MEETING 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/MSP/2005/L.1
16 November 2005

Original: ENGLISH

Third Meeting
Geneva, 5-9 December 2005
Item 6 of the provisional agenda
To discuss, and promote common understanding and effective action on the content, promulgation, and adoption of codes of conduct for scientists

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

Prepared by the Chairman

General considerations

Purpose and benefits

1. Recognising that codes of conduct for scientists can support the object and purpose of the Convention, it was suggested that codes of conduct can:

(i) Make a significant and effective contribution, in conjunction with other measures, to combating the present and future threats posed by biological weapons and bioterrorism;

(ii) Raise awareness of the Convention and of the potential risks inherent in scientific activity, and promote the need for reflection, consideration and discussion of the possible security implications of scientific work;

(iii) Help build a culture of responsibility and accountability among the scientific community, and increase public confidence that the risks are being appropriately managed;

(iv) Help scientists and others fulfil their legal, regulatory, professional and ethical obligations;

(v) Extend the responsibility for implementing the provisions of the Convention to the level of the individual.

Desirable qualities

2. Recognising the requirement that codes of conduct should avoid impeding scientific discovery or placing excessive constraints on research, it was suggested that codes of conduct should:

(i) Reflect the provisions of the Convention;

(ii) Be compatible with, and complement, national legislation and regulatory controls;

(iii) Be simple, clear and easily understandable both to scientists and to wider civil society;

(iv) Be seen as relevant, helpful and effective by those they apply to, and thus actively supported and followed;

(v) Be incorporated into existing working practices, funding and approval procedures, education and training;

(vi) Be revised and updated as necessary.

Scope, form and structure

3. Recognising that, although the principles underlying codes should reflect the Convention and be universal, a range of different approaches are needed to develop codes of conduct that apply to a wide variety of scientific activities and national circumstances, it was suggested that:

(i) Building blocks, core guidelines or common elements could be developed, that could then be used to develop specific codes;

(ii) Three layers of codes could be developed: a top layer describing the universal norms; a middle layer of more detailed codes developed or adapted by scientific bodies; and a bottom layer of operational codes specific to particular institutions;

(iii) There should be no attempt to impose a particular form or format of code;

(iv) Codes of conduct should apply not just to scientists, but to all relevant actors involved in scientific activity, including funders, publishers, managers and technical and ancillary staff;

(v) Codes of conduct should be sufficiently broad in scope to apply to new and unexpected scientific results and developments.

Content of codes of conduct

Principles

4. Recognising the dual-use dimension of much scientific activity and that in accordance with the Convention scientists should use their knowledge and abilities for the advancement of human and animal welfare in addition to respecting human rights and protecting the environment, it was suggested that codes of conduct should:

(i) Be aimed at the individual consciences of scientists and others;

(ii) Require individuals to refuse to participate in research, development or production of biological weapons or related materials or technology;

(iii) Require individuals to be aware of the risks of inadvertently participating in or assisting such activity, and to take active steps to prevent or stop it;

(iv) Require individuals to have a clear understanding of the content and purpose of their research or other work, and to consider its potential security consequences including dual-use implications;

(v) Be aimed at the intent and potential of the research, rather than attempting to define permissible or forbidden experiments.

References to norms, laws and standards

5. Recognising that codes of conduct should reflect the norms established by the Convention and should be consistent with national legislative and regulatory frameworks as well as with relevant professional standards, it was suggested that codes of conduct should:

(i) Refer to the Convention, and require awareness of and compliance with its provisions and with those of related national laws and regulations, including those dealing with export and transfer;

(ii) Require individuals to follow appropriate standards and procedures for biosafety, biosecurity, good laboratory and manufacturing practices, risk management, environmental protection, and other standards and procedures that relate to the safe and secure handling, storage and transfer of potentially hazardous materials;

(iii) Require individuals to be properly trained, qualified and licensed, as applicable, for the work they undertake, in accordance with relevant legislation and regulations.

Ethical guidance

6. Recognising that codes of conduct should help individuals make decisions and take action in accordance with the purposes and objectives of the Convention, it was suggested that codes of conduct should:

(i) Require individuals to investigate thoroughly and take into account the reasonably foreseeable social, environmental, health and security consequences of any proposed research or other scientific work;

(ii) Require individuals to analyse, assess and evaluate data throughout each step of the research process in order to be aware of emerging or unexpected implications that may be relevant to the Convention;

(iii) Contain guidance on the criteria and procedures for determining whether or not certain research or other work entails unacceptable risks;

(iv) Refer specifically, where appropriate, to areas of work with high potential for diversion or misuse, such as work aimed at increasing the pathogenicity, virulence, drug resistance or environmental persistence of microorganisms, altering host range or immune response, or synthesising pathogens;

(v) Contain guidance on the handling, dissemination and publication of research results, data and other information;

(vi) Encourage, as far as possible, transparency, peer review and open discussion of all scientific activity and its implications.

Notification, sanctions and consequences

7. Recognising that codes of conduct should help and encourage individuals prevent the misuse of science, it was suggested that codes of conduct should include:

(i) A requirement to report abuse, to raise concerns about possible breaches of the code, and to notify others when unexpected results may have social, environmental, safety, security or health implications;

(ii) Clear procedures for such notification, including nomination of a contact point;

(iii) Measures to protect the person reporting a concern, as well as to protect the legitimate rights of those involved in the activity reported;

(iv) Procedures for determining whether the code has been breached, and appropriate sanctions for those found to have breached the code.

Adoption of codes of conduct

Principles

8. Recognising that the involvement of scientists is crucial in the development and adoption of codes of conduct to ensure that codes are effective in preventing the misuse of science while not impeding scientific freedom, it was suggested that it is important to:

(i) Explain and demonstrate the benefits of codes to scientists, including increased public confidence and avoiding the need for more stringent and restrictive laws and regulations;

(ii) Demonstrate that the costs of development, promulgation and adoption of codes of conduct do not outweigh the benefits;

(iii) Encourage scientists, societies and institutions to develop codes, rather than have them imposed on them;

(iv) Avoid alienating scientists by suggesting that codes are aimed against them, or by implying that scientists need to be convinced to conduct responsible research.

Wider involvement

9. Recognising that all those with a responsibility for, or legitimate interest in, codes of conduct should be involved in their development and adoption, both individually and at organisational level, it was suggested this might involve the following:

(i) National, regional and international academies of science;

(ii) Academic and commercial scientists and their professional societies and unions;

(iii) The pharmaceutical, biotechnology and other relevant industries;

(iv) Scientific publishers and the mass media;

(v) Scientific funders;

(vi) Educational institutions;

(vii) Relevant international organisations.

Methods

10. Recognising that it is important to build on and coordinate with existing efforts, and avoid imposing burdensome and duplicative measures, it was suggested that:

(i) As far as possible, existing codes, mechanisms, frameworks and bodies should be used;

(ii) Adoption strategies should be tailored according to whether the code is to apply to government science, a professional body, industry, or individual institution;

(iii) Codes of conduct could be incorporated into licensing procedures, working practices and standard operating procedures, and internal review, evaluation and project approval procedures;

(iv) Codes of conduct could also be incorporated into employment procedures, conditions for suppliers, and conditions for the awarding of contracts or conclusion of other agreements;

(v) Codes of conduct should be regularly reviewed, evaluated for effectiveness, and revised as necessary.

Promulgation of codes of conduct

Principles

11. Recognising that codes of conduct will be most effective if they, and the principles underlying them, are widely known and understood, it was suggested that:

(i) Codes of conduct should be promulgated and promoted through multiple channels;

(ii) Discussion, exchange and networking, within and among institutions, societies, organisations and governments, both nationally and internationally, are important;

(iii) Promulgation and promotion of codes should be incorporated into education, training and licensing;

(iv) An active media, communication and outreach strategy is important for effective promulgation and promotion;

(v) Senior scientists and other personnel have a responsibility to ensure that junior colleagues are aware of codes of conduct and the principles underlying them;

(vi) Promulgation and promotion should be continuing efforts.

Methods

12. Recognising that there are many possible means of promulgation, and that the requirements for particular codes are likely to vary, it was suggested that the following methods could be useful for effectively promulgating codes of conduct and raising awareness of the principles underlying them:

(i) Use professional societies, industry bodies, institutional ethics and safety committees, and similar organs;

(ii) Convene or encourage the convening of seminars, symposia and conferences, within institutions, nationally and internationally;

(iii) Establish specific courses at undergraduate and postgraduate level, or include elements in existing courses, and consider targeting secondary schools also;

(iv) Include in textbooks and other educational materials;

(v) Incorporate into professional and technical training;

(vi) Use the scientific press, mass media, internet, public relations activities and collaborative promotions;

(vii) Offer incentives to institutions to promote codes of conduct and develop outreach programs;

(viii) Establish networks of laboratories to increase exchange and cooperation internationally;

(ix) Educate individuals on specific risks, provide case studies and practical examples.

___