Electrical Networks – back to the future ~ some personal reflections

From Indiana Jones to Darth Vader!

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ENA Safety Management Conference
15-16 May 2014
Chichen Itza
The Management of Human Assets
Underpinning PAS 55-1 ~
The “Swiss Chocolate Model”

Based on Figure 3, BSI PAS 55-1, reproduced with kind permission of the BSI
Source: RIIO – ED1 Workforce Requirements
The National Skills Academy for Power Energy & Utility Skills
The Management of Human Assets
Underpinning PAS 55-1 ~
The “Swiss Chocolate Model”

Based on Figure 3, BSI PAS 55-1, reproduced with kind permission of the BSI

BREAKING NEWS
New BSI Committee HCS/1: BS 76000 …
Knowledge bank…?

Training, skills, competence
Knowledge bank....?

Skills, competence, training...
Challenges for the Smart Meter roll-out!!

This cutout failed because of a very loose connection.

Skills, competence, training, auditing
New procedures, training, skills, competence

Knowledge bank (?)

Source: UK Power Networks ED1 I&M and Faults Asset Stewardship Report
• fault location?
• social media
• ageing network?
End of life predictions....

## Theft and attempted theft of assets

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* - significant numbers also in the North of England

1 death and 14 injuries

Source: ESQC Regulation 31 Reports
Dark risk......

Hidden interdependency risks
- limited information
- hard to model (and possibly predict)
- complexity

Complexity is set to grow with
- interconnectedness
- ‘Smart’ infrastructure

‘Black Swan’ events, typified by:
- rarity
- extreme impact
- retrospective predictability
Thank you