



Supplement of

Historical contextualization of the site selection process for the German high-level nuclear waste (HLW) repository as a tool for information and awareness preservation

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HISTORICAL CONTEXTUALIZATION OF THE SITE SELECTION PROCESS

as tool for information and awareness preservation

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HISTORICAL CONTEXTUALIZATION OF THE SITE SELECTION PROCESS



THE “HISTORICAL BACKPACK“

WHY HISTORICAL CONTEXTUALIZATION?

AIMS, METHODS AND TOOLS

OUTLOOK

HISTORICAL CONTEXTUALIZATION OF THE SITE SELECTION PROCESS



The "Historical Backpack" I

Since 1977	Controversy over Gorleben
1979 - 2012	Exploration of the Gorleben Salt dome
1980 - 1981	Exploratory drilling
June 1980	"Republik Freies Wendland"
June 1982	Release of the Duphorn-Report
July 1983	Federal Government decides on underground exploration
1986	Further excavation of Shaft I
1999 – 2002	AkEnd Arbeitskreis Auswahlverfahren Endlagerstandorte
2000	Nuclear phase-out agreement
2001 - 2011	Gorleben moratorium



Quelle: BGE

➔ Site selection procedure after the Site Selection Act is result of intergenerational social conflict

HISTORICAL CONTEXTUALIZATION OF THE SITE SELECTION PROCESS



The "Historical Backpack" II

2010 - 2013	Gorleben Fact-finding committee
2011	Decision to phase out nuclear power by 2022
2013	Site Selection Act for Nuclear Repository
2014 - 2016	Repository Commission Evaluation of the Act
2016	Reorganisation of Responsibilities in the waste disposal sector
2017	German Nuclear Waste Management Fund (KENFO)
2017	Amendment of the Site Selection Act: Beginning of the new site selection
30.06.2020	Geological Data Act (GeoIDG)
15.10.2020	Security Regulations (EndlSiAnfV ¹ und EndlSiUntV ²)



Quelle: BGE

¹Endlagersicherheitsanforderungsverordnung vom 6. Oktober 2020 (BGBl. I S. 2094)

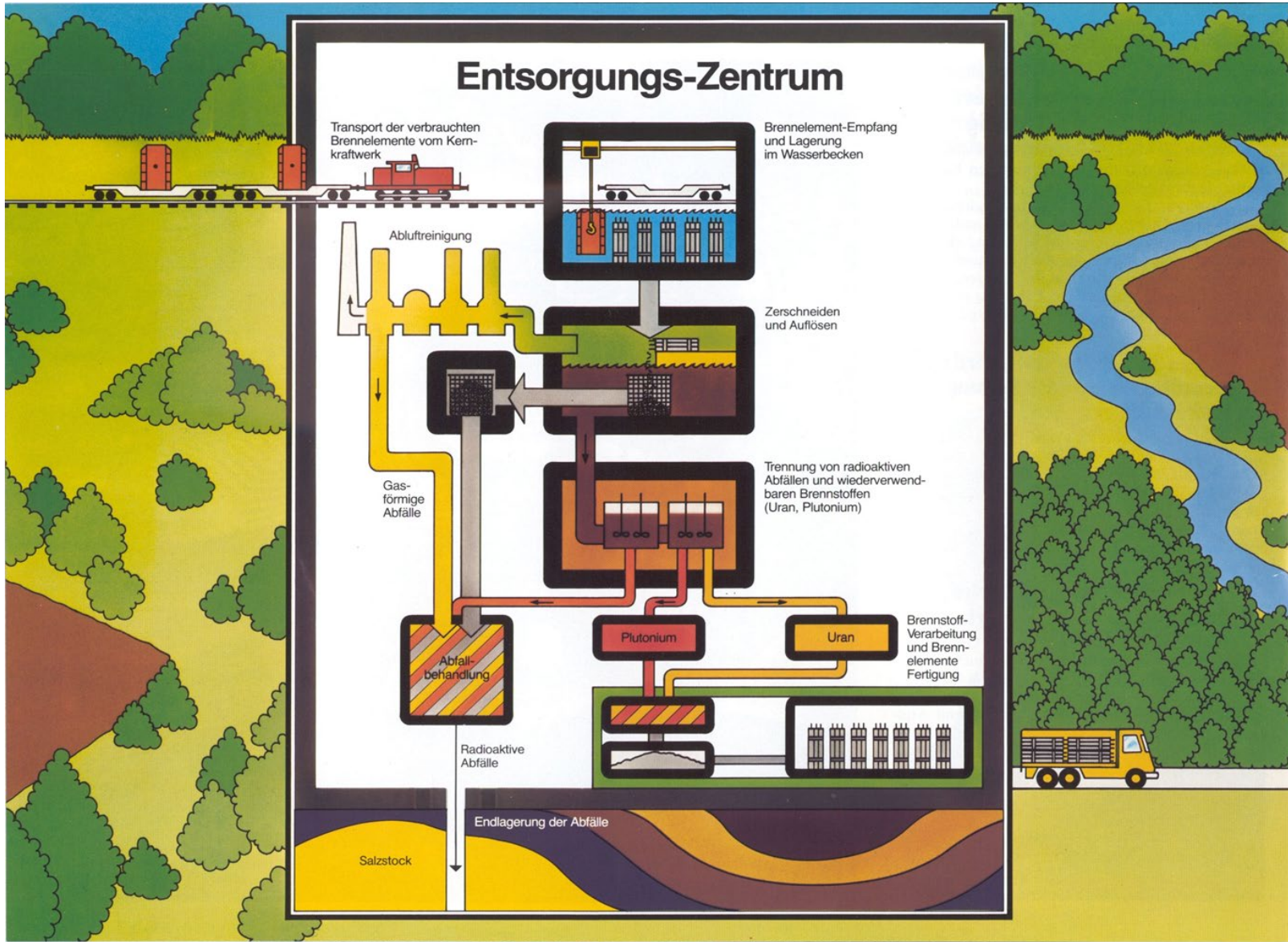
²Endlagersicherheitsuntersuchungsverordnung vom 6. Oktober 2020 (BGBl. I S. 2094, 2103)

HISTORICAL CONTEXTUALIZATION OF THE SITE SELECTION PROCESS



The “Historical Backpack“ III

- What was different “in the past“ (1977 to 2013 before the new procedure?)
 - Site selection for the „nuclear disposal center“ with the world largest civilian reprocessing plant in it
 - In the absence of an regulatory act procedures and criteria were developed according to practical considerations
 - The work at Gorleben took place at the height of the nuclear controversy in Germany
 - The prearranged selection procedure was not transparent and different opinions on it still exist today (see Fact-Finding committees‘ Report on Gorleben)



“Waste disposal center“

Quelle: Projektgesellschaft für Wiederaufarbeitung mbH

HISTORICAL CONTEXTUALIZATION OF THE SITE SELECTION PROCESS



The “Historical Backpack“ IV

- Site Selection Act 2013 and 2017 draws lessons from history:
 - Evaluation of the Repository Commission
 - Priority of safety and geology: the site „with the best possible safety“
 - The goal of StandAG § 1 Abs. 2 is a participatory, scientific-based, transparent, self-reflecting and learning procedure (*„partizipatives, wissenschaftsbasiertes, transparentes, selbsthinterfragendes und lernendes Verfahren“*)
 - Legitimacy through federal laws
 - Phased procedures according to criteria approved by the Repository Commission

HISTORICAL CONTEXTUALIZATION OF THE SITE SELECTION PROCESS



The “Historical Backpack“ V

- What is better today („new“ procedure since 2017)?
 - Continuous monitoring by the National Citizens‘ Oversight Committee (Nationales Begleitgremium (NBG): Review of files, Assessment Reports
 - Continuous public participation with Provision of platforms for public engagement (Informationsplattform, Fachkonferenz Teilgebiete, Forum Endlagersuche /1/) organized by the Federal Office for the safety of Nuclear Waste Management (Bundesamt für die Sicherheit in der kerntechnischen Entsorgung (BASE), with the participation of NBG and the BGE (Federal Company for Radioactive Waste Disposal)
 - Implementor BGE: Presentation/discussion/ implementation research findings with all stakeholders, correction of errors (e.g. Sub-areas Interim Report) and evidence–based learning (e.g. initiation of Research projects)
 - Defined procedures with ongoing scrutiny, review and approval from BASE

/1/ Phase II/III: Regionalkonferenzen, Rat der Regionen

HISTORICAL CONTEXTUALIZATION OF THE SITE SELECTION PROCESS



What is already done?

- ✓ The BGE has built up the site selection department (2016-2018)
- ✓ Based on existing data from federal and state authorities the BGE has identified partial areas based on the geoscientific exclusion criteria, the minimum requirements and the geoscientific weighing criteria. (2017-2020)
- ✓ The BGE submitted the Sub-areas Interim Report to the BASE (28.09.2020)
- ✓ The BGE discussed the Report on the “Specialist Conference on Sub-Areas“ (2020/1) and take continuously advises, suggestions and comments into account
- ✓ Currently the BGE has worked on methods for representative preliminary safety analyses, geoscientific consideration criteria and planning-scientific weighing criteria (2021-2023)



WHY HISTORICAL CONTEXTUALIZATION?

02

HISTORICAL CONTEXTUALIZATION OF THE SITE SELECTION PROCESS



Why?

- Because of the long time of waste disposal management the preservation of historical knowledge is important
- The phased procedure of the Site Selection Act is unique in the sense of the long time span and complexity
 - ➔ breakpoints and returns in the process require documentation and explanations
- Historical Contextualization is a component for a self-learning system
- Historical Contextualization is sociotechnical repository research : “*Wicked problem (Achim Bunnengräber)*“ of final nuclear waste disposal is to be researched with a multi-perspective, interdisciplinary and transdisciplinary approach



AIMS, METHODS AND TOOLS

03

HISTORICAL CONTEXTUALIZATION OF THE SITE SELECTION PROCESS



Goals

- to convey the problem of the nuclear waste disposal as a technical and social task between the generations
- to be the base for reflection on the decisions already made
- to contribute to transparency (with interim reports)
- Historical Contextualization is part of the BGE-Knowledgemanagement: Tacit knowledge is elicited with interviews and explicit knowledge is organized

HISTORICAL CONTEXTUALIZATION OF THE SITE SELECTION PROCESS



monitoring (events and literature)

set of cohesive storylines


interviews with eyewitnesses

**central documents related with
the storylines**

HISTORICAL CONTEXTUALIZATION OF THE SITE SELECTION PROCESS



Outcome

- no classic „opus magnum“ on BGE perspective
- research tools and finding aids for further research
- a base for reflection: 
- From the “participating observation“ to a “cultural memory“ (Aleida und Jan Assmann)



OUTLOOK

04

HISTORICAL CONTEXTUALIZATION OF THE SITE SELECTION PROCESS



Outlook

- Frank Uekötter /1/ comes to the conclusion, that the „*Geschichte der Atomkraft*“ can be seen as „*ein Erfolg der bundesdeutschen Verhandlungsdemokratie*“: The development of the “new” site selection process has overcome decades-old conflicts and blockages..
- All stakeholders of the siting process can contribute to the change of the “Hard Nuclear State“ („*harter Atomstaat*“, Robert Jungk) to the “Soft Waste Disposal State“ („*weicher Endlagerstaat*“, Achim Brunnengräber) /2/.

/1/ Frank Uekötter: *Atomare Demokratie – Eine Geschichte der Kernenergie in Deutschland*, Stuttgart 2022.

/2/ Achim Brunnengräber: *Vom starken zum weichen Atomstaat. Formelle Prozesse in der Atom- und Entsorgungspolitik – oder: Robert Jungk neu gelesen*, in: Ders./Bettina Bohmann/Peter Hocke/Ana Maria Isidora Losada (Hrsg): *Robuste Langzeit-Governance bei der Endlagersuche*, Bielefeld 2021, 61-78.

SAVE THE DATE



25-28
NOVEMBER
2024

9th International Conference on Clays
in Natural and Engineered Barriers for
Radioactive Waste Confinement

25th - 28th November 2024
supporting programme: 24th & 29th November

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HCC Hannover Congress Centrum
secretary@clayconference2024.de

plenary sessions · parallel sessions · poster presentations
networking events · scientific supporting programme and lively discussions

Organised by **BGE** **BUNDESGESELLSCHAFT
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