

| The Role of the UK National Coordinators for International Operating Experience Report Systems | | | | |
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1. Introduction

1.1. Purpose

1.1. This document defines the ONR roles and responsibilities to support the UK's participation with the International Atomic Energy Agency (IAEA) international operating experience programmes, in line with UK's commitments under the IAEA Convention on Nuclear Safety 1994 [1].

1.2. Scope & Applicability

1.2. The UK has committed to the IAEA Convention on Nuclear Safety 1994. Sub paragraph vii to Article 19 of this convention states:

"Each Contracting Party shall take the appropriate steps to ensure that: programmes to collect and analyse operating experience are established, the results obtained, and the conclusions drawn are acted upon and that existing mechanisms are used to share important experience with international bodies and with other operating organizations and regulatory bodies".

- 1.3. In this context, the IAEA is an international body that operates programmes for sharing operating experience in the nuclear industry. Individual member states share important experience with the IAEA's operating experience programmes under the oversight of government appointed National Co-ordinators. The UK government has delegated the role of the UK National Co-ordinators to ONR.
- 1.4. This document details the roles and responsibilities for ONR and the UK National Co-ordinators for sharing important nuclear safety experiences with, and encouraging the use of, the relevant IAEA's operating experience programmes:

| Name | Description | Scope | Ref. |
|-------|--|-----------------------|------|
| IRS | International Reporting System for Operating Experience | Nuclear Power Plants | [2] |
| FINAS | Fuel Information Notification and Analysis System | Fuel Cycle Facilities | [3] |
| IRSRR | Incident Reporting System for Research Reactors | Research Reactors | [4] |

Table 1 – Systems and Scope



1.3. Definitions

| BEIS | Department of Business, Energy and Industrial Strategy |
|-------|--|
| FINAS | Fuel Information Notification and Analysis System |
| IAEA | International Atomic Energy Agency |
| INES | International Nuclear Event Scale |
| IRS | Incident Reporting System |
| IRSRR | Incident Reporting System for Research Reactors |



2. Roles and Responsibilities

2.1. Role of Department of Business, Energy and Industrial Strategy (BEIS)

2.1. BEIS is the lead UK Government Department for interface with IAEA. BEIS is responsible for appointing the UK National Co-ordinators for the IAEA operating experience programmes.

2.2. Role of the Office for Nuclear Regulation (ONR)

- 2.2. ONR is responsible for:
 - Selecting suitably qualified and experienced staff members for BEIS to nominate for the roles of UK National Co-ordinators for the IAEA operating experience programmes.
 - Ensuring that ONR staff nominated as UK National Co-ordinators have adequate time, resources and funding to effectively discharge the role.

2.3. Role of the UK National Co-ordinators

- 2.3. The key responsibilities of the UK National Co-ordinators are:
 - Oversee the UK's sharing of operating experience with the IAEA operating experience programmes.
 - Promote the UK Nuclear Industry's use of operating experience from the IAEA operating experience programmes.
 - Control access, from UK based users, to the IAEA operating experience programmes' databases.
- 2.4. The UK National Co-ordinators' detailed responsibilities for overseeing the UK's sharing of operating experience with the IAEA operating experience programmes are:
 - Identify events to share with the IAEA's operating experience programmes.
 - In consultation with the relevant licensees, prepare event reports.
 - Upload event reports to the IAEA operating experience programmes' databases.
- 2.5. The IAEA operating experience database contains useful lessons learned that may be relevant to the UK nuclear industry. The UK National Co-ordinator's responsibilities for promoting the use of operating experience from the IAEA programmes are:



- Represent the UK at IAEA events associated with its operating experience programmes.
- Facilitate sharing of international event reports within the UK nuclear industry.
- Enable dissemination in ONR of international event reports using ONR's Regulatory Intelligence activities.
- 2.6. The IAEA expects the UK National Co-ordinator's to control access to IAEA operating experience programmes' databases. This is to ensure that the information in the database is used in accordance with its terms and conditions. As part of this role, the UK National Co-ordinator's responsibilities are:
 - Maintain oversight of the UK based users.
 - Manage UK based requests for access to the databases in accordance with the IAEA operating experience programmes' terms and conditions.
 - Advise UK based users of their responsibility to comply with the databases' term and conditions.

2.4. Role of the Nuclear Site Licensees

- 2.7. License Condition 7 requires Licensees to make and implement adequate arrangements for notifying and reporting incidents on their sites. ONR's regulatory guidance states that these arrangements should include sharing learning internationally [5].
- 2.8. The UK has committed to the IAEA operating experience programmes. This is a relevant international programme for licensees to share learning in the form of operating experience. Therefore, ONR expects that License Condition 7 arrangements should include reporting operating experience to these programmes.
- 2.9. The ONR expects the licensees to assist the UK National Co-ordinators with identifying and drafting relevant operating experience reports. This is because the licensees have the best available information of the events and relevant lessons learned.



3. UK National Co-ordinator Guidance

3.1. General

- 3.1. This section provides guidance for the UK National Co-ordinators on approaches that they can take to meet their responsibilities from Section 2 of this document.
- 3.2. The following points are general guidance that apply to all the UK National Co-ordinators' activities with the IAEA operating experience programmes. They are drawn from historical experiences.
- 3.3. The best criterion for selecting events to share with the international community is that the events have identified new learning opportunities.
- 3.4. The UK National Co-ordinators can identify events for inclusion in the IAEA operating experience programmes by searching ONR's Incidents database. Nuclear Safety categories and International Nuclear Event Scale (INES) ratings can be used as filters for events with a higher nuclear safety significance.
- 3.5. To facilitate timely provision of information, the UK National Co-ordinators should convene regular event screening and progress review meetings with relevant licensees. These meeting can identify new events for reporting and ensure timely dissemination of reports.
- 3.6. Historically, licensees have authored most of the event reports. In certain circumstances, the UK National Co-ordinator may author the reports. In these cases, the UK National Co-ordinator should consult with the licensee and ONR inspectors responsible for regulating this licensee.

3.2. IRS

- 3.7. The IRS scope is all civilian nuclear power plants [2]. This includes reactors that are under construction, being commissioned, operational and being decommissioned.
- 3.8. The UK National Co-ordinator should consult with the relevant ONR subdivision to identify licensees that are relevant to IRS.
- 3.9. The template in Appendix A can be used to provide the relevant information to the IRS.

3.3. FINAS

3.10. The FINAS scope is all types of installation dealing with the nuclear fuel cycle excluding nuclear power plants and research reactors or waste disposal



repositories [3]. This includes sites that are under construction, being commissioned, operational and being decommissioned.

- 3.11. The UK National Co-ordinator should consult with the relevant ONR sub-division to identify licensees that are relevant to FINAS.
- 3.12. The template in Appendix B can be used to provide the relevant information to the FINAS.

3.4. IRSRR

3.13. As of 2021, there are no civilian UK research reactors that are under construction or operational. The UK National Co-ordinator may consult with the relevant ONR sub-division to identify licensees, if this situation changes.

3.5. Submission of Event Reports

- 3.14. The IAEA have an internet application for sharing operating experience reports with their programmes. The process for using these applications is described in the relevant User's Manuals [2, 3 & 4].
- 3.15. The IAEA may review and comment on the event reports. The UK national co-ordinator should consult with the relevant licensee before making substantial changes to the reports to resolve the received comments.

3.6. Management of UK Users

- 3.16. A list of registered UK users is available on the IAEA operating experience programmes' databases. Guidance for viewing these lists is provided in the relevant user manuals. The UK National Co-ordinators can request that the IAEA systems administrators add or remove the users on these lists.
- 3.17. The IAEA operating experience programmes terms and conditions are that the information on the databases must not be distributed beyond authorised users. The UK national co-ordinator should ensure that all UK based users are aware of this requirement.

3.7. Export Control for Operating Experience Reports

3.18. Ideally, event reports that the UK National Co-ordinators submit to the IAEA operating experience programmes should be written at a sufficiently high level to not contain export-controlled information. However, in some cases it may be necessary to include detailed information. In these cases, to ensure compliance with ONR's export control arrangements, the UK National Co-ordinators should refer to the current ONR guidance for export control [6].



4. References

- 1. IAEA, Convention on Nuclear Safety 1994
- 2. IAEA, Incident Reporting System, Services Series 19
- 3. IAEA, Incident Reporting System for Fuel Cycle Facilities, Services Series 14
- 4. IAEA, Incident Reporting System for Research Reactors (IRSRR)
- 5. NS-INSP-GD-007 Technical Inspection Guide: Guidance: LC7 "Incidents on the Site" and Other Reporting and OE Processes.
- 6. P&C-EC-PROC-001, Export Control



Appendix A: UK IRS Report Template

| INTERNATIONAL REPORTING SYSTEM FOR OPERATING EXPERIENCE (IRS) | | | |
|---|---|---|--|
| EVENT TITLE | | | |
| | (Title should be single line of text maximum) | | |
| DATE of EVENT: | | | |
| UK EVENT REFERENCE: | | PLANT NAME: | |
| | | | |
| REACTOR TYPE/CAPACITY: | | FACILITY CONDITION: | |
| | | CONSTRUCTION/OPERATIONAL/SHU TDOWN DECOMMISSIONING | |

1. ABSTRACT OF THE EVENT

(A summary to convey the main messages essential for understanding the significance of the event, including a brief description of the event, its relevance to safety, its causes, the lessons learned, and corrective actions taken – no more than about 25 lines)

2. NARRATIVE DESCRIPTION

Facility

(Brief description of the facility).

Incident/Event

(Sufficient information to convey the progression of the event and its significance)

3. CODING - (See table below)

4. SAFETY ASSESSMENT

(Actual and potential consequences for nuclear safety, a discussion of the barriers broken or degraded by the event and the effective barrier that terminated the events. Also include human performance related aspects.)

5. CAUSES OF THE EVENT

(Indicate both direct and root causes)



6. LESSONS LEARNED FROM THE EVENT

(Relate the root and direct causes to lessons and lead into corrective actions)

7. ACTIONS TAKEN AFTER THE EVENT

(Detail in three categories: immediate, interim and those to prevent recurrence)

IRS CODING SHEET

Reference: Dictionary of codes in Appendix C of the IRS Guidelines

| CODING TYPE | CODE NO. | CODE DESCRIPTOR |
|---|-------------|-----------------|
| 1. Reporting categories. | | |
| 2. Plant status prior to the event | | |
| 3. Failed/affected systems. | | |
| 4. Failed/affected components. | | |
| 5. Cause of the event: Direct and Root. | | |
| 6. Effects on Operation. | | |
| 7. Characteristics of event/issue. | | |
| 8. Nature of failure or error. | | |
| 9. Recovery actions. | | |
| Other Comments | | |



Appendix B: UK FINAS Report Template

| FUEL INCIDENT NOTIFICATION AND ANALYSIS SYSTEM (FINAS) | | | |
|--|---|---|--|
| EVENT TITLE | | | |
| | (Title should be single line of text maximum) | | |
| DATE of EVENT: | | | |
| UK EVENT REFERENCE: | | PLANT NAME: | |
| | | | |
| FUEL CYCLE FACILITY TYPE: | | FACILITY CONDITION: | |
| | | CONSTRUCTION/OPERATIONAL/SHU TDOWN DECOMMISSIONING | |

1. ABSTRACT OF THE EVENT

(A summary to convey the main messages essential for understanding the significance of the event, including a brief description of the event, its relevance to safety, its causes, the lessons learned, and corrective actions taken – no more than about 25 lines)

2. NARRATIVE DESCRIPTION

Facility

(Brief description of the facility).

Incident/Event

(Sufficient information to convey the progression of the event and its significance)

3. CODING - (See table below)

4. SAFETY ASSESSMENT

(Actual and potential consequences for nuclear safety, a discussion of the barriers broken or degraded by the event and the effective barrier that terminated the events. Also include human performance related aspects.)

5. CAUSES OF THE EVENT

(Indicate both direct and root causes)



6. LESSONS LEARNED FROM THE EVENT

(Relate the root and direct causes to lessons and lead into corrective actions)

7. ACTIONS TAKEN AFTER THE EVENT

(Detail in three categories: immediate, interim and those to prevent recurrence)

FINAS CODING SHEET

Reference: Dictionary of codes in Appendix C of the FINAS Guidelines

| CODING TYPE | CODE NO. | CODE DESCRIPTOR |
|---|-------------|-----------------|
| 1. Reporting categories. | | |
| 2. Plant status prior to the event | | |
| 3. Failed/affected systems. | | |
| 4. Failed/affected components. | | |
| 5. Cause of the event: Direct and Root. | | |
| 6. Effects on Operation. | | |
| 7. Characteristics of event/issue. | | |
| 8. Nature of failure or error. | | |
| 9. Recovery actions. | | |
| Other Comments | | |