

DISCLAIMER

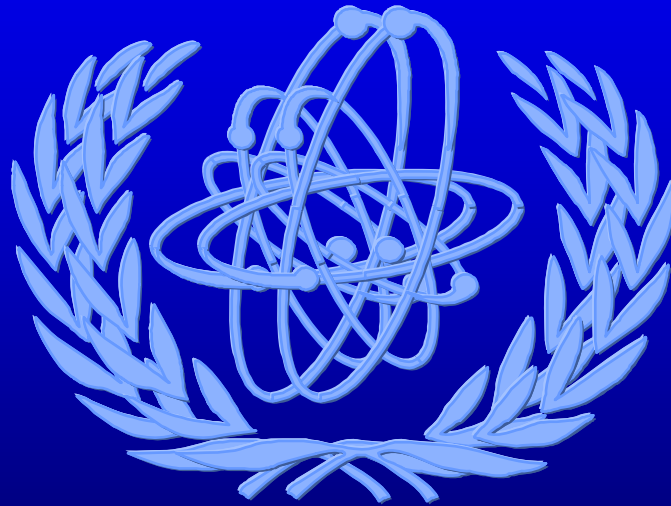
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Communication with Media and the Public



IRS and International Nuclear Event Scale (INES)

Lecture

Introduction

- **Define subject matter**
- **State what the audience will learn in this lecture**
- **Explain any relevant background**

Content

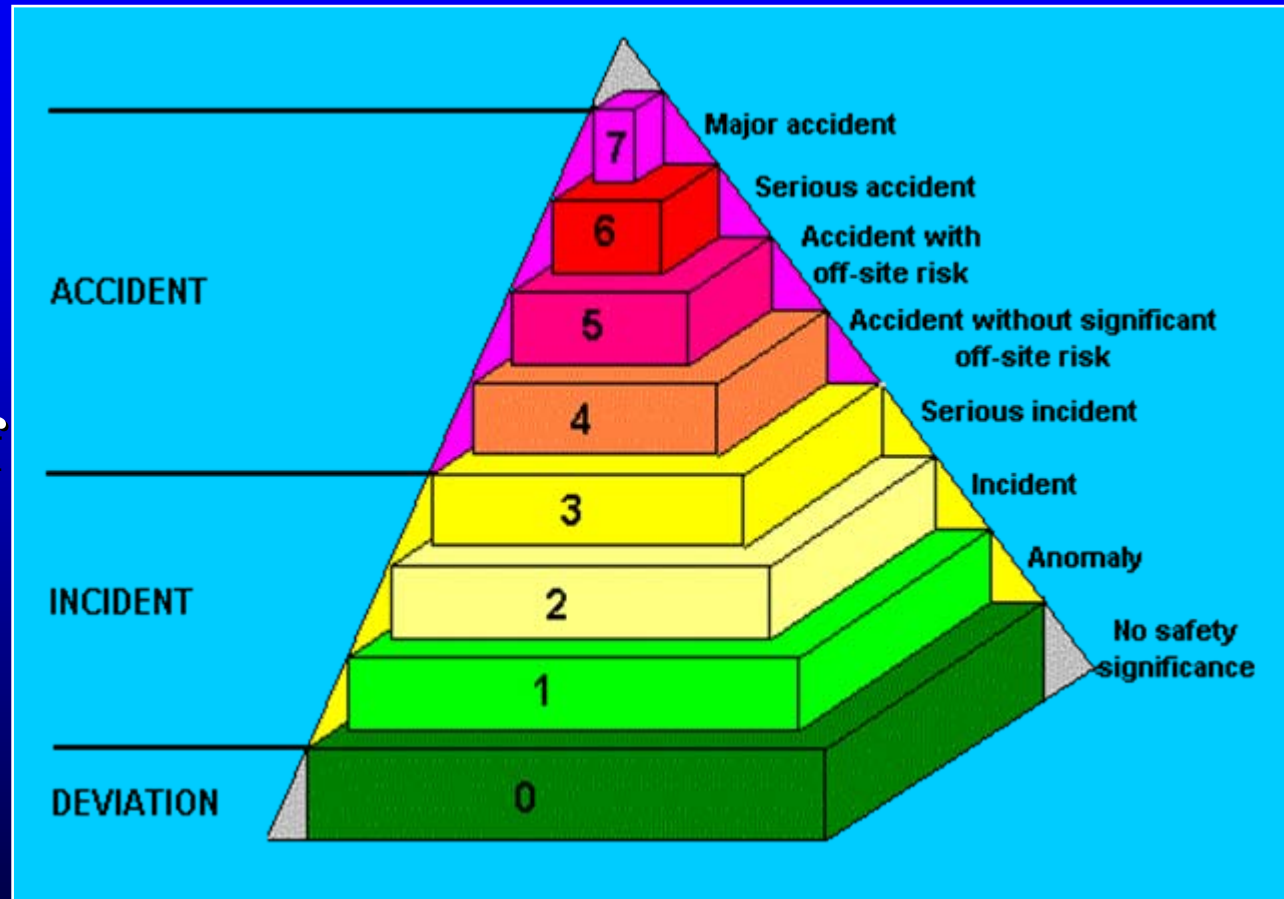
- **Incident Reporting System (IRS)**
- **Incident Reporting System for Research reactors (IRSRR)**
- **International Nuclear Event Scale (INES)**
- **Nuclear Events Web-based System (NEWS)**
- **Summary**

Overview

- Give big picture of the subject

What is INES?

- Tool to promptly communicate the public the safety significance of events at nuclear installations



Scale Criteria or Safety Attributes

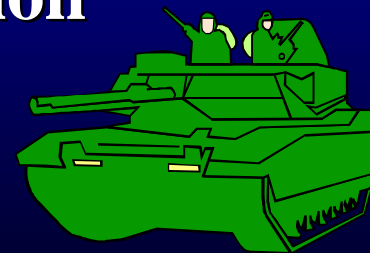
- Offsite impact



- Onsite impact



- Defence in depth degradation



Basic Structure

7 - Major	Major release		
6 - Serious	Significant release		
5 – Off site risk	Limited release	Severe damage to core and barriers	
4 – No significant off site risk (RA-2)	Minor release	Significance damage to reactor core/Fatal exposure of worker	
3 – Serious incident	Very small release	Severe contamination/ acute health effects to a worker	Near accident – No safety layers remaining
2 - Incident		Significant spread of contamination/acute health effects	Significant failures in safety provisions
1 - Anomaly			Beyond authorised operating regime



Defence in Depth

- **Defence in depth can be affected by the following factors:**
 - **common cause failures**
 - **bad procedures**
 - **Safety culture**
- **Events involving defence in depth degradation are:**
 - **Initiating events or degradation**

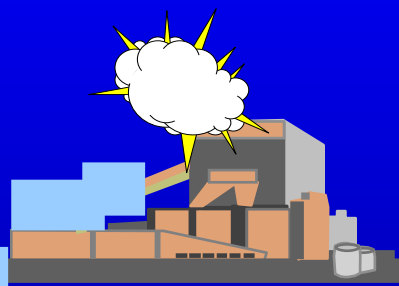
Examples of Classified Nuclear Events

Incident Reporting System for RRs

- **Incident Reporting System for Research Reactors (IRSRR)** is a global network through which nations share experience to improve the safety of the facilities
- **IRSRR** is a vehicle to communicate lessons learned to reflect the operation experience of a variety of RRs under different conditions around the world
- **IRSRR** as such is of value mainly to technical people working in the nuclear field

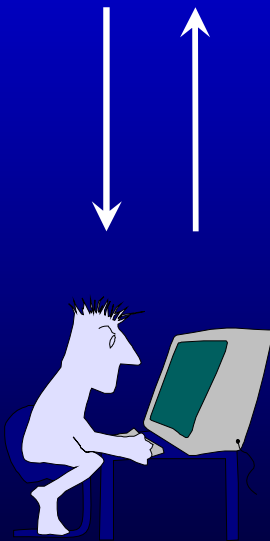
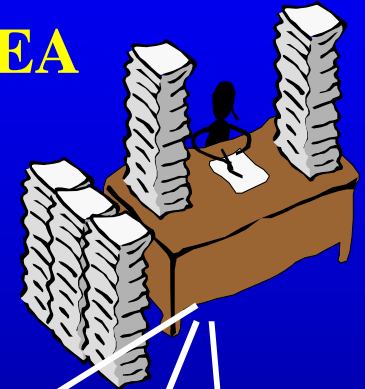


Incident Reporting System for RRs - IRSRR



**Plant Incident
Local Coordinator**

IAEA



National Coordinator

IV4_7 IRS and International Nuclear Event Scale



Member States Participating at IRSRR



Web-based System for IRSRR

The purpose of this system is to reduce the workload of national coordinators facilitating the collection, maintenance and dissemination of reports on unusual events in research reactors



IRSRR Web: Main Requirements

- **Any event sent through the system (by a national coordinator) shall be visible to other users only after revision and approval by the Agency moderator**
- **National Coordinators are allowed to make changes only in their own country reports and before final approval of the moderator**
- **Any modification after that will not be accepted by the system**



IRSRR Web: Main Requirements (1)

- **The first version of the report shall be maintained without modifications**
- **Modifications introduced by the moderator shall be saved in another version**
- **Security level should not be lower than the present one**

IRSRR Web: Main Requirements (2)

- **System have three levels of users**
 - **Administrator level (IAEA moderator) with full read and write access**
 - **National coordinators level with read access but limited write access (the user can write and send a new event but he or she is not allowed to make changes in someone else report)**
 - **Local coordinators level with read access only**



IRSRR WEB Test

The screenshot shows a Microsoft Internet Explorer browser window displaying the IRSRR 2001 website. The browser's title bar reads "IRSRR 2001, Index - Microsoft Internet Explorer provided by International Atomic Energy Agency". The address bar shows the URL "http://www.iaea.org/~nsni-maz/index.html". The website content includes a navigation menu on the left with links to "About IRSRR", "IRSRR Events", "New Event", "Search Event", "Experience with RR 1999", "Watch Codes", "Guidelines", "Feedback", and "Contact Us". A central graphic features the text "Incident Reporting System for Research Reactors (IRSRR)" alongside a nuclear symbol and a photograph of a control room. Below the graphic, a footer contains a series of links: "Home | [About IRSRR](#) | [IRSRR Events](#) | [New Event](#) | [Search Event](#) | [Guidelines](#) | [Feedback](#) | [Contact Us](#) | [Worldatom](#)". The footer also includes the text "Copyright © 2001, NSNI". The browser's status bar at the bottom indicates "Local intranet".



IRS Trends

2004

**Integrated system for all nuclear facilities –
WEB based**

Summary

- **State what has been learned**
- **Define ways to apply this lecture**

Where to Get More Information

- **Other lectures**
- **Practical lessons related to this lecture**
- **Books, articles, electronic sources**
- **Any other sources**