

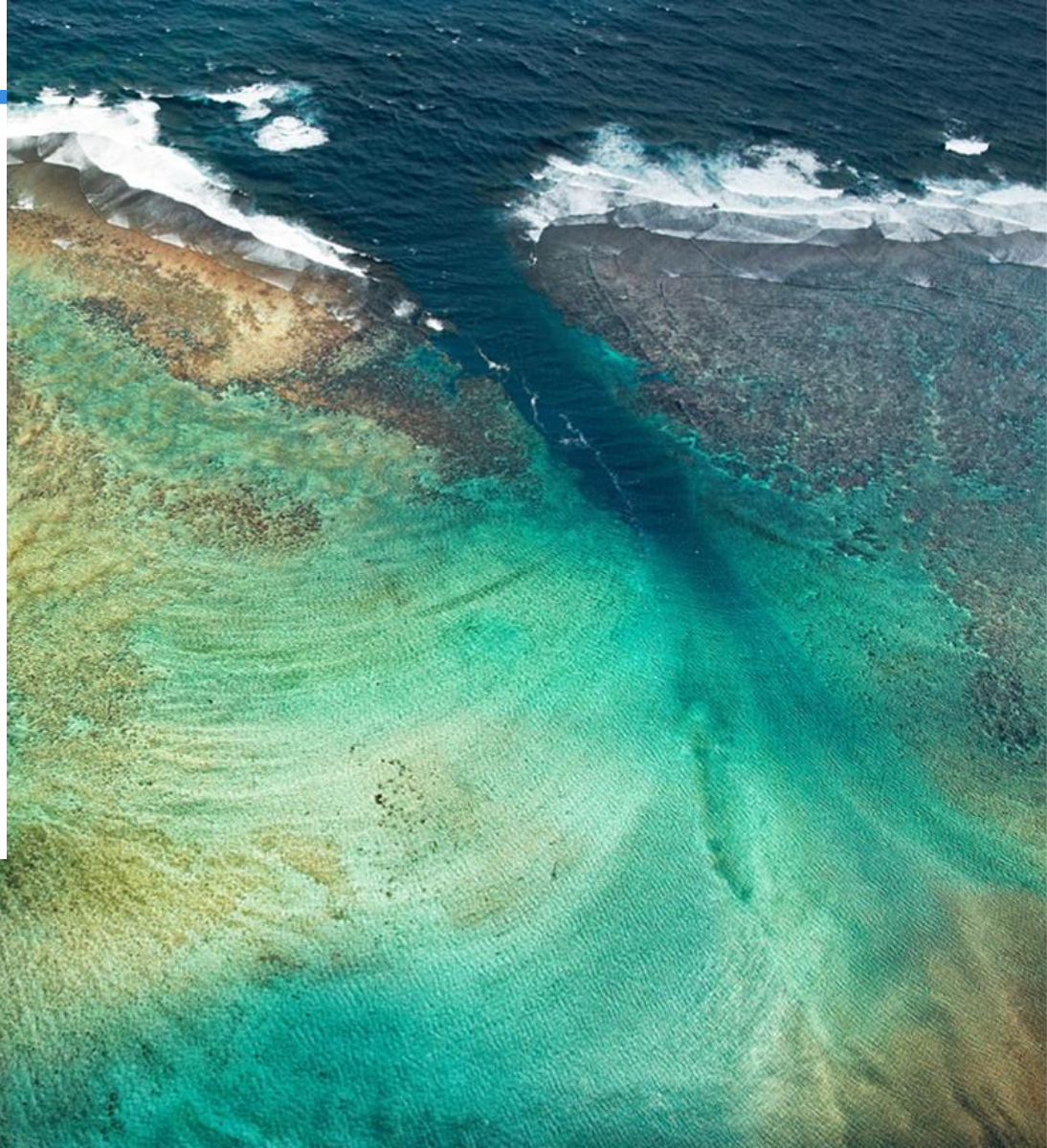
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# The Role of a 3<sup>rd</sup> Party in CFSI

OECD/NEA Workshop

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# Introduction

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The subject of counterfeit, fraudulent and suspect items (CFSI) is a significant topic in the nuclear industry in light of some high profile incidents in the past few years. Civil nuclear plant owners and operators mostly focus on detection to fight this; enhanced levels of inspection, supply chain audits, and repeat inspections are among the weapons employed.

This short presentation will look at the benefits of prevention of CFSI and the role Nuclear Safety Culture plays

# 3<sup>rd</sup> Party Role

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## Conformity Assessment

- Conformity – In accordance with standards or documented requirements
  - Assessment – Checking
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- Is that it then? The 3<sup>rd</sup> party checks the item or equipment meets the documented requirements?.

# 3<sup>rd</sup> Party Role

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## What went wrong then?

- A recent review at a long-time manufacturer of high integrity forgings found, among other items:
- The ISO 9001 and ASME management systems may detract from a comprehensive management system, through focussing on compliance issues rather than a system for the management of regulatory and other aspects related to the production application
- There is a risk that the cumulative effect of a series of "minor" changes are considered acceptable without requalification, since revisions to qualification documents were not reviewed against original specifications and qualifications
- The metallurgical aspects of the process are well understood, but it is not clear if they are documented in a way that can be applied by those operating the processes and carrying out tests.

# 3<sup>rd</sup> Party Role

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An effective CFSI policy doesn't just cover detection procedures. It should cover culture, prevention, detection and lessons learned.

- Most suspect items have a Management System approved manufacturer or supply chain
- Review of documented information does not detect culture
- Prevention is better than detection – detection confirms prevention
- Sharing across industries is imperative as supply chains lengthen and merge.

# 3<sup>rd</sup> Party Role

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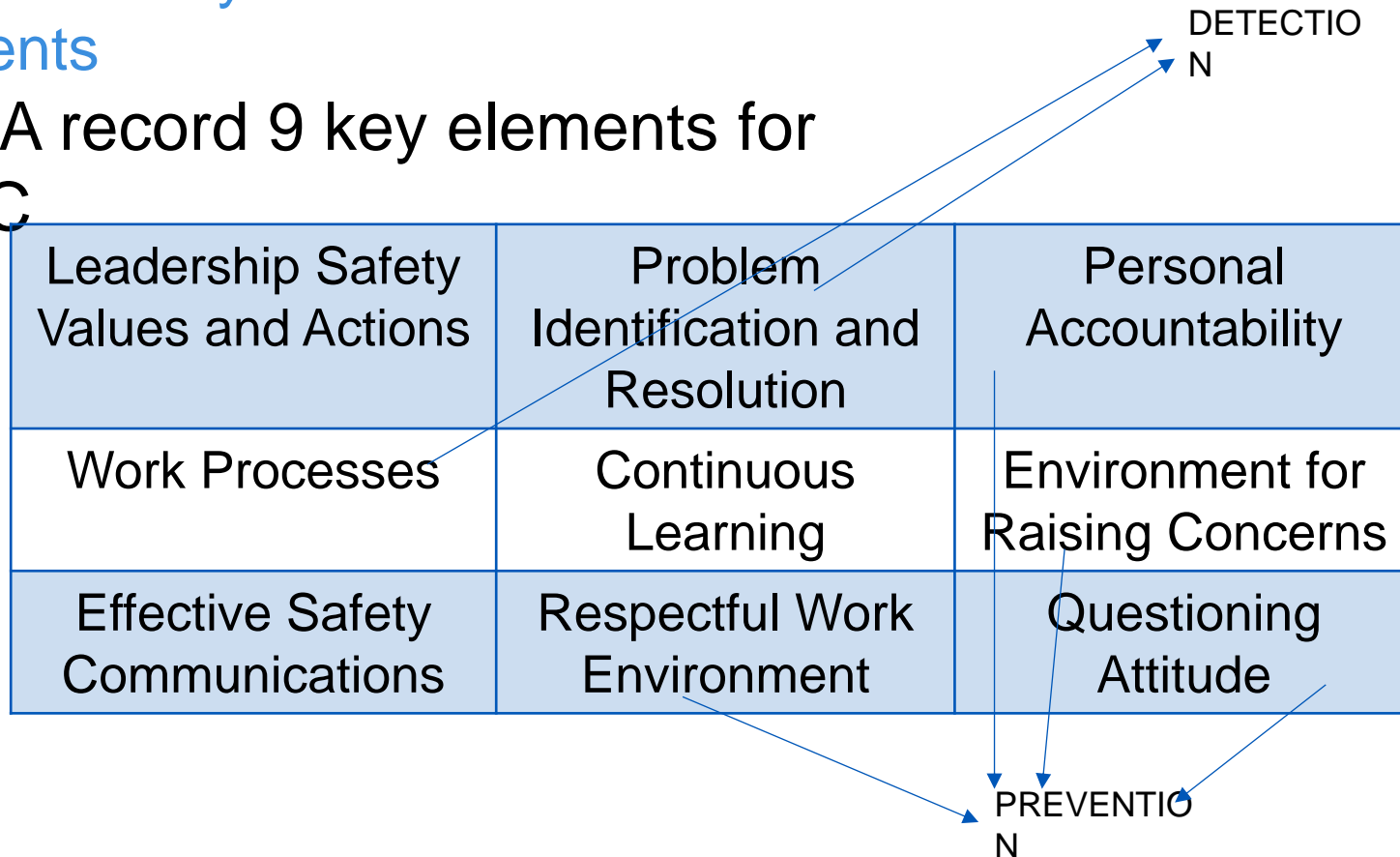
## Cost of effective CFSI Culture too high?

- *"Researchers at Energy Technologies Institute found that most high-cost projects had started construction with incomplete designs, whereas work on low-cost plants had begun only once design and planning had been finalised."*
- Taking the point that a complete design and clear plan help to produce a cost effective project, then a clearly defined culture which forms an integral part of the project implementation will recognise incomplete, unformed and suspect issues and deal with them.

# 3<sup>rd</sup> Party Role

## Nuclear Safety Culture Elements

- IAEA record 9 key elements for NSC



# 3<sup>rd</sup> Party Role

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## Summary

- Nuclear Safety Culture leads on both detection and prevention
- Certification provides a basis for certainty of implemented processes
- The cost of bad CFSI systems is potentially very high
- Intelligent selection of conformity assessment is imperative
- Target why things change and what was originally planned.



# 3<sup>rd</sup> Party Role

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## Thoughts and Insights



<https://www.lr.org/en/insights/articles/nuclear-supply-chain-fraud-the-elephant-in-the-room/>

# Thank you

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