions (could include)... Undergraduate and post graduate courses in universities
<b>India</b> Pres 15/6 PM	Need to increase awareness of the risk of bioterrorism among scientists and managers
<b>South Africa</b> Int 16/6 PM	Second most important element is education and awareness raising for scientists, managements and others
<b>AAAS</b> Pres 20/6 PM	Any code of conduct is likely to fade in the minds of its adherents and lose its powers of persuasion if not reinforced periodically
<b>United States</b> Pres 20/6 PM	Broad-based outreach must accompany the process to develop a code
<b>United States</b> Pres 20/6 PM	Develop leadership and advocacy for code infrastructure
<b>Iran</b> Pres 21/6 AM	Raising scientific community's awareness in either state or private sectors with respect to the objectives enshrined in the BWC could be an important and effective element in promoting the national implementation of the Convention
<b>Iran</b> Pres 21/6 AM	Scientists should be encouraged to convene seminars, workshops and prepare research papers to raise the awareness
<b>Canada</b> Pres 21/6 AM	(Important to raise awareness of) <ul style="list-style-type: none"> <li>• Individual accountability, potential harm outcome</li> <li>• Understanding of relevant conventions, treaties, agreements</li> <li>• Impact public safety/ health, environmental safety, global security</li> </ul>
<b>Canada</b> WP.7	...outreach and communication activities that might accompany the promulgation of a code of conduct would serve as a useful tool to inform researchers and students as to the limits of the legislation as well as the risks of other activities that are not necessarily prohibited.
<b>United Kingdom</b> WP.8	...it follows that a further fundamental aspiration of a code of conduct should be to assure awareness amongst individuals of the obligations and restrictions drawn from national legislation implementing, or otherwise relating to, the BTWC.
<b>Russia</b> WP.19	...to raise public awareness of the BTWC goals and objectives, administrative and criminal responsibility for violations of its provisions by...holding national and international workshops, symposia and conference to consider BTWC problems, including those that are the subject of consultations among States Parties to this Convention in Geneva

<b>Iran</b> Stat 22/6 AM	...the Avicenna Prize for Ethics in Science is expected to help significantly to increase international awareness and highlight the importance of ethics and science...The purpose of the Prize is to reward the activities of individuals and groups in the field of ethics in science. Such activities shall be in conformity with UNESCO's policies and be related to the Program of the Organization in the field of ethics of science and technology.
<b>Argentina</b> Stat 22/6 AM	On the subject of the content of codes, firstly as regards researchers as individuals, the content of codes should contribute to raising awareness regarding the need, firstly, to maintain intellectually honest conduct, maintain integrity in scientific practice and its outcomes and in relations with colleagues and, secondly, develop the awareness of researchers regarding the risk to individual communities and the environment that may be caused in working with dual-use microorganisms
<b>Italy</b> WP.34	Scientists must act to raise the public awareness on the principle that the production or use of biological weapons should be universally prohibited, prosecuted and punished (from this point of views, the suggestion to encourage under-graduate and post-graduate education programs which address the ethical and practical aspects of preventing the misuse of science should be taken into account)
<b>South Africa</b> Pres 14/6 AM	Through information and education programmes encourage professional groups, industry, academia, etc to develop their own accepted set of principles (codes of conduct) against BTW proliferation
<b>China</b> Pres 14/6 AM	Setting up institutions is to better supervise the implementation of the in-house guidelines
<b>Australia</b> Pres 14/6 AM	All relevant individuals must 'own' codes, including senior managers, academics, researchers, technicians - i.e. not just scientists
<b>Pakistan</b> Pres 14/6 PM	Awareness raising among scientific community about BTWC provisions (could include)... Research establishments, laboratories and universities to develop their own in-house codes of conduct
<b>Germany</b> Int 15/6 PM	Codes of conduct have added value in awareness raising, and implementing legislation and regulations
<b>Cuba</b> Stat 16/6 AM	Scientists and managers at all levels have the duty to disseminate and teach matters relating to the harmful use of biological agents and toxins
<b>Japan</b> Pres 21/6 AM	The government and concerned organizations such as universities, research institutes and professional bodies have their own roles for raising awareness

<b>United Kingdom</b> WP.9	<p>...the promulgation process must also involve activity with the appropriate community that will be affected...and...special efforts may be required to raise awareness in other scientific communities or in locations, laboratories, or places of work that have not generally considered that risk.</p> <p>Promulgation may involve some or all of the following:</p> <ul style="list-style-type: none"> <li>(a) Raising awareness of the existence and content of any Codes;</li> <li>(b) Clarifying content and assuaging concerns about the purpose of any Codes;</li> <li>(b) Publishing information about any Code;</li> <li>(d) Encouraging 'ownership' of any Codes within the scientific community and other relevant stakeholders;</li> <li>(e) Establishing expectations and objectives related to any Codes its adoption by the appropriate bodies</li> </ul> <p>It is important to the UK that the promulgation aspect continues such a broad approach with multiple stakeholders. The promulgation activities form an important part of awareness raising, which is an essential part of the overall exercise.</p>
<b>United Kingdom</b> WP.16	Institutions and organisations could be encouraged to reflect BTWC issues and the principles of relevant codes of conduct in their operational frameworks and procedures. Research Councils and other funding bodies could have a role in ensuring that research proposals consider implications for the BTWC and the risk/benefit balance of the work. Review panels, referees and publishers could also consider these issues.
<b>Argentina</b> Stat 22/6 AM	Scientific institutions must ensure compliance with principles established in codes through oversight mechanisms and transmission of values and principles to young researchers who initiate scientific work. Science institutions must create work environments that encourage integrity in research and should draft manuals of practice that accompany codes of conduct
<b>Argentina</b> Stat 22/6 AM	(On the national level) action should be taken to foster the enactment of legislation that is coherent, coordinated and agreed at the regional level in order to ensure conditions of security and enhance multicentric research. Likewise, science institutions should be provided with the necessary funding to appropriately implement established regulations
<b>Ukraine</b> Stat 22/6 PM	...use national and international professional organizations for spreading information on BWC at the relevant scientific fora, through scientific periodicals and in relevant National Institutions.
<b>Norway</b> Int 22/6 AM	If the profession is not adhering to law they could not receive their insurance
<b>Iran</b> Pres 21/6 AM	States Parties should appropriately inform the governmental and private institutions and companies about the objectives of the Convention, and highly and effectively warn them against the breach of obligations under the Convention
<b>Russia</b> WP.19	...to raise public awareness of the BTWC goals and objectives, administrative and criminal responsibility for violations of its provisions by...issuing by national BTWC bodies special compilations reflecting the progress made in the BTWC implementations

<b>Pakistan</b> Pres 14/6 PM	Awareness raising among scientific community about BTWC provisions (could include)... Popular lectures in the universities by experts in this field so that the new generation of scientists, medical doctors and engineers are aware of the dangers of an irresponsible attitude in handling these dangerous agents
<b>Australia</b> Pres 14/6 PM	...target audiences... in raising awareness of Codes of Conduct (could include) <ul style="list-style-type: none"> <li>a. Professional societies and industry bodies;</li> <li>b. Institutional biosafety committees (IBCs)...;</li> <li>c. Animal experimental ethics committees, human ethics committees, and scientific review bodies; and</li> <li>d. Direct targeting of institutions, including university vice chancellors, faculty heads, and the heads of institutions and companies.</li> </ul>
<b>IAS</b> Pres 15/6 PM	Academies of sciences (can): <ul style="list-style-type: none"> <li>• Be directly involved (in) the drafting of codes of conduct;</li> <li>• Dissemination among the science community;</li> <li>• Ombudsmen: Familiar with the use or abuse of science;</li> <li>• Raise awareness and explain (the) content to decision-makers; (and)</li> <li>• Monitor and evaluate</li> </ul>
<b>India</b> Pres 15/6 PM	Adoption of policy of outreach to industry to inform and involve it in the process of evolution of bio-safety and bio-security policies
<b>Sweden</b> Int 15/6 PM	Scientific academies might usefully be included in the development of codes of conduct
<b>Australia</b> Int 15/6 PM	Professional re-registration is one method of promulgating ethical standards.
<b>Japan Bioindustry Association</b> Pres 16/6 AM	Codes of Conduct required for professional researchers in the industrial sector
<b>DNV</b> Pres 16/6 AM	Ensure the scientific community implement measures capable of meeting the expectations placed upon them and communicate, communicate, communicate
<b>China</b> Pres 16/6 PM	Scientists... should actively conduct cooperation and communication. In order to learn others' advanced experience and promote... relevant work, scientists on the animal disease should communicate and cooperate with other countries and international organizations.
<b>WMA</b> Pres 20/6 AM	The WMA... can... <ul style="list-style-type: none"> <li>• Help with writing a code</li> <li>• Help with publicising to medical researchers and their colleagues</li> <li>• Link to other professional groups</li> <li>• (offer) reassurance</li> </ul>
<b>United Kingdom</b> WP.9	A code of conduct will require dissemination among the community that developed and agreed it, as well as those scientists at which it is aimed.
<b>Nigeria</b> Stat 21/6 PM	Codes of conduct... could be the basis for the promotion of education and awareness of all stakeholders, research funders and the general public

<b>France</b> Pres 13/6 PM	The scientific press should be used as an avenue for making available to the largest possible number, data which should not remain secret but should be simultaneously aware that unrestricted information can encourage persons to make malicious use of knowledge
<b>Australia</b> Pres 14/6 PM	Possible channels for (an integrated communications strategy) might include: <ul style="list-style-type: none"> <li>a. Print media, including scientific journals and newsletters of professional societies;</li> <li>b. Public relations activities, including a presence at events such as scientific conferences and industry conventions, distribution of brochures, stickers, posters, as well as poster or oral presentations or video displays;</li> <li>c. Collaborative promotions that encourage companies, professional societies or other relevant bodies to become involved in disseminating the message; and</li> <li>d. web links and shared internet resources, which are a powerful tool in the provision of educational material accessible to teachers in high schools, or safety officers in research and commercial establishments.</li> </ul>
<b>Russia</b> Stat WP.19	...to raise public awareness of the BTWC goals and objectives, administrative and criminal responsibility for violations of its provisions by...using widely electronic communications means, including the internet
<b>Bulgaria</b> Stat 14/6 AM	...work out a program for an active media policy in order to make the scientists to think much more about their responsibilities and obligations working with biological and toxic materials or in research projects leading to results with real or potential harmful effect on humans, animals and plants
<b>Pakistan</b> Stat 22/6 AM	The enormous power of the media should be used to enhance public awareness about the codes
<b>Australia</b> Pres 14/6 PM	It may also be helpful to establish procedures at the national level whereby those concerned about possible dual-use applications can seek guidance and report any concerns, including whistle-blowing on suspicious activities.
<b>The Royal Society</b> Pres 20/6 AM	...it might be necessary to have a nominated person to deal confidentially with any queries relating to 'dual use' concerns. Internationally, an individual might turn to the International Union of Microbiological Societies, International Council for Science or the International Committee of the Red Cross.
<b>United States</b> Pres 20/6 PM	Create avenues for individuals or organizations to report concerns
<b>Australia</b> Pres 14/6 PM	Committees already in place to evaluate research projects on their scientific quality could be expanded to provide a vehicle to consider ethical aspects of research, including the potential for the results to be misused by terrorists or States in the development of BW.
<b>Australia</b> Pres 14/6 PM	Utilise mechanisms already in place for maintaining oversight of safety aspects of scientific work within the institution to also monitor biosecurity aspects of the work

<b>Australia</b> Pres 14/6 PM	Consider the risk that a particular line of research might be misused in BW applications. In many organizations, institutional review bodies already exist for assessing research proposals and the role of these could be expanded to also consider any risks arising from the dual-use nature of the work. In order to take into account changes in research direction or the emergence of unexpected results, risk assessment of research project should be ideally be undertaken both prior to the commencement of a project, and at regular intervals throughout the life of a project.
<b>ABPI</b> Pres 16/6 AM	Utilise existing regulatory frameworks to monitor activities
<b>Canada</b> WP.5	By incorporating ethical and risk assessments of proposed microbiological work within existing institutional body doing similar work, the mission and goals could be harmonized.
<b>Germany</b> WP.12	Many States issue licenses or permits to scientists allowing research in the areas of genetic engineering and work with pathogenic microorganisms. In this regard, the awarding of a license or permit should be contingent upon receiving instruction about the content of the Biological Weapons Convention and the obligations of the scientist under this treaty, as well as instruction about ethical decision-making and risk assessment processes. Receiving a permit should further be contingent upon signing a code of conduct.
<b>Russia</b> WP.19	The consideration of the possible consequences of the scientific misuses could be encouraged by analyzing problems in the scientific councils or in the bioethical commissions of research institutes

<b>Australia</b> Pres 14/6 PM	In addition to any avenue available at national level, institutions may wish to establish internal procedures whereby those concerned about possible dual-use applications can seek guidance and report any concerns, including whistle-blowing on suspicious activities
<b>India</b> Pres 15/6 PM	Establishment, in universities and other scientific institutions, of procedures to monitor research activities and mechanisms to prevent dissemination of information that may be utilized for bioterrorism
<b>United States</b> Pres 20/6 PM	Establish review boards for proposals and publications
<b>Canada</b> Pres 21/6 AM	(Oversight measures should be) independent of government, (ensure) transparency (and be) far reaching in its mandate
<b>Canada</b> WP.5	The keystone to open reporting is the establishment of a trusted institutional body to which concerns can be communicated.
<b>Russia</b> Pres 14/6 AM	Establishing bioethics commissions in both public and private scientific organizations could be considered as a possible solution to the problem of adopting ethic(al) norms for scientists
<b>DNV</b> Pres 16/6 AM	Guidance and codes of practice may be useful but it is still the organization's responsibility to manage risks
<b>United States</b> Pres 16/6 PM	(In biodefence programmes) interviews and surveillance by supervisors, workers and self reporting to enhance/ ensure reliability and highest level of personnel conduct
<b>Libya</b> Int 21/6 PM	...it is necessary for us to support the constitution of national committees for ethics in science and life sciences...

<b>Nigeria</b> Stat 15/6 PM	Life sciences research projects should systematically be evaluated by peers and funding bodies. This evaluation should not only be on scientific quality, but also on ethical aspects, including the potential for use of result for hostile purposes
<b>Japan</b> Pres 21/6 AM	To incorporate the viewpoint of ‘preventing abuse/ misuse of science and technology’ into peer review process may be acceptable, effective and practical means for scientists
<b>Canada</b> Pres 21/6 AM	Peer based local oversight (is) key
<b>Australia</b> Pres 20/6 PM	Implementation (considerations include) <ul style="list-style-type: none"> <li>• relevance of the Code to a wide range of disciplines</li> <li>• formal structures for reviewing research may create contestation and regulation from above that is inimical to a voluntary code</li> <li>• weak links in the chain of compliance</li> <li>• lack of acceptance or ignorance among those who really count</li> <li>• information and raising awareness</li> <li>• creating a culture of commitment to appropriate use and access</li> </ul>
<b>Russia</b> Pres 14/6 AM	...the most efficient way to ensure the effective implementation of the Convention bans at the national level is to develop and adopt an appropriate national legislation, including penal legislation
<b>Australia</b> Pres 14/6 PM	States may also wish to consider establishing a national body to consider and advise on particular difficult issues in respect of the potential misuse of scientific knowledge, materials or equipment by terrorists or states for biological weapons applications.
<b>The Royal Society</b> Pres 20/6 AM	The Society strongly advocates the formation of a properly resourced international scientific advisory panel supporting the BTWC
<b>Sweden</b> Int 21/6 PM	An international scientific advisory panel could serve as a capacity building mechanism.
<b>The Royal Society</b> Pres 20/6 AM	Using the relevant international scientific organisations to provide scientific input to the BTWC would be another way of encouraging appropriate oversight, with the International Council for Science (ICSU) and the International Union of Microbiological Societies (IUMS) being well placed to take this forward.
<b>AAAS</b> Pres 20/6 PM	Evaluation should focus on both process and outcomes. The former assess the impact of the initiative
<b>AAAS</b> Pres 20/6 PM	Scientists preferred implementation through professional organizations or societies rather than government
<b>Russia</b> WP.19	The government on its part should supervise their (research funding organizations) operation in accordance with its BTWC obligations
<b>AAAS</b> Pres 20/6 PM	Adoption of a code does not guarantee its usefulness to researchers and others... Hence, the code should be viewed as only part of a larger effort to promote responsible research

<b>Iran</b> Pres 21/6 AM	Code of conduct for scientists may provide a tool nationally adopted by each State Party to the Convention in implementation of its obligations under the Convention and in accordance with its constitutional process and put into force within its territory
<b>Republic of Korea</b> Stat 13/6 AM	The widespread adoption of codes of conduct, codes of practice or codes of ethics by all related sectors, such as biotechnology and life sciences, will provide very concrete and solid ground from which useful best practices can emerge.
<b>China</b> Pres 14/6 AM	A code of conduct or ethic(al) regulations should be adopted and implemented to educate, supervise and regulate scientists' behaviour in order to prevent achievements in their research from being abused or misused intended or unintended. This the integration of discipline and self-discipline could be realized
<b>CB</b> Pres 15/6 AM	Importance of the research institution in developing accountability - 'if the university says, These are the rules, and you're going to live by them if you're going to work here, and you better do the best you can, then we start to believe them.
<b>Cuba</b> Int 20/6 AM	...it is necessary to recognise that the most appropriate body to ensure the provisions of activities that do not serve peaceful purposes is indeed with the Biological Weapons Convention
<b>DNV</b> Pres 16/6 AM	Encourage oversight of science-based activities... (through) set(ting) explanations, communicate them and monitor performance
<b>DNV</b> Pres 16/6 AM	Ensure funding agencies have effective policies forbidding awards to organizations unless they can demonstrate that the expectations placed upon them have been met
<b>China</b> Pres 14/6 AM	Strengthen and improve the adoption and implementation of the code of conduct, and make the existing code to be aware, accepted and complied by more personnel in the scientific community
<b>United Kingdom</b> WP.9	The most appropriate promulgation and adoption strategy will depend on the content and the 'ownership' of a particular code: for example, the strategy of government in relation to government-science may be different to the strategy of a professional body, or representatives of industry.
<b>United Kingdom</b> WP.9	Each community or stakeholder will develop its own plan for encouraging adoption. It may, however, include: setting a deadline for adoption by a professional organization; consideration of the code at an annual meeting; making adherence to a code a condition of supply to manufacturers; including information about any codes in education and training programmes; or amending agreements with contractors and other activities that may be funded by government, research or charitable foundations, or other bodies.
<b>China</b> Pres 15/6 PM	...the behaviours of physicians are also under the supervision of public opinions.

Annex II

LIST OF DOCUMENTS OF THE MEETING OF EXPERTS

<b>Symbol</b>	<b>Title</b>
BWC/MSP/2005/MX/1	Provisional Agenda for the Meeting of Experts
BWC/MSP/2005/MX/2	Provisional Programme of Work for the Meeting of Experts
BWC/MSP/2005/MX/3	Report of the Meeting of Experts
BWC/MSP/2005/MX/INF.1/Summary	Existing Codes of Conduct which Refer to Biological and Toxin Weapons  Summary of Background Paper prepared by the Secretariat
BWC/MSP/2005/MX/INF.1 [ENGLISH ONLY]	Existing Codes of Conduct which Refer to Biological and Toxin Weapons  Background Paper prepared by the Secretariat
BWC/MSP/2005/MX/INF.2/Summary	Codes of Conduct Relevant to the Life Sciences or Biotechnology which do not Refer to Biological and Toxin Weapons  Summary of Background Paper prepared by the Secretariat
BWC/MSP/2005/MX/INF.2 [ENGLISH ONLY]	Codes of Conduct Relevant to the Life Sciences or Biotechnology which do not Refer to Biological and Toxin Weapons  Background Paper prepared by the Secretariat
BWC/MSP/2005/MX/INF.3/Summary	Review and Analysis of Relevant Elements of Existing Codes of Conduct in Other Fields  Summary of Background Paper prepared by the Secretariat
BWC/MSP/2005/MX/INF.3 [ENGLISH ONLY]	Review and Analysis of Relevant Elements of Existing Codes of Conduct in Other Fields  Background Paper prepared by the Secretariat

BWC/MSP/2005/MX/INF.4\*  
[ENGLISH ONLY]

Relevant Organisations, Associations, Professional Bodies and Institutions Which Might Serve as Sources of Guidance on the Formulation of Codes of Conduct and as Agents for Adopting and Promulgating Such Codes

Background Paper prepared by the Secretariat

BWC/MSP/2005/MX/INF.5  
[ENGLISH ONLY]

List of States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, as at June 2005

Prepared by the Secretariat

BWC/MSP/2005/MX/INF.6  
[ENGLISH / FRENCH / SPANISH ONLY]

List of Participants

BWC/MSP/2005/MX/CRP.1  
[ENGLISH ONLY]

Draft Report of the Meeting of Experts

BWC/MSP/2005/MX/MISC.1  
[ENGLISH / FRENCH / SPANISH ONLY]

Provisional List of Participants

BWC/MSP/2005/MX/MISC.2  
[SPANISH ONLY]

Normas de Ética de la Asociación Física Argentina  
Presentado por Argentina

BWC/MSP/2005/MX/MISC.3  
[ENGLISH ONLY]

The Avicenna Prize For Ethics In Science  
Prepared by the Islamic Republic of Iran

BWC/MSP/2005/MX/MISC.4  
[ENGLISH ONLY]

Presentations Submitted by the United States

The following working papers are available in English only unless otherwise specified

BWC/MSP/2005/MX/WP.1	Preliminary Overview of an International Code of Conduct Related to the Biological Weapons Convention  Prepared by Argentina
BWC/MSP/2005/MX/WP.2	Common Elements of Codes of Conduct (I): Canadian Government Codes  Prepared by Canada
BWC/MSP/2005/MX/WP.3	Common Elements of Codes of Conduct (II): Professional Association Codes  Prepared by Canada
BWC/MSP/2005/MX/WP.4	Common Elements of Codes of Conduct (III): Academic Codes  Prepared by Canada
BWC/MSP/2005/MX/WP.5	Biodefence: Codes of Conduct and Practice  Prepared by Canada
BWC/MSP/2005/MX/WP.6	Thoughts on the Functions of Codes of Conduct: Potential Weaknesses and Solutions  Prepared by Canada
BWC/MSP/2005/MX/WP.7 and Corr.1	The Overlap Between Codes of Conduct and Legislation  Prepared by Canada
BWC/MSP/2005/MX/WP.8	Content of Codes of Conduct Relevant to the BTWC  Prepared by the United Kingdom

BWC/MSP/2005/MX/WP.9	The Promulgation and Adoption of Codes of Conduct  Prepared by the United Kingdom
BWC/MSP/2005/MX/WP.10	German Policies for Biodefence Research  Prepared by Germany
BWC/MSP/2005/MX/WP.11	Regulations for the Prevention of Bioterrorism – Pros and Contrasts from a Scientist’s Point of View  Prepared by Germany
BWC/MSP/2005/MX/WP.12	Codes of Conduct and their Application in the Life Sciences at Universities  Prepared by Germany
BWC/MSP/2005/MX/WP.13	The University Science Perspective  Prepared by Germany
BWC/MSP/2005/MX/WP.14	Infectious Diseases, Biosafety and Biosecurity  Prepared by Germany
BWC/MSP/2005/MX/WP.15	Legislation and Freedom of Research  Prepared by Germany
BWC/MSP/2005/MX/WP.16	Report of Seminars Organised by the Foreign And Commonwealth Office  Prepared by the United Kingdom
BWC/MSP/2005/MX/WP.17	United Kingdom Examples of Codes of Conduct and Associated Activities Related to Government Science  Prepared by the United Kingdom
BWC/MSP/2005/MX/WP.18	Some Reflections on the Ethic Norms and Codes of Conduct for Scientists Majoring in Biosciences  Prepared by the Russian Federation

BWC/MSP/2005/MX/WP.19	Answers to the Questions Regarding Codes of Conduct for Scientists Majoring in Biological Sciences  Prepared by the Russian Federation
BWC/MSP/2005/MX/WP.20*	China's Views and Practices in Adopting and Implementing Code of Conduct of Scientists  Prepared by the People's Republic of China
BWC/MSP/2005/MX/WP.21	Codes of Conduct for Scientists: Discussions in Japan on the Issue  Prepared by Japan
BWC/MSP/2005/MX/WP.22	Codes of Conduct for Scientists: A View from Analysis of the Bioindustrial Sectors in Japan  Prepared by Japan
BWC/MSP/2005/MX/WP.23	Indian Initiatives on Codes of Conduct for Scientists  Prepared by India
BWC/MSP/2005/MX/WP.24	Bioethics Related Activities in Indonesia  Prepared by Indonesia
BWC/MSP/2005/MX/WP.25	'Codes' in the Context of the BTWC  Prepared by South Africa
BWC/MSP/2005/MX/WP.26	The Content, Promulgation and Adoption of Codes of Conduct for Scientists  Prepared by the Islamic Republic of Iran
BWC/MSP/2005/MX/WP.27	Ethical Principles in Gene Technology, Environmental Ethics and the Biological Weapons Convention — Is there a Link?  Prepared by Australia

BWC/MSP/2005/MX/WP.28

Elements for Use in Developing Codes of Conduct  
for Scientists

Prepared by Australia

BWC/MSP/2005/MX/WP.29

Raising Awareness: Approaches and Opportunities  
for Outreach

Prepared by Australia

BWC/MSP/2005/MX/WP.30

Selected Canadian Codes of Conduct for Life  
Sciences

Prepared by Canada

BWC/MSP/2005/MX/WP.31  
[SPANISH ONLY]

Códigos Y Principios

Presentado por la República de Cuba

BWC/MSP/2005/MX/WP.32  
[SPANISH ONLY]

Experiencia Nacional Sobre la Promulgación de  
Códigos

Presentado por la República de Cuba

BWC/MSP/2005/MX/WP.33

Approach to Codes of Conduct

Prepared by the Republic of Korea

BWC/MSP/2005/MX/WP.34

Codes of Conduct for Biological Scientists

Prepared by Italy

BWC/MSP/2005/MX/WP.35

Codes of Conduct for Scientists: Considerations  
During a BWC Regional Workshop and  
Subsequent Considerations

Prepared by Australia

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