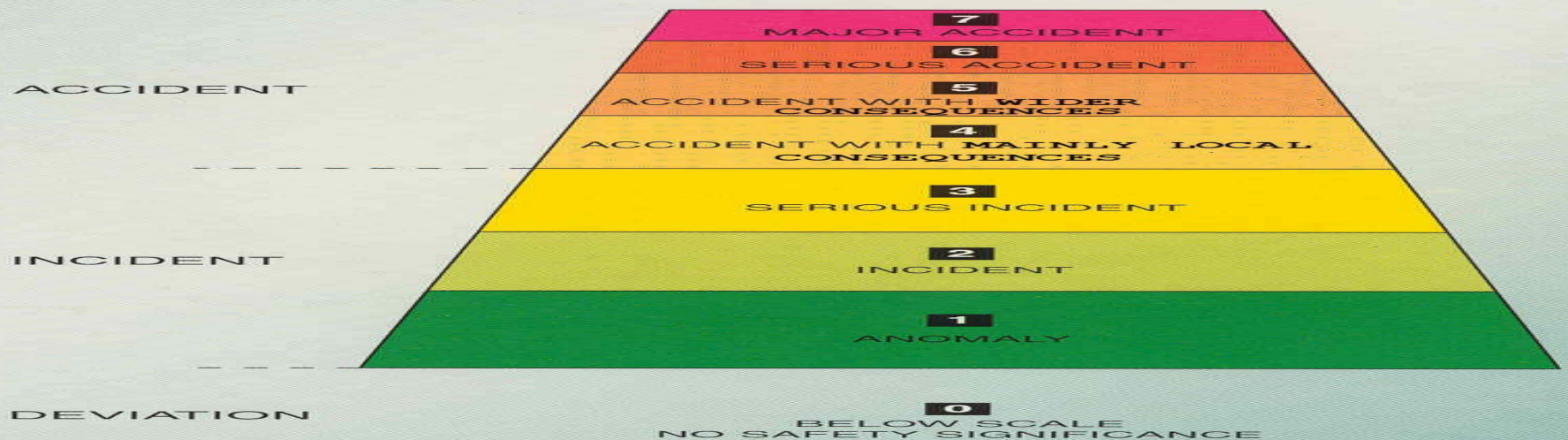


The International Nuclear Event Scale (INES):

Enhanced reporting on nuclear and radiological events



R. Spiegelberg Planer

Incident and Emergency Centre

Department of Nuclear Safety and Security

Why a Scale?

A clip from the original video



IAEA

International Atomic Energy Agency

Any incident in a nuclear facility or involving radiation sources or radioactive substances may create **media and public concerns, sometimes resulting in rumours, psychological and social stress or even economic consequences**

Timely and accurate responses
to media and public concerns
are key to
avoiding confusing and non-relevant
information
that often circulates during incident
or emergency situations

***" Good crisis communications is
based on a system already in
place"***

*former White House press secretary Marlin Fitzwater
(President Ronald Reagan and President George H.W. Bush)*

International Nuclear Event Scale INES

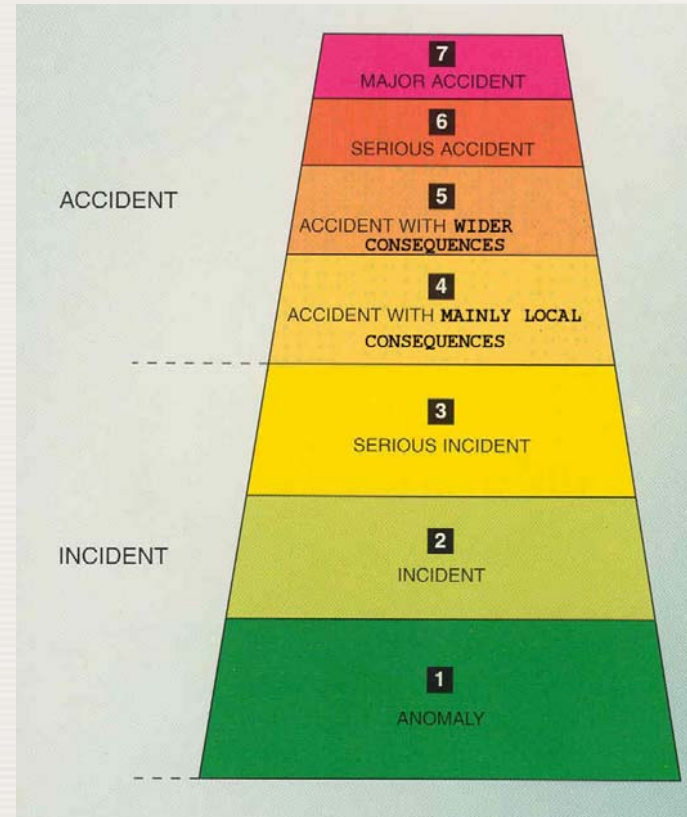
INES can be applied to **any event** associated with radioactive material:

1990 – NPPs

1992 – all facilities

2001 – radiation sources and transport

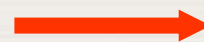
2004 – additional guidance for rad source and transport



INES operates successfully in more than 60 countries

INES Classification

Levels 4 to 7 - “Accidents”



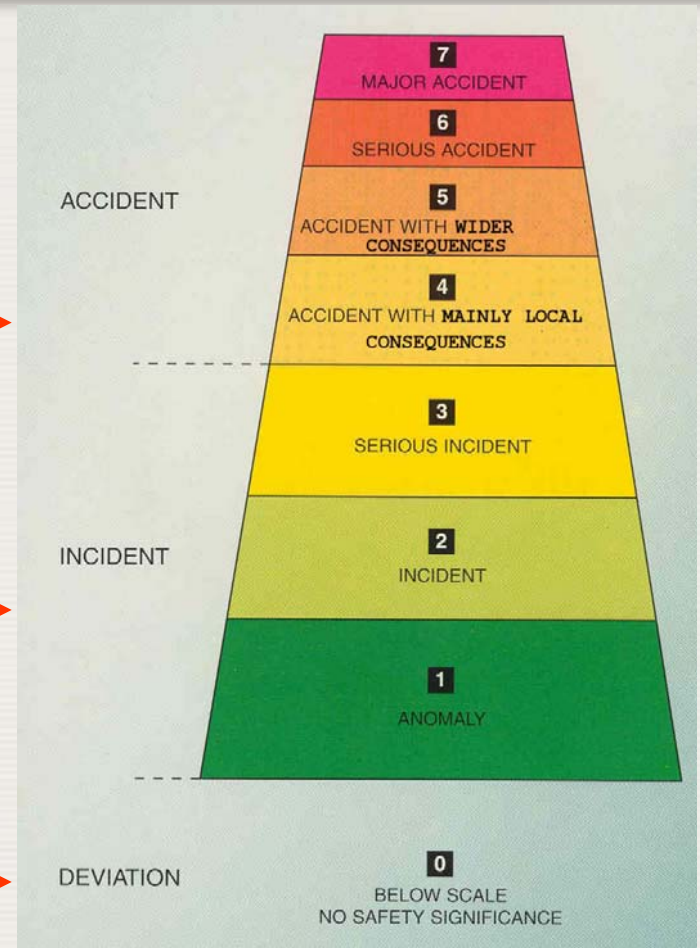
Levels 1 to 3 - “Incidents”



Level 0 – “Deviations”



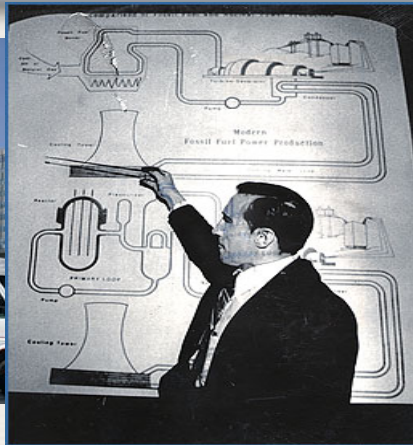
Events with no radiological or nuclear safety significance



INES Criteria

1. The **Actual consequences** of the event in terms of dose received or activity released (off-site for facilities)
2. **On-site impact** of an event, as an indicator of the severity of the event inside the site of a facility and the potential harm to the public
3. **Degradation in “Defence in Depth”** looking at failures in safety provisions to determine how close the event was to causing actual consequences

International Nuclear Event Scale INES



Primary role:

- **Prompt** communication to the public
- **Objective and easy understanding** of events
- **Consistency and relative importance** in terms of **safety significance**

Welcome to

NEWS

Press Releases
Communication
Information

<http://www-news.iaea.org/news/default.asp>

Nuclear Events Web-based System

Using INES

What INES does...

- Contributes to common understanding of incidents and accidents
- Events of public interest are disseminated transparently
- Brings uniform terminology
- Increases credibility and reassurance

Using INES

What INES **does not do**...

- Does not replace the existing national criteria for the reporting of events
- the **extent of emergency response** to accidents is not used as a basis for rating
- Cannot be used to compare safety or regulatory programmes between countries

INES Example of Previous Events



Chernobyl

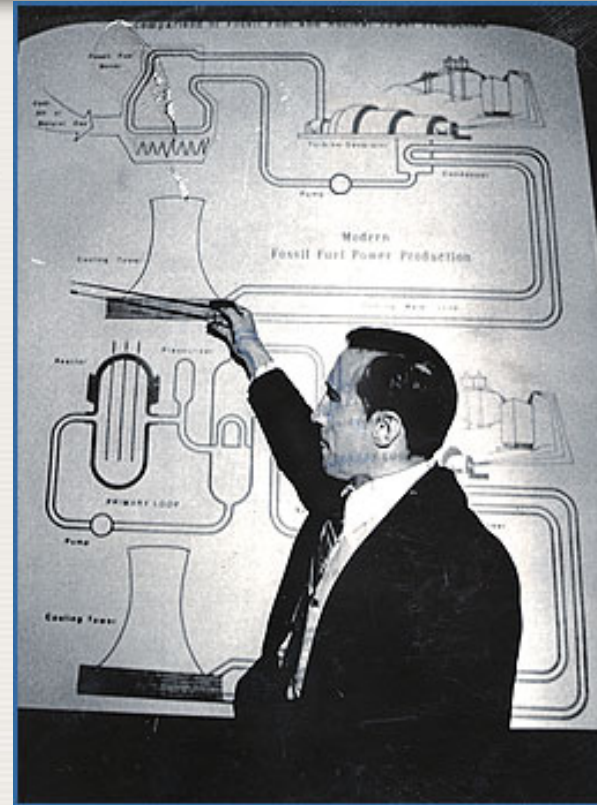
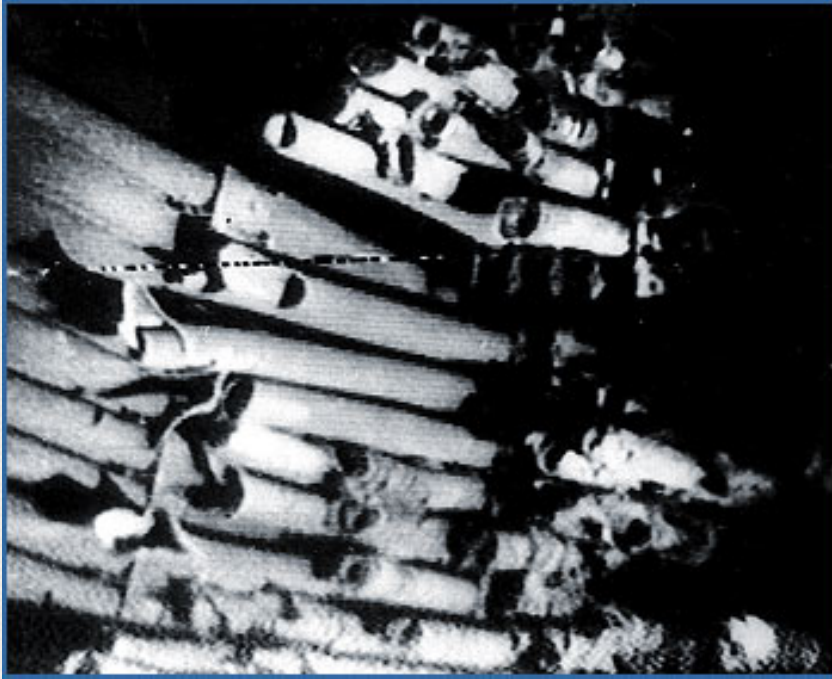
1986

Rated at level 7

- the highest

INES level

INES Example of Previous Events



TMI – 1979, USA

Rated at level 5

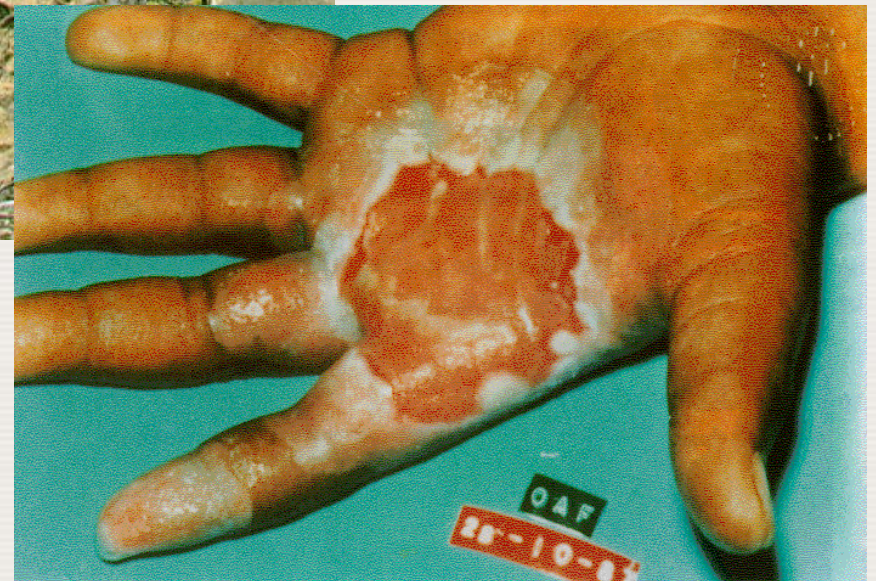


INES Example of Previous Events



**Goiania,
Brasil**

**Rated at
level 5**



INES Example of Previous Events

Event	Rating
Chernobyl (1986)	7
Kyshtym (1957)	6
Windscale (1957)	5
Goiana (1987)	5
Three mile island (1979)	5
Tokaimura (1999)	4
Vandellos (1989)	3
Industrial radiographer worker overexposure	2

Communicating Events Internationally

WHY?

News travels very fast

If the event is being discussed in other countries we need to ensure they can communicate authoritative information



Communicating Events Internationally

WHAT?

Events at **Level 2** and above

AND

Events attracting
international public interest



Communicating Events Internationally

Welcome to



NEWS



Press Releases

Communication

Information



Nuclear Events Web-based System

NEWS provides **access** to...

- **Event descriptions**
- **INES ratings and justification for the rating**
- **Press releases**
- **Technical documentation for experts**
- **Event-related discussion forum for experts**

NEWS - *Writing* access:

- ~60 INES National Officers are registered with permission to send event information for their country
 - Includes event descriptions, INES event ratings, press releases and technical documentation
- **Senior management experts from facilities**
- **Senior experts from regulatory bodies**

NEWS - Levels of *reading* access:

- Other experts or government representatives nominated by country to view events
- National and international media
- General public

Incident and Emergency Centre



**FOCAL POINT FOR
GLOBAL INCIDENT AND EMERGENCY
COMMUNICATIONS,
PREPAREDNESS AND
RESPONSE**