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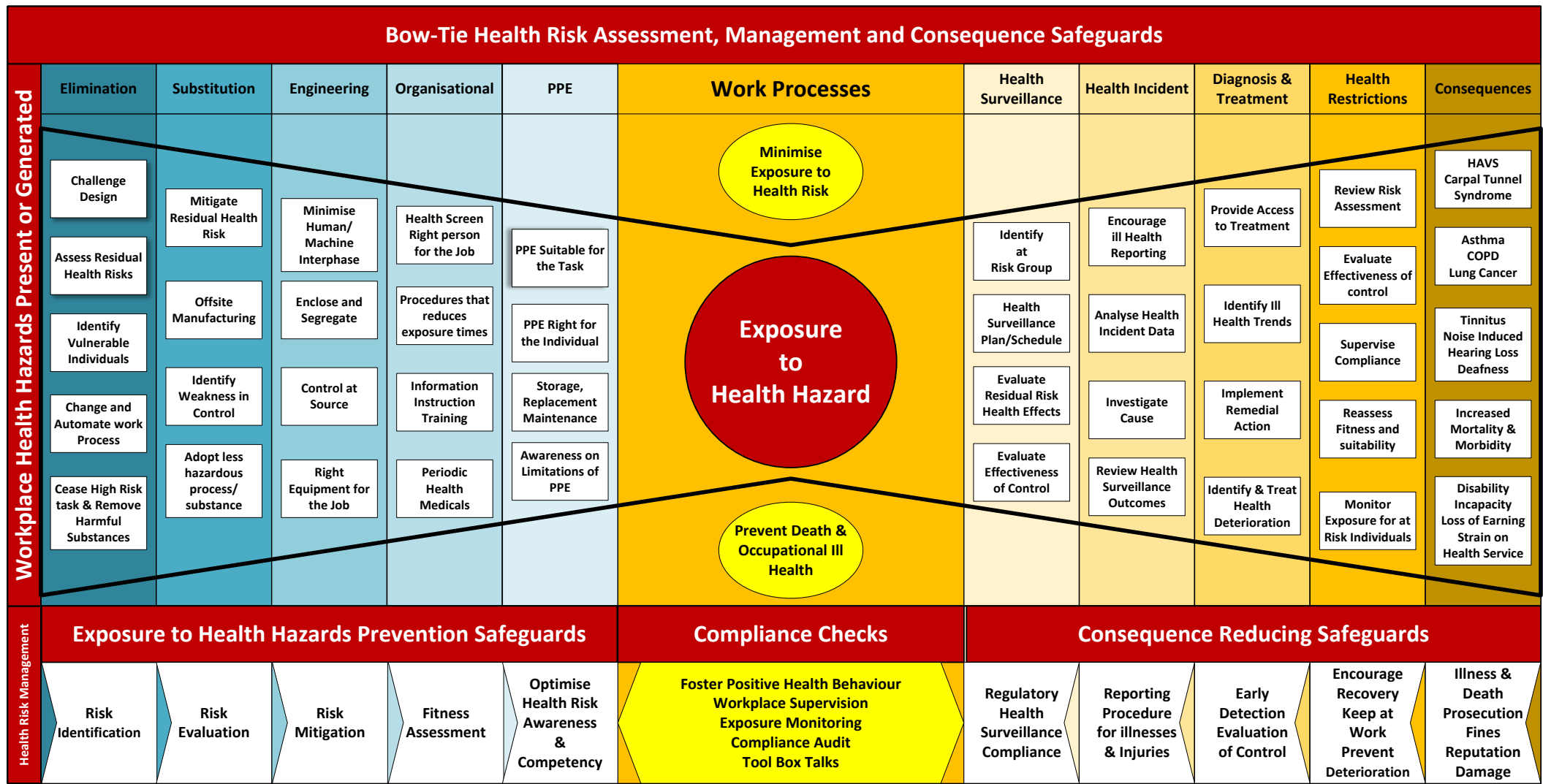
**Chair, HSE / CONIAC Tackling Ill Health Working Group**

**Co-Chair, ICE SH&W Knowledge Network Leadership Group**

# Bow Tie Analysis & The Matrix



# Bow-Tie Health Risk Assessment, Management and Consequence Safeguards



Houssein Peerally @Skanska UK

Potential Time Frame for Disease Manifestation – up to 40 Years

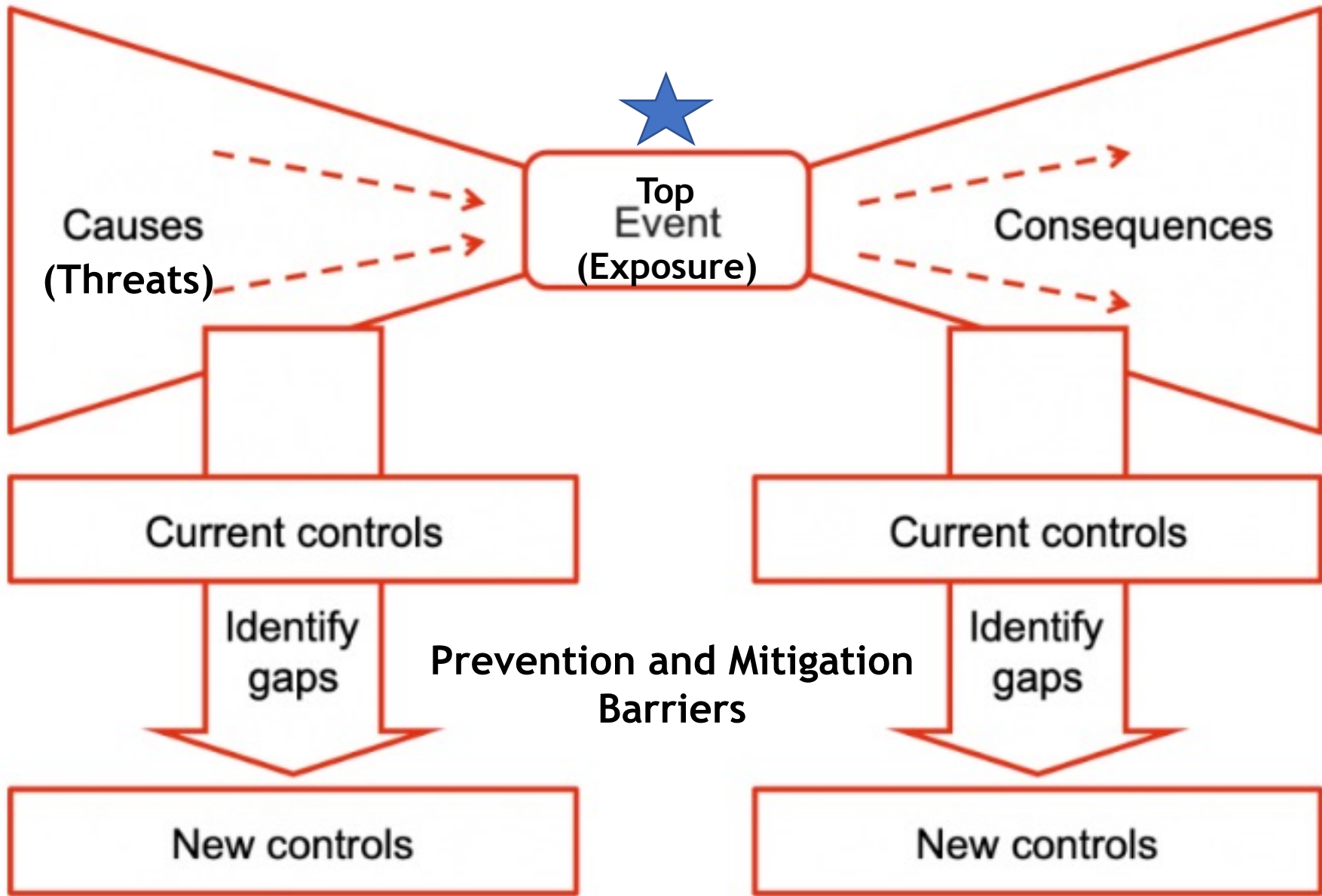
# BOW TIE ANALYSIS?

What is it?

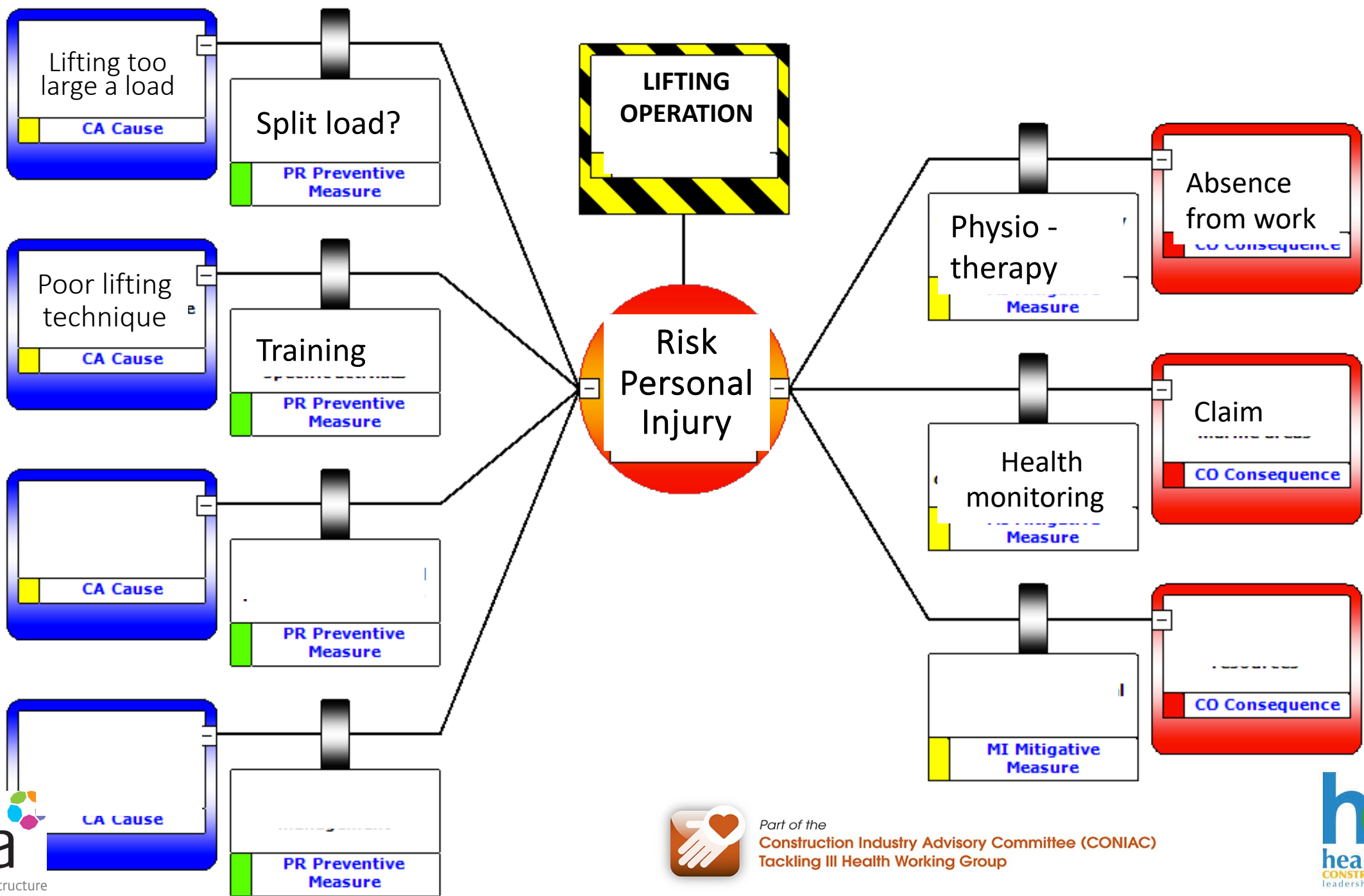
A system or toolkit developed in Australia in 1979 - then adapted by Royal Dutch Shell Group following the Alpha Piper disaster in 1988.

Bow tie analysis is a simple process for identifying where new or enhanced controls may be worthwhile.

It is a core part of risk assessment, particularly where there is a high level of risk or where control effectiveness is assessed as low.







With thanks to Houssain Perrally & Skanska

<https://www.linkedin.com/in/houssein-peerally-8b88ab36/>

Also help available via:-

GOV.UK - <https://www.gov.uk/government/news/bowtie-a-visual-tool-to-keep-an-overview-of-risk-management-practices>

RSSB - <https://www.rssb.co.uk/safety-and-health/guidance-and-good-practice/bowties/using-bowtie-analysis>

# Occupational Health Risk Management Maturity Matrix - Example

CATEGORY	TYPICAL SUB-CATEGORY (not exhaustive!)	LEVEL 0 – AWARE	LEVEL 1 - COMMITTED	LEVEL 2 - ESTABLISHED	LEVEL 3 - ADVANCED	SCORE
COMPANY	Leadership					
	Competence					
	Auditing					
PEOPLE	Assessments					
	Drug & Alcohol					
	Attendance management					
RISK MANAGEMENT	Hazard Identification					
	Health risk management					
	Health surveillance					
WELLBEING	Mental Health					
	Wellbeing Activities					



Also help available via:-

Cross Rail - [https://learninglegacy.crossrail.co.uk/wp-content/uploads/2017/09/HS08-01\\_OH-Maturity-matrix-2015-17.pdf](https://learninglegacy.crossrail.co.uk/wp-content/uploads/2017/09/HS08-01_OH-Maturity-matrix-2015-17.pdf)

HS2 JV - <https://learninglegacy.hs2.org.uk/document/health-safety-improvement-safety-culture-management/>

CECA - Costain Health Maturity Matrix

# What ACTIONS will you take away with you today?