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T024. Nuclear Futures, how to govern nuclear wastes? EASST – Augustus 2016, Barcelona

Focus on the *art* of government of nuclear wastes

- What? Studying regimes of practices of government (Dean 2010 – analytics of government) in three different countries : France, Belgium and Canada.
- Which period? Since the "participatory turn" onwards (Bergmans et al. 2014)

Today's main questions :

- How public(s) and experts have been integrated so far in the different decision-making processes of HLRW?
- How, after all, geological disposal concept remains the preferred option?

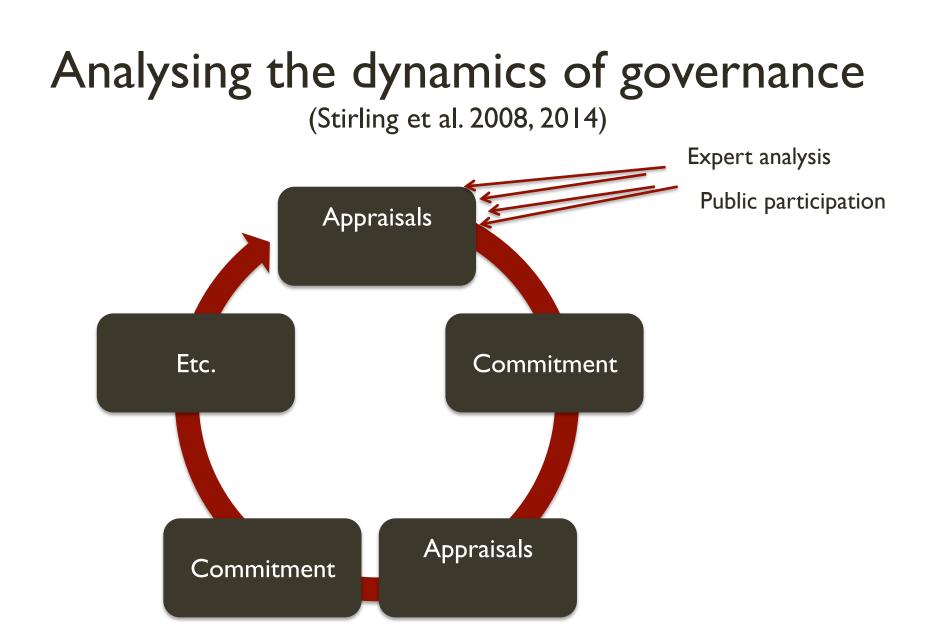


Figure "How to govern a technological system?" inspired by Stirling et al. 2008, 2014.

Analysing the dynamics of governance

(Stirling et al. 2008, 2014)

• Opening up <

- open appraisal raises alternative questions, focuses on neglected issues, includes marginalized perspective, triangulates contending knowledge, tests sensitivities to different methods, considers ignored uncertainties, examines different possibilities and highlights new options (Stirling 2008, 278-280).

Closing down >

is about defining the *right* questions, finding the priority issues, identifying salient knowledge, recruiting appropriate protagonists, to determine the 'best' options (lbid).

Analysing the dynamics of governance: the necessary combination

Voß, Kemp, and Bauknecht (2006): 436

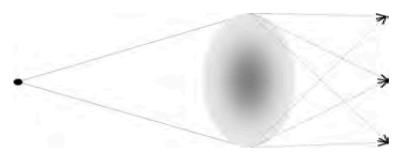
Sequential closing: *succession* of opening up and closing down

Subsidiarity/ experimental closing : test a closing to identify the best option

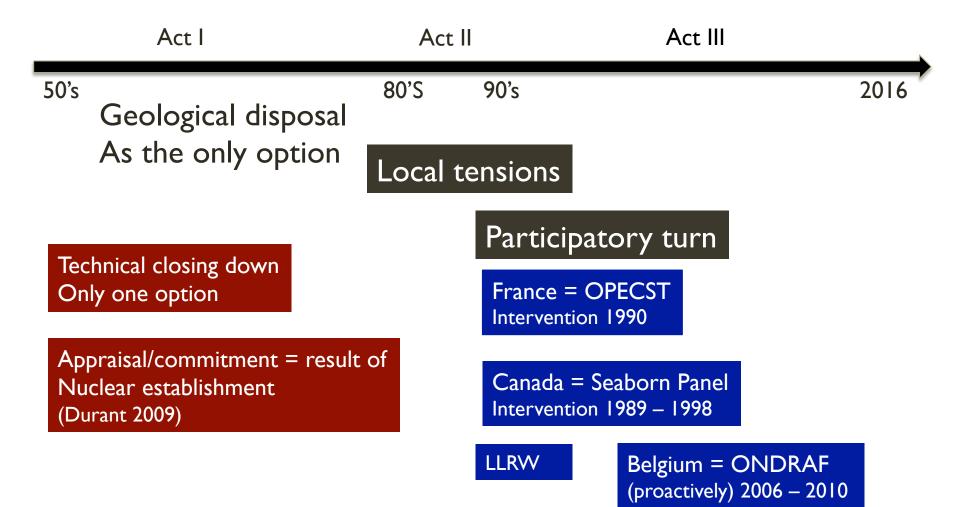
Sequential closing



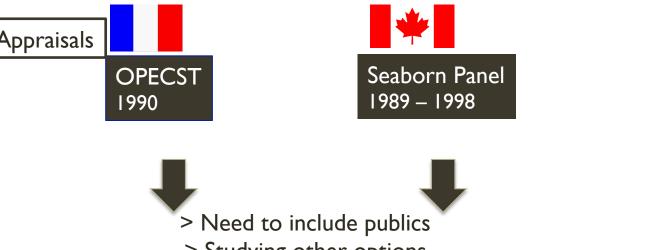
Subsidiary/experimental closing



Art of government over the years



Art of government since 90's: first opening up moments after the crisis



> Studying other options> Need of independent agencies

> Need to include publics< Focus on GD

ONDRAF

2001

Act of Parliament

> Comparing three possible Options

- I. Deep geological disposal
- II. Storage above ground
- III. Partitioning/Transmutation of long-life elements

Nuclear Fuel Act 2002

- > Comparing three possible Options
- I. Deep geological disposal
- II. Storage on nuclear sites
- III. Centralized Storage (above or below)

Ministers commitment 2006

Comparing all existing Options Art of government since 90's: succession of appraisals towards an political decision on the option

OPECST 1996, 2001, 2005

> GD with reversibility P/T as alternative for futures wastes

CEN 1996, 2005

< GD



> Eternal storage above the ground



GD with Procedural conditions "adaptive phase management" ONDRAF 2006-2011 < GD Consensus conference 2009

< GD with reversibility

Publics consultations 2009

> Several options

Art of government in France and in Canada : political decision on the option as closing up moment

Act of Parliament 2006 < Geological disposal as preferred option BUT with reversibility & keep going partitioning/ transmutation researches

" (...) to select the technical safest option and at the same time keep choices open" (OPECST 2005)



< Geological disposal as Preferred option BUT with Adaptive Phase Management

"APM allows flexibility in the pace and manner of implementation through phased decision making" (NWMO 2005)

NO commitment

Discussion - Conclusions

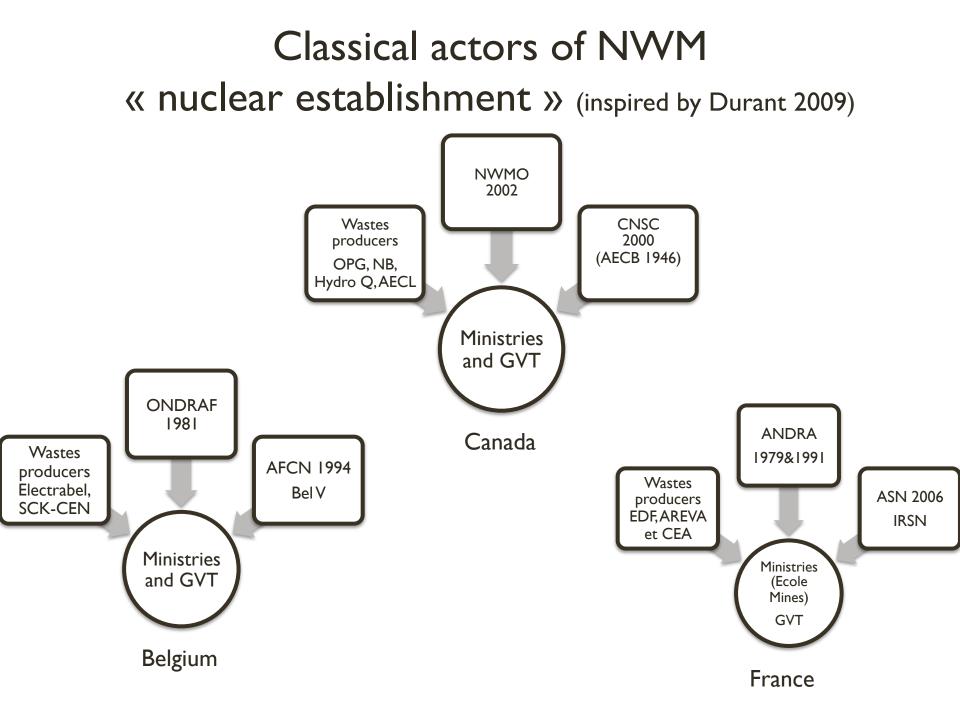
- Both Canadian and French made closing up commitment
 - Neither closing down, nor opening up
 - GD = the chosen option (*closing of* the options)
 - <u>&</u> [reversibility] or [APM] = negotiations spaces
 (opening of new possibilities)
- The closing is made possible because of the "up"

Discussion - Conclusions

- Closing up as new strategy to move forward with HLRW
 - The "up" as a way to legitimate the already-chosen option
 - It's a strategic instrument to sustain continuity of the program provided by NWM actors (giving partially "the right to shape" decision)
- Underestimating performative effect of the "up"

Thanks for your attention!

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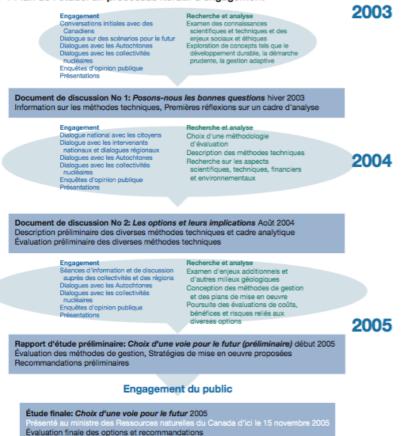


NWMO's consultations

	4 Ateliers thématiques (experts-stakeholders) Septembre 2003 - Atelier sur l'environnement (13p) - Atelier sur les aspects techniques (49p) - Atelier sur le savoir traditionnel (26p.)						
		planification du dialogue avec les collectivités (24p.) Doc discussion 1 "Posons-nous les bonnes questions?"					
			Novembre 2003				
				Séances d'informations avec les élus politiques 2004			
					Sondage d'opinior Juin 2004	15	
Site web 2002	40 documents de références multidisciplinaires (expert Janvier 2003	analysis)		sions sur le doc 1 nbre 2003	 - 1900 canadiens - 700 résidents de 	s municipalités nucléarisées	
Mise en place du Comité Consultatif 2002	Table ronde sur l'éthique (expert) 2003			R et Analyse technique sur les 3 opt janvier – juillet 2004		c discussion 2 "Les choix et leurs implications" 0t 2004	
Création NWMO 2002	Réunions avec le peuple autochtone 2003			Evaluation préliminaire des résultats Janvier 2004	de l'année 2003	Séances d'informations et de discussions septembre – décembre 2004	
Rencontres et entretiens préliminaires (14 gpes discussion) 2002	Sondage d'opinion (participatory avrmai 2003	event)		Rencontres et Ateliers thématiques 2004		Deux Discussions électroniques octobre – décembre 2004	
 Maires municipalités nucléarisées Spécialistes de la consultation publique Régulateurs 	Ateliers du futur (s juin – octobre 200			Sondages délibératifs févrmars 2004		Ateliers autochtones novembre 2004 – février 2005	
- Législateurs et parlementaires - Organismes internationaux	-1900 répondants - 64 questions			Discussions nationale Mars 2004	es et régionales	Etude et analyse préliminaire des résultats de 2004 Janvier 2005	
Avril 2002 Juillet 2002 Octobre 2002 Janvier 2003 Avril 2003 Juillet 2003 Octobre 2003 Janvier 2004 Avril 2004 Juillet 2004 Octobre 2004 Janvier 2005 Avril 2005 Juillet 2005							

NWMO's consultations

Figure 8-1 Plan de l'étude: un processus itératif d'engagement



Résumé des commentaires du public, Commentaires du Conseil consultatif

Source: NWMO 2005