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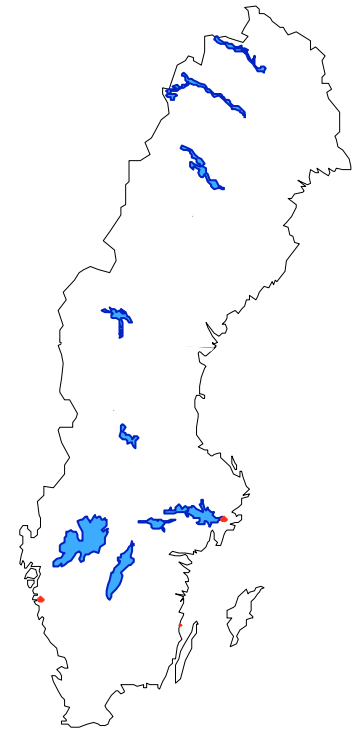
Swedish Radiation Safety Authority

Appendix 10

Plans for SSM's review of SKB's safety case for a spent nuclear fuel repository

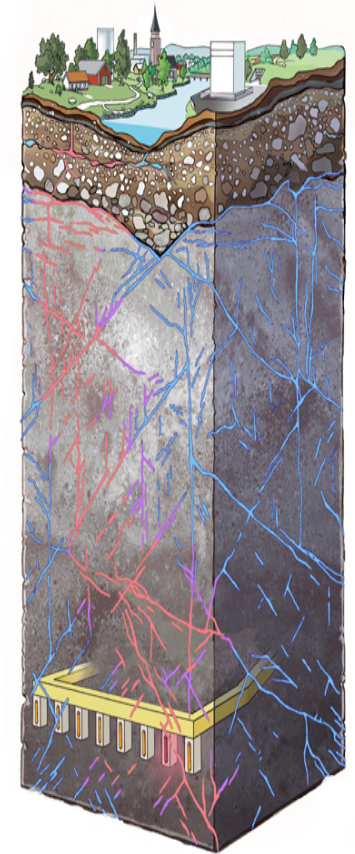
Presentation for BRITE 2009-11-05

Björn Dverstorp
Swedish Radiation Safety authority (SSM)



Outline

- Licensing process
- Review organisation
- Review strategy
- Time schedule



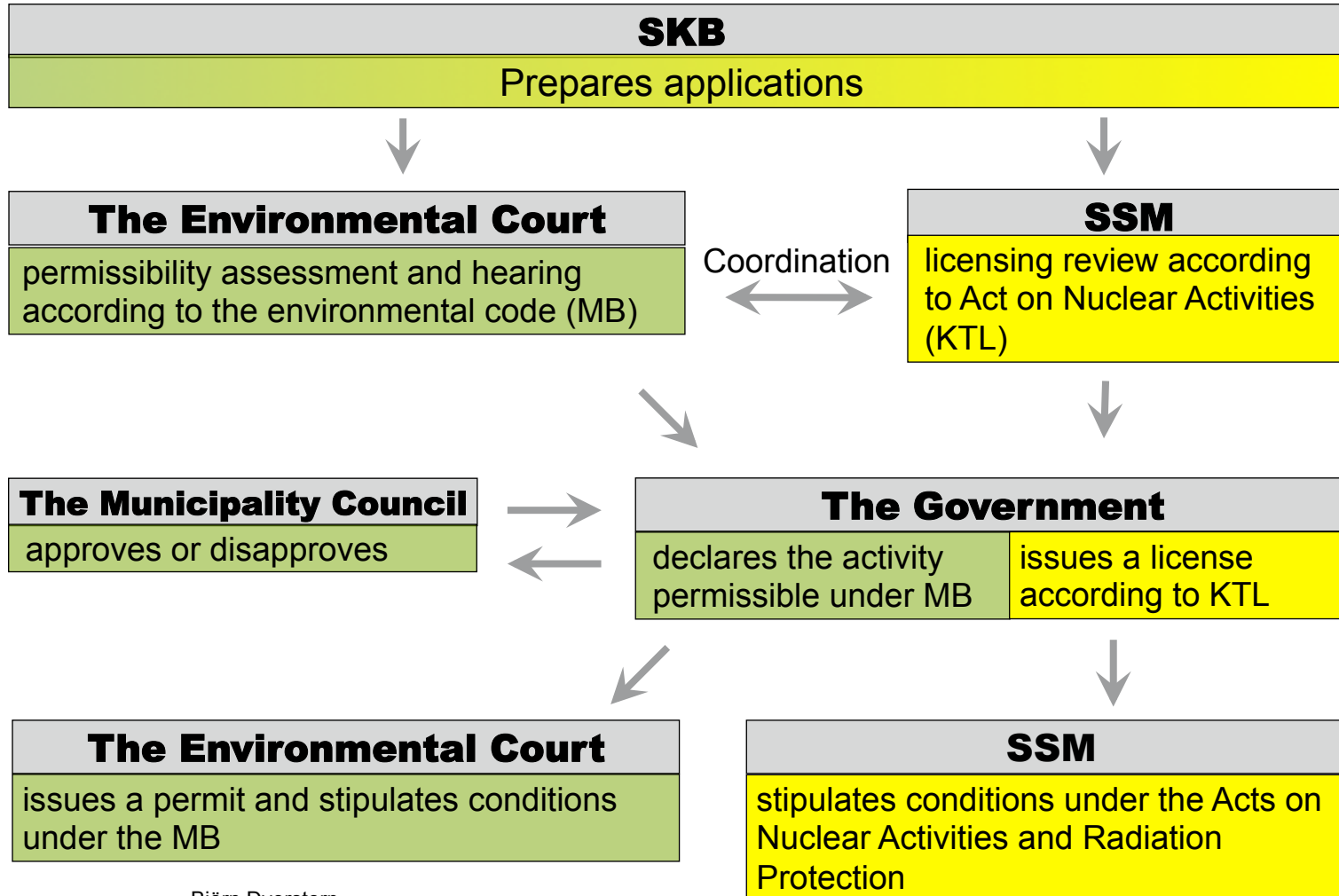


Scope of licensing review

- Two facilities
 - KBS-3 repository
 - encapsulation plant
- Two parallel legal review processes
 - permissibility assessment/environmental court
 - licensing review under the act on nuclear activities/
SSM
- Government decision
 - municipal veto

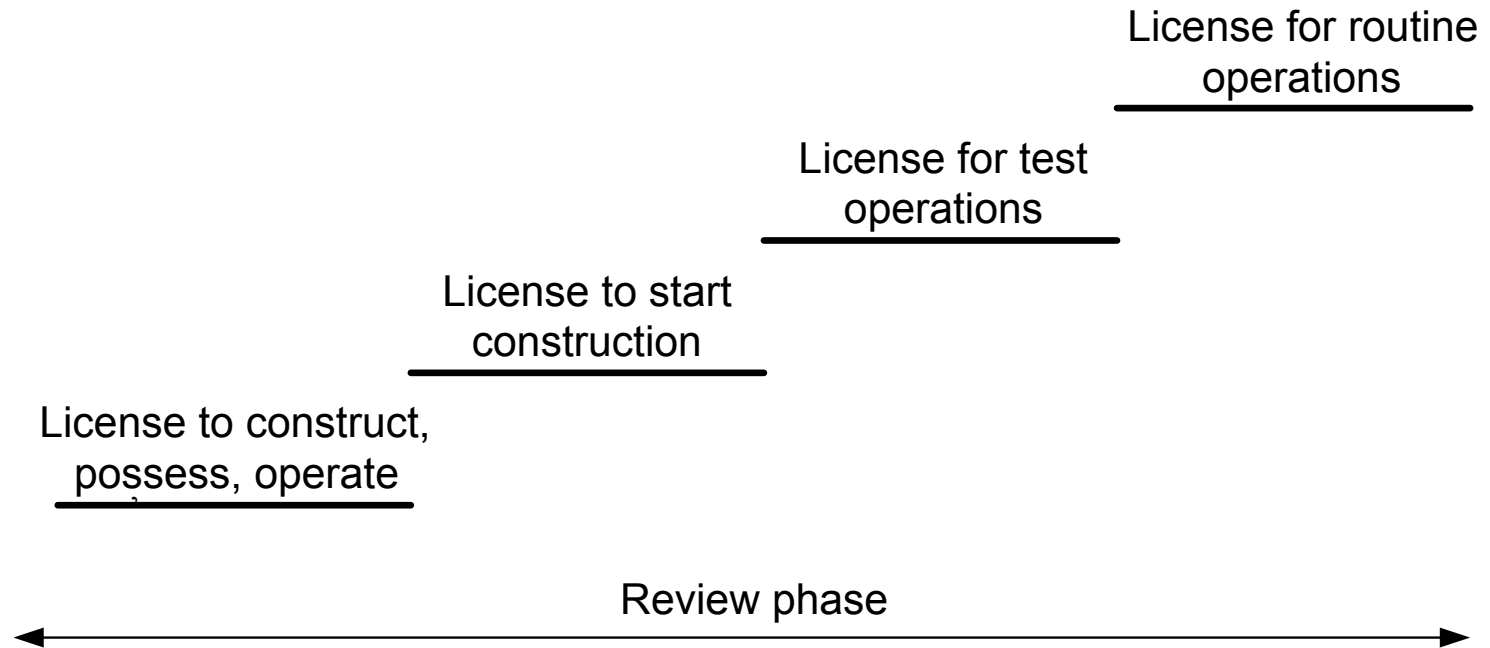


Licensing process





Stepwise licensing procedure





Organisation

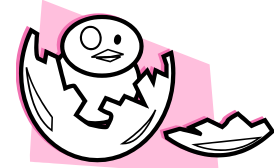
- Review will be carried out as a SSM project
- >30 SSM staff (~ 25 personyears per year)
- External expert support (annual budget 1.5 – 2 MEuro)
- Negotiation of framework contracts 2010
- Funded by the waste fund
- Duration ≥ 2 years





Role of SSM' s independent modeling

- Analyse *specific issues* on request from the review team
 - reproducing SKB's calculations
 - modelling with alternative models
- In-house
 - consequence analysis incl. dose calculations
- External
 - barrier performance, climate, rock mechanics, hydrology



Strategy for purchasing of review support

- Negotiation of framework contracts 2010
 - Specified support services in a number of scientific and technical areas
 - Criteria: documented competence, experience from Swedish programme etc
 - Disqualifying factors: dependence on SKB
- Employment on project basis may be offered for participation in SSM's project group



Iterative review strategy

1. Acceptance review by SSM
2. First broad review with all external experts
 - completeness
 - identification of critical areas
 - proposal for Requests for Complementary Information (RCI)
3. Synthesis of findings at workshop
 - decision on RCIs
 - documentation of resolved issues
 - updating of review report
 - updated assignments to consultants
 - possible re-organisation of consultant groups





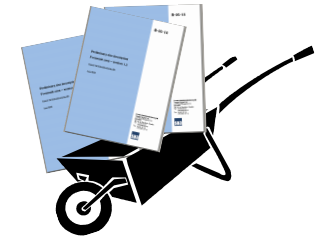
Issues resolution process

- Stepwise prioritisation of review issues
 - Safety Integration Review (SIR) team meetings
- Recurrent project workshops followed by SIR meetings
- SIR team meeting protocols will be made publically available



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- Assignment to Monitor Scientific on development of issues resolution process during review
 - report due end 2009



Requests for complementary information

- Pre-licensing dialogue on content of application but requests for complementary information (RCI) unavoidable
 - unique application
 - few formal requirements on content of application
- Strictly controlled process for RCIs (transparent, open, traceable)
- Practical routines to be developed



Elements of internal QA 1(2)

- Project quality plan
 - general description of **processes**, responsibilities, documentation
 - distinction between Project & Review management
- Project handbook
 - procedures, practical instructions, review guidance, checking and clearing of review contributions, modelling etc
- Review plan
 - scope of review, review criteria, critical issues, time schedule
 - updated during review!



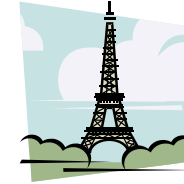
Elements of internal QA 2(2)

- Collaborative web based work place
 - to be purchased early 2010
 - should not be by-passed
 - rules for registration of working material to be developed



Insight and communication

- Broad national consultation
- Dedicated web domain
 - agenda and review status
 - web consultation
 - "issue resolutions" (pending or done)
 - supplementary information
- International peer reviews (NEA, IAEA)
- Public meetings after review milestones
 - e.g. peer reviews and requests for compl. information
- Dialogue on statements after completion of review



NEA peer review

- To support SSM' s review (2nd opinion)
- Scope
 - long-term radiation safety
 - engineering feasibility and justification of method and site selection
- Time schedule
 - Review starts with SKB presentation early 2011
 - Hearing with SKB
 - Final report and presentation to SSM early 2012
- Terms of reference remains to be developed



Time schedule

- ➔ End 2009: 1st version of project plan
- ➔ Early 2010: ToR for NEA peer review
- ➔ Mid 2010: formation of expert support organisation
- ➔ Aug 2010: National and international consultation of review plan
- ➔ Oct 2010: launching of review project
- ➔ Jan 2011: submission of SKB:s license application
- ➔ Feb 2011: kick-off meeting with external experts and start of review