

# Decommissioning as a Step Forward for Risk Governance

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# Acknowledgements



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# Decommissioning: a new situation for risk governance

- Unexpected events happen because...
    - Each plant has its own technical history, which is not fully known
    - Design drawings and plans are sometimes outdated, incomplete or missing
    - Decommissioning involves multiple activities, tightly coupled, sometimes with more variability than on construction sites
  - Examples of unexpected events (IAEA, 2016)
    - Unknown material encountered
    - Failure to identify uranium in safety analysis
    - Identification of contamination in a non-radiological area
    - Handling materials before their identification
- Decommissioning organizations need to be made adaptable to unexpected events: **resilience strategy**

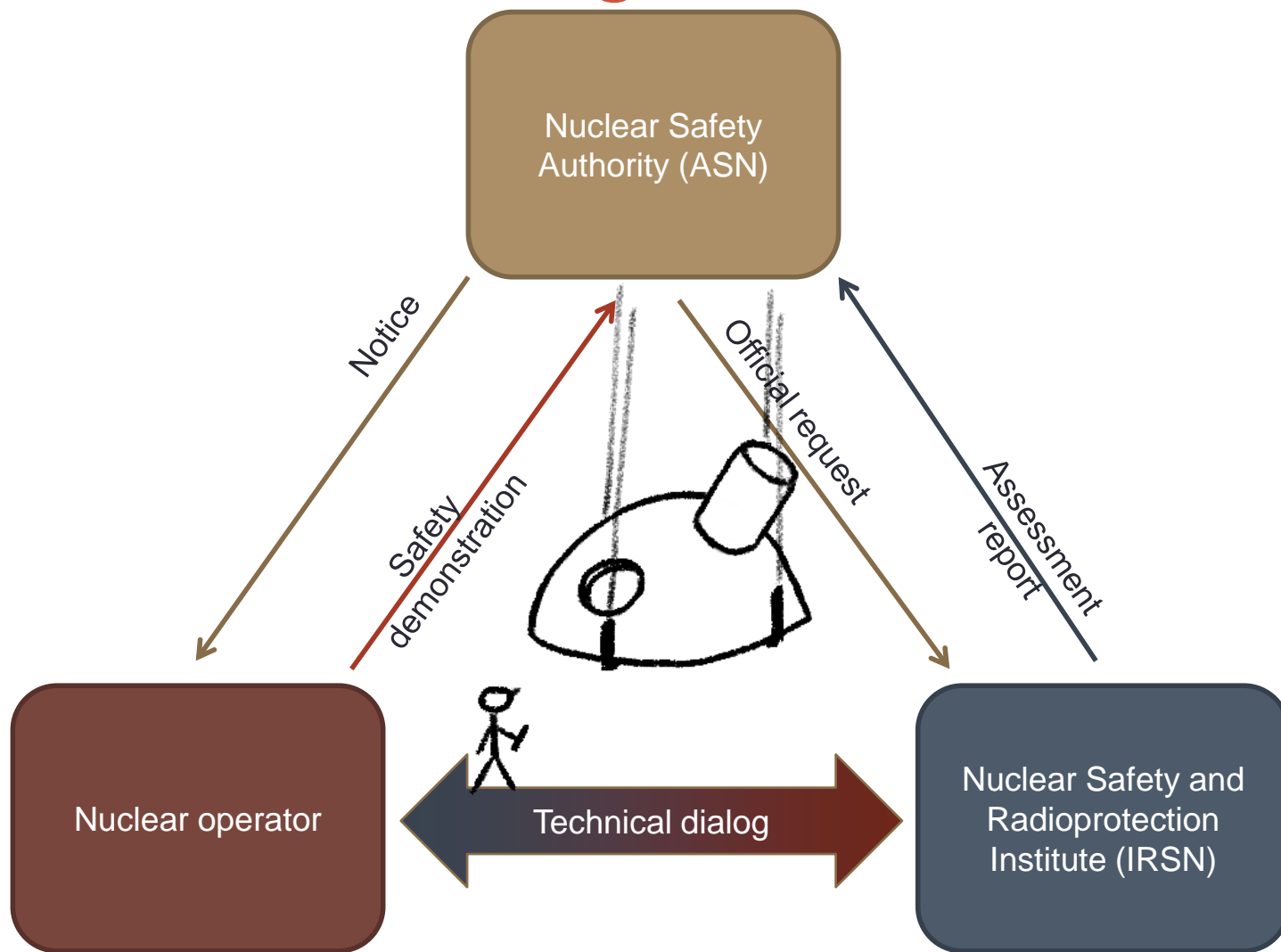
# The problem and a suggestion

Wildavsky (1985) identified that risk governance has to choose between two generic strategies, Anticipation and Resilience, but he didn't clarify how to articulate them

Suggestion: Analyzing them through the ways actors assign importance [overstepping their antagonism]

Modes of valuation (Eydieux, 2017) Criteria =>	valuation by Authority	valuation by Theories	valuation by Inquiry
Dangers and Certainties (Dewey, 1929)	Quest for certainty in order to manage dangers	Certainties intelligently produced	Upholding uncertainty to manage dangers

# Research settings



# Methodology

## Technical dialog

- collection method: document collection complemented by interviews
- analysis techniques: intertextuality analysis and narrative analysis

## Heavy handling

- collection method: fieldwork based on situated observation
- analysis technique: situation analysis

## Fields comparison

- collection method: previous analyses
- analysis technique: comparative analysis of management situations and tools

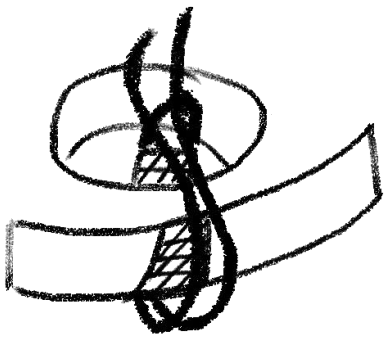

Two decommissioning:  
- UP2-400, reprocessing plant => **assessment**  
- Eurodif, uranium enrichment plant => **demonstration**

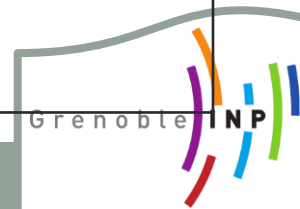
# Extending the demonstration or the assessment

**Assessment:** skills management

HOF experts have doubt and write a recommendation

Recommendation is presented in the report

<b>Workers</b> talking about one skill		Theory	Authority
		Inquiry	Authority

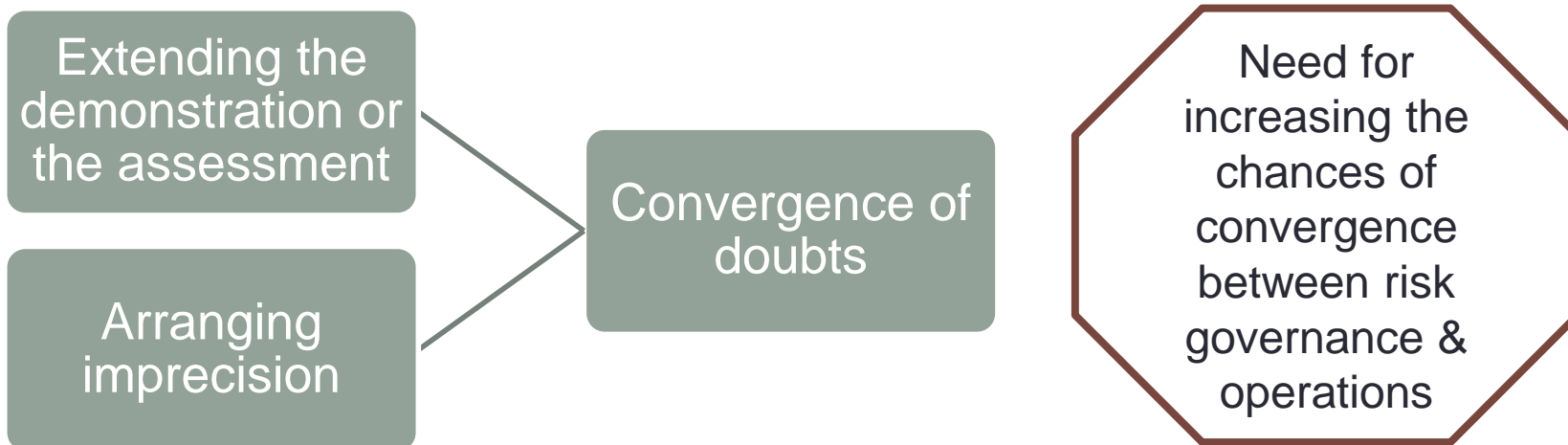


# Arranging imprecision

		<b>Assessment:</b> not fully specified operational documents	
		HOF experts have doubt => test of docs involving users	The report recommends an ergonomic test of docs
<b>Manager</b> using forms to coordinate activity	Associates workers with tasks, materialized by forms	Authority	Authority
	Explaining a task, understands that it can disturb a worker	Inquiry	Authority



# How to articulate anticipation and resilience through risk governance



Creating a systematic dialog between two repertoires/literatures:

- Technical, read by generalist experts
- Academic, read by specialist experts

# Risk governance towards doubts

- Wildavsky (1979) explains that someone has to carry the weight of uncertainty
    - Anticipation: policy makers => workers
    - Resilience: workers => policy makers
    - It supposes that some certainty must be found
  - Dewey (1929): yes for religion, not for science & technology
    - "If scientific knowledge enables us to estimate more accurately the worth of things as signs, we can afford to exchange a loss of theoretical certitude for a gain in practical judgment." (p. 213)
- Shift in how we see risk governance
- Not devices of control
  - Devices for producing new doubts