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PARALLEL SESSION

***Other High Reliability Organizations' Approach to
Safety***

Mr A J Gonzalez



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Managing the Organisational and Cultural Precursors to Major Events – recognizing and addressing complexity [R.H. Taylor]

- Precursors leading to major organizational accidents are very similar in different industries.**
- Techniques for a better systematic approach have been developed and introduced for recognizing and addressing complexity.**
- Like in PSA, quantification should be used with care when employing these techniques**



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Evolution of Radiation Safety Culture in Africa: Impact of the Chernobyl Accident [S. Elegba]

**• Safety infrastructure is a priori
condition for safety culture.**

• Chernobyl led to development radiation safety infrastructure in Africa.



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Historical Foundation for Safety Culture & High Reliability Organization.[D. Minnema]

- From 1960's, Seminal events → nuclear safety investigated.
- **History has demonstrated that organizational accidents happen (and will continue to happen), their consequences made them extraordinary**



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Patient Safety, Present and Future]

Presenter: [R. Amalberti]

- Variations in medical area → different approaches.
- **Challenge → reduce severity not necessarily frequency**
- **It is difficult, even unfeasible, to shut down an hospital**



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Safety Culture: A Requirement for New Business Models – Lessons Learned from Other High Risk Industries [Lena Kecklund]

• Challenge → Change!

- In times of change, safety must be a core value**
- Management may give priority to money.**



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Current approaches of regulating radiological safety of medical and ind. practices in Romania [C. Goicea]

- **There is a lot to learn about the (new) regulation of patient safety.**
- **Safety culture encourages active learning attitudes and discourages complacency.**
- **Commitment to safety culture should be expressed in written policy statements for management and staff.**



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Regulatory Body safety culture in non-nuclear HROs: Lessons for Nuclear Regulators [MFlemming]

**•How can we talk about safety culture if
we do not have an ethical agreement?**

- Regulator safety culture influences duty holder safety culture.**
- Duty holder safety culture influences regulator safety culture.**
- Governments influence both**



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Safety Culture – Lessons learned from the US Chemical Safety and Hazard Investigations Board [Mark Griffon]

- Do not look at whether the regulations have been followed, but whether the regulations are effective.**
- The technical cause of the disaster is not the most important thing to look for. Equal attention paid to process safety.**
- Safety culture should be open to refinement, because if everyone is thinking equal → organization-wide blind spots.**



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Product Safety Culture: A New Variant of Safety Culture? [Lucia Suhanyiova]

- **Product safety culture → the integrity of the product or service, and the safety for the end user.**
- Organizational culture and values can and do impact the user.
- Safety culture isn't just human culture, but also how humans interact with technology.
- Complex technical system may be detrimental to safety if people can't understand what's going on.



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Human and Organisational Safety Barriers in the Oil & Gas Industry [Espen Nystad]

- **Safety barriers are not just hardware—
humans can be safety barriers too!**
- **Mindful safety practices can be used as part of safety culture.**
- **An interesting area for the nuclear industry to explore, given its
tendency to focus on hardware safety barriers.**



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Learning Lessons from TMI to Fukushima and other industrial accidents: Key for assessing safety management practices [Nicolas Dechy]

• We do not learn from accidents.....resulting in many accidents repeating themselves!

- Risk reduction → asymptotic.

(Nuclear industry may need to shift the paradigm from prevention to mitigation)



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Understanding Nuclear Safety Culture: A Systemic Approach [Abdul Nasir Afghan]

- **Are our basic assumptions robust? Risk is unpredictable in complex systems!**
- All social systems are complex adaptive systems and subject to rapid change and evolution.
- Small changes can have major impacts which can drastically improve the safety culture.



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Reflections

- **We should learn from safety culture outside the ‘nuclear club’.**
- **We need an international action plan to address the many issues on safety culture discussed during the sessions**

Thank you!

