



Management of Change in the Nuclear Industry



Sellafield Ltd

The result of organisational factors?





Legal Requirements

- **Compliance with the law**
 - Nuclear Site License Condition 36
 - Environmental Permitting Regulations (EPR's)
 - Control of Major Accident Hazards (COMAH) Regulations 2015

COMAH - Human Factors

- Regulation 5 General Duties of operators
- *‘Where reliance is placed on people as part of the necessary measures, human factor issues should be addressed with the same rigour as technical and engineering measures’.*

Sellafield Ltd Context

- **Largest change programme in the UK Nuclear Industry**
- Safer sooner – **SAFELY**, reliance on **capability** rather than engineered controls.
- **Stakeholder confidence**, change is high profile.

Maintaining Capability

- **Define the Baseline / Nuclear Baseline Posts & Roles.**
- **Governance.**
- **Proposed change assessed against the Baseline including **cumulative** effect**

Nuclear Baseline

- Nuclear organisations must define, build and maintain nuclear safety capability.

Constructing the Nuclear Baseline

- Understand clearly the nuclear activities being undertaken, current and future.
- Identify the organisation, roles and numbers of personnel required to deliver and maintain nuclear safety – the ***Nuclear Baseline***.
- “A licensee should understand its core capability and maintain it within its own organisation”

Governance

- Subsequent changes to the established nuclear baseline must be reviewed and controlled.
- Anticipate and address gaps before the problems arise.
- Demonstrable senior management accountability and ownership but with independent challenge.

Organisational Management

- Our only constant is change!
- Need to ensure that changes are fully considered and safely implemented.
- More than just numbers to balance on a spreadsheet.
- Intelligent MoC application supports safe delivery.
- **Engage Early ! - Dialogue** with Resource Lead / Resource Coordinator.
- Responsible managers MoC decision recorded in People Management System (Auditable)

How do we manage organisational change?

- Management of Change Risk Assessment (MoCRA).
- Management of change committee
 - NRESC
 - Nuclear
 - Radiological protection
 - Environmental protection
 - Safety and security
 - COMAH

MoCRA Categorisation

- All individual risk topics and the assessment overall have to consider the degree of **unmitigated** risk ‘**if the change were ill conceived or poorly implemented**’, taking into account:
 - NRESC significance.
 - The degree of impact on the Nuclear Baseline Posts & Roles
 - Scale of the change (scope, numbers of people and activities affected).
 - Impact on the Baseline resources and vulnerabilities.
 - Degree to which the change could be reversed.
 - Impacts of, and impacts upon, other organisational changes.
 - There are additional requirements for Major/Major+ Changes, including Regulatory permissioning.

MoC Committee Considerations

- **Involvement of key stakeholders**, consultation - Safety Reps.
- Accuracy of the **description** of the change.
- Adequacy of **justification** for the need for change.
- Potential **interactions** with **other current changes** or impact upon the **organisation**; Value Streams, Site Management, Project Delivery or Enabling Functions.
- Adequacy of **risk assessment**, mitigation and proposed categorisation.
- Arrangements to **control** implementation and monitor the change.
- Arrangements for review and close out.
- **Adequacy of the proposal overall** in relation to the significance of the risks.
- The **cumulative effect** of change

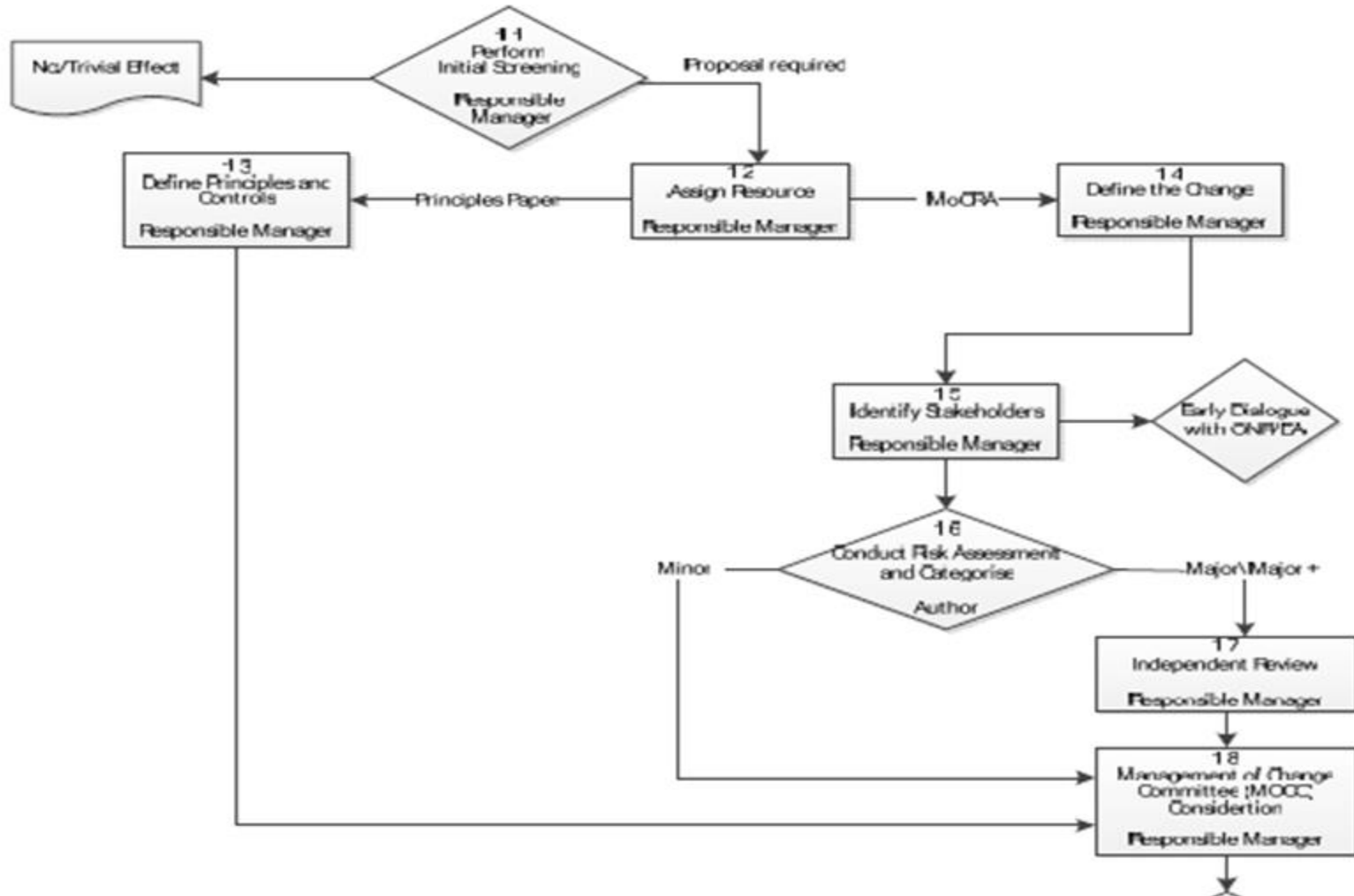
Management of Change Key Points

- **Responsible Manager** accountable for all aspects.
- Application by **competent users** aids process flow..
- No/Trivial effect - Change Record (Simple form), Minor / Major / Major + MoCRA's, written by SQEP Authors.
- Principles papers for series of changes
- **MoC Committee provides advice** to Responsible Manager
Cumulative risk

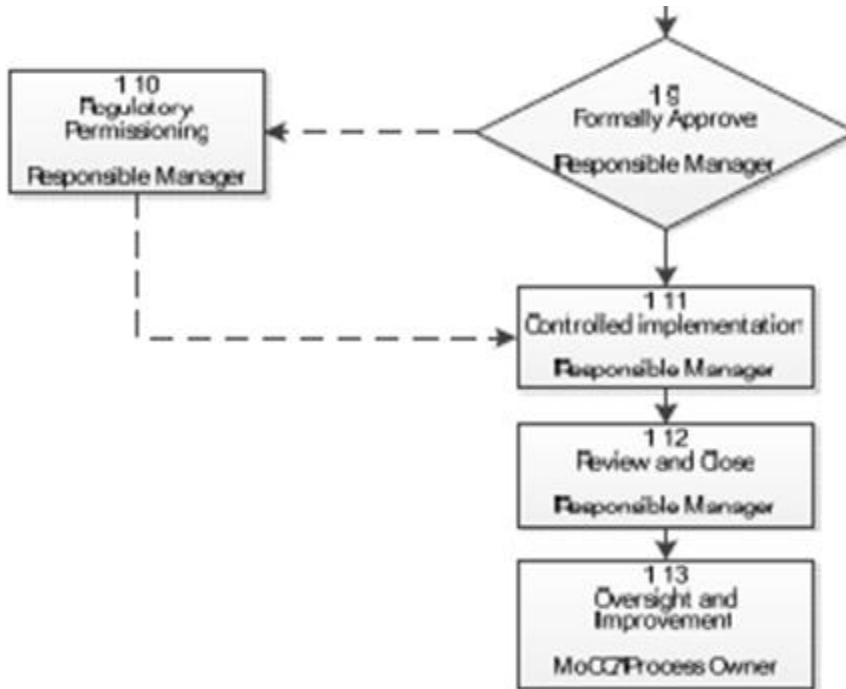
Management of Change Key Points

- **However you change - Handover is key !**
 - Plant & Local knowledge
 - Documents, Reports & Actions
 - Ownership
 - Contact points
 - Issues

MOC Flowchart



MOC Flowchart



References

- ✓ Nuclear baseline and the management of organisational change. Good practice guide.
- ✓ Control of Major Accident Hazards (COMAH) Regulations 2015.
- ✓ Chemical Information Sheet CHIS7 'organisational change and major accident hazards'.
- ✓ The UK Nuclear Industry Guide To: Organisational Capability and Resilience.

Questions ?