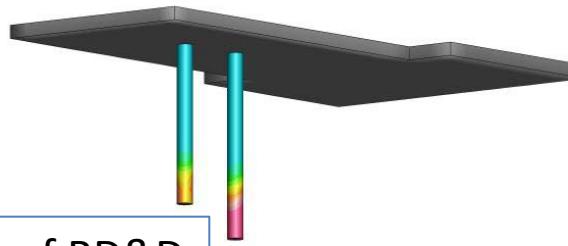
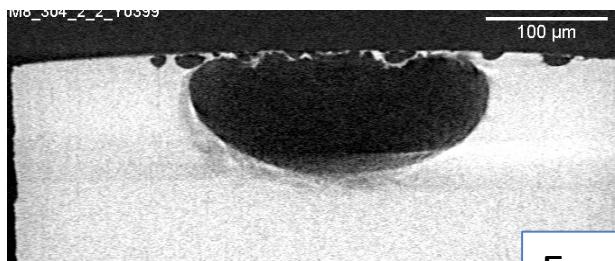
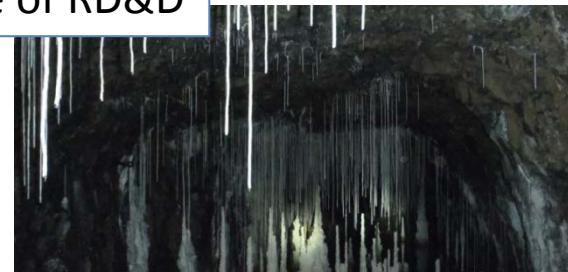


# WMO RD&D areas of interest not addressed by initial EURAD scope



Example of RD&D



**Jon Martin**

The research leading to these results has received funding from the European Union's Seventh Atomic Energy Community's (Euratom) Framework programme FP7 (2007-2013) under grant agreements n° 240366, SecIGD, and n° 323260, SecIGD2.

**nagra.**



**SKB**

**enresa**

**Radioactive Waste Management**

**ONDRAF/NIRAS**

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für Wirtschaft  
und Technologie

## Background

- EURATOM funded RD&D is a valuable part of all European nations radioactive waste management and disposal RD&D programmes
- IGD-TP EG is fully supportive of EURAD. If funded it will address important WMO needs, but not all of them (I.Gaus, Nagra will speak more about this later today)
- The IGD-TP Executive Group has started to draft a list of topics of interest to the WMOs that may be outside of the current and future scopes of EURAD, this could be for many reasons, e.g.
  - Scope is such that it would be inappropriate to collaborate with Regulatory bodies due to perceived conflict of interest
  - Topic area/scope of interest did not gain consensus with other EURAD actor groups (i.e. not of sufficient common interest)
  - Work is too time critical to be addressed by the ongoing joint programme

The research leading to these results has received funding from the European Union's European Atomic Energy Community's (Euratom) Seventh Framework programme FP7 (2007-2013) under grant agreements n° 243696, Sec.GD, and n° 323260, Sec.C2.

## Draft list of possible topics of interest

RD&D topic	Possible WMO lead
<b>Container manufacture and materials</b>	RWM
Operational safety (note IGSC EGOS is planning work in this area)	
Borehole sealing	
Management of bituminised waste	ONDRAF/NIRAS
Depleted uranium	COVRA
Exotic/problematic/orphan wastes (note EURAD ROUTES scope)	
Robust shielded containers	
Non-destructive analysis	ONDRAF/NIRAS, SKB
Chemotoxic challenge (with regards to GWDD requirements)	
Transferability of info on host rock from one environment to another	
Criticality Safety (BUC and likelihood and consequence assessment for post-closure)	
Safety, security and safeguards (technical not political issues)	
Large scale chemical containment demonstration	
Environmental impact and non-human biota	
<b>Advanced site characterisation techniques</b>	SKB/Posiva
Climate Change (consistency of models, assumptions and approaches)	Nagra
<b>Retrievability (technical not political issues)</b>	Andra



nagra.



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## Structure of session

9:30-13:00 we will separate into our three technical break-out session working groups

After lunch at 14:30 we will all reconvene in the main meeting room and the technical session rapporteurs will report back on the findings of their working group

## Possible working group outcomes

Range of outcomes possible, for example:

- Proposal to IGD-TP EG for consideration of progress towards funding by WMOs
- Proposal to WMO college for support as future EURAD proposal to General Assembly

The research activity is part of the Future networking activity/topic day, the European Union's European Atomic Energy Community's (Euratom) Seventh Framework programme FP7 (2007-2013) under grant agreements n° 249396, SecIGD, and n° 323260, SecIGD2.  
• No common interest, etc, etc.

# Technical break out sessions

Rooms:

K1 (Konferenzraum 1)

Aula

K2 (Konferenzraum 2)

Technical Break-out Sessions (see separate agenda)						
0930	1: Technical issues in support of retrievability Chair: Frédéric Plas (Andra) Rapporteur: Jean-Michel Hoorelbecke (Andra)	2: Heat generating waste containers Chair: Jon Martin (RWM) Rapporteur: Michelle Cowley (RWM)	3: Progress in site investigation and characterisation techniques Chair: Irina Gaus (Nagra) Rapporteur: Bernd Frieg (Nagra)			
1300	Lunch					
Tuesday 4 <sup>th</sup> December – IGD-TP Afternoon Session						
Session Chair: Current IGD-TP Chair (Jon Martin)						
1430	Technical session report back – 1: Technical issues in support of retrievability	Jean-Michel Hoorelbecke (Andra)				
1500	Technical session report back – 2: Heat generating waste containers	Michelle Cowley (RWM)				
1530	Technical session report back – 3: Progress in site investigation and characterisation techniques	Bernd Frieg (Nagra)				

↑ Aula  
(Euratom) ↓

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Radioactive Waste Management

COVRA

# Implementing Geological Disposal of Radioactive Waste

## Technology Platform

First Name	Last Name	Day 2 Technical Session
Marcus	Altmaier	Session 3
Thuro	Arnold	Session 2
Jorma	Autio	Session 1
Attila	Baksay	Session 2
Jozef	Balaz	Session 2
Tamara	Baldwin	Session 2
Anthony	Banford	Session 2
Megan	Barnett	Session 1
Jeroen	Bartol	Session 1
Tara	Beattie	Session 2
Johan	Bertrand	Session 2
Thomas	Beuth	Session 2
Roman	Beyerknecht	Session 2
Matts	Björck	Session 2
Ingo	Blechschmidt	Session 1
Edgar	Bohner	Session 2
Wilhelm	Bollingerfehr	Session 1
Audrey	Bonnellye	Not Applicable
Ursula	Borak	Not Applicable
Dirk	Bosbach	Session 3
Wernt	Brewitz	Session 3
Christophe	Bruggeman	Session 2
Gunnar	Buckau	Session 3
Mauro	Cappelli	Session 2
Paul	Carbol	Session 1
Neil	Carr	Session 1
Andrea	Cherkouk	Session 2
Oto	Chren	Session 2
Petra	Christensen	Session 2
Francis	Claret	Session 3
Alastair	Clark	Session 3
Joaquin	Cobos	Session 1
Michelle	Cowley	Session 2
Miguel	Cuñado	Session 2
Alexandre	Dauzeres	Session 2
Christophe	Davies	Session 2
Guido	Deissmann	Session 2
Jacques	Delay	Session 3
Linda	Delory	Session 2
Julien	Dewogélhaëre	Session 2
Nikitas	Diomidis	Session 2
Lara	Duro	Session 2
Joaquín	Farias - Seifert	Session 1

Joerg	Feinhals	Session 2
Javier	Fernandez Lopez	Session 2
Barbara	Ferrucci	Session 3
Panja	Feuker	Session 1
Cornelius	Fischer	Session 3
Carina	Franck	Session 2
Bernd	Frieg	Session 2
Annika	Fritzell	Session 1
Daniel	Galson	Session 3
Xavier	Gaona	Session 2
Marie	Garcia	Session 2
David	Garcia	Session 3
Irina	Gaus	Session 3
Horst	Geckeis	Session 1
Astrid	Goebel	Session 2
Bernd	Grambow	Session 1
Monica	Hammarström	Session 1
Lucie	Hausmannova	Session 1
Vaclava	Havlova	Session 3
Tim	Heath	Session 3
Christian	Herold	Session 2
Philipp	Herold	Session 1
Johannes	Herrmann	Not Applicable
Arnd	Heumann	Not Applicable
Zbynek	Hlavac	Session 3
Gunnar	Hoefer	Session 3
David	Holton	Session 1
Erika	Holton	Session 2
Jean-Michel	Hoorelbeke	Session 1
Masataka	Imai	Session 1
Tomoko	Ishii	Session 1
Ivan	Ivanov	Session 3
Elke	Jacops	Session 3
Peter	Jansson	Session 2
Darius	Justinavicius	Session 3
Birgitta	Kalinowski	Session 3
Timur	Kandemir	Session 2
Ivo	Kaplan	Session 3
Ole	Kastbjerg Nielsen	Session 3
Jake	Kinghorn-Mills	Session 1
Andrea	Koerdt	Session 1
Jaroslave	Kotátková	Session 2

Steven	Krüger	Session 2
Michael	Kühn	Session 3
Hans Jörg	Kunte	Session 2
Zdena	Lahodová	Session 2
Eileen	Langegger	Session 2
Eva	Laraia	Session 2
Frank	Lemy	Session 1
Séverine	Levasseur	Session 2
Jonathan	Martin	Session 2
Dalibor	Mateju	Session 1
Juan Carlos	Mayor Zurdo	Session 3
Andrew	McClusky	Session 2
Fiona	McEvoy	Session 3
Rob	McLaverty	Session 3
Giuseppe	Modolo	Session 2
Peter	Molnar	Session 3
Christian	Müller	Session 3
Lumír	Nachmilner	Session 2
Markus	Olin	Session 2
Teresa	Orellana Perez	Session 2
Jana	Orzechowski	Session 3
Isabel	Paiva	Session 2
Frédéric	Plas	Session 1
Petra	Polivka	Session 2
Ulf	Ronnateg	Session 2
Wolfram	Rühaak	Session 3
Elisabeth	Salat	Session 2
Annika	Schäfers	Session 1
Stéphan	Schumacher	Session 1
Patrik	Sellin	Session 2
Assen	Simeonov	Session 3
Eric	Simo	Session 2
Ján	Sirota	Session 2
Anders	Sjöland	Session 2
Joachim	Stahlmann	Session 1
Jiri	Stastka	Session 2
Walter	Steininger	Session 3
Martin	Stiefel	Session 2
Silvia	Stumpf	Session 2
Maryna	Surkova	Session 3
Valentina	Svitelman	Session 3
Jiri	Svoboda	Session 2
Nathalie	Texier Mandoki	Session 2

Holger	Tietze-Jaensch	Session 3
Satohito	Toguri	Session 1
Marika	Vespa	Session 3
Holger	Völzke	Session 2
Virginie	Wasselini-Trupin	Session 2
Mary	Westermann	Session 1
Peter	Wikberg	Session 3
Robert	Winsley	Session 2
Jens	Wolf	Session 2
Dietmar	Wolff	Session 2
Béatrice	Yven	Not Applicable
Kornelia	Zemke	Session 3
Borys	Zlobenko	Session 3

Energy Community's (Euratom)  
n°323260, SecGD2.

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