The role of social science in further research on monitoring for GD

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Remaining challenges

- Exploratory research in MoDeRn highlighted the need for monitoring programmes to be discussed at an early stage in the process
- It identified the need for further work on:
  - How to engage effectively with different stakeholder groups during the RD&D stage
  - How to make monitoring information accessible and transparent
  - How monitoring can contribute to meeting stakeholder concerns about long term safety

Challenge 1: Engaging effectively with stakeholders

- The small exploratory workshops that we conducted in the MoDeRn project produced a first identification of stakeholder concerns
- What is needed now is the development of a more structured approach to eliciting the monitoring requirements of different stakeholders
- Building on previous work in Belgium and the UK, we will develop a **structured engagement process** designed to deliver concrete outputs, produced jointly by the participants, as a guide to future practice.

Challenge 2: Making inform-ation provision transparent

- The proposed research would take a participatory approach to developing guidance on information mechanisms that will draw upon *analysis of the structure and functioning of stakeholder relationships* to establish:
    - The role that monitoring (results) can play in establishing and stabilising the socio-technical networks necessary for implementation of GD;
    - The processes of mediation & intermediation that structure the communication of data;
    - The relationship between different types of data-sets from different forms of monitoring.

Challenge 3: Using monitoring to address safety concerns

- A key issue in this respect that was raised by MoDeRn stakeholders is the interpretation of *unexpected* monitoring results, and the evaluation of risk to the repository system
- This would therefore be a focus for this third strand of the proposed research, which would
  - Involve stakeholders and experts exploring *together*, in a structured learning process, how to understand and deal with unanticipated results; and, to apply this to a specific concern,
  - Investigate the effects on stakeholder expectations that there should be a **response plan** in the event of anomalous results

Summary

- The proposed work would contribute to the development and evaluation of:
  - *Practical forms of stakeholder engagement*;
  - *Practical guidance on information provision*;
  - *A practical, learning-based approach to calibrating expert and stakeholder expectations of monitoring*