



**Temporary Operational Protocol for
making safe and managing orphaned
or seized radioactive sources**



Comhshaol, Pobal agus Rialtas Áitiúil
Environment, Community and Local Government



Radiological Protection Institute of Ireland
An Institiúid Éireannach um Chosaint Raideolaíoch



**An Roinn Iompair
Turasóireachta agus Spóirt**
Department of Transport,
Tourism and Sport



Environmental Protection Agency
An Ghníomhaireacht um Chaomhnú Comhshaoil



An Roinn Cosanta
Department of Defence



An Roinn Sláinte
DEPARTMENT OF HEALTH



Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive



AN ROINN DLÍ AGUS CIRT AGUS COMHIONANNAIS
DEPARTMENT OF JUSTICE AND EQUALITY



**AN ROINN OIDEACHAIS
AGUS SCILEANNA** | DEPARTMENT OF
EDUCATION
AND SKILLS

Revenue



Cáin agus Custaim na hÉireann
Irish Tax and Customs

Introduction

Many incidents involving the loss of control of sealed radioactive sources have been reported worldwide. Such sources have the potential to lead to excessive radiation exposure of members of the public, leading to death or serious injury, or to result in widespread environmental contamination. A study reviewing the different management practices for sources in the EU estimated up to 70 sources are lost from regulatory control per year throughout the EU¹.

This protocol outlines the arrangements to manage the safe interim storage of an orphan radioactive source or of a source identified for seizure, pending its ultimate disposal. Such sources may be sources found outside of regulatory control, detected at a frontier or seized in the public interest. This includes a radioactive source arising from a CBRN (Chemical, Biological, Radiological, Nuclear) incident, following neutralisation of any associated dispersal device and confirmation of the suspect object as radioactive.

The arrangements in this protocol are meant to be consistent with and used in conjunction with relevant protocols to the Major Emergency Framework Document and may be revisited as necessary as those protocols are further developed.

This Temporary Operational Protocol is designed to be implemented by the Radiological Protection Institute of Ireland (RPII), with the Department of Environment, Community and Local Government (DECLG) and in conjunction with an organisation (or organisations) identified on a case by case basis to assist the RPII as Competent Authority in making arrangements for the appropriate management and temporary storage of a discovered orphan source or a source identified for seizure. A non exhaustive list of organisations that could be requested by the RPII, on a case by case basis, to play an advisory and/or supporting role in the implementation of the protocol can be seen in Annex 1.

Responsibility

In accordance with Appendix A to the Strategic Emergency Planning Guidance document, as issued by the Office of Emergency Planning and approved by Government, the DECLG is the lead Government department for dealing with an emergency involving a radioactive source.

¹ Proposal for a Council Directive on the control of high activity sealed radioactive sources, 7396/02 of 21 March 2002, COM (2002) 130 final

Under S.I. 875 of 2005², the RPII is the designated competent authority for the High Activity Sealed Sources (HASS) Directive (2003/122 Euratom). In addition, the State retains certain responsibilities for orphan sources as indicated during the transposition of the HASS Directive³.

Government policy on radioactive waste provides for the establishment of a National Radioactive Waste Storage Facility. Pending the establishment of this facility, there is a need to identify, in the case of the discovery of an orphan source or the identification of a source for seizure, a safe and secure storage facility that could temporarily hold a source in an emergency situation. Organisations listed in Annex 1 could be requested to provide assistance to the Competent Authority in identifying a suitable temporary storage facility.

Criteria for invoking this Protocol

This Protocol will be invoked when an orphan or seized radioactive source needs to be stored safely and securely on an interim basis so that its ultimate disposal can be managed.

Only sources meeting the following criteria will be considered for interim management under the terms of this protocol:

- Presence of a demonstrable risk to public safety if the source is not moved;
- Inability of current holder to arrange safe disposal;
- Failure to identify the original owner;
- Immediate export route unavailable.

The RPII will determine if the criteria have been met to activate the protocol.

The RPII will undertake to make a best endeavour to identify and secure appropriate temporary storage through agreement with a suitable organisation, commencing with the non-exhaustive list set out in Annex 1. It is acknowledged that this process may require the co-operation of more than one organisation in addition to RPII and DECLG. For example, the relevant Government Department with responsibility for the sector in which the source originates or in which the temporary storage is identified may be asked to play an advisory and co-ordinating role.

Should no agreement for interim storage be reached, then a Government direction on the matter will be sought. Every effort of cooperation by all parties involved will

² S.I. No. 875/2005 - Radiological Protection Act 1991 (Control of High-Activity Sealed Sources) Order 2005

³ Letter of 14 December 2005 from J. Mooney (DEHLG) to T. Ryan (RPII)

be made to reach agreement on a temporary storage solution before this step becomes necessary.

Duration of interim storage

Such a source will not remain in the temporary storage location for any longer than 18 months. The RPII will manage the onward transfer and/or disposal of the source within that timeframe – this would be considered a priority activity by RPII.

Costs

Responsibility for costs associated with the onward transfer and/or disposal of the source would chiefly depend on the origin of the source. Any such costs incurred will be sought from the original owner. An assessment of the costs to be recovered will be made by the RPII and the DECLG. If such outstanding costs cannot be recovered in this way, the DECLG will make arrangements for such costs to be met. The organisation providing temporary storage will not be responsible for any such costs.

Source management procedure

Assuming that an organisation can be identified and agrees, or is directed by Government, to provide a temporary storage facility for the management of the source then the following operational procedure will apply:

1. In the event that a source is discovered in an unsecured or public area then An Garda Síochána will participate in the onsite co-ordination in line with obligations under A Framework for Major Emergency Management (2006)⁴.
2. The source will be characterised to the extent possible by RPII in terms of radionuclide, physical size and activity.
3. RPII will advise where necessary on regulatory, safety requirements for transport and temporary storage.
4. An Garda Síochána in conjunction with RPII will advise on security requirements for the transport and temporary storage of the source where appropriate

⁴ www.mem.ie

5. RPII will advise on the transport of the source to the temporary storage facility and, where appropriate, transport will be arranged by RPII, who will also ensure that all regulatory and licensing requirements are put in place.
6. RPII will maintain normal regulatory oversight of the source including inspection appropriate to the nature of the source while it is in temporary storage.
7. RPII, in consultation with the organisation providing temporary storage, any organisation playing an advisory/co-ordination role, and DECLG, will work to identify an alternative storage or disposal route for the source.
8. DECLG, RPII, the organisation providing temporary storage, and any organisation playing an advisory/co-ordination role, working as a sub-group of the Interdepartmental High Level Group on Radioactive Waste will meet monthly to assess progress and to establish timelines for the onward transfer and/or disposal of the source.
9. RPII will confirm transfer and/or final disposal to the HLG.

Review of arrangements

In addition to the planned monthly reviews at any stage, any of the organisations directly involved when this protocol is invoked may request a review of the progress of plans and/or the continued suitability of temporary storage arrangements.

Liaison between agencies

Each of the organisations directly involved (DECLG, RPII, those providing storage, and those playing an advisory/co-ordination role) will appoint a liaison person and one alternate for the purposes of these arrangements. These liaisons will provide points of contact in each organisation for all arrangements pertaining to any sources stored under this protocol.

Annex 1: Non-Exhaustive List of Organisations who could be requested by the RPII, on a case by case basis, to play an advisory and/or supporting role in the implementation of the protocol, including, where applicable, through the provision of temporary storage by agreement under the terms of the protocol.

Department of the Environment, Community and Local Government

Department of Transport, Tourism and Sport

Department of Education and Skills

Department of Defence

Department of Justice and Equality

Department of Health

Local Authorities

Environmental Protection Agency

The Defence Forces

An Garda Síochána

Health Service Executive

Office of the Revenue Commissioners (Customs)

Radiological Protection Institute of Ireland

3 Clonskeagh Square

Clonskeagh

Dublin 14

T: +353-1-2697766

F: +353-1-2697437

E: rpii@rpii.ie

W: www.rpii.ie