

# **Operations Manual for Incident and Emergency Communication**

**DATE EFFECTIVE: 1 JUNE 2012**



**IAEA**

International Atomic Energy Agency

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**EPR-IEComm (2012)**

**Emergency Preparedness  
and Response**

# **Operations Manual for Incident and Emergency Communication**

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# Foreword

The Convention on Early Notification of a Nuclear Accident (the ‘Early Notification Convention’) and the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency (the ‘Assistance Convention’) are the prime legal instruments that establish an international framework to facilitate the exchange of information and the prompt provision of assistance in the event of a nuclear or radiological incident or emergency, with the aim of minimizing the consequences. The International Atomic Energy Agency (IAEA) has specific functions assigned to it under these Conventions. The arrangements provided between the IAEA, the IAEA’s Member States and/or Parties to one or both Conventions, all other relevant international intergovernmental organizations (herein referred to as international organizations), and other States for facilitating the implementation of these Conventions — specifically concerning those articles that are operational in nature — are documented in the present Operations Manual for Incident and Emergency Communication (IEComm).

IEComm is the successor to the previous Emergency Notification and Assistance Technical Operations Manual (ENATOM), first issued on 18 January 1989. Member States, Parties to the Early Notification and Assistance Conventions, relevant international organizations and other States, have since then regularly received updates to the manual. This manual covers the communication protocols for Contact Points identified under the Early Notification and Assistance Conventions, as well as the protocol for users of the International Nuclear and Radiological Event Scale (INES).

Since the last edition of ENATOM, several factors have warranted some modifications to the existing arrangements: changes due to lessons identified from experience in exchanging information during incidents and emergencies, responding to requests for information and assistance during nuclear and radiological incidents and emergencies in the past few years, the Unified System for Information Exchange in Incidents and Emergencies (USIE) for Contact Points and for INES national officers, revision of the Joint Radiation Emergency Management Plan of the International Organizations (Joint Plan), and changes to better reflect that emergency situations can arise from both accidents and criminal and other unauthorized acts.

The General Conference of the IAEA in resolution GC(49)/RES/9 requested “...the Secretariat to continue to review and, as necessary, streamline its mechanisms for reporting and for sharing information...” and encouraged “...Member States to do the same.” In 2007 the General Conference of the IAEA, in resolution GC(51)/RES/11, welcomed the “...decision to develop a global, unified incident and emergency reporting system which combines the Emergency Notification and Assistance Technical Operations Manual (ENATOM) arrangements and the Nuclear Events Web-based System (NEWS) mechanism...”. In resolution GC(54)/RES/7 the General Conference of the IAEA requested to “... the Secretariat to continue its efforts to finalize and implement a global and unified system for reporting and sharing information on nuclear and radiological accidents and incidents, and to act upon the feedback provided by Member States...”. The General Conference of the IAEA, in resolution GC(54)/RES/7, also encouraged “...all Member States to enhance, where necessary, their own preparedness and response capabilities for nuclear and radiological incidents and emergencies, by improving capabilities to prevent accidents, to respond to emergencies and to mitigate any harmful consequences and, where necessary, to request support from the Secretariat or from other Member States in developing national capabilities consistent with international standards, and urges all Member States to take part in these exercises...”. The General Conference in resolution GC(55)/RES/9 “...urges Member States to reinforce emergency notification, reporting and information sharing arrangements and capabilities utilizing USIE...”.

IEComm is operational as of 1 June 2012. All States are invited to use the arrangements described here when providing relevant information about nuclear or radiological incidents or emergencies, in order to minimize the consequences and to facilitate the prompt provision of information and assistance.

## **NOTES FOR THE USER**

This manual describes arrangements operative from 1 June 2012 and supersedes the previous edition, EPR-ENATOM (2007). Responsible personnel are encouraged to immediately begin planning to make any necessary changes to their operational systems. By 1 June 2012, all copies of the previous edition of ENATOM need to be removed from operational response systems and either archived or destroyed.

The 2012 edition incorporates the following main changes over the 2007 edition:

- The manual has a new title
- Response time objectives are provided for emergency notification and the provision of follow-up information
- Event categorization and response procedures for events have been modified
- Arrangements for using the unified system for information exchange in incidents and emergencies have been elaborated
- Arrangements for INES national officers have been elaborated
- A new exercise regime has been set up with a revised scope and schedule.

The IAEA's Incident and Emergency Centre stands ready to provide any clarification on the implementation of the arrangements described here, and may be reached at the contact details provided in Section 3.4 of this manual.

## **EDITORIAL NOTE**

The views expressed do not necessarily reflect those of the governments of States that are IAEA Member States and/or Parties to either or both of the Convention on Early Notification of a Nuclear Accident and the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency, or of other relevant international intergovernmental organizations, or of the governments of other States.

Although great care has been taken to maintain the accuracy of information contained in this manual, neither the IAEA's Secretariat nor its Member States assume any responsibility for consequences that may arise from its use.

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# 1. INTRODUCTION

## 1.1. Background

At the meeting of the IAEA's Board of Governors on 16 September 1987, the Secretariat informed the Board about its intention to develop an Emergency Notification and Assistance Technical Operations Manual (ENATOM). ENATOM conceptually links the IAEA, the IAEA's Member States, Parties to the Early Notification Convention and to the Assistance Convention [1], relevant international intergovernmental organizations ('international organizations') and other States. ENATOM was designed to facilitate the practical implementation of those Articles of the Early Notification and Assistance Conventions that are operational in nature. In addition, it was designed to contain, in one manual, practical information relating to when and how to invoke either or both Conventions.

ENATOM was first issued on 18 January 1989. Member States, Parties to the Early Notification and Assistance Conventions, relevant international organizations and other States have since then regularly received updates to the manual. Since December 2000, the IAEA has reissued ENATOM regularly to take account of many factors relating to technological developments, operational concepts, the revision of international safety standards in the area of emergency preparedness and response, and Member States' expectations. Starting with this version and based on the harmonization of information exchange and reporting arrangements for INES national officers and Contact Points, the manual has been renamed to Operations Manual for Incident and Emergency Communication (IEComm). The manual is reviewed biennially and reissued when needed.

### **Safety Requirements on Preparedness and Response for a Nuclear or Radiological Emergency**

In March 2002, the IAEA Board of Governors approved a Safety Requirements publication to be issued according to the IAEA's statutory function "to establish ... standards of safety for protection of health and minimization of danger to life and property". This Safety Requirements publication, Preparedness and Response for a Nuclear or Radiological Emergency [2], which is jointly sponsored by seven international organizations, establishes the requirements for an adequate level of preparedness and response for a nuclear or radiological incident or emergency in any State. The implementation of the requirements in [2] is intended to minimize the consequences for people, property and the environment of any nuclear or radiological incident or emergency. The fulfilment of these requirements contributes to the harmonization of arrangements in the event of a transnational emergency. National authorities are expected to apply these requirements by means of adopting legislation, establishing regulations and assigning responsibilities. Of particular relevance to IEComm are certain requirements that necessitate an operational interface between States and the IAEA (paras 4.14, 4.15, 4.29, 4.30 and 4.84 of [2]).

### **Joint Radiation Management Plan of the International Organizations**

It had also been recognized that there was a need for clarification of interactions between various international organizations during a nuclear or radiological incident or emergency. In this context, a Joint Radiation Emergency Management Plan of the International Organizations [3] ('Joint Plan') was conceived and first issued in December 2000 and updated periodically. The latest update takes into account the functions, roles and operations of the new co-sponsoring organizations, experience gained in response to real events and exercises, and recommendations of the Inter-Agency Committee on Radiological and Nuclear Emergencies (IACRNE). The Joint Plan is a companion publication to IEComm, and is published and made available separately.

### **Response and Assistance Network**

IEComm addresses the issue of requesting and providing assistance in the event of a nuclear or radiological incident or emergency. For the provision of assistance, the IAEA facilitates a global Response and Assistance Network (RANET) of national response capabilities able to respond rapidly to nuclear or radiological emergencies. The IAEA's General Conference in its resolution GC(54)/RES/7 strongly encouraged "...States Parties to the Assistance Convention to support the fulfilment by the Agency of its obligations under the Convention by registering their internationally available response capabilities under RANET." The details of the operations of RANET are described in a companion publication to IEComm, and are published separately [4].

### **Other factors**

Lessons have also been identified from the ConvEx-1, ConvEx-2 and ConvEx-3 exercises conducted in previous years and from actual responses by the IAEA and States providing timely assistance to events with suspected or potential radiological consequences. Experience from routine actions has been used to standardize some of the response actions, which had been dealt with in an ad-hoc manner in the past.

## **1.2. Objective**

The objective of IEComm is that its application improves the information exchange on nuclear or radiological incidents and emergencies between the IAEA's Secretariat, the IAEA's Member States, Parties to the Early Notification and Assistance Conventions, relevant international organizations and other States. The manual gives guidance to the IAEA Member States, State Parties and relevant international organizations to develop suitable arrangements to interface with each other and the IAEA Secretariat. In addition, IEComm is also designed to contain, in one manual, practical information relating to when and how to invoke these arrangements.

## **1.3. Scope**

IEComm describes in a practical manner the IAEA's expectations regarding notification and reporting, the exchange of official information and the timely provision of assistance among the IAEA's Secretariat, its Member States, Parties to the Early Notification and Assistance Conventions, relevant international organizations and other States in events with apparent, potential or perceived radiological consequences that necessitate response actions or that raise media interest and the development of preparedness.

The IEComm arrangements described here are in the context of the Early Notification and Assistance Conventions [1], the Safety Requirements on Preparedness and Response for a Nuclear or Radiological Emergency [2], the Joint

Plan [3] and the International Nuclear and Radiological Event Scale (INES) [5]. The IEComm arrangements should not be confused with other reporting systems such as the IAEA's incident reporting system (IRS) or the illicit trafficking database (ITDB). Furthermore, this manual does not discuss the INES classification methodology, which is presented in [5]. This manual presents the arrangements for INES national officers to disseminate information on INES rated events.

## 1.4. Structure

IEComm consists of four sections. Section 1 provides the background, objective, scope and structure of the manual, together with definitions of terms and abbreviations. Section 2 provides basic information on the IAEA's Incident and Emergency System (IES). This information is provided to enable the reader to understand the response objectives, planning basis, services and concept of operations of the IES. Section 3 describes actions that need to be taken by Member States and Parties to the Early Notification and Assistance Conventions in order to develop and maintain preparedness to respond, including the management of contact details, and how the IAEA will organize and participate in trials, drills and exercises. Section 4 provides an overview of the response actions expected from States Parties, Member States, relevant international organizations and the IAEA for different scenarios.

IEComm has two Attachments, which are issued separately: IEComm Attachment 1 (Incident and Emergency Communications with the IAEA's Incident and Emergency Centre — Contact details, Checklists and Forms) is restricted in its distribution and is available only to designated national warning points and national competent authorities and Relevant International Organizations (see Section 3). IEComm Attachment 2 is the list of all official contact points and is also restricted in its distribution to national warning points, national competent authorities and relevant international organizations.

In addition to IEComm, the following two publications constitute an integral part of the incident and emergency response framework:

1. Joint Radiation Emergency Management Plan of the International Organizations, EPR-JPLAN 2010 [3].
2. The IAEA Response and Assistance Network, EPR-RANET 2010 [4].

## 1.5. Definitions

### Advisory

An official message to a national or international authority by an authorized authority providing details of a nuclear or radiological incident or emergency, without the explicit obligation or expectation to do so under international treaty or according to international safety standards, but with the purpose, inter alia: 1) to pre-empt legitimate requests from other States Parties to the Assistance Convention for 'assistance' in obtaining information<sup>1</sup>; 2) to trigger the IAEA to offer its good offices<sup>2</sup>; 3) to provide advance warning to the IAEA, other relevant organizations or other States of a developing situation so that they can be ready to respond should the situation worsen<sup>3</sup>; 4) for the IAEA, other relevant international organizations, or other States to initiate an administrative response and/or to provide advice to their governments, public or media on a developing situation of actual, potential or perceived radiological significance; 5) to otherwise alert IAEA emergency response staff.

### Authentication

The process of confirming that a message received comes from a valid source.

### Contact Point

A generic term for an organization designated by a State or an international organization that has a role to play in international exchange of information or request for and provision of assistance concerning a nuclear or radiological incident or emergency.

### Dangerous source

A source that could, if not under control, give rise to exposure sufficient to cause severe deterministic effects [6], [7].

### EMERCON

A descriptor referring to the official system for issuing and receiving notifications, urgent information exchange and assistance provision through the IAEA's Incident and Emergency Centre in the event of a nuclear or radiological incident or emergency.

### Emergency

A non-routine situation that necessitates prompt action, primarily to mitigate a hazard or adverse consequences for human health and safety, quality of life, property or the environment. This includes nuclear and radiological emergencies and conventional emergencies such as fires, release of hazardous chemicals, storms or earthquakes. It includes situations for which prompt action is warranted to mitigate the effects of a perceived hazard.

### Incident

Any unintended event, including operating errors, equipment failures, initiating events, accident precursors, near misses or other mishaps, or criminal or other unauthorized acts, the consequences or potential consequences of which are not negligible from the point of view of protection or safety.

### INES national officer

The person or his/her alternate(s) who are officially designated by the government of their State to submit INES ratings on behalf of the State.

### National Warning Point<sup>4</sup>

A Contact Point that is staffed or able to be alerted at all times for promptly responding to, or initiating a response to, an incoming notification, advisory message, request for assistance or request for verification of a message as appropriate, from the IAEA.

<sup>1</sup> See Article 2 of the Assistance Convention [1].

<sup>2</sup> See Article 5 of the Assistance Convention [1].

<sup>3</sup> So that, e.g. the IAEA can carry out its functions under Article 4 of the Early Notification Convention [1].

<sup>4</sup> In the Early Notification and Assistance Conventions, the term 'point of contact' is used. However, the term was found to be confusing and was often misused by Parties. The term 'National warning point' is used here to make it clear that this is the Contact Point that needs to be available 24 hours a day for receipt of a notification, advisory report or request for information or assistance.

<b>National Competent Authority</b>	A Contact Point that has the competency and responsibility to either notify/report a nuclear or radiological incident or emergency to the IAEA or that has the competency and responsibility to receive notifications from other States or the IAEA on nuclear or radiological emergencies which could affect its State.
<b>Notification</b>	A message submitted promptly to a national or international authority by an authorized competent authority under international treaty or according to international standards providing details of an emergency or a potential emergency; for example, as required by the Convention on Early Notification of a Nuclear Accident [1] or international safety standards [2] (see also Advisory).
<b>Notifying State</b>	The State that is responsible for notifying potentially affected States and the IAEA of an event or situation of actual, potential or perceived radiological significance for other States. This includes: 1) the State Party that has jurisdiction or control over the facility or activity (including space objects) in accordance with Article 1 of the Early Notification Convention, or 2) the State that initially detects, or discovers evidence of, a transnational emergency, for example by: detecting significant increases in atmospheric radiation levels of unknown origin; detecting contamination in transboundary shipments; discovering a dangerous source that may have originated in another State; or diagnosing medical symptoms that may have resulted from exposure outside the State.
<b>Nuclear installation</b>	A nuclear fuel fabrication plant, research reactor (including subcritical and critical assemblies), nuclear power plant, spent fuel storage facility, enrichment plant, reprocessing facility or nuclear powered vessel.
<b>Offer of good offices</b>	A message sent to a Contact Point of an affected or potentially affected State offering the IAEA services.
<b>Relevant international organization</b>	An international intergovernmental organization that, according to the information provided to the IAEA, has a significant legal or statutory role and/or capability to provide advice or assistance in the event of a nuclear or radiological incident or emergency.
<b>Reporting State</b>	The State that is informing potentially affected States and the IAEA of an event of actual, potential or perceived radiological significance. The State sends the information voluntarily (see Advisory), without a legal obligation to do so.
<b>Significant transboundary release</b>	A release of radioactive material to the environment that may result in doses or levels of contamination beyond national borders from the release which exceed international intervention levels or action levels for protective actions [2], including food restrictions and restrictions on commerce.
<b>State Party</b>	A State having deposited an instrument of ratification, acceptance, approval or accession for the Early Notification Convention or for the Assistance Convention.



**Transnational emergency**

A nuclear or radiological emergency of actual, potential or perceived radiological significance for more than one State. This includes:

- (1) a significant transboundary release of radioactive material (however, a transnational emergency does not necessarily imply a significant transboundary release of radioactive material.);
- (2) a general emergency at a facility or other event that could result in a significant transboundary release (atmospheric or aquatic) of radioactive material;
- (3) discovery of the loss or illicit removal of a dangerous source that has been transported across or is suspected of having been transported across a national border;
- (4) an emergency resulting in significant disruption to international trade or travel;
- (5) an emergency warranting the taking of protective actions for foreign nationals or embassies in the State in which it occurs;
- (6) an emergency resulting in or potentially resulting in severe deterministic effects and involving a fault and/or problem (such as in equipment or software) that could have serious implications for safety internationally; and
- (7) an emergency resulting in or potentially resulting in great concern among the population of more than one State owing to the actual or perceived radiological hazard.

**Verification**

The process of confirming that the information in a message is properly understood (see Authentication).

## 1.6. Abbreviations

CONVEX	Convention Exercise
EMERCON	Emergency Convention
ENATOM	Emergency Notification and Assistance Technical Operations Manual
ENF	Event Notice Form
ERF	Event Rating Form (for submitting INES rated events)
FAO	Food and Agriculture Organization of the United Nations
GC(Y Y)/RES/X	IAEA General Conference (YY = session number) resolution (X = number)
GENF	EMERCON General Emergency at Nuclear Facility Form
IACRNE	Inter-Agency Committee on Radiological and Nuclear Emergencies
IAEA	International Atomic Energy Agency
IEC	Incident and Emergency Centre (of the IAEA)
IEComm	Operations Manual for Incident and Emergency Communication
IES	Incident and Emergency System (of the IAEA)
INES	International Nuclear and Radiological Event Scale
INTERPOL	International Criminal Police Organization
IRIX	International Radiological Information Exchange Format
IRS	Incident Reporting System
ITDB	Illicit Trafficking Database
MPA	EMERCON Radiation Measurements and Protective Actions Form
MTPI	Division of Public Information (of the IAEA)
NCA	National Competent Authority
NCA(A)	National Competent Authority for an Emergency Abroad
NCA(D)	National Competent Authority for a Domestic Emergency
NEWS	Nuclear Events Web-based System
NPP	Nuclear Power Plant
NWP	National Warning Point
OCHA	United Nations Office for the Coordination of Humanitarian Affairs
OOSA	United Nations Office for Outer Space Affairs
PAHO	Pan American Health Organization
RANET	Response and Assistance Network
RFA	Request for Assistance Form
RSMC	Regional Specialized Meteorological Centre (of the WMO)
SCC	Security Control Centre – United Nations Security and Safety Services
SRF	EMERCON Standard Reporting Form
URL	Universal Resource Locator (address on the World Wide Web)
USIE	Unified System for Information Exchange in Incidents and Emergencies
UTC	Universal Time Coordinated
WCO	World Customs Organization
WHO	World Health Organization
WMO	World Meteorological Organization

## 1.7. Member States and Parties

Status as at 7 May 2012. The latest status can be found on the IAEA web site.

**1 Party to the Early Notification Convention**

**3 Not a Member State of the IAEA**

**5 Membership approved by General Conference but only in effect once necessary legal instruments are deposited**

**2 Party to the Assistance Convention**

**4 International Organization**

AFGHANISTAN	CROATIA <sup>1,2</sup>	JAMAICA	NEPAL	SRI LANKA <sup>1,2</sup>
ALBANIA <sup>1,2</sup>	CUBA <sup>1,2</sup>	JAPAN <sup>1,2</sup>	NETHERLANDS <sup>1,2</sup>	SUDAN
ALGERIA <sup>1,2</sup>	CYPRUS <sup>1,2</sup>	JORDAN <sup>1,2</sup>	NEW ZEALAND <sup>1,2</sup>	SWAZILAND <sup>5</sup>
ANGOLA <sup>1</sup>	CZECH REPUBLIC <sup>1,2</sup>	KAZAKHSTAN	NICARAGUA <sup>1,2</sup>	SWEDEN <sup>1,2</sup>
ARGENTINA <sup>1,2</sup>	DEMOCRATIC REPUBLIC OF THE CONGO	KENYA	NIGER	SWITZERLAND <sup>1,2</sup>
ARMENIA <sup>1,2</sup>	DENMARK <sup>1</sup>	KOREA, REPUBLIC OF <sup>1,2</sup>	NIGERIA <sup>1,2</sup>	SYRIAN ARAB REPUBLIC
AUSTRALIA <sup>1,2</sup>	DOMINICAN REPUBLIC	KUWAIT <sup>1,2</sup>	NORWAY <sup>1,2</sup>	TAJIKISTAN <sup>1,2</sup>
AUSTRIA <sup>1,2</sup>	DOMINICA	KYRGYZSTAN	OMAN	THAILAND <sup>1,2</sup>
AZERBAIJAN	ECUADOR	LAO PEOPLE'S DEMOCRATIC REPUBLIC	PAKISTAN <sup>1,2</sup>	THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA <sup>1,2</sup>
BAHRAIN <sup>1</sup>	EGYPT <sup>1,2</sup>	LATVIA <sup>1,2</sup>	PALAU <sup>5</sup>	TOGO <sup>5</sup>
BANGLADESH <sup>1,2</sup>	EL SALVADOR <sup>1,2</sup>	LEBANON <sup>1,2</sup>	PANAMA <sup>1,2</sup>	TONGA <sup>5</sup>
BELARUS <sup>1,2</sup>	ERITREA	LESOTHO	PAPUA NEW GUINEA	TUNISIA <sup>1,2</sup>
BELGIUM <sup>1,2</sup>	ESTONIA <sup>1,2</sup>	LIBERIA	PARAGUAY	TURKEY <sup>1,2</sup>
BELIZE	ETHIOPIA	LIBYA <sup>2</sup>	PERU <sup>1,2</sup>	UGANDA
BENIN	FINLAND <sup>1,2</sup>	LIECHTENSTEIN <sup>1,2</sup>	PHILIPPINES <sup>1,2</sup>	UKRAINE <sup>1,2</sup>
BOLIVIA <sup>1,2</sup>	FRANCE <sup>1,2</sup>	LITHUANIA <sup>1,2</sup>	POLAND <sup>1,2</sup>	UNITED ARAB EMIRATES <sup>1,2</sup>
BOSNIA AND HERZEGOVINA <sup>1,2</sup>	GABON	LUXEMBOURG <sup>1,2</sup>	PORTUGAL <sup>1,2</sup>	UNITED KINGDOM <sup>1,2</sup>
BOTSWANA <sup>1,2</sup>	GEORGIA	MADAGASCAR	QATAR <sup>1,2</sup>	UNITED REPUBLIC OF TANZANIA <sup>1,2</sup>
BRAZIL <sup>1,2</sup>	GERMANY <sup>1,2</sup>	MALAWI	REP. OF MOLDOVA <sup>1,2</sup>	UNITED STATES OF AMERICA <sup>1,2</sup>
BULGARIA <sup>1,2</sup>	GHANA	MALAYSIA <sup>1,2</sup>	ROMANIA <sup>1,2</sup>	URUGUAY <sup>1,2</sup>
BURKINA FASO	GREECE <sup>1,2</sup>	MALI	RUSSIAN FEDERATION <sup>1,2</sup>	UZBEKISTAN
BURUNDI	GUATEMALA <sup>1,2</sup>	MALTA	RWANDA <sup>5</sup>	VENEZUELA, BOLIVARIAN REPUBLIC OF
CAMBODIA <sup>1</sup>	HAITI	MARSHALL ISLANDS	SAINT VINCENT & THE GRENADINES <sup>1,2,3</sup>	VIET NAM <sup>1,2</sup>
CAMEROON <sup>1,2</sup>	HOLY SEE	MAURITANIA, ISLAMIC REPUBLIC OF <sup>1,2</sup>	SAUDIA ARABIA <sup>1,2</sup>	YEMEN
CAPE VERDE <sup>5</sup>	HONDURAS	MAURITIUS <sup>1,2</sup>	SENEGAL	ZAMBIA
CENTRAL AFRICAN REPUBLIC	HUNGARY <sup>1,2</sup>	MEXICO <sup>1,2</sup>	SERBIA <sup>1,2</sup>	ZIMBABWE
CHAD	ICELAND <sup>1,2</sup>	MONACO <sup>1,2</sup>	SEYCHELLES	EURATOM <sup>1,2,4</sup>
CHILE <sup>1,2</sup>	INDIA <sup>1,2</sup>	MONGOLIA <sup>1,2</sup>	SIERRA LEONE	FAO <sup>1,2,4</sup>
CHINA <sup>1,2</sup>	INDONESIA <sup>1,2</sup>	MONTENEGRO	SINGAPORE <sup>1,2</sup>	WHO <sup>1,2,4</sup>
COLOMBIA <sup>1,2</sup>	IRAN, ISLAMIC REPUBLIC OF <sup>1,2</sup>	MOROCCO <sup>1,2</sup>	SLOVAKIA <sup>1,2</sup>	WMO <sup>1,2,4</sup>
CONGO	IRAQ <sup>1,2</sup>	MOZAMBIQUE <sup>1,2</sup>	SLOVENIA <sup>1,2</sup>	
COSTA RICA <sup>1,2</sup>	IRELAND <sup>1,2</sup>	MYANMAR <sup>1</sup>	SOUTH AFRICA <sup>1,2</sup>	
CÔTE D'IVOIRE	ISRAEL <sup>1,2</sup>	NAMIBIA	SPAIN <sup>1,2</sup>	
	ITALY <sup>1,2</sup>			

## 2. THE IAEA INCIDENT AND EMERGENCY SYSTEM

### 2.1. Framework

In order to meet its legal responsibilities, the IAEA Secretariat needs to be prepared to respond appropriately and efficiently to any incident or emergency situation that may have actual or potential radiological consequences to health, property or the environment and which would urgently require the IAEA Secretariat's involvement. In addition, the IAEA Secretariat also needs to be in the position to respond to requests for assistance.

To address these issues, the IAEA established the Incident and Emergency System (IES) consisting of a 24-hour warning point<sup>5</sup> and operational focal point in the Secretariat: the IAEA's Incident and Emergency Centre (IEC) which maintains a 24/7 alert and response capability. This capability can be used for requests for assistance and for urgent information exchange in situations that may give rise to radiological consequences, irrespective of their cause. States and relevant international organizations can promptly send or review information on radiation related events with potential or suspected consequences for the public. Media/public requests for information sent to the IEC are rerouted to the IAEA's Division of Public Information (MTPI).

#### NOTE

**The IAEA cannot ensure immediate response if a message is sent to any contact address in the IAEA other than directly to the IEC.**

**The IAEA also cannot ensure that an initial notification message can be routed from a notifying State through the IEC to a nearby State in time for implementation of effective urgent protective measures for some postulated emergencies at some types of facility. Consequently, the IAEA urges relevant States to put in place bilateral arrangements so that a State notifies directly potentially**

<sup>5</sup> The Security Control Centre (SCC), which is located in the Vienna International Centre, serves as an integrated 24-hour warning point and telecommunications backup for the IAEA's IEC. Any incoming emergency fax message or telephone call, if correctly addressed, arrives simultaneously at the SCC and at the IEC.

**affected States of an emergency that warrants the immediate application of urgent protective measures.**

## 2.2. Objectives

The prime objective of the IES is to facilitate the minimization of consequences through:

- Exchange of information among States/relevant international organizations, such as the official information provided by States and the provision of information on potential consequences and prognosis of the possible emergency progression;
- Provision of assistance to States/international organizations upon request;
- Provision of clear, factually correct, timely, consistent, objective and easily understandable public information;
- Coordination of the inter-agency response.

## 2.3. Concept of operations

The IES operates in three modes: *Normal/Ready*<sup>6</sup> mode, *Basic response*<sup>7</sup> mode and *Full response*<sup>8</sup> mode. Response actions and urgency of the response will vary according to the magnitude and potential consequences of the event.

### 2.3.1. Exchange of information

State Parties are obliged to send initial notification forthwith directly or through the IAEA to States which might be affected. Member States have the obligation to send a notification of transnational emergencies promptly. States are encouraged to send advisory messages of events directly or through the IAEA to States which might be affected. It should be noted that a transnational emergency is not necessarily transboundary.

For facilities close to national borders (when emergency planning zones go beyond national borders), a notification is expected to be sent directly (and to the IAEA) to the relevant neighbouring countries at the same time it is sent to the off-site authorities. Even when facilities are located far away from national borders, notifications are expected to be sent forthwith (i.e., within less than 2 hours) after the declaration of a

<sup>6</sup> In *Normal/Ready mode*, the IEC is the focal point for incoming messages. It is not staffed continuously. On-call officers are available to immediately respond. This mode includes all day-to-day activities designed to ensure readiness and is the default condition in which the IEC is maintained. The IEC will remain in this mode through initial discussions of any incoming message regarding a situation with apparent, suspected or potential radiological consequences, particularly before the situation is confirmed. Assistance missions may be deployed in response to a request for assistance.

<sup>7</sup> In *Basic response mode*, the IEC is not staffed continuously. On-call officers remain available to immediately respond to incoming messages. If appropriate, some staff may be activated and additional staff may be placed on standby and preparations may be implemented to move rapidly to *Full response mode*. Extra assessments are made during office hours from staff activated by the IEC. Assistance missions may be deployed in response to a request for assistance.

<sup>8</sup> In *Full response mode* the IEC is staffed continuously (24 hours a day with shift changes) and manages the IAEA's response actions.



nuclear or radiological emergency or when changes of the emergency class occur directly or through the IAEA (see Appendix VI in [8]). The IEC expects to receive initial information from a National Competent Authority (NCA).

This information will be authenticated and the message content verified with the NCA of the State that issued it. If the information is confirmed, the IES will be activated accordingly and the notification will be distributed to all Contact Points. The IEC distributes an initial notification not later than 2 hours after receiving it, while aiming at a much shorter response time.

The IEC may follow up with the NCA information received from Contact Points or from the INES national officers if the event warrants response.

The IEC rapidly screens follow-up information provided by the notifying State and, depending on its urgency: (1) sends it to NCA(A)s and Permanent Missions of other relevant States and relevant international organizations, as appropriate, and/or (2) posts it on USIE. Follow-up information has to contain all information important for minimizing the transboundary or transnational radiological consequences, which includes results from environmental radiation monitoring. Contact Points are encouraged to send radiation monitoring data in editable electronic format (e.g., in the IRIX format<sup>9</sup>) to the IEC. If information is received in another language but English, and if English translations will not be made available timely, the IEC makes an unofficial translation of the information and makes this unofficial translation available to other relevant States and international organizations with the consent of the State that provided the original information.

Follow-up information needs to be sent by the notifying State promptly (i.e., not later than 4 hours) after the notification of a nuclear or radiological emergency. For facilities close to national borders, it is expected that follow-up information is sent directly to neighbouring countries (and to the IAEA) at the same time as this information is made available to authorities at the national level.

Information with confidentiality marking, personal medical information or information whose distribution might pose a security risk will not be provided to Contact Points.

In addition, the IEC assesses and makes available information on the potential consequences of a nuclear or radiological emergency, including analysis of available information and prognosis of possible emergency progression based on evidence and scientific knowledge available to States and international organizations.

The relevant National Competent Authority or a State's Permanent Mission to the IAEA may request information about an on-going situation in another State. The IEC, after authenticating the request, will forward it to the relevant State that is expected to respond promptly to the IEC. The IEC, when appropriate, rapidly screens the reply for consistency, plausibility, legibility and comprehension and dispatches the response to the requesting National Competent Authority. However, if the situation is not confirmed, the IEC will inform the Contact Point that requested the information accordingly.

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<sup>9</sup> A copy of the format is available on the USIE web site for download.

If there are media reports, inquiries or other unconfirmed reports of a transnational emergency or an incident of international concern, the IEC may contact the National Warning Point (NWP) of the relevant State for verification. If the situation is confirmed, the IEC requests the relevant NCA(D) to send an initial notification or an advisory message, as appropriate, to the IEC.

### **2.3.2. Provision of assistance**

The relevant National Competent Authority or a State's Permanent Mission to the IAEA may request assistance or other services such as event investigation. The IEC provides/facilitates assistance in making an initial assessment with resources allocated for this purpose (i.e., a fact finding mission) and may coordinate/facilitate the establishment of an international Joint Assistance Team by using established assistance mechanisms such as RANET.

### **2.3.3. Provision of public information**

The IAEA will make all reasonable efforts to coordinate the release of information with a notifying/reporting State, other relevant States and international organizations, with due regard to their respective areas of responsibility. The IAEA monitors the international news media to identify relevant articles, inconsistencies in articles against authoritative information and rumours, and request clarification as appropriate from the relevant NCA. Timely, factually correct, objective and easily understandable information (including analysis of available official information, assessment of possible consequences and prognosis of possible emergency progression) will be published on the IAEA's public web site and/or made available to the news media (if appropriate). Contact Points are consulted to obtain clarity on information provided and are requested to provide additional information as needed. The IAEA extracts and summarizes any unrestricted and authenticated information received from Contact Points about the situation and posts it on the IAEA's public web site.

### **2.3.4. Coordination of the inter-agency response**

The framework for inter-agency response coordination is described in the Joint Radiation Emergency Management Plan of the International Organizations [3]. Detailed concepts of operations have been agreed between the IAEA and the Food and Agricultural Organization of the United Nations, the World Health Organization and the World Meteorological Organization, and further agreements with other international organizations are being developed.

The IEC sends a notification/report to all relevant international organizations which have registered as Contact Points and confirms that the initial notification has been received. A liaison officer is available for any communication between the IEC and the international organizations. The IEC may set up video/telephone conferences to exchange information and to coordinate common issues between the relevant international organizations, such as the issuing of joint press releases.

### **2.3.5. Termination and follow up actions**

When the situation is contained and stable and does not present any further immediate risk to persons and the environment, or when the IEC does not anticipate any urgent requests for advice or assistance, the IEC will announce the termination of response.

If there is a need for follow-up actions, an implementation plan may be prepared and will be shared with the parties concerned.

## 3. CONTACT POINTS AND PREPAREDNESS TASKS

### 3.1. Designation and contact details

#### 3.1.1. Obligations and expectations

##### Parties to the Conventions

Each State and international organization party to the Early Notification and Assistance Conventions **must** designate and make known to the IAEA its point of contact and competent authorities. This manual (see section 3.2) establishes further definitions (based on the definitions in the conventions) for the roles of Contact Points, to allow more efficient operations.

##### States not Party

Any other Member State, in order to meet the requirements in [2]<sup>10</sup>, designate its National Warning Point and National Competent Authorities for these purposes and make them known to the IAEA. The IAEA Secretariat also strongly encourages all non-Member States of the IAEA to designate their National Warning Points and National Competent Authorities for these purposes and to make them known to the IAEA.

##### All Member States

Each Member State may designate an INES national officer<sup>11</sup>, and make them known to the IAEA.

##### International organizations

International organizations, which are not yet co-sponsors of the Joint Plan, wishing to be considered 'relevant' for the purposes of either Convention, send a letter to the IAEA making such a request and attaching as appropriate, information that would allow the IAEA to recognize them as having a significant legal or statutory role and/or capability to provide advice or assistance in the event of a nuclear or radiological incident or emergency.

#### 3.1.2. Designation of Contact Points

Each State, through either its **Ministry of Foreign Affairs or Permanent Mission to the IAEA**, or each relevant international organization, makes known in a written communication to the IAEA its designations for its National Warning Point and National Competent Authorities and its INES national officer. Changes to these designations must also be communicated in advance through these same official

<sup>10</sup> See para. 4.29 of [2].

<sup>11</sup> The General Conference (GC(54)/RES/7) urged Member States to designate INES national officers.

channels. Changes to the communication details of a designated Contact Point or a designated INES national officer can be directly sent by the Contact Point or INES national officer.

Relevant international organizations make known in a written communication to the IAEA their designations for their warning point and competent authority.

### 3.1.3. Contact details

Contact details (fax numbers, telephone numbers (landline, mobile or satellite), email addresses and numbers or IP addresses for video conferencing) and relevant contact persons such as the USIE Administrators and the National Assistance Coordinators and changes thereto may be communicated in writing, in advance of the date of change, **directly from these designated Contact Points to the IEC (using the contact details in 3.4.2)** and copied to the Permanent Mission to the IAEA, or from the Mission itself. These details and any changes to them need to be communicated to any other relevant body in the State, especially other Contact Points in the country. The IEC will test the changed communication details for National Warning Points and National Competent Authorities for a Domestic Emergency and for an Emergency Abroad (see below).

## 3.2. Expected functions

According to the national emergency systems in place in States, the functions of the Competent Authorities under the terms of both the Early Notification and Assistance Conventions may be combined and performed by one or more institutions. Unless otherwise informed, the IAEA assumes that the Competent Authorities nominated under the Early Notification and Assistance Conventions have the same authority for issuing notifications and providing information concerning transnational emergencies as specified in [2].

3

### NWP

#### 3.2.1. National warning point — NWP

The NWP role is assigned to a **single** institution in a State, which has been designated by its government to receive an initial notification/advisory/follow-up message and/or request for assistance, information or verification and **immediately** to act upon it on a 24/7 basis. The NWP's functions are independent of those of the NCA. Nevertheless, an NCA could also have the functions of an NWP.

The NWP is expected to be part of a national emergency response system and possesses both the authority and the means to activate it. The service is obligated, under the terms of the Early Notification and Assistance Conventions and the requirements of [2], to be available continuously, i.e. staffed and able to be alerted 24 hours per day, seven days per week<sup>12</sup>. If requested to consider providing assistance, it needs to be able to rapidly forward any request received to the relevant NCA. The NWP must have persons on duty or have speedy access to persons who can understand and speak English. The NWP has a capability available at all times to receive fax messages and to establish direct telephone communications with the IEC. The NWP has internet capability for sending and receiving electronic mail and registers staff as Liaison Officers on the USIE web site for accessing and

<sup>12</sup> For example, in the event of an urgent request for verification of an unconfirmed report of an emergency in a State, the IAEA may contact the NWP of that State, which needs to be capable to rapidly obtain verification of such a report from the relevant NCA.

acknowledging receipt of messages posted. The NWP needs to register one staff member as USIE Administrator.

## NCA(D)

### 3.2.2. National Competent Authority — NCA(D) — for a domestic emergency

The NCA(D) role is assigned to one or more institutions within a State authorized by its government to issue an initial notification/advisory/follow-up message, as appropriate, or to reply to a request for verification/information regarding a nuclear or radiological incident or emergency originating at a facility or location on the territory or under jurisdiction of the State. Each assigned NCA(D) needs to be competent to verify relevant information provided during a nuclear or radiological incident or emergency at a facility or in a location under the institution's authority. The NCA(D) is authorized by its government in such a way that, in the event of a nuclear or radiological incident or emergency, it may direct a request for assistance to the IAEA. The NCA(D) coordinates the request for assistance with all other NCAs in the State.

A State could designate more than one NCA(D). Most importantly, all NCA(D)s have to be in an appropriate position within the State's national emergency response system to send or provide relevant authoritative information during a nuclear or radiological incident or emergency. It is expected that the NCA(D) has arrangements in place to get relevant authoritative information during a nuclear or radiological incident or emergency from the relevant authorities within the State (e.g., information on patients after overexposures, or activity concentration levels in food products after a contamination event that is not in the NCA(D) area of authority). The NCA(D) does not normally need to be continuously staffed, but in the event of a nuclear or radiological incident or emergency the relevant NCA(D) is expected to be activated and to coordinate with the NWP as well as other relevant organizations. It has a capability available at all times to receive fax messages and to establish direct telephone communications with the IEC. The NCA(D) has internet capability for sending and receiving electronic mail and registers staff as Publishers to publish messages on USIE. It is recommended that staff who are responsible to acknowledge USIE alert messages (Liaison Officer role) and who compose reporting forms (Editor role) are registered on USIE with the appropriate roles. The NCA(D) needs to register one staff member as USIE Administrator.

## NCA(A)

### 3.2.3. National Competent Authority — NCA(A) — for an emergency abroad

The NCA(A) role is assigned to the **single** institution within a State that is expected to verify or arrange for the verification of any relevant information provided during a nuclear or radiological emergency originating in another State, as well as being in a position to receive notifications, advisory messages, follow up information and requests for assistance. In the event of a nuclear or radiological incident or emergency, the NCA(A) is authorized by its Government to direct requests for assistance to the IAEA. The NCA(A) coordinates the request for assistance with all other National Competent Authorities.

This institution is in an appropriate position within its own national emergency response system for receiving, sending or providing information during a nuclear or radiological incident or emergency originating in another State. The Contact Point for the NCA(A) need not normally be continuously staffed but, in the event of a nuclear or radiological incident or emergency in another State, the NCA(A) has arrangements to rapidly activate following a notification of a transnational emergency being received by the NWP. It has a capability at all times to receive fax messages and to establish direct telephone communications with the IEC. The NCA(A) has internet capability



for sending and receiving electronic mail and registers staff as Publishers on USIE. It is recommended that staff who are responsible to acknowledge USIE alert messages (Liaison Officer role) and who draft reporting forms (Editor role) are registered on USIE with the appropriate roles. The NCA(A) needs to register one staff member as USIE Administrator.

#### **3.2.4. Permanent missions to the IAEA**

The Permanent Mission to the IAEA will receive copies of relevant communications sent out from the IEC to its State's Contact Points while the IEC is activated, and have read-only access to the USIE web site. It is highly desirable that the Permanent Mission has internet capability to be able to send and receive electronic mail and access the USIE web site. The mission will also be requested to assist in the event of communication problems between the IEC and the State concerned, and if the State has not yet nominated a National Warning Point or National Competent Authorities. The mission of a State requesting assistance may itself be requested to assist with matters such as obtaining visas for personnel entering their State and with customs clearance for equipment being brought into the State as part of providing assistance.

#### **3.2.5. INES national officer**

This is the single person designated by a Member State that is expected to rate an event according to the INES methodology and who ensures that events with a final reading of 2 or higher, or events attracting international public interest, are posted on USIE and on the public NEWS web site. The INES national officer can have alternates who have the same rights as the INES national officer. The INES national officer has read-write access to the event rating form on USIE. The public NEWS web site is a read-only site.

#### **3.2.6. Relevant international organizations**

The IEC also maintains communications arrangements with relevant international organizations in order to coordinate any inter-agency response to nuclear or radiological incidents and emergencies. A number of international organizations are Parties to the Early Notification and Assistance Conventions and have established warning points, and others have agreed arrangements with the IEC for the purpose of response coordination. The framework for the coordination of the inter-agency response is provided in the Joint Plan [3].

### **3.3. Preparedness tasks**

Procedures in the national language need to be prepared for staff manning the National Warning Point and the National Competent Authorities. These procedures are based on the response procedures given in Section 4 and Attachment 1<sup>13</sup> (issued separately), and need to be coordinated with the other Contact Points in the State. It is important that these staff members are regularly trained in their procedures, ideally understanding and speaking English, and able to recognize an incoming EMERCON message and take immediate appropriate actions. Suitable equipment and communication capabilities need to be provided (including an accurate clock showing UTC). Relevant EMERCON forms have to be completed in advance of need, where possible (for example, with geographical coordinates of nuclear facilities), and matched

<sup>13</sup> Attachment 1 is available upon request by the officially designated competent authorities and contact points under the Early Notification Convention and the Assistance Convention.

with national arrangements for issuing notifications and exchanging information<sup>14</sup>. More information on developing emergency preparedness can be found in [8], [9] and [10].

### 3.4. Communication with the IEC

#### 3.4.1. Validity of contact details

Promptly after receiving the name and contact details or changes thereto of the designated National Competent Authorities and National Warning Point, as described above in Designation and contact details (Section 3.1), the IEC will:

- a) ensure that the correct channels have been used for designating National Warning Points and National Competent Authorities; if not, the IEC will submit the information received to the State's Permanent Mission to the IAEA for appraisal and confirmation;
- b) check that the contact details for the National Warning Point/National Competent Authorities are correct by performing a simple communications test on or shortly after the date of change;
- c) include the information received in its Contact Point database, which is accessible through the USIE web site;
- d) make available to the IAEA's Member States, to the Parties of the two Conventions and to relevant international organizations the updated list of Contact Points as a downloadable electronic document on the USIE web site twice a year in April and October.

#### 3.4.2. Details for routine communications with the IEC

National Competent Authorities, National Warning Points, INES national officers, Permanent Missions to the IAEA, international organizations and others may wish to consult the IEC on matters concerning the Early Notification and Assistance Conventions [1], the Safety Requirements [2] and emergency arrangements in general.

The IEC is ready to receive any **routine non-urgent** written (for example, changes to contact details) or verbal communication from the Permanent Missions to the IAEA or relevant Contact Points, as appropriate, through:



**routine fax number: +43 1 2600 7 29309; or**

**routine telephone numbers: +43 1 2600 22026 (or 22745 as backup)**

**routine email address: [iec3@iaea.org](mailto:iec3@iaea.org)**

**Communication in the event of a nuclear or radiological incident or  
emergency need to be through the arrangements described in  
IEComm Attachment 1.<sup>15</sup>**

<sup>14</sup> Training should be provided on submitting information to the IAEA using the USIE interface over the internet, but appropriate paper EMERCON forms or templates should still be maintained as a contingency arrangement.

<sup>15</sup> Attachment 1 is available upon request by the officially designated competent authorities and contact points under the Early Notification Convention and the Assistance Convention.

**3.4.3. Practical emergency communication channels**

The IEC does not recognize information sent in any encoded form as a valid communication. All communication needs to be in a non-encoded form and preferably in English.

The following modes of emergency communication with the IAEA are currently available.

**Facsimile**

Fax may be used for initial notification, advisory messages and changes of emergency class/type from and to Contact Points, as well as for providing follow-up information, and for requesting information and assistance. Fax is a primary mechanism for the IAEA to inform Contact Points of any notification received. Fax is also the primary backup channel in the case of malfunction of the USIE web site or the Internet in general.

**Emergency web site**

The IEC offers a secure exchange of incident and emergency information through an official protected web site (USIE): for submission of initial notification, advisory messages, event messages, requesting information and requesting assistance by relevant Contact Points to the IEC, together with attached electronic documents; for receiving alerts (USIE uses a Contact Points primary fax, email and mobile phone as alert channels), accessing messages and downloading relevant documents<sup>16</sup>. Information is primarily made available in English. Information received by the IAEA is published on USIE, respecting any confidentiality issues, to relevant countries/organizations. USIE can be accessed with a log-on ID and password obtained through the IAEA NUCLEUS web site (<http://nucleus.iaea.org>). A registration request for one or more users needs to be sent by e-mail to [usie.contact-point@iaea.org](mailto:usie.contact-point@iaea.org), including a signature of the requester (full name and official position) and his/her/their nucleus account(s), from an e-mail address registered with one of the nominated Contact Points. All Contact Points need to register staff for accessing USIE (Reader role), acknowledging messages (Liaison Officer role), drafting messages (Editor role) and publishing messages (Publisher role) depending on their contact point function (NWP, NCA(D) or NCA(A)). In addition, each organization has to have one staff member registered as USIE Administrator, who can activate the organizational alert channels in USIE.

**3****Telephone**

Telephone is an optional channel for use by National Competent Authorities for requesting information, verification of receipt or authentication<sup>17</sup>. The IEC uses the telephone to authenticate and to verify notification and/or advisory messages arriving at the IEC as well as to establish a direct communication link with any National Warning Points and/or National Competent Authorities. All telephone conversations made by and with the IEC on operational telephone channels are recorded. Note that the preferred language is English, and States are requested to use English for telephone communications with the IEC whenever possible.

**Electronic mail**

Email with attachments may be used for providing follow-up information and for requesting information from the IEC after the initial contact with the IEC has been established.

<sup>16</sup> Submitted by Contact Points; and for Contact Points to confirm to the IEC that they have taken note of a particular message.

<sup>17</sup> The telephone may also be used as a contingency if other modes of communication fail for submitting initial notifications, advisory and follow-up messages.

**Do NOT use email as the communication channel for the initial notification or advisory messages, for reporting a change of emergency class or for requesting assistance.**

**Video conference** Video conferencing can be used with one or a few partners after agreement on the time and any technical details. The IEC will set up a test connection in order to check the setup.

**Do NOT use video conferencing as the communication channel for the initial notification or advisory messages, for reporting a change of emergency class or for requesting assistance.**

#### 3.4.4. Amendments and bulletins

The IEC envisages publishing the next edition of IEComm in 2014. It will issue amendments to the current edition if it becomes necessary and will distribute IEC information bulletins quarterly with relevant information to all National Warning Points and National Competent Authorities. Critical information will require confirmation of receipt from States.

The IEC will additionally endeavour<sup>18</sup> to collect and disseminate to States Parties and Member States information concerning:

- a) experts, equipment and materials that could be made available in the event of nuclear or radiological incidents and emergencies, by publishing information about RANET capabilities;
- b) methodologies, techniques and available results of research relating to response to nuclear or radiological incidents and emergencies, by publishing relevant material.

### 3.5. Emergency trials, drills and exercises (ConvEx)

Standard drills and exercises are prepared, performed and evaluated to test key response objectives within the scheme described below. The annual exercise schedules are made available at the end of the year for the following year on the USIE web site. The results and appropriate evaluations will be made available on USIE after each exercise.

Other trials outside of this scheme can be performed for examining possible new arrangements. Invitations to participate on a voluntary basis will be sent on routine communication channels several weeks in advance.

All trials, drill and exercise messages in this framework **must** be clearly marked with the words 'EXERCISE' in English.

<sup>18</sup> Article 5 of the Assistance Convention [1].

**3.5.1. ConvEx-1**

**Objective 1: to test that National Warning Points are continuously available, whether fax contacts and USIE alert channels are accurate and that Contact Points can access USIE properly.**

**ConvEx-1a**

**ConvEx-1a:** to test that National Warning Points for receiving notifications are available continuously

The IEC informs all Contact Points in advance of a ConvEx-1a that it plans to conduct this exercise at least 14 days before the exercise will be conducted. It is expected that Contact Points activate their alert channels on the USIE Exercise web site so they can practice using these. The exact date and time of this exercise are not announced; however, the month in which this exercise is conducted is indicated in the exercise schedule published on USIE.

Once per year, the IEC sends an exercise message by fax to all NWP and NCA(A)s. A corresponding event is published on the USIE Exercise web site and USIE Exercise notifications are sent over the USIE Exercise alert channels to all National Warning Points and National Competent Authorities. It is expected that:

- NWP send an acknowledgement of receipt by fax or email within 30 minutes to the IEC;<sup>19</sup> and
- NCA(A)s, no later than their next working day, access the USIE Exercise web site and acknowledge the exercise message on the USIE Exercise web site.

**ConvEx-1b**

**ConvEx-1b:** to test that National Warning Points are available continuously and that National Competent Authorities can promptly respond to received notifications

The IEC informs all Contact Points in advance of a ConvEx-1b that it plans to conduct this exercise within the next 14 days. Contact Points activate their alert channels on the USIE Exercise web site so they can practice using these channels. The exact date and time of the exercise is not announced; however, the month in which this exercise is conducted is indicated in the exercise schedule published on the USIE web site.

Once per year, the IEC sends an exercise message to all Contact Points by fax, publishes an event on the USIE Exercise web site and requests acknowledgments on the USIE Exercise web site. It is expected that:

1. NWP send an acknowledgement of receipt by fax within 30 minutes to the IAEA's IEC<sup>20</sup>;
2. NWP promptly alert the relevant NCA(A)s;

<sup>19</sup> Contact Points that are not defined according Section 3 of this manual are expected to respond like a National Warning Point.

<sup>20</sup> Contact Points that are not defined according to Section 3 of this manual access the USIE Exercise web site, find the exercise message and confirm their access to the USIE Exercise web site on the reply fax message.

3. As soon as possible, the relevant NCA(A)s access the USIE Exercise web site, read and acknowledge the message on this site. The target time for acknowledgement of the message on the USIE Exercise web site is 2 hours.

**ConvEx-1c**

**ConvEx-1c:** to validate the USIE Administrators' access to USIE

USIE Administrators have the right to change their organization's alert channels on the USIE and USIE Exercise web sites. This is an important function and therefore, the IEC contacts all USIE Administrators once per year by email and ask them to confirm their ability to access USIE and change the settings.

Each USIE Administrator needs to:

- send a confirmation email to the USIE Contact Point.

Unsuccessful email deliveries are followed up with the relevant organization to identify a new administrator, if needed.

**ConvEx-1d**

**ConvEx-1d:** to test the IAEA's emergency communication channels

Any Contact Point may send a test message by fax to the IEC not more frequently than once per quarter without prior arrangement, and the IEC returns a simple acknowledgement of receipt on or before the next working day. No other States are involved in this action.

**3.5.2. ConvEx-2**

**Objective 2: to test whether National Competent Authorities can appropriately fill out reporting forms and to drill the appropriate procedures for information exchange and requesting and providing assistance.**

**ConvEx-2a**

**ConvEx-2a:** to test the ability of National Competent Authorities to complete the appropriate reporting forms

This exercise is conducted once per year on an announced date. Prior to the exercise, the IEC invites all NCAs to participate. In the registration process, the IEC asks for the participants' communication details, so that the IEC can send the exercise messages by fax or email to registered Contact Points, as the IEC does not need to use the primary communication channels for sending the exercise messages. On the day of the exercise, the IEC sends out the exercise messages, which are parts of a scenario in descriptive form, starting at three different times of day: 04:00 UTC for the Asian region, 10:00 UTC for the European/African region and 16:00 UTC for the American region. The exercise requires the NCAs to complete the appropriate forms based on the exercise messages on the USIE Exercise web site.

The NCAs are to

- complete the forms during their normal working hours and submit them to the USIE Exercise web site.

**ConvEx-2b**

**ConvEx-2b:** to test the arrangements for a request and the provision of assistance

This exercise is conducted once per year on an announced date. The IEC invites NCAs to participate and to coordinate the participation of relevant national capabilities in the exercise. This exercise specifically addresses Contact Points with registered



RANET capabilities, but also encourages the participation of other Contact Points who plan to join the RANET network. This exercise is conducted over a maximum of three days. However, the exercise is not run in real time and all counterparts and the IEC can perform their exercise activities during their normal working hours. The ConvEx-2b is conducted jointly with relevant international organizations.

The IEC invites the NCAs of IAEA Member States to coordinate the communication of information and requests for advice and assistance for a hypothetical situation in their State. The IEC provides input messages in advance if needed.

The IEC forwards messages from the Accident State to participating Contact Points. It is expected that other participating NCAs review the information and decide whether they are in a condition to render the requested assistance, taking all technical and administrative constraints and capabilities into account. The completion of an Assistance Action Plan is tested. The IEC and participating NCA(A)s use appropriate communication means to exchange information and to simulate the provision and coordination of international assistance to the requesting State.

### ConvEx-2c

**ConvEx-2c:** to test arrangements for a transnational radiological emergency

This exercise is conducted once every two years on a specified announced date and lasts no more than 8 hours (elapsed time). In advance of this exercise, the IEC invites all Contact Points to participate in this exercise, which is not conducted in the same year as a ConvEx-3 exercise.

The IEC invites the NCAs of an IAEA Member State – ‘the Accident State’ – to communicate messages for a hypothetical radiological emergency in their State. The IEC provides input messages in advance if needed. The scope of the exercise may include testing bilateral or other multilateral arrangements through the use of the USIE Exercise web site.

The IEC forwards messages from the Accident State to participating Contact Points, and publishes the information submitted on USIE Exercise. It is expected that other participating NCAs access information on the USIE Exercise web site and confirm that they have read and understood messages and respond appropriately to any requests for advice or information.

### ConvEx-2d

**ConvEx-2d:** to test arrangements for a transnational nuclear emergency

This exercise is conducted once every four years on a specified announced date and lasts no more than 8 hours (elapsed time). In advance of this exercise, the IEC invites all Contact Points to participate. This exercise is conducted jointly with the WMO and is expected to involve national meteorological services. A ConvEx-2d is not conducted in the same year as a ConvEx-3 exercise.

The IEC invites the NCAs of an IAEA Member State – ‘the Accident State’ – to communicate messages for a hypothetical nuclear emergency in their State. The Secretariat provides exercise input messages in advance, if needed. The scope of the exercise does not include testing bilateral or other multilateral arrangements.

The IEC forwards messages from the Accident State to participating Contact Points, and publishes the submitted information on USIE Exercise. It is expected that other

participating NCAs access information on the USIE Exercise web site, confirm they have read and understood messages and respond appropriately to any requests for advice or information.

### 3.5.3. ConvEx-3

#### **Objective 3: to test the full operation of the information exchange mechanisms and requesting and providing assistance**

A large-scale exercise is conducted once every three to five years. Details are announced to States in advance. All States Parties to the Early Notification Convention are strongly encouraged to participate. Such an exercise is coordinated with exercise plans of other international organizations through the IACRNE<sup>21</sup>. Member States that have adopted the arrangements of this manual are encouraged to volunteer as host for a ConvEx-3 exercise. The exercise scenario needs to simulate a nuclear or radiological emergency involving a significant release of radioactive material into the environment requiring off-site protective actions and having transnational impact or a nuclear or radiological emergency triggered by a criminal act and involving significant radiological consequences requiring protective actions. The scenario may involve requesting assistance and the provision of assistance. States do not need to set up a specific exercise to host a ConvEx-3 exercise, but are encouraged to review their plans to conduct national exercises and may decide on offering such a national exercise as the basis for a ConvEx-3 exercise. Experience has shown that the arrangements for international communication exchange were improved significantly after such exercises. The host country will be involved at the international level in the preparations for the exercise.

3

#### **Trial**

#### **Objective: to obtain feedback on proposals for new arrangements or exercises**

Trials are conducted whenever proposals for new arrangements are developed. To test the functionality and to obtain some feedback from users, selected Contact Points or all Contact Points are invited to participate in such trials.

#### **National or multinational Exercises**

The IEC can participate in national, regional and multinational exercises at the request of the State conducting the exercise. The IEC can participate in such exercises in different ways: a) either by just confirming the exercise messages, or b) by ‘minimal play’, meaning that all received messages are confirmed and verified if needed and are published on the USIE Exercise web site, or c) by ‘normal play’, in which the IEC actually introduces questions to the country conducting the exercise, responds to incoming questions and, if requested to do so, distributes messages to other participating countries/organizations. The organizers of national exercises which are run on the USIE Exercise web site may want to use the USIE feature for direct notification of other countries or to send exercise messages to States on the basis of bilateral or multilateral agreements. Events on USIE (or USIE Exercise) can be published with access restrictions, which can be set to a single country, selected countries or all countries. Consequently only those given access see the event and associated messages on USIE (or USIE Exercise).

<sup>21</sup> See also Ref. [3].

For the latter purpose, the IEC appreciates receiving a request to participate at least 2 months before the planned date of the exercise. The IEC nominates a staff member as the IEC exercise controller for the exercise and requests access to important information for the IEC exercise controller. The IEC keeps information restricted on a need to know basis, as requested by the State conducting the exercise.

### **3.6. Other arrangements with the IEC**

The IEC additionally endeavours<sup>22</sup> to assist a State Party or Member State, upon request, in:

- a)** preparing emergency plans for response to nuclear and radiological incidents and emergencies and the appropriate legislation;
- b)** developing appropriate training programmes for personnel to deal with nuclear or radiological incidents and emergencies;
- c)** conducting investigations into the feasibility of establishing appropriate radiation monitoring systems.

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<sup>22</sup> Article 5 of the Assistance Convention.

## Section

## 4

## 4. OPERATIONAL ARRANGEMENTS

### 4.1. Background

This section, together with Attachment 1<sup>23</sup>, provides the key material for a State/international organization to understand the IEC's operations and prepare its own detailed interfacing arrangements, including procedures, checklists and training. IEComm in itself does not establish any obligations on Member States and relevant international organizations. However, it is highly recommended that States/international organizations build compatible arrangements.

### 4.2. Event categorization

A nuclear or radiological incident or emergency requires arrangements in place, which allow an appropriate reaction to the event. For communication on the international level, arrangements need to be in place for events that States have an obligation to notify and for events (i.e. transnational emergencies) that are described in international standards. Arrangements also need to be in place for events that may call for transparency and information sharing with the international community and events that may trigger a request for assistance or information to the IAEA by one or more States. This can be accomplished through the adoption of a categorization system composed of sets of conditions that trigger a certain reaction. The categorization system adopted for the purpose of IEComm (Figure 1) addresses conditions 1) specific to nuclear installations, 2) radiological events (not specific to nuclear installations), and 3) criminal or other unauthorized acts involving radioactive material.

4

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<sup>23</sup> Attachment 1 is available upon request by the officially designated competent authorities and contact points under the Early Notification Convention and the Assistance Convention.

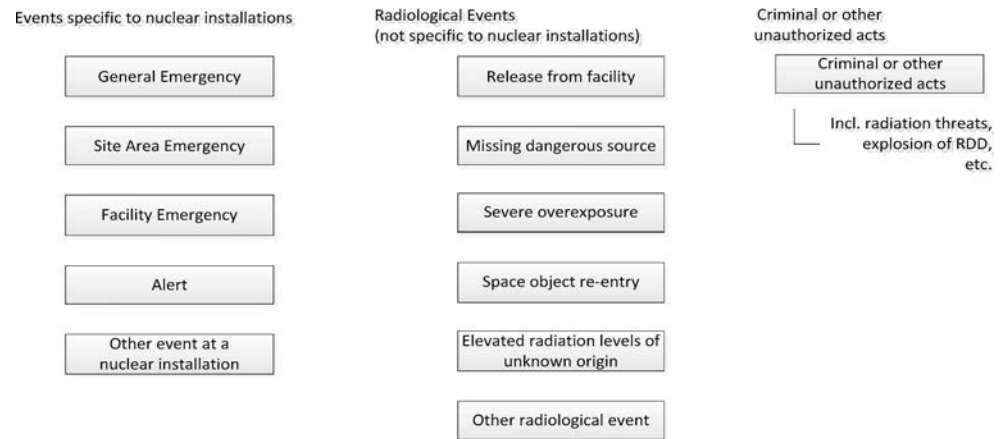


Figure 1. Sets of emergency conditions, grouped into three classes, used to describe situations that warrant immediate response actions under IEComm.

#### 4.2.1. Events specific to nuclear installations<sup>24, 25</sup>

For events specific to nuclear installations, four classes<sup>26</sup> are used in the present Section 4 to initiate different levels of actions, namely **'Alert'**, **'Facility Emergency'**, **'Site Area Emergency'** and **'General Emergency'**. In addition, one procedure is given on how to provide information on other events in a nuclear installation that do not warrant a declaration of an emergency class. Such events may have to be communicated because of public or media interest, or if relevant lessons can be learned by the international community.

#### 4.2.2. Radiological events (not specific to nuclear installations)

In addition to the classes that are specific to nuclear installations, there are six types of incidents or emergencies for which specific response procedures have been formulated, namely **'release from facility'**, **'missing dangerous source'**, **'space object re-entry'**, **'severe overexposure'**, **'elevated radiation levels of unknown origin'** and **'other radiological event'**.

#### 4.2.3. Criminal or other unauthorized acts

Finally, the response procedure **'criminal or other unauthorized acts'** has been formulated for incidents and emergencies that have a nuclear security aspect. This procedure can be used for different incidents and emergencies such as a bomb threat, an explosion of a radioactive dispersion device, the detonation of an improvised nuclear device, intentional exposure, a radiation threat, etc.

<sup>24</sup> This relates to threat categories I and II as defined in [2], namely:

I - Facilities, such as nuclear power plants, for which on-site events (including very low probability events) are postulated that could give rise to severe deterministic health effects off the site, or for which such events have occurred in similar facilities

II - Facilities, such as some types of research reactors, for which on-site events are postulated that could give rise to radiation doses to people off the site which warrant urgent protective action in accordance with international standards, or for which such events have occurred in similar facilities. Threat category II (as opposed to threat category I) does not include facilities for which on-site events (including very low probability events) are postulated that could give rise to severe deterministic health effects off the site, or for which such events have occurred in similar facilities.

<sup>25</sup> Note that a nuclear powered vessel is considered a nuclear installation for the purpose of this document.

<sup>26</sup> Four classes ('Alert', 'Facility Emergency', 'Site Area Emergency' and 'General Emergency') are consistent with those specified in para. 4.19 of [2]. It is recognized that at the national level, a State/operator may use other classes.

This categorization is used by the IEC to rapidly take appropriate response actions upon receipt of an initial notification or an advisory message.

If any of these classes or types could give rise to a 'transnational emergency', Member States provide<sup>27</sup> an **initial notification** to the IEC and other States (note that a 'General Emergency' and a 'Space Object Re-entry' with nuclear power sources or dangerous radioactive sources on board are always transnational emergencies). For incidents and emergencies of local concern, States may optionally provide an **advisory message**.

The detailed definitions of these emergency classes and types, and the corresponding immediate response actions to be taken in the context of these arrangements, are described below.

### 4.3. Response services provided by the IEC

<b>Authenticated and verified messages</b>	The IEC sends initial notification or advisory messages in English about a nuclear or radiological emergency to Contact Points as appropriate. The information contained in these is both authenticated and verified by IAEA staff.
<b>Authenticated and screened follow-up information</b>	The information provided in subsequent follow-up messages in English, which may include facility data, meteorological information, monitoring data, and information on protective actions, received by the IEC from the notifying State or affected States, is authenticated and rapidly scanned for consistency, plausibility, legibility and comprehension by the IAEA staff before it is passed on to other Contact Points.
<b>Assessment, analysis and prognosis</b>	The IEC provides Contact Points with timely information during a nuclear or radiological emergency on its potential consequences, including analysis of available information and data and on prognosis of possible scenarios based on evidence, scientific knowledge and the capabilities of Member States. This information will be used as the basis for the IAEA to provide Member States, international organizations and the general public with timely, clear, factually correct and easily understandable information.
<b>Meteorological products</b>	For a release of radioactive material to the atmosphere from a nuclear installation or other facility, the IEC has arrangements with the WMO for the production of a standard set of meteorological products for initial response, on the basis of event site coordinates and, if available, source term and release duration information, as follows: <ul style="list-style-type: none"> <li>• three-dimensional trajectories of hypothetical packets of material, plotted separately for packets released at 500, 1500 and 3000 metres above the ground; also marked are the locations of each packet at 6 hourly intervals at the main synoptic hours (6h, 12h, 18h, 24h UTC) up to the end of the dispersion model forecast;</li> <li>• time integrated airborne concentrations within the layer 500 m above the ground in Bq·h/m<sup>3</sup> for each of three forecast periods;</li> <li>• total deposition (wet and dry) in Bq/m<sup>2</sup> from the release time for each of three forecast periods.</li> </ul>

<sup>27</sup> Either by virtue of the obligation of the Early Notification Convention to notify a significant transboundary release, or to meet the requirements of para. 4.15 of [2] (encouraged by the IAEA General Conference in GC(46)/RES/9).



Contact Points are requested to set up links to their national meteorological service, who can provide interpretation of these products from WMO and help with the development of national arrangements for atmospheric dispersion calculations. A list of national meteorological services can be found on the WMO web pages at: [http://www.wmo.int/pages/prog/www/DPFSERA/delegated\\_authorities.htm](http://www.wmo.int/pages/prog/www/DPFSERA/delegated_authorities.htm).

#### **Emergency assistance**

If requested, the IAEA is ready to assist in an initial assessment of the situation (to provide recommendations and/or appraisal of actions taken and being planned), including, if appropriate, the sending of qualified personnel and experts rapidly to the requesting State. Appropriate resources allocated for conducting such an initial assessment will be made available by the IAEA.

The IAEA will, when requested, both facilitate and assist with the coordination of any international assistance required.

#### **Fact-finding mission**

In case of a nuclear or radiological emergency and with consent of the State concerned, the IAEA conducts timely fact-finding missions. The results of such missions are made publicly available with the consent of the State concerned.

## **4.4. Response procedures**

Twelve sets of event types (four emergency classes and one other event type specific to nuclear installations; six types of radiological events (not specific to nuclear installations) and one type for a criminal or other unauthorized act using radioactive material) are used in this manual to describe actions to be taken in various situations.

This section describes the procedures for **information exchange** for each of the twelve event types. For each, the procedure lists the actions expected by the relevant Contact Point and by the IEC.

Following this, Section 4.5 provides a procedure for requesting assistance from the IAEA, and for facilitating and/or coordinating the provision of **emergency assistance** by the IAEA.

References in the text are made to various EMERCON forms for submitting messages to the IEC, namely SRF, GENF and MPA. Other forms such as the Event Notice Form (ENF), the 'Request for Information' Form and the 'Request for Assistance' Form are referred to in the text as well. These forms and instructions for their completion are provided in IEComm Attachment 1<sup>28</sup>.

<sup>28</sup> Attachment 1 is available upon request by the officially designated competent authorities and contact points under the Early Notification Convention and the Assistance Convention.

## Emergency Class: GENERAL EMERGENCY

- Description:** Events resulting in an actual or substantial risk of a release or radiation exposure warranting taking urgent protective actions off the site.
- Purpose:** To notify and provide relevant information with the aim of minimizing consequences of a transnational emergency; and, as appropriate, in order to minimize the transboundary radiological consequences of any release.
- Obligation:** If a release of radioactive material occurs or is likely to occur and results or may result in an international transboundary release, **States Parties** to the Early Notification Convention **are obliged to notify** potentially affected States and the IAEA, **provide relevant information** and **respond to requests for information** from affected States.
- Expectation:** **Member States**, in order to meet the requirements in [2], are **expected to notify, provide relevant information** and **respond to requests for information** concerning a transnational emergency, related to a declared 'General Emergency'.
- Encouragement:** The IAEA Secretariat **strongly encourages** States to notify a General Emergency in line with the response time objectives set out in Section 2.3 and described in Appendix VI of [8].

GENERAL EMERGENCY		
	ACTIONS BY CONTACT POINTS	ACTIONS BY THE IEC
<b>Initial notification of a General Emergency by notifying State</b>	<p>NCA(D) sends the initial notification by fax EMERCON form GENF to the IEC, possibly with attachments and/or URL for its own web site, or submits the notification using a GENF form to USIE</p> <p>NCA(D) calls the IEC to confirm receipt<sup>29</sup> of notification</p>	<p>Acknowledges the message</p> <p>Authenticates and verifies the content of the initial notification by telephone call to the designated NCA(D) of the notifying State</p> <p>Offers the IAEA's good offices to the notifying State</p> <p>Establishes 24/7 response mode (including dedicated phone, fax and email with notifying State)</p> <p>Informs forthwith NWP's of Member States; and other States that may be physically affected and relevant international organizations of the notification received</p>

<sup>29</sup> If dedicated communications lines have already been established, these will be used.

**Further  
emergency  
information from  
notifying State**

4

**Meteorological  
products**

<b>GENERAL EMERGENCY</b>	
<b>ACTIONS BY CONTACT POINTS</b>	<b>ACTIONS BY THE IEC</b>
	<p>Sends copy of the initial notification by fax to NWP's, NCA(A)s and Permanent Missions of all States.</p> <p>Offers its good offices to potentially affected States</p> <p>Publishes initial notification on USIE, including any attachments and/or links to the notifying State's web site. Sends email to NCA(A)s of States within 1000 km of a nuclear power plant or within 50 km of a research reactor requesting them to confirm receipt of notification on USIE</p> <p>Calls NWP's of States within 1000 km of a nuclear power plant or within 50 km of a research reactor that have not confirmed receipt of the notification on USIE, by fax, email or telephone, and establishes dedicated phone contact with relevant NCA(A)s</p> <p>Establishes separate phone liaison with other States, Permanent Missions and relevant international organizations</p>
<p>NCA(D) sends further relevant information by fax or email on EMERCON forms GENF or MPA to the IEC, or submits the form to USIE, possibly with attachments and/or URL for its own emergency web site</p> <p>If the further information contains a change of the emergency class or a termination of the emergency, the NCA(D) ensures receipt of the message by the IEC with a telephone call.</p>	<p>Distributes further information by fax to NCA(A) and Permanent Missions of all Member States, and to relevant international organizations</p> <p>Publishes follow-up information on USIE, including any attachments and/or links to notifying State's web sites</p> <p>Compiles and analyses information, assesses the potential consequences and prognosis of potential scenarios and sends summary to all Contact Points and publishes on USIE</p> <p>Coordinates the inter-agency response of the international organizations</p>
<p>NCA(D) may generate national meteorological products or request these from WMO RSMC; NCA(D) sends result by fax or email to IEC or submits together with an EMERCON form to USIE</p>	<p>Requests and receives meteorological products from relevant WMO RSMCs</p> <p>Publishes meteorological products on USIE;</p>

**Information from  
potentially  
affected States**
**Requests from  
other States for  
information**
**Public information**

<b>GENERAL EMERGENCY</b>	
<b>ACTIONS BY CONTACT POINTS</b>	<b>ACTIONS BY THE IEC</b>
<p>State from which information is requested</p> <p>NCA(A) sends relevant information by fax or email on EMERCON form MPA to the IEC or submits form to USIE, or the URL of the national emergency web site providing the relevant information</p>	<p>Requests NCA(A) of other States within 1000 km of a nuclear power plant or within 50 km of a research reactor to provide – on EMERCON form MPA – information on monitoring and protective actions</p> <p>Compiles and analyses information, assesses the potential consequences and prognosis of potential scenarios and sends summary to all Contact Points and publishes on USIE</p> <p>Establishes hyperlinks to other States' emergency web sites on USIE</p>
<p>State requesting information</p> <p>NCA(A) or Permanent Mission requests information by fax, telephone, email or via USIE</p> <p>State(s) from which information is requested</p> <p>NCA(D) of notifying State or NCA(A) of other relevant State sends replies to the IEC by fax, email, or provides answers to the IEC by telephone or submits requested information to USIE</p>	<p>Compiles requests and forwards them to the NCA(D) of notifying State or NCA(A) of other relevant State</p> <p>Distributes answers by fax, email or provides answers by telephone to Contact Points requesting the information and publishes on USIE. If there is a sufficient number of requests for information or a need to counter false rumours, the IEC sends by fax an advisory message to NCA(A)s of all States or publishes on USIE</p>
<p>NCA(D) sends/submits copies of any press release to the IEC/USIE or sends/submits URL of public web site</p> <p>INES national officer coordinates with the relevant NCA and submits INES ERF through USIE</p>	<p>Publishes press release/URL to USIE</p> <p>MTPI</p> <p>Establishes liaison to coordinate release of information to media with official media focal point in notifying State and relevant international organizations as appropriate. Issues press release(s) and posts on the IAEA's public web site detailing initial notification and actions taken by IAEA</p>



## Emergency Class: SITE AREA EMERGENCY

<b>Description:</b>	Events resulting in a major decrease in the level of protection for those on the site and near the facility, but not sufficient to meet criteria for 'General Emergency'.
<b>Purpose:</b>	To bring the IEC's and other States' response systems to an enhanced state of readiness in anticipation of the possibility that the situation worsens and rapid distribution of authenticated information becomes necessary.
<b>Obligation:</b>	There is <b>no obligation</b> on States Parties by virtue of the Early Notification Convention to notify the IAEA or other States of conditions representing a 'Site Area Emergency'.
<b>Expectation:</b>	A <b>State</b> may <b>voluntarily send</b> an advisory message to the IEC regarding a 'Site Area Emergency' in order: 1) to pre-empt legitimate requests from other States Parties to the Assistance Convention for 'assistance' in obtaining information <sup>30</sup> ; 2) to trigger the IAEA to offer its good offices <sup>31</sup> ; 3) to provide advance warning to the IAEA, other relevant organizations or other States of a developing situation so that they can be ready to respond should the situation worsen; 4) for the IAEA, other relevant international organizations, or other States to initiate an administrative response and/or to provide advice to their governments, public or media on a developing situation of actual, potential or perceived radiological significance; 5) to otherwise alert IAEA response staff.
<b>Encouragement:</b>	The IAEA Secretariat <b>strongly encourages</b> States to inform the IEC of a 'Site Area Emergency' in order that it can be ready to carry out its functions under Article 4 of the Early Notification Convention [1].

**Initial advisory message of Site Area Emergency by reporting State**

SITE AREA EMERGENCY	
ACTIONS BY CONTACT POINTS	ACTIONS BY THE IEC
<p>NCA(D) sends the message on EMERCON form SRF, possibly with attachments and/or URL for its own web site, by fax to the IEC or submits to USIE</p> <p>NCA(D) calls the IEC to confirm receipt of notification</p>	<p>Acknowledges the message</p> <p>Authenticates and verifies the content of the advisory message by telephone call to the designated NCA(D) of the reporting State.</p> <p>Offers the IAEA's good offices to the reporting State</p>

<sup>30</sup> See Article 2 of the Assistance Convention [1].

<sup>31</sup> See Article 5 of the Assistance Convention [1].



**Further  
emergency  
information from  
reporting State**

**Requests from  
other States for  
information**

**Public information**

SITE AREA EMERGENCY	
ACTIONS BY CONTACT POINTS	ACTIONS BY THE IEC
	<p>Unless otherwise instructed by the reporting State, sends advisory message by fax to all States and publishes advisory message on USIE, including any attachments and/or links to the reporting State's web site relevant international organizations, and requests them to confirm receipt of the message</p> <p>Calls NWP's of States within 1000 km of a nuclear power plant or within 50 km of a research reactor that have not confirmed receipt of advisory message on USIE, by fax, email or telephone, and establishes dedicated phone contact with NCA(A)s</p>
<p>NCA(D) sends further relevant information by fax or email on EMERCON form SRF to the IEC, or submits form to USIE, possibly with attachments and/or URL for its own emergency web site</p> <p>If the further information contains a change of the emergency class or a termination of the emergency, the NCA(D) calls IEC to confirm receipt of the message.</p>	<p>May distribute further information by fax to NCA(A) and Permanent Missions of all Member States, and to relevant international organizations</p> <p>Publishes follow-up information on USIE, including any attachments and/or links to reporting State's own web site</p> <p>Compiles and analyses information, assesses the potential consequences and prognosis of potential scenarios and sends summary to all Contact Points and publishes on USIE</p> <p>Coordinates the inter-agency response of the international organizations</p>
<p>State requesting information</p> <p>NCA(A) or Permanent Mission may request information by fax, telephone, email or via USIE</p> <p>Notifying State</p> <p>NCA(D) sends replies to the IEC by fax or email or provides answers to the IEC by telephone</p>	<p>Compiles requests, forwards them to the NCA(D) of relevant State</p> <p>Distributes answers by fax, email or provides answers by telephone to requesting Contact Points and publishes on USIE. If there is a sufficient number of requests for information or a need to counter false rumours, the IEC sends by fax an advisory message to NCA(A)s of all States</p>
<p>NCA(D) sends copies of any press release or URL of public web site or submits to USIE</p> <p>INES national officer coordinates with the relevant NCA and submits INES ERF through USIE</p>	<p>Publishes press release/URL on USIE</p> <p>MTPI</p> <p>May set hyperlink in the IAEA's public web site or publishes web story on IAEA web site if agreed by NCA(D) of reporting State</p>

## Emergency Class: FACILITY EMERGENCY

<b>Description:</b>	Events resulting in a major decrease in the level of protection for people on the site.
<b>Purpose:</b>	To inform the IEC and other States of an event with no off-site consequences and to pre-empt possible questions.
<b>Obligation:</b>	There is <b>no obligation</b> on States Parties by virtue of the Early Notification Convention to notify the IAEA or other States of conditions representing a 'Facility Emergency'.
<b>Expectation:</b>	A <b>State</b> may <b>voluntarily send</b> an advisory message to the IEC regarding a 'Facility Emergency' in order: 1) to pre-empt legitimate requests from other States Parties to the Assistance Convention for 'assistance' in obtaining information <sup>32</sup> ; and 2) for the IAEA, other relevant international organizations, or other States to provide advice to their governments, public or media on a situation of perceived radiological significance.
<b>Encouragement:</b>	The IAEA Secretariat <b>encourages</b> States to inform the IEC of a 'Facility Emergency', especially when this event has attracted wide media coverage and for the purpose of international information exchange.

**Initial advisory  
message by  
reporting State**

FACILITY EMERGENCY	
ACTIONS BY CONTACT POINTS	ACTIONS BY THE IEC
<p>NCA(D) sends the message by fax EMERCON form SRF to the IEC, possibly with attachments and/or URL for its own web site, or submits the message to USIE</p> <p>NCA(D) calls the IEC to confirm receipt of notification</p>	<p>Acknowledges the message</p> <p>Authenticates and verifies the content of the advisory message by telephone call or email to the designated NCA(D) of the reporting State</p> <p>Considers to offer the IAEA's good offices to the reporting State</p> <p>Unless otherwise instructed by the reporting State, publishes the message on USIE restricted to NWP's and NCA(A)s of countries within 1000 km of the nuclear power plant or within 50 km of the research reactor</p>

<sup>32</sup> See Article 2 of the Assistance Convention [1].

**Further  
information from  
reporting State****Requests from  
other States for  
information****Public information**

FACILITY EMERGENCY	
ACTIONS BY CONTACT POINTS	ACTIONS BY THE IEC
<p>NCA(D) sends further relevant information to the IEC on EMERCON form SRF by fax or email, or submits form to USIE, possibly with attachments and/or URL for its own emergency web site</p> <p>If the further information contains a change of the emergency class or a termination of the emergency, the NCA(D) calls the IEC to confirm receipt of the message.</p>	<p>Publishes follow-up information on USIE, including any attachments and/or links to reporting State's own web site</p> <p>Compiles and analyses information, assesses the potential consequences and prognosis of potential scenarios, sends summary to all Contact Points and publishes on USIE</p>
<p>State requesting information</p> <hr/> <p>NCA(A) or Permanent Mission may request information by fax, telephone, email or on USIE</p> <p>Notifying State</p> <hr/> <p>NCA(D) sends replies to the IEC by fax, email or provides answers to the IEC by telephone</p>	<p>Compiles requests, forwards requests to the NCA(D) of relevant State</p> <p>Sends answers to requesting Contact Points or publishes on USIE. If there is a sufficient number of requests for information or a need to counter false rumours, the IEC publishes the event for all countries on USIE</p>
<p>NCA(D) sends/submits copies of any press release to the IEC/USIE or sends/submits URL of public web site</p> <p>INES national officer coordinates with the relevant NCA and considers submitting INES ERF through USIE</p>	<p>Publishes press release/URL on USIE</p> <p>MTPI</p> <hr/> <p>May set hyperlink in the IAEA's public web site or publishes web story on IAEA web site if agreed by NCA(D) of reporting State</p>

## Emergency Class: ALERT

<b>Description:</b>	Events resulting in an uncertain or significant decrease in the level of protection of the public or people on the site.
<b>Purpose:</b>	To inform the IEC and other States of an enhanced state of readiness in anticipation of the possibility that the situation worsens and rapid distribution of authenticated information becomes necessary.
<b>Obligation:</b>	There is <b>no obligation</b> on States Parties by virtue of the Early Notification Convention to notify the IAEA or other States of conditions representing an 'Alert'.
<b>Expectation:</b>	A <b>State</b> may <b>voluntarily send</b> an advisory message to the IEC regarding an 'Alert' in order: 1) to pre-empt legitimate requests from other States Parties to the Assistance Convention for 'assistance' in obtaining information <sup>33</sup> ; 2) to provide advance warning to the IAEA, other relevant organizations or other States of a developing situation so that they can be ready to respond should the situation worsen; and 3) for the IAEA, other relevant international organizations, or other States to provide advice to their governments, public or media on a situation of perceived radiological significance.
<b>Encouragement:</b>	The IAEA Secretariat <b>encourages</b> States to inform the IEC of an 'Alert', when this event has attracted wide media coverage and for the purpose of international information exchange.

**Initial advisory message by reporting State**

ALERT	
ACTIONS BY CONTACT POINTS	ACTIONS BY THE IEC
<p>NCA(D) sends the advisory message by fax EMERCON form SRF to the IEC, possibly with attachments and/or URL for its own web site, or submits the message to USIE</p> <p>NCA(D) calls the IEC to confirm receipt of notification</p>	<p>Acknowledges the message</p> <p>Authenticates and verifies the content of the advisory message by telephone call or email to the designated NCA(D) of the reporting State.</p> <p>Unless otherwise instructed by the reporting State, publishes the message on USIE restricted to NWP's and NCA(A)s of countries within 1000 km of a nuclear power plant or within 50 km of a research reactor</p>

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<sup>33</sup> See Article 2 of the Assistance Convention [1].

**Further  
information from  
reporting State****Requests from  
other States for  
information****Public information**

<b>ALERT</b>	
<b>ACTIONS BY CONTACT POINTS</b>	<b>ACTIONS BY THE IEC</b>
<p>NCA(D) sends further relevant information to IEC on EMERCON form SRF by fax or email, or submits this information to USIE, possibly with attachments and/or URL for its own emergency web site</p> <p>If the further information contains a change of the emergency class or a termination of the emergency, the NCA(D) calls the IEC to confirm receipt of the message.</p>	<p>Publishes follow-up information on USIE, including any attachments and/or links to reporting State's own web site</p> <p>Compiles and analyses information, assesses the potential consequences and prognosis of potential scenarios, sends summary to all Contact Points and publishes on USIE</p>
<p>State requesting information</p> <hr/> <p>NCA(A) or Permanent Mission may request information by fax, telephone, email or on USIE to IEC</p> <p>Notifying State</p> <hr/> <p>NCA(D) sends replies to the IEC by fax, email or provides answers to the IEC by telephone</p>	<p>Compiles requests, forwards them to the NCA(D) of relevant State</p> <p>Sends answers to requesting Contact Points or publishes on USIE. If there is a sufficient number of requests for information or a need to counter false rumours, the IEC publishes the event for all countries on USIE</p>
<p>NCA(D) sends/submits copies of any press release to IEC/USIE or sends/submits URL of public web site</p> <p>INES national officer coordinates with the relevant NCA and considers submitting INES ERF through USIE</p>	<p>Publishes press release/URL on USIE</p> <p>MTPI</p> <hr/> <p>May set hyperlink in the IAEA's public web site or publishes web story on IAEA web site if agreed by NCA(D) of reporting State</p>

## Event Type: OTHER EVENT IN A NUCLEAR INSTALLATION

<b>Description:</b>	Events resulting in an insignificant decrease in the level of protection of the public or people on the site.
<b>Purpose:</b>	To inform the IEC and other States of an event in a nuclear installation which has, despite its insignificant level a decrease of protection and safety, raised public concerns and/or media interest.
<b>Obligation:</b>	There is <b>no obligation</b> on States Parties by virtue of the Early Notification Convention to notify the IAEA or other States of conditions representing such an event.
<b>Expectation:</b>	A <b>State</b> may <b>voluntarily send</b> an advisory message to the IEC and other States in order: 1) to provide authoritative information on situations which are discussed or which will likely be discussed in the public media; and 2) to pre-empt legitimate requests from other States Parties to the Assistance Convention for 'assistance' in obtaining information <sup>34</sup> .
<b>Encouragement:</b>	The IAEA Secretariat <b>encourages</b> States to inform the IEC of such events, when this event has attracted wide media coverage and for the purpose of international information exchange.

OTHER EVENT IN A NUCLEAR INSTALLATION	
ACTIONS BY CONTACT POINTS	ACTIONS BY THE IEC
<b>Initial advisory message by reporting State</b>  NCA(D) sends by fax the form ENF, possibly with attachments and/or URL for its own web site, or submits an ENF form to USIE	Fax messages will be converted to an USIE ENF form  The ENF form will automatically be published on the protected USIE site for all Contact Points and INES national officers
<b>Further information from reporting State</b>  NCA(D) sends further relevant information to the IEC by fax or email on form ENF, or submits form to USIE, possibly with attachments and/or URL for its own emergency web site	Publishes follow-up information on USIE, including any attachments and/or links to reporting State's own web site  Compiles and analyses information, assesses the potential consequences and prognosis of potential scenarios, sends summary to all Contact Points and publishes on USIE

<sup>34</sup> See Article 2 of the Assistance Convention [1].



**Requests from other States for information****Public information**

<b>OTHER EVENT IN A NUCLEAR INSTALLATION</b>	
<b>ACTIONS BY CONTACT POINTS</b>	<b>ACTIONS BY THE IEC</b>
<p>State requesting information</p> <p>NCA(A) or Permanent Mission may request information by fax, telephone, email or on USIE to IEC</p> <p>Notifying State</p> <p>NCA(D) sends replies to the IEC by fax or email or provides answers to the IEC by telephone or posts another ENF form on USIE</p>	<p>Compiles requests, forwards them to the NCA(D) of relevant State</p> <p>Sends answers to requesting Contact Points or publishes on USIE. Submitted ENF forms will be automatically published on USIE for all States and INES national officers.</p>
<p>NCA(D) sends/submits copies of any press release to IEC/USIE or sends/submits URL of public web site</p> <p>INES national officer coordinates with the relevant NCA and considers submitting INES ERF through USIE</p>	<p>Publishes press release/URL on USIE</p> <p>MTPI</p> <p>May set hyperlink in the IAEA's public web site or publishes web story on IAEA web site if agreed by NCA(D) of reporting State</p>

## Event Type: RELEASE FROM A FACILITY

<b>Description:</b>	Events resulting in a release of radioactive material to the environment.
<b>Purpose:</b>	To inform the IEC and other States of an event at a facility resulting in a release of radioactive material and to inform the IEC and other States about potential consequences and protective actions taken by the responsible authorities.
<b>Obligation:</b>	An <b>obligation of States Parties</b> by virtue of the Early Notification Convention to notify the IAEA and other States of such conditions exists if these conditions have or may result in an international transboundary release that could be of radiological safety significance for another State.
<b>Expectation:</b>	<p><b>Member States</b>, in order to meet the requirements in [2], are <b>expected to notify, provide relevant information and respond to requests for information</b> concerning a transnational emergency.</p> <p>A State may <b>voluntarily send</b> an advisory message to the IAEA regarding a release from a facility in order: 1) to pre-empt legitimate requests from other States Parties to the Assistance Convention for ‘assistance’ in obtaining information<sup>35</sup>; 2) to provide for the IAEA, other relevant international organizations, or other States, advice to their governments, public or media on a situation of perceived radiological significance.</p>
<b>Encouragement:</b>	The IAEA Secretariat <b>strongly encourages</b> States to inform the IAEA of such an event for the purpose of international information exchange, especially when this event has attracted wide media coverage.

**Initial notification  
or advisory  
message by the  
notifying/reporting  
State**

RELEASE FROM A FACILITY	
ACTIONS BY CONTACT POINTS	ACTIONS BY THE IEC
<p>NCA(D) sends initial notification/advisory message by fax on EMERCON form SRF to the IEC, possibly with attachments and/or URL for its own web site, or submits the initial notification/advisory message to USIE</p> <p>NCA(D) calls the IEC to confirm receipt of notification/advisory message</p>	<p>Acknowledges the initial notification/advisory message</p> <p>Authenticates and verifies the content of the initial notification/advisory message by telephone call or email to the designated NCA(D) of the reporting State</p> <p>Unless otherwise instructed by the reporting State, publishes the initial notification/advisory message on USIE to relevant Contact Points</p>

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<sup>35</sup> See Article 2 of the Assistance Convention [1].

**Meteorological products****Information from potentially affected States****Further information from notifying/reporting State****Requests from other States for information**

<b>RELEASE FROM A FACILITY</b>	
<b>ACTIONS BY CONTACT POINTS</b>	<b>ACTIONS BY THE IEC</b>
NCA(D) may generate national meteorological products or request these from WMO RSMC; NCA(D) sends result by fax or email to IEC or submits result together with an EMERCON form to USIE	Requests and receives meteorological products from relevant WMO RSMCs  Publishes meteorological products on USIE to potentially affected and neighbouring States;
State(s) from which information is requested NCA(A) sends further relevant information by fax or email on EMERCON form SRF and/or MPA to the IEC, or submits form to USIE or the URL of the web site providing the relevant information	May request NCA(A) of other relevant States to provide information on EMERCON form SRF and/or MPA  Respecting confidentiality constraints, compiles information, sends a summary by fax to NCA(A) of relevant States or publishes on USIE for those relevant States only  Establishes hyperlinks on USIE to other States' emergency web sites providing relevant information
NCA(D) sends further relevant information by fax or email on EMERCON forms SRF or MPA to the IEC, or submits to USIE, possibly with attachments and/or URL for its own emergency web site	Distributes further information by fax to NCA(A) and Permanent Missions of States, in the same geographical region and to relevant international organizations  Publishes follow-up information on USIE, including any attachments and/or links to notifying State's own web site  Compiles and analyses information, assesses the potential consequences and prognosis of potential scenarios and sends summary to all Contact Points and publishes on USIE  Coordinates the inter-agency response of the international organizations
State requesting information NCA(A) or Permanent Mission may request information by fax, telephone, email or on USIE to IEC	Compiles requests, forwards them to the NCA(D) of relevant State

**Public information**

<b>RELEASE FROM A FACILITY</b>	
<b>ACTIONS BY CONTACT POINTS</b>	<b>ACTIONS BY THE IEC</b>
<p>Notifying State</p> <p>NCA(D) sends replies to the IEC by fax, email or provides answers to the IEC by telephone</p>	<p>Sends answers to requesting Contact Points or publishes on USIE. If there is a sufficient number of requests for information or a need to counter false rumours, the IEC publishes the event for all countries on USIE</p>
<p>NCA(D) sends/submits copies of any press release to IEC/USIE or sends/submits URL of public web site</p> <p>INES national officer coordinates with the relevant NCA and submits INES ERF through USIE</p>	<p>Publishes press release/URL on USIE</p> <p>MTPI</p> <p>May set hyperlink in the IAEA's public web site or publishes web story on IAEA web site if agreed by NCA(D) of reporting State</p>



## Event Type: MISSING DANGEROUS SOURCE

<b>Description:</b>	A lost or stolen dangerous <sup>36</sup> source, i.e. one that, if not brought under control, could give rise to exposure sufficient to cause severe deterministic effects.
<b>Purpose:</b>	To notify and provide relevant information with the aim of minimizing consequences of a transnational emergency; to activate other States' emergency response systems to be ready to respond to a dangerous source possibly entering their State, including (1) to respond to issues of international trade (particularly in scrap metal) with the relevant State; or (2) to respond to issues that are perceived to be radiologically significant by the media or public in another State.
<b>Obligation:</b>	There is <b>no obligation on States Parties</b> by virtue of the Early Notification Convention to notify the IAEA or other States of conditions representing such an event.
<b>Expectation:</b>	<p><b>Member States</b>, in order to meet the requirements in [2], are <b>expected to notify, provide relevant information and respond to requests for information</b> concerning a transnational emergency, which includes a discovery of the loss or unauthorized removal of a <b>dangerous source that has been transported across or is suspected of having been transported across a national border</b>.</p> <p>A <b>State</b> may <b>voluntarily</b> send an advisory message to the IEC regarding a 'missing dangerous source' that does not represent a transnational emergency in order: 1) to pre-empt legitimate requests from other States Parties to the Assistance Convention for 'assistance' in obtaining information<sup>37</sup>; 2) to trigger the IAEA to offer its good offices<sup>38</sup>; 3) to provide advance warning to the IAEA, other relevant organizations or other States of a developing situation so that they can be ready to respond if the situation worsens; 4) for the IAEA, other relevant international organizations, or other States to initiate an administrative response and/or to provide advice to their governments, public or media on a developing situation of actual, potential or perceived radiological significance.</p>
<b>Encouragement:</b>	The IAEA Secretariat <b>strongly encourages</b> States to inform the IAEA of such an event for the purpose of international information exchange, especially when this event has attracted wide media coverage.

<sup>36</sup> **Examples of 'dangerous sources'** as defined here are the following: industrial radiography and teletherapy sources; irradiators; radiothermal generators; fixed industrial gauges involving high activity sources; high dose rate and low dose rate brachytherapy sources; well logging sources and similar sources.

The following **would not be considered** 'dangerous sources': moisture density gauges and fixed industrial gauges involving lower activity sources, and similar sources.

<sup>37</sup> See Article 2 of the Assistance Convention [1].

<sup>38</sup> See Article 5 of the Assistance Convention [1].



**Initial notification  
or advisory  
message by the  
notifying State**

MISSING DANGEROUS SOURCE	
ACTIONS BY THE CONTACT POINTS	ACTIONS BY THE IEC
<p>NCA(D) sends the initial notification – if a movement across a national border is actual or suspected – otherwise sends an advisory message by fax on EMERCON form SRF to the IEC, possibly with attachments and/or URL for its own web site, or submits the initial notification/advisory message to USIE</p> <p>NCA(D) calls the IEC to confirm receipt of notification/advisory message</p>	<p>Acknowledges the initial notification/advisory message on USIE</p> <p>Authenticates and verifies the content of the initial notification or advisory message by telephone call to the designated NCA(D) of the reporting State</p> <p>Offers the IAEA's good offices to the reporting State</p> <p><b>If suspected or actual movement across a border</b>, promptly informs by fax NWP, NCA(A)s and Permanent Missions of relevant States in accordance with instructions of notifying State and as appropriate, of notification received. <b>Otherwise</b>, informs within 24 hours by fax to NWP, NCA(A)s and Permanent Missions of relevant States in accordance with instructions of notifying State and as appropriate, of advisory message received</p> <p>Offers the IAEA's good offices to reporting State and potentially affected States</p> <p>Publishes notification/advisory message on USIE, including any attachments and/or links to the reporting State's web site to States as appropriate. Sends email to relevant States requesting them to access USIE and confirm receipt of any notification/advisory message</p> <p>Informs NWPs of relevant States that have not confirmed on USIE receipt of any notification by telephone call</p> <p>If the event involves criminal activities, the IAEA may establish liaison with INTERPOL, WCO and/or other relevant international organizations</p>



**Public information**

<b>MISSING DANGEROUS SOURCE</b>	
<b>ACTIONS BY THE CONTACT POINTS</b>	<b>ACTIONS BY THE IEC</b>
<p>NCA(D) sends copies of any press release or URL of public web site or submits to USIE</p> <p>INES national officer coordinates with the relevant NCA and submits INES ERF through USIE</p>	<p>Publishes press release/URL on USIE</p>
	<p>MTPI</p> <p>May set hyperlink in the IAEA's public web site or publishes web story on IAEA web site if agreed by NCA(D) of reporting State</p>

## Event Type: SEVERE OVEREXPOSURE

<b>Description:</b>	An accidental exposure due to a radiation source, intake of or contamination with radioactive material which can cause severe deterministic effects. Those are normally identifiable due to the appearance of early symptoms.
<b>Purpose:</b>	To notify and provide relevant information with the aim of minimizing consequences; to activate other States' emergency response systems to be ready to respond to a request for assistance.
<b>Obligation:</b>	<b>States Parties</b> have <b>no obligation</b> to report a severe overexposure but State Parties to the Assistance Convention have the right to request assistance in order to mitigate the consequences.
<b>Expectation:</b>	A State may <b>voluntarily</b> send an advisory message to the IEC regarding an 'overexposure' that does not represent a transnational emergency in order: 1) to trigger the IAEA to offer its good offices <sup>39</sup> ; and 2) to provide advance warning to the IAEA, other relevant organizations or other States of a developing situation so that they can be ready to respond if requested.
<b>Encouragement:</b>	The IAEA Secretariat <b>encourages</b> States to inform the IAEA of such an event for the purpose of international information exchange, especially when this event has attracted wide media coverage.

### Initial advisory report by the reporting State

### Further information from reporting State

SEVERE OVEREXPOSURE	
ACTIONS BY THE CONTACT POINTS	ACTIONS BY THE IEC
<p>NCA(D) sends advisory message by fax on EMERCON form SRF to the IEC, possibly with attachments and/or URL for its own web site, or submits the message to USIE</p> <p>NCA(D) calls the IEC to confirm receipt of advisory message</p>	<p>Acknowledges the advisory message on USIE</p> <p>Authenticates and verifies the content of the initial notification or advisory message by telephone call to the designated NCA(D) of the reporting State</p> <p>Offers the IAEA's good offices to the reporting State</p> <p>Starts liaison with WHO to determine best options on the follow-up to the situation, if the situation represents a public health issue.</p>
<p>NCA(D) sends further relevant information by fax or email on EMERCON form SRF to the IEC, or submits form to USIE, possibly with attachments and/or URL for its own emergency web site</p>	<p>Respecting confidentiality constraints, publishes follow-up information on USIE, including any attachments and/or links to notifying State's own web site</p>

<sup>39</sup> See Article 5 of the Assistance Convention [1].

**Request for assistance from reporting State****Requests from other States for information****Arranging assistance mission****Public information**

<b>SEVERE OVEREXPOSURE</b>	
<b>ACTIONS BY THE CONTACT POINTS</b>	<b>ACTIONS BY THE IEC</b>
NCA(A) sends request for assistance to the IEC by fax or submits from RFA to USIE	<p>Confirms request for assistance and verifies content</p> <p>May request NCA(A) of other relevant States (preferably to States with registered relevant RANET capabilities) and relevant international organizations to provide requested assistance, respecting instructions from the reporting State</p>
<p>State requesting information</p> <p>NCA(A) or Permanent Mission may request information by fax, telephone or email to IEC</p> <p>State from which information is requested</p> <p>NCA(D) of notifying State or NCA(A) of other relevant State sends replies to the IEC by fax, email or provides answers to the IEC by telephone</p>	<p>Compiles requests, forwards them to the NCA(D) of reporting State or NCA(A) of other relevant State</p> <p>Respecting confidentiality constraints, distributes answers by fax, email or communicates answers by telephone to requesting Contact Points</p>
<p>Requesting and providing States</p> <p>Review and revise as needed and finally sign assistance action plan</p> <p>Requesting State</p> <p>Facilitates assistance mission</p>	<p>Drafts assistance action plan [4] and provides to all involved Contact Points</p> <p>Coordinates implementation of assistance mission</p>
<p>NCA(D) sends copies of any press release or URL of public web site or submits to USIE</p> <p>INES national officer coordinates with the relevant NCA and submits INES ERF through USIE</p>	<p>Publishes press release/URL on USIE</p> <p>MTPI</p> <p>May set hyperlink in the IAEA's public web site or publishes web story on IAEA web page if agreed by NCA(D) of reporting State</p>

## Event Type: SPACE OBJECT RE-ENTRY

<b>Description:</b>	A satellite or other space object with nuclear power source(s) or dangerous radioactive sources on board has given rise to a risk of re-entry of radioactive material to the Earth in the near future, or such re-entry is occurring or has occurred.
<b>Purpose:</b>	To notify and provide relevant information with the aim of minimizing consequences of a transnational emergency; and, as appropriate, in order to minimize the transboundary radiological consequences of any release. This implies the need to activate States' emergency response systems to: (1) be ready to respond to a nuclear powered satellite or satellite with radioactive material possibly making landfall or having made landfall in their States; (2) respond to issues of international trade and travel in the potentially affected States; (3) respond to issues regarding protective actions or advice for foreign nationals or embassies within the notifying State and potentially affected States; or (4) respond to issues that are perceived to be radiologically significant by the media or public in another State.
<b>Obligation:</b>	If a release of radioactive material occurs or is likely to occur and results or may result in an international transboundary release, <b>States Parties</b> to the Early Notification Convention <b>are obliged to notify</b> potentially affected States and the IAEA, <b>provide relevant information</b> and <b>respond to requests for information</b> from affected States. A <b>launching State</b> has <b>other obligations</b> referred to in the Joint Plan [3] with regard to notifying the United Nations and other States.
<b>Expectation:</b>	<p><b>Member States</b>, in order to meet the requirements in [2], are <b>expected to notify, provide relevant information and respond to requests for information</b> concerning a transnational emergency, which includes re-entry of a space object with nuclear power source(s) or dangerous radioactive sources on board.</p> <p>A State may <b>voluntarily send</b> an advisory message to the IEC regarding a 'space object re-entry' in order: 1) to pre-empt legitimate requests from other States Parties to the Assistance Convention for 'assistance' in obtaining information<sup>40</sup>; 2) to trigger the IAEA to offer its good offices<sup>41</sup>; 3) to provide advance warning to the IAEA, other relevant organizations or other States of a developing situation so that they can be ready to respond should the situation worsen; 4) for the IAEA, other relevant international organizations, or other States to initiate an administrative response and/or to provide advice to their governments, public or media on a developing situation of actual, potential or perceived radiological significance.</p>
<b>Encouragement:</b>	The IAEA Secretariat <b>strongly encourages</b> States to inform the IAEA of such an event for the purpose of international information exchange.

<sup>40</sup> Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency (1986) – Article 2.

<sup>41</sup> Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency (1986) – Article 5.

## SPACE OBJECT RE-ENTRY

ACTIONS BY THE CONTACT POINTS	ACTIONS BY THE IEC
<p><b>Launching State</b></p> <p>NCA(D) sends initial notification or advisory message by fax on EMERCON form SRF to the IEC or submits to USIE, possibly with attachments and/or URL for its own web site</p> <p>Once landfall is clear, NCA(D) must notify, using fax on EMERCON form SRF or submit to USIE, possibly with attachments and/or URL for its own web site, the IAEA</p> <p>NCA(D) calls the IEC to confirm receipt of notification/advisory message</p>	<p>Acknowledges the initial notification or advisory message on USIE</p> <p>Authenticates and verifies the content of the initial notification or advisory message by telephone call to the designated NCA(D) of the launching State</p> <p>Offers the IAEA's good offices to the launching State</p> <p>Informs forthwith NWP's of States that may be physically affected and relevant international organizations of the notification received, and sends a copy of the notification or advisory message by fax to NCA(A)s and Permanent Missions of all States</p> <p>Establishes liaison with OOSA</p> <p>Publishes notification or advisory message on USIE, including any attachments and/or links to the launching State's web site. Requests NCA(A)s of potentially affected States to access USIE and confirm receipt of notification</p> <p>Telephones NWP's of relevant States that have not confirmed receipt of notification on USIE</p>
<p><b>Launching State</b></p> <p>If satellite makes landfall at known location, NCA(D) sends further relevant information on EMERCON form SRF by fax to the IEC or submits to USIE, possibly with attachments and/or URL for its own web site</p>	

**Initial  
notification or  
advisory  
message from  
the launching  
State**

**Further  
information from  
Launching State**



**Information from  
other States**
**Requests from  
other States for  
information**

SPACE OBJECT RE-ENTRY	
ACTIONS BY THE CONTACT POINTS	ACTIONS BY THE IEC
Ensures receipt by telephone call to the IAEA	<p>Promptly informs by fax and through USIE NCA(A)s and Permanent Missions of States, that may be physically affected and relevant international organizations of the additional information received</p> <p>Offer the IAEA's good offices to potentially affected States</p> <p>Compiles and analyses information, assesses the potential consequences and prognosis of potential scenarios and sends summary to all Contact Points and publishes on USIE</p>
<p>Affected State</p> <p>If satellite material is detected in State territory, NCA(A) sends relevant information by fax to the IEC using EMERCON form MPA, or submits to USIE, possibly with attachments and/or URL of web site providing relevant information</p>	<p>Compiles and analyses information, assesses the potential consequences and prognosis of potential scenarios and sends summary to all Contact Points and publishes on USIE</p> <p>Establishes hyperlinks on USIE to other States' emergency web sites providing relevant information</p> <p>Coordinates the inter-agency response of the international organizations</p>
<p>State requesting information</p> <p>NCA(A) or Permanent Mission may request information by fax, telephone or email to IEC</p> <p>State from which information is requested</p> <p>NCA(D) of launching or NCA(A) of other relevant State sends replies to the IEC by fax, email or communicates answers to the IEC by telephone.</p>	<p>Compiles requests and forwards them to the NCA(D) of launching State or NCA(A) of other relevant State or liaises and obtains information from OOSA</p> <p>Distributes answers by fax or email to requesting Contact Points or communicates answers to Contact Points by telephone and may publish on USIE. If there is a sufficient number of requests for information or a need to counter false rumours, the IEC sends by fax an advisory message to NCA(A)s of all States</p>

**Public  
information**

SPACE OBJECT RE-ENTRY	
ACTIONS BY THE CONTACT POINTS	ACTIONS BY THE IEC
<p>Launching or affected State</p> <hr/> <p>NCA(D) or NCA(A) sends any press release or URL of public web site to the IEC by email or fax, or submits to USIE</p>	<p>Publishes press release/URL on USIE</p> <hr/> <p>MTPI</p> <hr/> <p>May issue press release and post to the IAEA's public web site detailing request for assistance, actions taken by and role of IAEA</p>

## Event Type: ELEVATED RADIATION LEVELS OF UNKNOWN ORIGIN

<b>Description:</b>	Confirmed unusually higher ambient dose rates or activity concentrations in air, food or commodities believed to come from an unknown origin in another State, raising suspicion of an event of actual, potential or perceived radiological significance for other States.
<b>Purpose:</b>	To activate the IEC: (1) to investigate the source of elevated radiation levels or activity concentrations that might indicate a release of radioactive material of transnational concern; and to warn States' emergency response systems (2) to increase the frequency of routine monitoring and inform of any unusual levels to the IEC; (3) to be ready to respond to issues that are potentially radiologically significant or perceived to be radiologically significant by the media or public.
<b>Obligations:</b>	There is <b>no obligation</b> on <b>States Parties</b> by virtue of the Early Notification Convention to notify the IAEA or other States of conditions representing such an event.
<b>Expectation:</b>	<b>Member States</b> , in order to meet the requirements in [2], are <b>expected to notify, provide relevant information and respond to requests for information</b> concerning an event of actual, potential or perceived radiological significance for other States, which includes initial detection or discovery of evidence of a transnational emergency, for example by: detecting significant increases in atmospheric radiation levels of unknown origin; or detecting significant increases in contamination in imported commodities.
<b>Encouragement:</b>	The IAEA Secretariat <b>encourages</b> States to inform the IAEA of such an event for the purpose of international information exchange, especially when this event has attracted wide media coverage.

### Advisory message

ELEVATED RADIATION LEVELS OF UNKNOWN ORIGIN	
ACTIONS BY THE CONTACT POINTS	ACTIONS BY THE IEC
<p>Notifying State(s)</p> <p>NCA(D) sends advisory message by fax on EMERCON form SRF/MPA to the IEC (for attention of the IEC) or on form ENF (for information only), or submits message on USIE, possibly with attachments and/or URL for its own web site</p> <p>NCA(D) calls the IEC to confirm receipt of advisory message</p>	<p>Authenticates and verifies the content of the initial message by telephone call to the designated NCA(D) of the notifying State</p> <p>Publishes initial message on USIE, including any attachments and/or links to the notifying State's web site</p>

**Information from other States****Requests from other States for information****Public information**

<b>ELEVATED RADIATION LEVELS OF UNKNOWN ORIGIN</b>	
<b>ACTIONS BY THE CONTACT POINTS</b>	<b>ACTIONS BY THE IEC</b>
<p>State from which information is requested</p> <p>NCA(A)s send relevant information by fax or email on EMERCON form MPA to the IEC, or submit to USIE relevant information on any unusual radiation levels detected, possibly including attachments or the URL of national emergency web site</p>	<p>Contacts NWP/NCA(A)s of other relevant States and checks CTBTO data to identify origin; may request WMO expertise to calculate back trajectories</p> <p>Compiles and analyses information, assesses the potential consequences and prognosis of potential scenarios and sends summary to all Contact Points and publishes on USIE</p> <p>Requests information from NCA(D) (through NWP) of the State in which the origin of the release is considered</p>
<p>State requesting information</p> <p>NCA(A) or Permanent Mission may request information by fax, telephone, email to IEC, or by submitting form 'Request for information' on USIE</p>	<p>Endeavours to seek and provide information as available</p> <p>If there is a sufficient number of requests for information or a need to counter false rumours, the IEC sends by fax an advisory message to NCA(A)s of all States or publishes document on USIE</p>
<p>INES national officer coordinates with the relevant NCA and submits INES ERF through USIE</p>	<p>MTPI</p> <p>May issue press release(s) and post it/them on the IAEA's public web site, detailing actions taken by the IAEA, and information to counter rumours</p>

## Event Type: OTHER RADIOLOGICAL EVENT

<b>Description:</b>	Any other radiological event not specifically addressed above <sup>42</sup> .
<b>Purpose:</b>	To notify and provide relevant information with the aim of minimizing consequences of a transnational emergency not addressed above <sup>43</sup> ; and, as appropriate, in order to minimize the transboundary radiological consequences of any release, or for which the reporting State wants: to pre-empt legitimate requests for information to protect health, property or the environment under the Assistance Convention <sup>44</sup> ; to obtain the IAEA's good offices <sup>45</sup> ; to provide advanced warning to the IAEA in order that it can prepare to meet its obligations <sup>46</sup> ; or to provide information to other competent authorities that they may initiate an administrative response and/or provide advice to their governments, public or media regarding protection issues <sup>47</sup> .
<b>Obligation:</b>	If a release of radioactive material occurs or is likely to occur and results or may result in an international transboundary release, <b>States Parties</b> to the Early Notification Convention <b>are obliged to notify</b> potentially affected States and the IAEA, <b>provide relevant information</b> and <b>respond to requests for information</b> from affected States.
<b>Expectation:</b>	<b>Member States</b> , in order to meet the requirements in [2], are <b>expected to notify, provide relevant information</b> and <b>respond to requests for information</b> concerning an event of actual, potential or perceived radiological significance for other States ( <b>transnational emergency</b> ).
	A State may <b>voluntarily send</b> an advisory message to the IEC in order: 1) to pre-empt legitimate requests from other States Parties to the Assistance Convention for 'assistance' in obtaining information <sup>44</sup> ; 2) to trigger the IAEA to offer its good offices <sup>45</sup> ; 3) to provide advance warning to the IAEA, other relevant organizations or other States of a developing situation so that they can be ready to respond should the situation worsen; 4) for the IAEA, other relevant international organizations, or other States to initiate an administrative response and/or to provide advice to their governments, public or media on a developing situation of actual, potential or perceived radiological significance; 5) to otherwise alert IAEA emergency staff.

<sup>42</sup> For example, a discovered dangerous ('orphan') source, an accidental medical exposure giving rise to severe overexposure (but not underexposure) or a transport accident.

<sup>43</sup> This includes: 1) any other event that could result in a significant transboundary release (atmospheric or aquatic) (e.g. dam burst carrying radioactive material downstream into another State, specific terrorist threat); 2) discovery of a dangerous source that has been transported across or is suspected of having been transported across a national border; 3) any other event resulting in significant disruption to international trade or travel; 4) any other event warranting the implementation of protective actions for foreign nationals or embassies in the State in which it occurs; 6) any other event resulting or potentially resulting in severe deterministic effects and involving a fault/problem (such as in equipment or software) that could have serious implications for safety internationally; 7) diagnosis of medical symptoms that may have resulted from accidental exposure outside the State; 8) any other event resulting or potentially resulting in significant psychological effects among the population of a State or States other than the State in which it occurs owing to the actual or perceived radiological hazard.

<sup>44</sup> See Article 2 of the Assistance Convention [1].

<sup>45</sup> See Article 5 of the Assistance Convention [1].

<sup>46</sup> See Article 4 of the Early Notification Convention [1].

<sup>47</sup> For example, in the event of a transport accident.

**Encouragement:**

The IAEA Secretariat **encourages** States to inform the IEC of such events, when this event has attracted wide media coverage and for the purpose of international information exchange.

**Initial advisory  
message from  
reporting State**

OTHER RADIOLOGICAL EVENT	
ACTIONS BY THE CONTACT POINTS	ACTIONS BY THE IEC
<p><b>If transnational,</b> NCA(D) sends the initial advisory message by fax to the IEC EMERCON form SRF or submits the message to USIE (if not transnational use the ENF form), possibly with attachments and/or URL for its own web site, to the IAEA.</p> <p>NCA(D) calls the IEC to confirm receipt of notification/advisory message</p>	<p>Authenticates and verifies the content of the initial advisory message received by telephone call to the designated NCA(D) of the reporting State</p> <p>Offers the IAEA's good offices to the reporting State</p> <p>Promptly informs NWP's and Permanent Missions of potentially affected States (as determined by notifying State) and relevant international organizations as appropriate of any initial advisory message received</p> <p>Respecting any confidentiality constraints or instructions from the reporting State, sends copy of the initial advisory message by fax to NCA(A)s and Permanent Missions of all States</p> <p>Respecting any confidentiality constraints or instructions from the reporting State, publishes initial advisory message on USIE, including any attachments and/or links to the notifying State's web site</p> <p>If a dangerous source that is damaged, stuck, involved in fire or has lost its shielding, is found or detected, information about the exact location of the source(s) is withheld until the source(s) has (have) been made safe and secure</p> <p>If a release to the atmosphere is involved, informs WMO and requests meteorological transport model predictions from the lead WMO RSMCs</p>

**Further  
information from  
reporting State**

**Information from  
potentially  
affected States**

OTHER RADIOLOGICAL EVENT	
ACTIONS BY THE CONTACT POINTS	ACTIONS BY THE IEC
	<p>If the event involves contamination of water, surface, people or commodities that may warrant urgent protective actions, or for which precautionary protective actions have been taken, informs and establishes liaison with WHO (PAHO if in the Americas), and FAO (as appropriate)</p> <p>If the event involves serious overexposures or requires medical treatment, establishes liaison with WHO (and PAHO if in the Americas), and takes steps to protect patient confidentiality</p> <p>If the event is a complex emergency or disaster with a radiological component, establishes liaison with OCHA</p>
<p>NCA(D) sends further relevant information by fax or email on EMERCON form SRF to the IEC, or submits form to USIE, possibly with attachments and/or URL for its own emergency web site</p>	<p>According to instructions of reporting State, respecting confidentiality constraints and as appropriate, distributes further information by fax to NCA(A) and Permanent Missions of all States, and to relevant international organizations</p> <p>Respecting confidentiality constraints and as appropriate, compiles and analyses information, assesses the potential consequences and prognosis of potential scenarios and sends summary to relevant Contact Points and publishes on USIE</p> <p>Coordinates the inter-agency response of the international organizations</p>
<p>State(s) from whom information has been requested</p> <hr/> <p>NCA(A) sends relevant information on EMERCON form MPA by fax or email to the IEC or submits this information to USIE or the URL of the national emergency web site providing the relevant information</p>	<p>If transnational, may request NCA(A) of other States to provide information on monitoring and protective actions using EMERCON form MPA</p>



**Requests from other States for information****Public information**

OTHER RADIOLOGICAL EVENT	
ACTIONS BY THE CONTACT POINTS	ACTIONS BY THE IEC
	<p>Compiles information, sends summary by fax to NCA(A) of all States and publishes on USIE</p> <p>Establishes hyperlinks on USIE to other States' emergency web sites providing relevant information</p>
<p>State requesting information</p> <p>NCA(A) or Permanent Mission may request information by fax, telephone, email or on USIE</p> <p>State from whom information is requested</p> <p>NCA(D) of notifying State or NCA(A) of other relevant State sends replies to the IEC by fax or email or communicates answers to the IEC by telephone.</p>	<p>Compiles requests and forwards them to the NCA(D) of notifying State or NCA(A) of other relevant State</p> <p>Distributes answers by fax or email to requesting Contact Points or communicates answers to Contact Points by telephone and may publish on USIE. If there is a sufficient number of requests for information or a need to counter false rumours, the IEC sends by fax an advisory message to NCA(A)s of all States</p>
<p>NCA(D) sends copies of any press release or URL of public web site or submits to USIE</p> <p>INES national officer coordinates with the relevant NCA and submits INES ERF through USIE</p>	<p>Publishes press release/URL on USIE</p> <p>MTPI</p> <p>May issue press release(s) and post it/them on the IAEA'S public web site, detailing actions taken by the IAEA, and information to counter rumours</p>

## Event Type: CRIMINAL OR OTHER UNAUTHORIZED ACT

<b>Description:</b>	Criminal or other unauthorized acts involving radioactive material cover a wide spectrum of possible scenarios, such as covert placement of unshielded radioactive material, a radiation threat, sabotage of radioactive material packages or shipment, capture and the subsequent dispersion of radioactive material by means of conventional explosives.
<b>Purpose:</b>	To notify and provide relevant information with the aim of minimizing potential consequences of a transnational emergency; and, as appropriate, in order to minimize the transboundary radiological consequences of any release, or for which the reporting State wants: to pre-empt legitimate requests for information to protect health, property or the environment under the Assistance Convention <sup>48</sup> ; to obtain the IAEA's good offices <sup>49</sup> ; to provide advanced warning to the IAEA in order that it can prepare to meet its obligations <sup>50</sup> ; or to provide information to other competent authorities that they may initiate an administrative response and/or provide advice to their governments, public or media regarding protective actions.
<b>Obligation:</b>	If a release of radioactive material occurs or is likely to occur with a release magnitude that warrants taking protective actions and results or may result in an international transboundary release, <b>States Parties</b> to the Early Notification Convention <b>are obliged to notify</b> potentially affected States and the IAEA, <b>provide relevant information</b> and <b>respond to requests for information</b> from affected States.
<b>Expectation:</b>	<p><b>Member States</b>, in order to meet the requirements in [2], are <b>expected to notify, provide relevant information</b> and <b>respond to requests for information</b> concerning an event of actual, potential or perceived radiological significance for other States (transnational emergency).</p> <p>A State may <b>voluntarily send</b> an advisory message to the IEC in order: 1) to pre-empt legitimate requests from other States Parties to the Assistance Convention for 'assistance' in obtaining information<sup>48</sup>; 2) to trigger the IAEA to offer its good offices<sup>49</sup>; 3) for the IAEA, other relevant international organizations, or other States to initiate an administrative response and/or to provide advice to their governments, public or media on a developing situation of actual, potential or perceived radiological significance.</p>
<b>Encouragement:</b>	The IAEA Secretariat <b>encourages</b> States to inform the IEC of such events, when this event has attracted wide media coverage and for the purpose of international information exchange.

<sup>48</sup> See Article 2 of the Assistance Convention [1].

<sup>49</sup> See Article 5 of the Assistance Convention [1].

<sup>50</sup> See Article 4 of the Early Notification Convention [1].

**Initial advisory  
message from  
reporting State**

**Further  
information from  
reporting State**

**Public information**

<b>CRIMINAL OR OTHER UNAUTHORIZED ACT</b>	
<b>ACTIONS BY THE CONTACT POINTS</b>	<b>ACTIONS BY THE IEC</b>
<p><b>If transnational,</b> NCA(D) sends the advisory message by fax on EMERCON form SRF to the IEC or submits message to USIE, possibly with attachments and/or URL for its own web site, to the IAEA.</p> <p>Ensures receipt of initial advisory message by telephone call to the IAEA</p>	<p>Authenticates and verifies the content of the initial message received by telephone call to the designated NCA(D) of the reporting State</p> <p>Offers the IAEA's good offices to the reporting State</p> <p>Respecting any confidentiality constraints, promptly informs NWP's and Permanent Missions of potentially affected States (as determined by notifying State) and relevant international organizations, as appropriate, of any message received</p> <p>Establishes liaison with EUROPOL and INTERPOL and/or other relevant international organization respecting instructions from the reporting State</p>
<p>NCA(D) sends further relevant information by fax or email on EMERCON form SRF to the IEC, or submits this information on USIE, possibly with attachments and/or URL for its own emergency web site</p>	<p>According to instructions of reporting State, respecting confidentiality constraints and as appropriate, distributes further information</p> <p>Respecting confidentiality constraints and as appropriate, compiles and analyses information, assesses the potential consequences and prognosis of potential scenarios and sends summary to relevant Contact Points and publishes on USIE with restricted access</p>
<p>NCA(D) sends copies of any press release or URL of public web site or submits press release on USIE</p>	<p>Publishes press release/URL to USIE</p> <p>MTPI</p> <p>May issue press release(s) and post it/them on the IAEA's public web site, detailing actions taken by the IAEA, and information to counter rumours</p>

## 4.5. Requesting IAEA emergency assistance

If a State needs assistance in the event of a nuclear or radiological incident or emergency, whether or not such an event originates on its territory or is under its jurisdiction or control, it may, in accordance with the Assistance Convention, request assistance from or through the IAEA.

The requesting State is responsible for overall direction, support and supervision of any assistance within its territory. The Permanent Mission, or the relevant National Competent Authority, is the Government representative that is expected to request assistance under the terms of the Assistance Convention.

To facilitate the prompt provision of assistance, it is expected that a NCA of the State requesting assistance will specify by fax or by completing form RFA on USIE the scope and type of assistance required as follows:

- a) **Information about the incident or emergency:** nature of the event, location, time of its occurrence (UTC and local time), name and full address of organization in charge of response actions, and name and contact details of person assigned to liaise with the IAEA.
- b) **Type(s) of emergency assistance required:**<sup>51</sup> radiation survey, environmental sampling and analysis, source search and recovery, assessment and advice, decontamination, medical support, dose assessment, and other(s), need to be specified.

**Note:** if a request for assistance is not sent directly – on the established emergency channels – to the IEC, this will cause considerable delay before the IEC can act upon it.

In addition, it is also expected that the requesting State will:

- Approve, in writing, the Assistance Action Plan for the requested assistance proposed by the IEC, and promptly transmit such approval to the IEC.
- Provide, to the extent of its capabilities, local facilities and services for the proper and effective administration of the assistance.
- Ensure the protection and security of personnel, equipment and materials brought into its territory by or on behalf of the assistance for such purposes.
- Afford the necessary privileges, immunities and facilities for the performance of the assistance functions.
- Facilitate the entry into, stay in and departure from its national territory of personnel, equipment and property involved in the assistance.
- Facilitate the transit through its territory of duly notified personnel, equipment and property involved in the assistance.

<sup>51</sup> More details on the assistance that can be provided through the IAEA Response and Assistance Network can be found in [4].

**IEC actions**

Immediately after receiving a request for emergency assistance, the IEC will:

- Communicate with the requesting Contact Point, via telephone, to authenticate and to verify the request received.
- Evaluate technically the request received.
- Provide initial advice to the requesting State, as appropriate.
- Alert the appropriate RANET National Competent Authorities (through NWPs, if necessary).
- Assess the IAEA's own capability to provide the emergency assistance requested and request any appropriate RANET capabilities to place on standby their available resources.
- Develop the Assistance Action Plan for implementing the emergency assistance requested in coordination with the requesting and if necessary, with the providing State(s)/relevant international organization(s).
- Obtain deployment authorization from the relevant NCA(A)s upon acceptance of the Assistance Action Plan by the State requesting emergency assistance.
- Facilitate the emergency assistance.

## References

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- [2] FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS, INTERNATIONAL ATOMIC ENERGY AGENCY, INTERNATIONAL LABOUR ORGANIZATION, OECD NUCLEAR ENERGY AGENCY, PAN AMERICAN HEALTH ORGANIZATION, UN OFFICE FOR THE CO-ORDINATION OF HUMANITARIAN AFFAIRS, WORLD HEALTH ORGANIZATION, Preparedness and Response for a Nuclear or Radiological Emergency, Safety Standards Series No. GS-R-2, IAEA, Vienna (2002).
- [3] EUROPEAN COMMISSION, EUROPEAN POLICE OFFICE EUROPOL, FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS, INTERNATIONAL ATOMIC ENERGY AGENCY, INTERNATIONAL CRIMINAL POLICE ORGANIZATION, INTERNATIONAL MARITIME ORGANIZATION, OECD NUCLEAR ENERGY AGENCY, PAN AMERICAN HEALTH ORGANIZATION, UNITED NATIONS ENVIRONMENT PROGRAMME, UNITED NATIONS OFFICE FOR THE CO-ORDINATION OF HUMANITARIAN AFFAIRS, UNITED NATIONS OFFICE FOR OUTER SPACE AFFAIRS, WORLD HEALTH ORGANIZATION, WORLD METEOROLOGICAL ORGANIZATION, in cooperation with the INTERNATIONAL CIVIL AVIATION ORGANIZATION and the UNITED NATIONS SCIENTIFIC COMMITTEE ON THE EFFECTS OF ATOMIC RADIATION, Joint Radiation Emergency Management Plan of the International Organizations, EPR-JPLAN (2010), IAEA, Vienna (2010).
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- [8] INTERNATIONAL ATOMIC ENERGY AGENCY, Arrangements for Preparedness for a Nuclear or Radiological Emergency, Safety Guide, GS-G-2.1, IAEA, Vienna (2007).
- [9] INTERNATIONAL ATOMIC ENERGY AGENCY, Method for Developing Arrangements for Response to a Nuclear or Radiological Emergency, EPR-METHOD 2003, IAEA, Vienna (2003).
- [10] INTERNATIONAL ATOMIC ENERGY AGENCY, Criteria for Use in Preparedness and Response for a Nuclear or Radiological Emergency, General Safety Guide, GSG-2, IAEA, Vienna (2011).





**1**

**INTRODUCTION**

**2**

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