



# The relationship between risk and asset management

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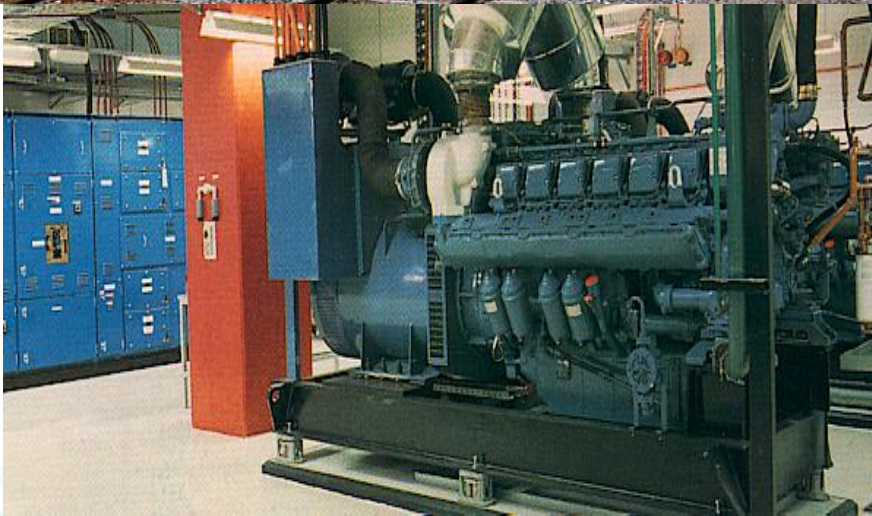
Asset management seminar – 22 November 2012

# Agenda

This presentation aims to raise awareness of:

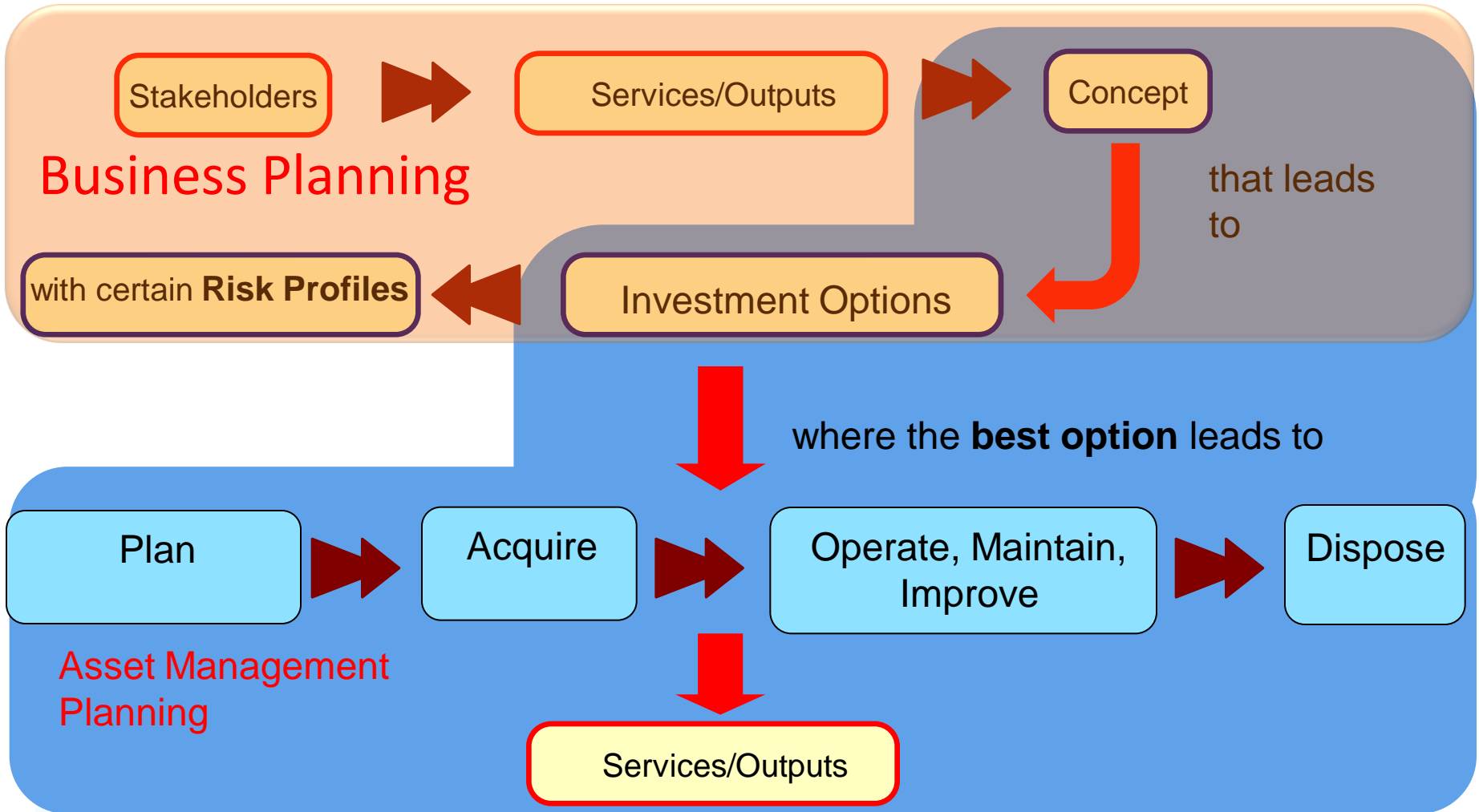
- What is 'asset management'
- What is 'risk management'
- Some of the key risk-based processes used in the development of asset management plans.

# What are assets?

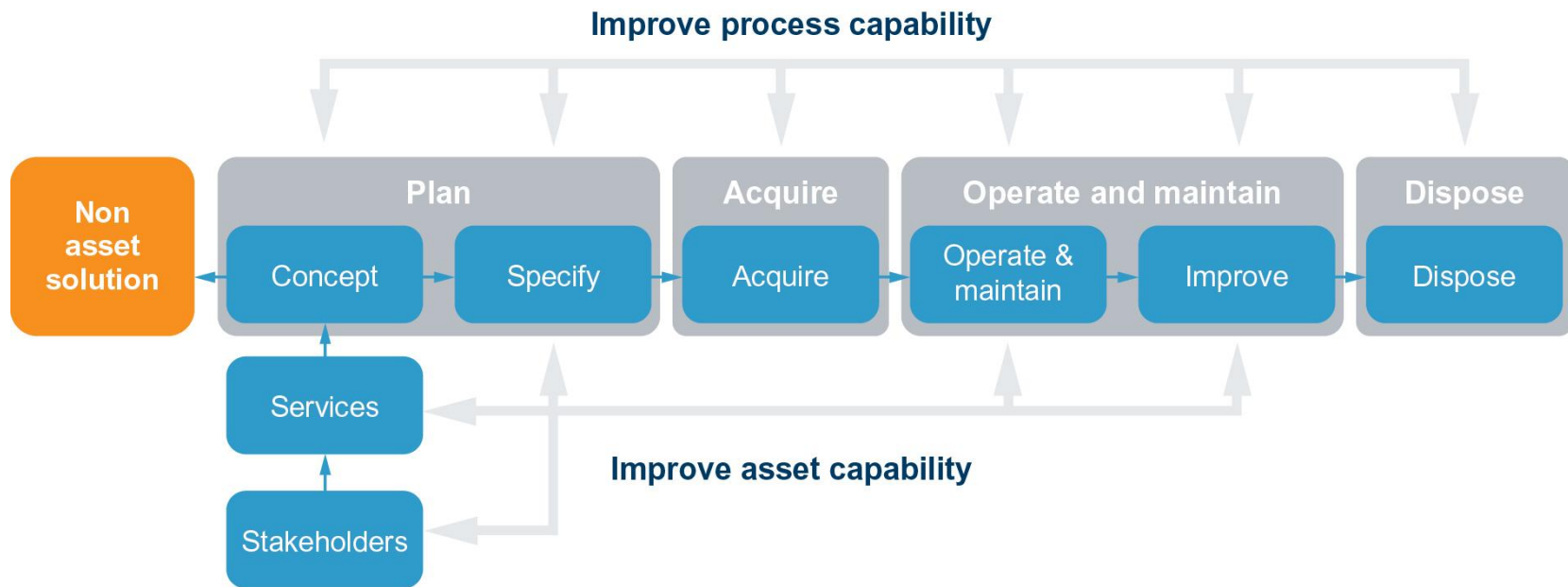


# Where does asset management fit?

What do companies do?



# The asset lifecycle

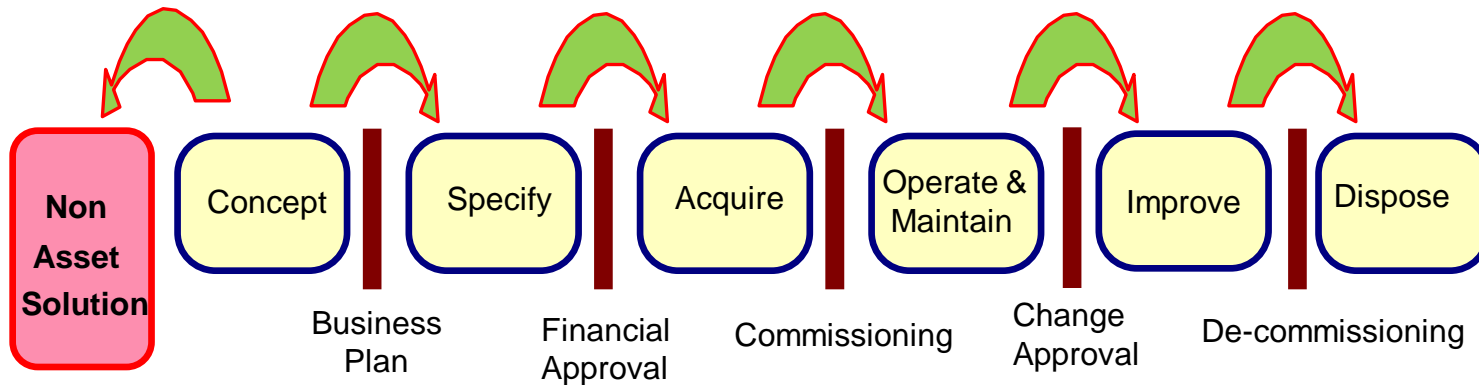


## The scope of asset management includes every stage of the asset lifecycle

- The asset lifecycle integrates organisational functions including Planning and Finance, Project delivery, Budgeting, Procurement, Maintenance & Operations and Disposal
- 'Systems engineering' is a tool that enables a complex multi-disciplinary project or activity to reduce the risk that the 'services' will not be delivered (that is, be confident that they will be)



# Asset lifecycle management – key risks



Select services (and performance) that are not needed



Select solutions that cannot meet service needs



Poorly specify needed assets



Assets do not meet the specification

Assets do not deliver the services



Difficult to improve or manage change to assets



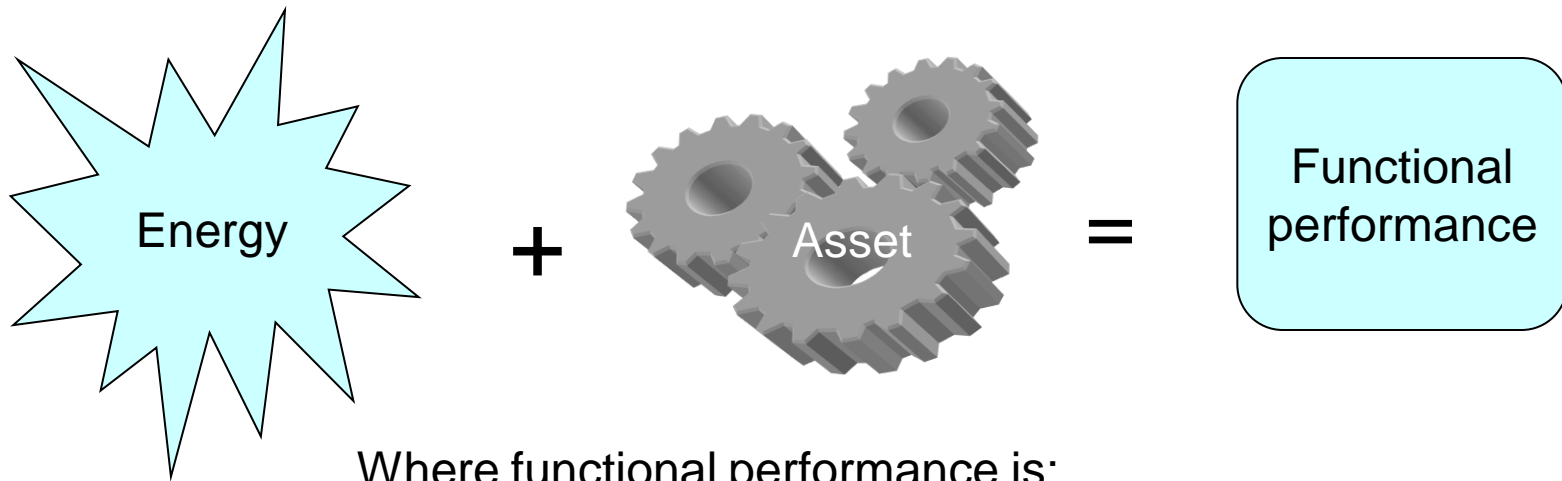
Get unexpected surprise at disposal of assets



# How is risk apparent?

What is engineering?

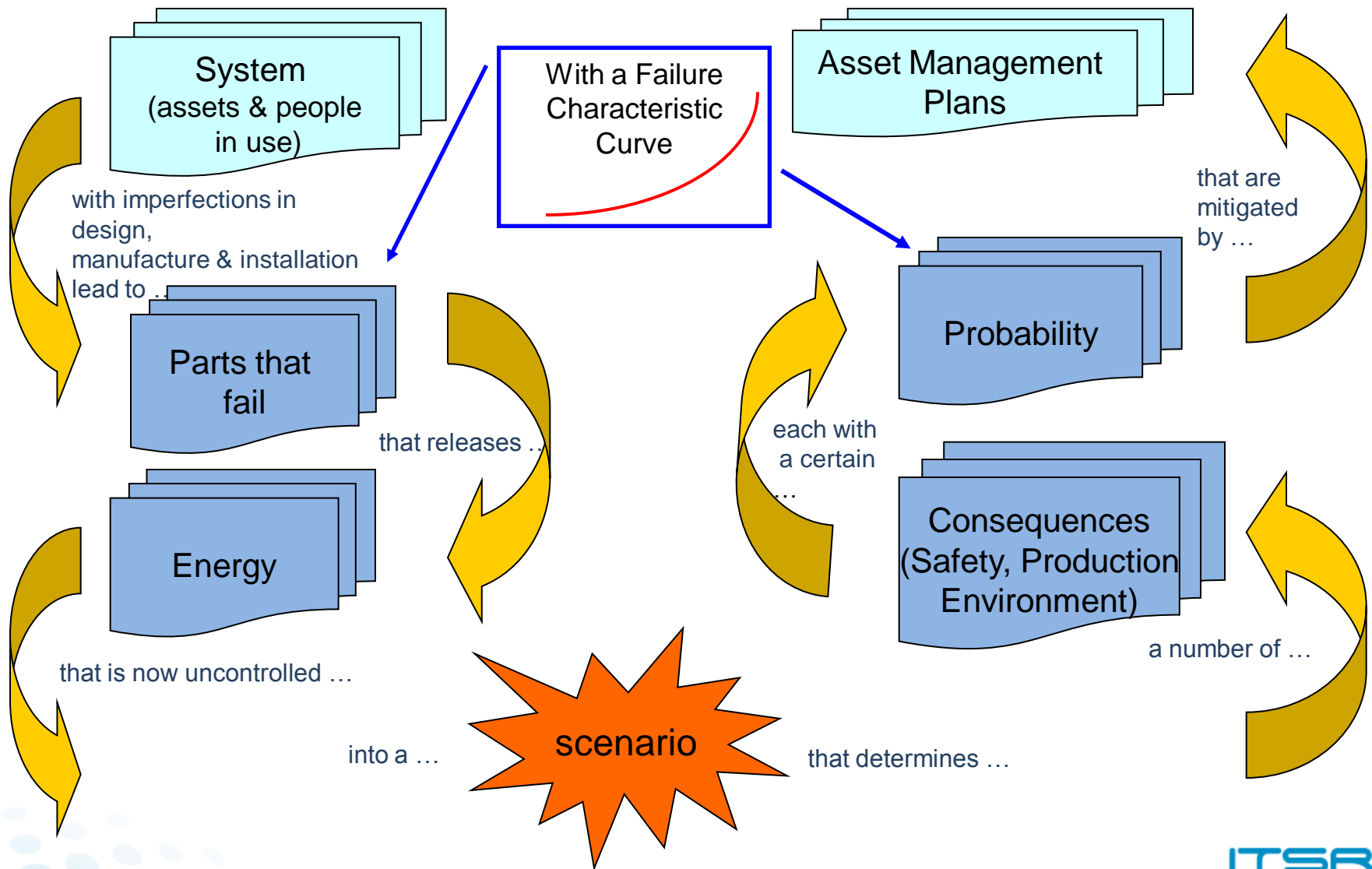
The controlled transformation and use of energy.



Where functional performance is:

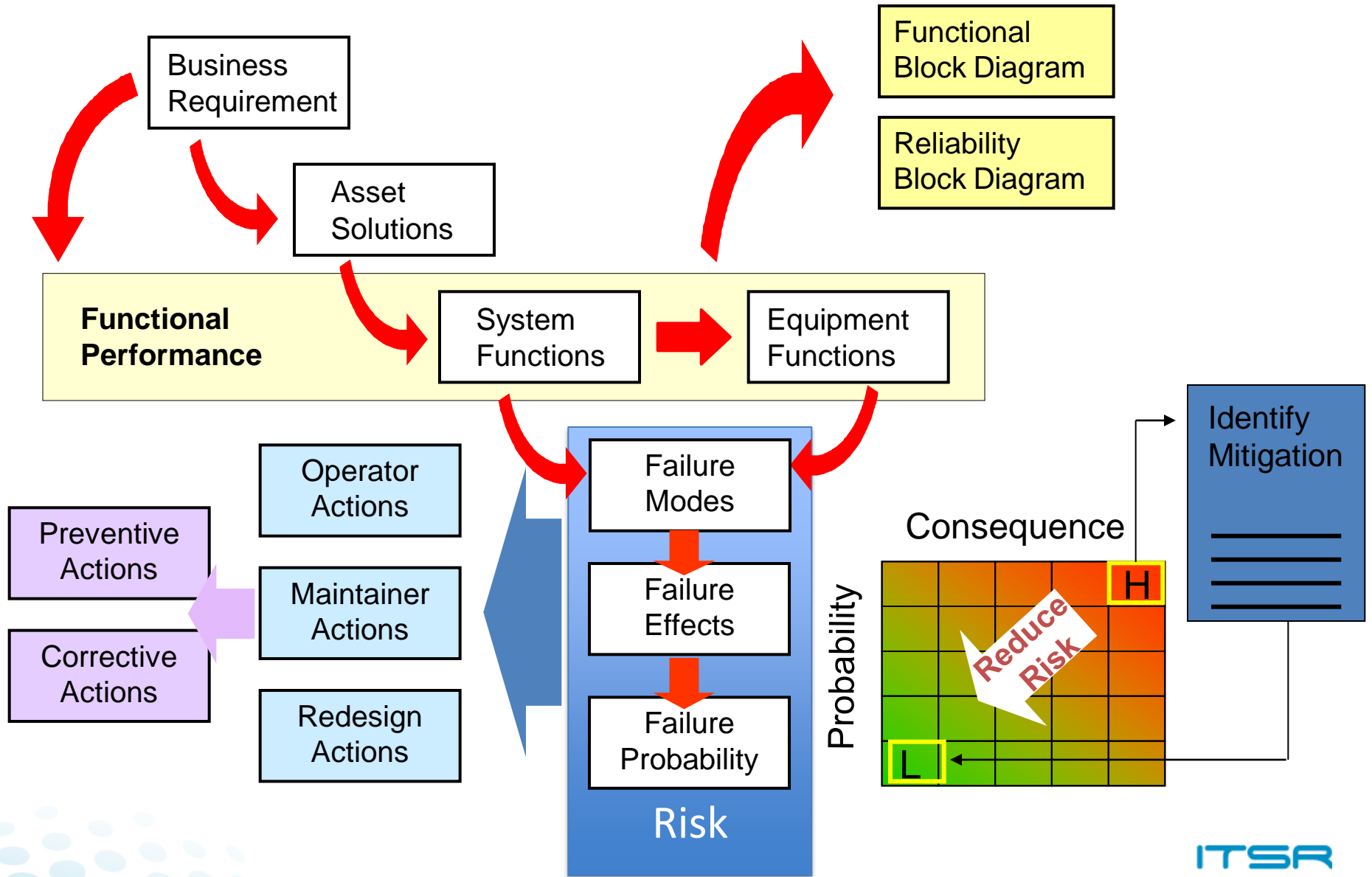
1. Acceptable performance
2. Acceptable risk (safety, environment, financial etc)
3. Required reliability & availability & maintainability

# How is risk apparent?





# FMEA – a risk-based analysis process



# Why is risk such an important tool?

A short history:

- Pre 1928 – Newtonian physics and Certainty
- Post 1928 – Quantum mechanics and Uncertainty/Probability
- Post 1946 – The explosion of Uncertainty/Probability and Risk

The identification and management of risk is the fundamental basis that supports asset management.

“Risk is the only tool the modern world has, that can make the future come true”

*Peter M Kohler*

# Asset management

Coordinated activities of an organisation to  
realise value from assets  
*ISO 55000 Asset Management*

# Risk and asset management

## Conclusion

- Asset management (AM) is applied risk management, associated with the concept, design, operation and support of physical assets
- Risk management (within AM) applies to the assets of all operators (there are no other tools!)
- Application of AM reflects the level of risk and the business context (there is no one-size-fits-all approach)
- Good AM practice:
  - has been identified
  - is documented
  - is demonstrably practical
  - makes business sense.

# Risk and asset management

## Conclusion

For more information, see the supporting paper:

Sharing practice: A discussion on the relationship  
between risk and asset management

Any questions?