

IRCC Workshop Edinburgh



**Verifying Fire Engineered Solutions as part of a
Building Regulatory System**

Thoughts on Where We Are

- almost ancient history
- the Regulators
- the Designers
- the Fire Engineers
- the future

the good:
protecting the ordinary folk

the bad:
build fast and cheap

and the ugly:
fast on the draw and deadly

Thoughts on Where We Are

➤ almost ancient history

➤ the Regulators

the good:
protecting society

➤ the Designers

the trying to be good:
dynamic, innovative buildings

➤ the Fire Engineers

the specialists:
trying to help sort it out

➤ the future

almost ancient history

- **the drive for performance based regulation**
 - aspiration, evidence and 'calculation envy'
- **building design and construction, buildings in use**
 - the new Building and Fire Acts
- **functional requirements and risk assessment**
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The Regulators

- **protecting society by enforcing regulations on the socially acceptable level of risk**
 - **resistance to implementing functional requirements**
 - **guidance used as a benchmark, the ‘equivalence’ argument**
- **competence and confidence to apply judgement**

The Designers/Design Team

- multiple design aims and areas of expertise to cover
 - fire safety issues not understood, strict compliance as a design objectives
 - fire engineering seen as a way of reducing cost/value engineering or crossing a regulatory hurdle
 - guidance compliance offers certainty and used as a benchmark
- design team/client education on designing for fire safety in use for life safety and business protection

The Fire Engineers

- fire engineering reports are a mixed bag
 - reflect client/design team pressures and extent to which they can be educated?

however

- narrative for fire safety strategy weak or absent
- over reliance on modelling
- assumed precision in ASET/RSET analysis for equivalence arguments

The Future

aspiration is for the 3 professional groups to work towards designing and building fire safe environments.....

- **education/understanding key**
- **education of clients/design teams**
- **consistent standards for education and professional qualification**