

International Action Plan for Strengthening the International Preparedness and Response System for Nuclear and Radiological Emergencies

A. Preamble

The Convention on Early Notification of a Nuclear Accident (CENNA) and the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency (CANARE) were developed in 1986, shortly after the Chernobyl accident. Their aims are essentially to provide an international framework for mitigating the consequences of a nuclear or radiological emergency¹ through exchange of information and facilitating the prompt provision of assistance. The IAEA's functions are to promote, facilitate and support cooperation among States Parties, and to perform certain operational tasks in an emergency.

In 2000, in resolution GC(44)/RES/16, the IAEA General Conference encouraged Member States to participate in the process of strengthening international, national and regional capabilities for responding to nuclear and radiological emergencies and to make those capabilities more consistent and coherent. In June 2001 the IAEA Secretariat convened the First Meeting of Representatives of National Competent Authorities identified under the CENNA and the CANARE (First Competent Authorities' meeting), including non-Party IAEA Member States. The participants recognized that States and the IAEA Secretariat needed to make substantial improvements in the arrangements for responding to nuclear and radiological emergencies.

In 2002, in resolution GC(46)/RES/9.D, the General Conference encouraged Member States *to contribute to the international efforts to develop a consistent, coherent and sustainable joint programme for improved and more efficient international response to nuclear and radiological emergencies* and requested the Secretariat *to seek ways of facilitating cooperation and coordination among Parties to the CENNA and CANARE to ensure adequate implementation.*

In June 2003, the Secretariat convened a Second Competent Authorities' Meeting, at which the participants agreed to establish a regionally balanced National Competent Authorities' Co-ordinating Group (NCACG) – inter alia - to develop an action plan for strengthening the international emergency response system in co-ordination with the IAEA Secretariat. In September 2003, the General Conference in its resolution GC(47)/RES/7.A. supported the Secretariat's intention, expressed in IAEA document GOV/INF/2003/49-GC(47)/9, to develop an action plan with the NCACG.

A draft action plan was developed over several months of collaborative work between the Secretariat and the NCACG, drawing on recommendations and feedback from competent authorities, experience gained in responding to emergencies and in drills and exercises, and the findings of relevant international conferences. Subsequently, the Secretariat convened a technical meeting to consider the draft international action plan. The meeting, chaired by the Minister-Counsellor Ole Lundby of the

¹ The term 'nuclear or radiological emergency' used here includes emergency situations or events resulting from accidents, negligence or malicious acts, and is consistent with the term used in the Safety Requirements publication on Preparedness and Response for a Nuclear or Radiological Emergency, GS-R-2 and relevant General Conference resolutions. It is more general than that used in the CENNA and CANARE.

Permanent Mission of Norway to the Agency and attended by 49 senior experts from 37 Member States and one international organization, was held from 5 to 8 April 2004.

It is evident that human, financial and in-kind resources will be needed in order to meet the time targets of the plan. The General Conference in its resolution GC(47)/RES/7 urged Member States to make necessary contributions to this work. In addition, the Secretariat as stated in para. 6 of Annex 4 to GOV/INF/2003/15-GC(47)/INF/4 intends to identify the human and financial resources needed in order to support the implementation of the action plan, to optimize the use of its existing resources and, where necessary, to request additional extra-budgetary resources from Member States.

B. Objective of the International Action Plan

1. The objective is to strengthen the international emergency preparedness and response system pursuant to General Conference resolutions GC(46)/RES/9.D and GC(47)/RES/7.A by focusing the efforts of IAEA Member States, competent authorities identified under the CENNA and the CANARE, and of the IAEA Secretariat.
2. For the purposes of this action plan, the international emergency preparedness and response system is deemed to comprise: the legal framework provided by the Conventions; arrangements for the exchange of information and resources for identifying, assessing and responding to a nuclear or radiological emergency - among States Parties, non-Party IAEA Member States, relevant international organizations and the IAEA Secretariat; and preparedness arrangements to maintain the capability to respond.

C. Background

3. Nuclear and radiological emergencies can have serious consequences for life, health, the environment and society over wide geographical areas. Authorities in States have the responsibility to decide upon and to take appropriate response actions and to ensure that resources are available for mitigating the consequences. However, the proper handling of a nuclear or radiological emergency, and also a situation in which a prompt response is warranted in order to mitigate the effects of a perceived hazard, can easily require resources that exceed the capabilities of individual States. It is therefore important for States to co-operate in response to such emergencies and situations.
4. Principal tasks of the responsible authorities both in the State where an emergency occurs and in any other potentially affected States are:
 - to protect life, health, property and the environment; and
 - to provide timely, consistent and appropriate information regarding, inter alia, the event, its consequences and the actions taken².

² Recognizing that the social consequences of some types of actual or perceived nuclear or radiological emergency may pose a greater challenge than the radiological consequences.

5. These tasks can be performed effectively only if emergency preparedness arrangements are in place to ensure a timely, managed, coordinated and effective response at the scene and at the local, regional, national and international levels.
6. Above all, the responsible authorities must have:
 - information (regarding the event, its development and consequences, and the response actions taken); and
 - resources (e.g.: technical expertise; human resources and tools for acquiring and processing information and making assessments; trained personnel, equipment and facilities for carrying out response actions; financial resources).

D. Relevant Past and Current Activities

0. The IAEA's principal role with regard to international arrangements for response to a nuclear or radiological emergency is to promote, facilitate and support cooperation among States Parties to the Conventions and to provide for the application of the relevant international standards in IAEA Member States. In this regard, the Safety Requirements publication on Preparedness and Response for a Nuclear or Radiological Emergency, GS-R-2³, constitutes the basis for international cooperation. Moreover, the IAEA has issued technical documents and standard training material and facilitated their use in more than 90 States through its technical cooperation programme. Although the primary aim of these activities has been the strengthening of national capabilities, they have also helped to harmonize international arrangements. In addition, the IAEA Secretariat regularly reviews and, if necessary, adjusts the arrangements it has made for facilitating the exchange of information and resources in an emergency. It issues the Emergency Notification and Assistance Technical Operations Manual (ENATOM)⁴ and the Emergency Response Network (ERNET) manual⁵, which describe how the IAEA Secretariat expects States and relevant international organizations to interface with its Emergency Response Centre in an emergency.

1. There are in place several other IAEA action plans and activities that relate to emergency preparedness and response, including the action plan for the safety of transport of radioactive material (document GOV/2004/2), the action plan for the safety and security of radioactive sources (document GOV/2003/47-GC(47)/7), and activities on protection against nuclear terrorism (document GOV/2002/10).

2. Although the IAEA has the principal role among international organizations with regard to international preparedness for and response to a nuclear or radiological emergency, others do have important roles and programmes⁶. The Food and Agriculture Organization of the United Nations (FAO), the World Meteorological Organization (WMO) and the World Health Organization (WHO) are full parties to the CENNA and the CANARE. These organizations, together with other

³ http://www-pub.iaea.org/MTCD/publications/PDF/Pub1133_scr.pdf

⁴ <http://www-pub.iaea.org/MTCD/publications/PDF/enatom2002.pdf>

⁵ http://www-pub.iaea.org/MTCD/publications/PDF/ernet2002_web.pdf

⁶ e.g., http://www.who.int/ionizing_radiation/a_e/en/; <http://www.wmo.ch/web/www/ERA/emergency-response.html>; <http://www.iaea.org/programmes/nafa/dx/emergency/FAOwp2004-5.html>

international organizations⁷, participate in the Inter-Agency Committee on Response to Nuclear Accidents (IACRNA). This committee regularly issues updated editions of the Joint Radiation Emergency Management Plan of the International Organizations⁸ (the Joint Plan) and coordinates joint actions, such as international exercises, designed to improve the response to a nuclear or radiological emergency.

10. Many Member States are further developing their own national arrangements, and bilateral and multilateral arrangements with other States. There are also joint initiatives among groups of States and/or competent authorities to enhance their common arrangements.

E. The Challenge

11. Since the Chernobyl accident in 1986, major political and technological developments (such as improvements in international cooperation and advances in information technology) have provided opportunities for improving the international emergency preparedness and response system. It is also recognized that there is a large number of radioactive sources - in use or in transport – for which the international emergency preparedness and response system is less developed than for nuclear installations. Particularly since 11 September 2001, there is also significant concern about the possible malicious use of radioactive material and about possible attacks on nuclear installations. All these factors highlight the need for improving and extending the system.

12. Adequate arrangements at the national level are a precondition for a strong international preparedness and response system. Although some Member States have taken steps to strengthen their arrangements, many Member States have not. The challenge is to take advantage of best practices, ongoing activities and available resources in Member States and international organizations, and focus these resources into concerted and coordinated actions to strengthen the international emergency preparedness and response system.

F. The Approach

13. During 2004-2009 concerted efforts will be made to enhance the development of compatible arrangements, and to establish sustainable processes for their further development. It is envisaged that from 2010 onwards these processes will be used to address additional needs and opportunities.

⁷The European Commission (EC) has issued a Council Decision (14 December 1987) on community arrangements for the early exchange of information in the event of a radiological emergency, and operates the European Community Urgent Radiological Information Exchange (ECURIE) system exchanging with the Commission information required by the Council Decision. Both the European Union (EU) and the Nuclear Energy Agency of the Organisation for Economic Co-operation and Development (OECD/NEA) have promoted relevant research and studies. The WHO, United Nations Office for the Co-ordination of Humanitarian Affairs (UN/OCHA) and the EU – inter alia - have mechanisms for providing various types of emergency assistance on request from their member states.

⁸<http://www-pub.iaea.org/MTCD/publications/PDF/jplan2002.pdf>

14. The action plan will be carried out by a collaboration between the Secretariat, Member States and their competent authorities. It is envisaged that arrangements for implementation will be made that include – inter alia - the Secretariat and the NCACG, and that will 1) ensure the preparation of detailed workplans, taking into account other action plans and programmes of the IAEA, Member States and other international organizations, the need to exploit potential synergies with those activities, and new priorities; 2) direct the execution of the action plan, monitoring progress against performance indicators and taking necessary corrective actions; 3) ensure adequate and appropriate communication among relevant stakeholders; 4) ensure that best advantage is taken of available resources, systems, technologies and communication networks.

G. Actions

15. The international action plan covers three main areas (A: international communication, B: international assistance and C: sustainable infrastructure) of preparedness and response to a nuclear or radiological emergency⁹. It is expected that for many States the implementation of the action plan will also contribute to improvements in their national capabilities.

(A) International communication

16. **GOAL:** To have in place an effective internationally harmonized communication system for nuclear and radiological emergencies. This system will complement national systems, and provide a high degree of confidence that Member States can communicate in a timely manner notifications and authoritative and verifiable information. This will facilitate emergency preparedness and response, consistent decision-making and communication with the public and the news media.

17. **ISSUES:** The current arrangements for international emergency communications vary considerably from State to State, including telephone, facsimile, modem, Internet and/or - between a few States - point-to-point video communications. These arrangements are only partially compatible and for some States multiple standards apply. For example, within the EU, States are currently required to report both under ECURIE and ENATOM arrangements. Ideally, States party to regional arrangements ought to be able to satisfy their regional and global obligations by means of a single set of consensus arrangements. Important issues need to be addressed: e.g. the content of information to be shared; the timeliness, reliability and security of communications; inconsistent use of terms and language; ease of use and compatibility with and among national systems.

18. Six actions are considered for the period 2004-2009 for improving the communication arrangements.

Action A.1 Identify existing communication arrangements, define compatibility requirements for international application, identify future global needs and develop a strategy for enhancing international emergency communications

Desired Outcome: Consensus documentation of the emergency information/data sets to be communicated internationally¹⁰ and the timeline for their exchange for preparedness and response

⁹To include nuclear or radiological events that may require prompt action by more than one State to assess the situation and minimize any consequences no matter what their cause or where they may occur.

¹⁰Taking into account action (xx) of the Action Plan for the Safety of Transport of Radioactive Material (GOV/2004/2)

decisions, assessments and communication; clear understanding of existing national, regional and global needs and solutions for communicating this information; a glossary of standard terms; a communications strategy and a set of priorities for longer term action.

Timing: It is envisaged that the action will begin in 2004 and consensus documentation will be issued after deliberations at the Third Competent Authorities' meeting scheduled for June 2005. The documentation should then be reviewed from time to time as part of a continuous improvement mechanism. Since other actions depend on the outcome of this action, it has a high priority.

It is anticipated that the adopted strategy would address data transfer being conducted in two different modes, to which Actions A.2. and A.3. are directed, although their development and implementation would need to be carried out in a coordinated manner.

Action A.2 Strengthen the international system for secure, timely and reliable emergency notification, active transmission of important/urgent information¹¹ identified under Action A.1, and receipt of confirmation

Desired Outcomes: (1) Adoption of the functional and technical requirements for an enhanced international system, including data structure¹², security and reliability (elucidated in parallel with Action A.3); (2) a decision on a system to be developed, on the basis of an assessment of possible solutions and recommended options, including network architecture¹³, communication devices, and considerations of solutions for Action A.3 and the need to dovetail with existing national and international systems; and (3) adopted, developed and implemented solution, including data format¹⁴, for the enhanced international system.

Timing: It is envisaged that the first phase of this action should commence in 2004 and be completed in time for review by all national competent authorities at the third Competent Authorities' meeting scheduled for June 2005. Phase two would begin in late 2005, interim, pilot or prototype solutions would be reviewed, and recommendations would be made to the fourth Competent Authorities' meeting envisaged for June 2007 for anticipated implementation by 2009.

Action A.3 Develop compatible international arrangements that connect and enhance systems for sharing information¹⁵ identified under Action A.1.

Desired Outcomes: (1) Adoption of the functional and technical requirements for enhanced international data communication arrangements, including data structure (elucidated in parallel with Action A.2); (2) decisions on arrangements to be developed, based on assessments of possible solutions and recommended options, including architecture, and taking into account Action A.2.; and (3) adopted, developed and implemented solutions, including detailed data formats.

Timing: The development of the data structure and mechanism for exchange for Actions A.2 and A.3 should be concurrent and compatible. The development and agreement of formats for different types of data is expected to be a continuous process that will run throughout the whole period 2004–2009 as

¹¹ This would include information considered necessary to satisfy the terms and objectives of the CENNA and CANARE, international safety standards and other relevant undertakings. This usually includes information that is of immediate use and value to decision makers and requires little computational processing.

¹² How the data are organized for efficient retrieval and use.

¹³ The physical channels (hardware) and communication protocols (software) by which the data are transmitted.

¹⁴ How the data are configured for compatibility between transmission and receipt.

¹⁵ This may include systems for retrieval of information on plant status, details of the implementation of countermeasures, data sets such as detailed geo-referenced radiological measurements, meteorological data and other modelling/assessment data, which can be used to improve national and international assessments of the consequences and subsequent decisions.

new data sets are incorporated. If resources are available, Actions A.2 and A.3 could be carried out in parallel; however, completion of Action A.2. is of higher priority than completion of Action A.3. In any case coordination between the two actions is important.

Action A.4 Review and enhance public communication arrangements

Desired Outcome: Enhanced and recognized arrangements¹⁶ (including strategy, procedures, information formats and symbology) for harmonized and timely provision of consistent public and media information and for responding to incorrect information and rumours and to requests from the public and news media.

Timing: This action should be co-ordinated with Action A.2 and documentation is envisaged to be completed in time for review by all national competent authorities at the Fourth Competent Authorities' meeting scheduled for June 2007.

Action A.5 Review and implement changes to arrangements for communication between IAEA Member States and the IAEA Secretariat, including the protected web site ENAC

Desired Outcome: Upgraded effective operational arrangements for communication and information exchange with the IAEA's Emergency Response Centre. This includes improved versions of the ENAC web site, aligned with the outcome of Actions A.2 to A.4, and coordinated to the extent reasonable with other bodies such as the European Commission.

Timing: New arrangements will be synchronized with the release of updated editions of ENATOM taking into account the progress in implementing Actions A.1 to A.4.

Action A.6 Promote compatibility among arrangements for secure and reliable voice and video communications for specific intergovernmental emergency response purposes.

Desired Outcome: Compatible arrangements for secure point-to-point voice and video emergency communications to be adopted and used by interested parties. These arrangements are intended for discussions on a developing situation, provision of advice and information, and for making detailed arrangements for the provision of assistance

Timing: The action is expected to begin in 2004 and a proposal completed in time for review at the third Competent Authorities' meeting scheduled for June 2005.

(B) International assistance

19. **GOAL:** To have in place effective, efficient and compatible arrangements whereby Member States can confidently obtain relevant and adequate assistance, including: sound and timely assessments and advice; technical products (e.g. atmospheric dispersion predictions) to support assessments and decision making; and coordinated practical assistance.

20. **ISSUES:** Member States have developed different national arrangements to respond to a nuclear or radiological emergency within their own borders. The IAEA Safety Standards provide the radiation protection framework for a harmonized approach to radiation emergency preparedness and response. However, the types of response teams, technical products, equipment, training and methods of

¹⁶ There is a requirement (para. 4.84) in IAEA Safety Standard GS-R-2 that States and the IAEA make arrangements for co-ordinating the timely provision of accurate information to the public and to the news media in the event of a nuclear or radiological emergency.

operation differ between States, resulting in significant challenges in providing effective assistance to one another. Confidence in the accuracy and appropriateness of laboratory measurements is seen as vital. There are additionally a number of operational, administrative and practical challenges that include finding appropriate resources, obtaining agreement to assist, control of resources, co-ordination of assistance, and issues regarding liability and confidentiality. Moreover new opportunities exist through technological and other developments.

21. In addition to the IAEA, other international organizations (such as the EU, UN/OCHA, FAO, WMO and WHO) have established mechanisms for facilitating assistance of various types in emergencies. Although the IAEA has the prime function with respect to facilitating assistance in the event of a nuclear or radiological emergency and the IACRINA has developed the Joint Plan, there is a need for greater compatibility and coordination in the assistance arrangements.

22. In order to overcome the difficulties in providing effective assistance to one another, common elements of the national and international arrangements need to be enhanced and made compatible. Provision of assistance will almost always require some form of communication and these actions must be coordinated with the actions under (A) International communication. Seven actions are proposed for the period 2004–2009, as follows:

Action B.1 Identify and define the requirements for assistance of different types, review existing capabilities, and propose plans for enhancing the delivery of such assistance.

Desired Outcome: Identification of different types of assistance needed for different scenarios, and detailed specifications of what is needed to efficiently provide such assistance, taking account of the requirements under relevant international conventions and agreements; a review of current capabilities and mechanisms; a glossary of agreed terms; and proposals and recommended priorities for strengthening arrangements for each type of assistance.

Timing: This action should be given high priority because it will affect the long-term implementation of the action plan. Consensus documentation ought to be issued after deliberations at the third Competent Authorities' meeting scheduled for June 2005. While this action will provide the basis for initiating subsequent additional actions, it is proposed in the short term to start on the following actions in parallel and in a coordinated manner to make more immediate improvements to the existing arrangements.

Action B.2 Develop compatible arrangements for response to situations involving lost, stolen, damaged or discovered dangerous¹⁷ sources.

Desired Outcome: Established arrangements for locating and recovering missing, damaged and discovered sources, including their temporary storage, enabling efficient provision of assistance, taking account of the Code of Conduct on Safety and Security of Radioactive Sources.

Timing: This action is expected to begin after approval of the plan and to be accomplished within one year of completion of action B.1. It has a high priority.

Action B.3 Establish compatible arrangements for radiation monitoring and interpretation of results during emergencies.

Desired Outcome: Compatible arrangements for different types of emergency radiation monitoring, including external radiation monitoring, radionuclide specific measurements and aerial and ground-based radiation surveys, and for interpretation of results, enabling efficient provision of assistance to

¹⁷ A source that could, if not under control, give rise to exposure sufficient to cause severe deterministic effects.

rapidly characterize the levels, nature and extent of contamination for the purposes of decision making on protective actions.

Timing: This action is expected to be accomplished within two years of the completion of action B.1.

Action B.4 Develop – in collaboration with WHO – compatible arrangements for the medical management of radiation injuries, and their diagnosis and treatment, including management of psychological consequences.

Desired Outcome: Compatible arrangements for providing medical assistance in nuclear or radiological emergencies, including triage, taking due care of personal contamination, addressing psychological impact, and specialized treatment of whole body and localized radiation injuries and their follow-up.

Timing: This action is expected to commence in 2004 and to be accomplished within two years of the completion of action B.1. It has a high priority.

Action B.5 Update – in collaboration with WMO - standard meteorological products, and enhance arrangements for providing associated assistance¹⁸.

Desired Outcome: Updated standard meteorological products and enhanced arrangements for providing assistance in obtaining those products¹⁹.

Timing: A plan for development and implementation of the changes is envisaged to be submitted to the third Competent Authorities' meeting in June 2005. Consensus arrangements would be implemented subsequently. It has a medium priority because requests for this type of emergency assistance are infrequent and some arrangements already exist, albeit not well harmonized.

Action B.6 Review the use of models for assessment of the impact of releases to the environment with respect to efficient provision of assistance, and enhance arrangements for providing such assistance.

Desired Outcome: Specification of a consistent set of products for each type of environment transport model, dose assessment model and decision support system according to needs defined in actions A.1. and B.1.; and enhanced arrangements for provision of this assistance.

Timing: The detailed scope of the work to be carried out under this action should be defined based on the outcome of actions A.1. and B.1.

Action B.7 Review and develop the ERNET concept

Desired Outcome: Enhanced arrangements necessary to ensure the efficient, effective and safe implementation of IAEA brokered assistance through the ERNET concept of registering, in advance of an emergency, qualified capabilities to provide certain types of assistance through the IAEA should the need arise.

Timing: New arrangements will be synchronized with the release of updated editions of EPR-ERNET taking into account the progress in implementing Actions B.1 to B.6.

¹⁸ The Second Competent Authorities' meeting (Decision 2003/16) recommended that the IAEA Secretariat pursue with WMO an update of the requirements for meteorological products, including their format, content and mechanisms for delivery. This action is to respond to that recommendation.

¹⁹ Issues relating to transmission of the products need to be coordinated with actions under A) international communications.

(C) Sustainable infrastructure

23. GOAL: Sustainable, effective and efficient infrastructure for enhancement of the international preparedness and response system.

24. ISSUES: The CENNA and CANARE and the relevant safety standards relating to international preparedness and response have no built-in sustainable mechanisms for ensuring effectiveness and continuous improvement of practical arrangements. There is a basic capability between States and the Secretariat and some significant developments have been made for special purposes; however, there is no systematic long-term programme for the activities of the Secretariat and Member States for sustaining and improving the arrangements. Without such a long-term programme it may be difficult for States and the Secretariat to use their resources efficiently to maintain the international system and to take advantage of new opportunities for improvement.

25. Moreover it is recognized that serious emergencies and the opportunities to learn from the experience of responding to them are infrequent. It is therefore important to share the lessons identified from drills, exercises and actual experiences and to ensure effective preservation of knowledge for future emergency planners/responders.

Action C.1 Implement the action plan, using a quality management system²⁰, monitoring progress against performance indicators, providing support for the NCACG's work, preparing and conducting biennial Competent Authorities' meetings, and facilitating communication among stakeholders.

Desired Outcome: Effective, efficient and sustainable structure for implementation of the action plan; biennial meetings of national competent authorities; meetings of NCACG; transparent communication, reporting to policy-making organs; and effective participation by Member States and relevant international organizations.

Timing: Ongoing implementation and communication; biennial meetings of national competent authorities in 2005, 2007 and 2009.

Action C.2 Evaluate and, where appropriate, enhance the ability of the IAEA's Emergency Response System to fulfil its role as a facilitator and coordinator for response to a nuclear or radiological emergency

Desired Outcome: Sustainable infrastructure that is in full compliance with the safety standard GS-R-2 by the IAEA's Emergency Response System²¹ and a sustainable system for its improvement consistent with the outcomes of other relevant actions of this plan.

Timing: This action is expected to be completed within the period of the action plan.

Action C.3 Review and, where appropriate, develop the mechanisms for communicating lessons identified from past events and exercises, and preserving knowledge of the response to these relatively rare events for the future

Desired Outcome: Enhanced and extended arrangements for sharing and preserving knowledge and experience of response to drills, exercises and actual events.

²⁰ Methodologies should be incorporated during process design that facilitate, once processes are operational, the application of quality management principles such as continuous improvement and performance and output/outcome monitoring.

²¹ The General Conference has requested that the IAEA Director General regularly evaluate and report on the capability of the IAEA's Emergency Response System (GC(46)/RES/9.D para. 38)

Timing: Strengthened arrangements in place by 2006.

Action C.4 Facilitate and promote adoption and implementation of the updated notification, communications and assistance framework by all States and relevant international organizations; updating and reissuing ENATOM; disseminating information; assisting Member States on request in their implementation of the new arrangements; and by conducting appropriate tests, drills and exercises.

Desired Outcome: Improved implementation of notification, communications and assistance framework in States.

Timing: The IAEA Director-General approaches all States to promote adoption of the CENNA and CANARE as soon as possible. Mechanisms for implementing new arrangements should be considered by the Secretariat and the competent authorities before the third Competent Authorities' meeting envisaged for June 2005, considering the most appropriate approaches for each region.

