



E U R O S A F E

PARIS 2006

GRS

IRSN

*Towards Convergence of  
Technical Nuclear Safety Practices in Europe*

PARIS  
13 & 14 NOVEMBER 2006

**Radioactive Waste Management:**  
Long Term Safety Requirements  
and Societal Expectations





The EUROSAFE Forum is part of the EUROSAFE approach, which consists of two further elements: the EUROSAFE Tribune and the EUROSAFE website. The general aim of EUROSAFE is to contribute to fostering the convergence of technical nuclear safety practices in a broad European context. This is done by providing technical safety and research organisations, safety authorities, power utilities, the rest of the industry and non-governmental organisations mainly from the European Union and East-European countries, and international organisations with a platform for the presentation of recent analyses and R&D in the field of nuclear safety, to share experiences, exchange technical and scientific opinions, and conduct debates on key issues in the fields of nuclear safety and radiation protection.

The EUROSAFE Forum 2006 focuses on “ **Radioactive Waste Management: Long Term Safety Requirements and Societal Expectations**” from the point of view of the authorities, TSOs and industry and presents the latest work in nuclear installation safety and research, waste management, radiation safety as well as nuclear material and nuclear facilities security carried out by GRS, IRSN, AVN and their partners in the European Union, Switzerland and Eastern Europe.

A high level of nuclear safety is a priority for Europe. The technical safety organisations play an important role in contributing to that objective through appropriate approaches to major safety issues as part of their assessments and research activities.

The challenges to nuclear safety are international. Changes in underlying technologies such as instrumentation and control, the impact of electricity market deregulation, demands for improved safety and safety management, the ageing of nuclear facilities, waste management, maintaining and improving scientific and technical knowledge, and the need for greater transparency - these are all issues where the value of an international approach is gaining increasing recognition.

The enlarged European Union of 25 countries, of which 13 use nuclear energy, will require closer collaboration between technical safety organisations and even more convergence in European nuclear safety practices. EUROSAFE aims to respond to these needs.

## Radioactive Waste Management: Long Term Safety Requirements and Societal Expectations

### Programme Committee:

Benoît De Boeck, *AVN*  
Jean-Bernard Chérié, *IRSN*  
Ulrich Erven, *GRS*  
Gustaf Löwenhielm, *SKI*  
Antonio Munuera Bassols, *CSN*  
Peter Storey, *HSE*  
Seppo Vuori, *VTT*

### Technical Plenary Presentations

The plenary presentations and the discussion within the panel and with the audience will be moderated by Marie-Dominique Montel, Journalist

#### 14:00 Welcome

Welcome by the Directors of IRSN, GRS, AVN  
**Jacques Repussard**, *Director General of IRSN*  
**Lothar Hahn**, *Technical and Scientific Director of GRS*  
**Jean-Jacques Van Binnebeek**, *Director General of AVN*

#### 14:30 Address

**Hideki Nariai**, *President of JNES - Japan*

#### 14:45 Nuclear energy and the risks associated with resulting nuclear material

**Yves Marignac**, *Director of WISE - Paris*

#### 15:15 Ways of ensuring short / long term safety

**Benoît De Boeck**, *Deputy Director General of AVN*  
**François Besnus**, *Head of Radioactive Waste Safety Department, IRSN*

**Bruno Baltes**, *Head of Final Storage Department, Waste Management Division, GRS*

#### 15:45 Involving stakeholders in the decision making process: by informing or by letting them contribute?

**Georges Mercadal**, *Chairman of the French Commission for the Public Debate on Radioactive Waste Management*

#### 16:15 Break

#### 16:45 Panel Discussion

The nuclear industry and the principle of precaution: can a decision be made about a geological repository?

- **Mariano Vila d'Abadal**, *General Secretary of the Asociación de Municipios en Areas de Centrales Nucleares - Spain*
- **Josefin Päiviö Jonsson**, *Head of Section of Repository Safety at SKI - Sweden*
- **Phil Davies**, *NDA - United Kingdom*
- **Hans Issler**, *President of Nagra - Switzerland*
- **Thomas Flüeler**, *Senior Research Associate at the Institute for Human- Environment Systems, ETH Zürich - Switzerland*

#### 18:15 Guest Lecture

**François Dosé**, *Member of the French Parliament for the Meuse Department*

#### 18:45 Reception

#### 20:00 Dinner

## Seminar 1

Nuclear  
Installation  
Safety

## Chairpersons:

T. Foult, *IRSN*  
H. Liemersdorf, *GRS*  
M. De Franco, *IRSN*  
V. Teschendorff, *GRS*

Four seminars, that are open to all, will be held in order to provide the best opportunities for comparing experiences and learning about recent activities of IRSN, GRS, AVN and their partners in the European Union, Switzerland and Eastern Europe.

**9:00** Progress and perspectives of ASTEC application for severe accidents in the European Network SARNET  
J. P. Van Dorsselaere, *IRSN*; H.-J. Allelein, K. Neu, *GRS*

**9:30** Methods and results of a PSA Level 2 for a German BWR of the 900 MWe class  
H. Löffler, M. Sonnenkalb, *GRS*

**10:00 Break**

**10:30** Use of PSA for the analysis of operational events in nuclear power plants  
M. Hulsmans, *AVN*

**11:00** A new method to consider human actions in the framework of a dynamic PSA  
M. Kloos, J. Peschke, *GRS*

**11:30** Pre-accidental situations highlighted by RECUPERARE method and data  
N. Matahri, *IRSN*

**12:00 Lunch Break**

**13:30** Validation of thermal-hydraulic codes for boron dilution transients in the context of the OECD/SETH and OECD/PKL Projects  
A. Bucalossi, *AVN*

**14:00** Development and application of the coupled thermal-hydraulics and neutron-kinetics code ATHLET/BIPR-VVER for safety analyses  
M. Lizorkin, S. Nikonov, *RRC-KI - Russia*; S. Langenbuch, K. Velkov, *GRS*

**14:30** Research works on contamination transfers through cracked concrete walls  
T. Gelain, J. Vendel, *IRSN*

**15:00 Break**

**15:30** Water volume available for ECCS sump recirculation mode following a LOCA  
T. Riekert, *TÜV NORD SysTec - Germany*;  
H. Rebohm, *TÜV NORD EnSys Hannover - Germany*;  
J. Huber, *TÜV Süd - Germany*;  
F. Brandes, *TÜV ET BW - Germany*

**16:00** EPR: steam generator tube rupture analysis in Finland and in France  
S. Israel, *IRSN*

**16:30 End of Seminar 1**

## Seminar 2

Waste  
Management  
and Environment

## Chairpersons:

W. Brewitz, *GRS*  
B. Baltes, *GRS*  
M. Jorda, *IRSN*

**9:00** Safety of direct disposal of spent fuel and of disposal of reprocessing waste  
F. Besnus, *IRSN*

**9:30** Safety of geological disposal: developing a common regulatory view  
F. Besnus, *IRSN*; P. Metcalf, *IAEA*; V. Nys, *AVN*;  
J. Vigfusson, *HSK - Switzerland*

**10:00 Break**

**10:30** Needs and activities concerning the establishment of a thermodynamic reference database for HLW disposal in Germany  
H.-J. Herbert, *GRS*; V. Brendler, *FZR - Germany*;  
B. Kienzler, *FZK - Germany*; W. Voigt, *TU BA Freiberg - Germany*;  
S. Wilhelm, *Colenco - Switzerland*

**11:00** Diffusion experiments at Mont Terri: overview and results  
S. Savoye, *IRSN*

**11:30** Application of the newly developed 3D transport code  $r^3t$  to selected field cases  
A. Rübel, E. Fein, *GRS*

**12:00 Lunch Break**

**13:30** Time-dependent evolution of the excavation damaged zone in the argillaceous Tournemire site  
J. Cabrera, A. Rejeb, *IRSN*

**14:00** Development by AVN of review guidance for safety assessment of radioactive waste disposal  
V. Nys, O. Smidts, J. Mertens, *AVN*

**14:30** NEA perspectives on timescales and criteria in post-closure safety of geological disposal  
C. Pescatore, E. Forinash, *OECD/NEA*

**15:00 Break**

**15:30** Requirements and methods for comparing safety of sites for disposal of radioactive waste  
P. Brennecke, *BfS - Germany*

**16:00** Focus on isolation and containment rather than on potential hazards: an approach to regulatory compliance for the post-closure phase  
B. Baltes, A. Becker, A. Kindt, K.-J. Röhlig, *GRS*

**16:30 End of Seminar 2**

### Seminar 3

#### Radiation Protection

##### Chairpersons:

J. F. Lecomte, *IRSN*  
G. Pretzsch, *GRS*

**9:00** The building of a Pluralist Expertise Group about old uranium mines in Limousin (France)  
D. Gay, *IRSN*

**9:30** The White Paper from the national association of local commissions on information around nuclear facilities (ANCLI) as a contribution for the public debate in France on the nuclear waste policy  
M. Séné, *GSIEN/ANCLI - France*

**10:00 Break**

**10:30** Radiation exposures of workers resulting from the transport of industrial radiation sources in Germany  
F. Sentuc, G. Schwarz, *GRS*

**11:00** Radioactive waste storage facilities - involvement of AVN in inspection and safety assessment  
R. Simenon, M. Sonck, O. Smidts, *AVN*

**11:30** TACIS Belarus - an overview of results and planned activities in the field of radiation protection, emergency preparedness and waste management  
L. Ackermann, *GRS*

**12:00 End of Seminar 3**

### Seminar 4

#### Nuclear Material and Nuclear Facilities Security

##### Chairpersons:

W. -D. Gutschmidt, *GRS*  
J. Joly, *IRSN*

**13:30** Nuclear material discovery or loss: the French experience  
S. Zanetti, *IRSN*

**14:00** The international safeguards  
M. Gleizes, *IRSN*

**14:30** Recent and future nuclear security developments in the Netherlands  
B. Dal, *VROM - Netherlands*

**15:00 Break**

**15:30** Cyber security - a new element in licensing and supervision?  
W. Voß, *BMU - Germany*

**16:00** Implementation of the G8GP programme on physical protection - experiences and results  
P. Salewski, *GRS*

**16:30 End of Seminar 4**

# Useful Information

## Venue

### Pavillon Dauphine

Place du Maréchal de Lattre de Tassigny  
75116 Paris  
<http://www.pavillon-dauphine.com>

## Access

**Metro:** Exit station *Porte Dauphine* (line 2)  
**RER:** Exit station *Avenue Foch* (line C)

### Car park:

- Pavillon Dauphine

### Access from Roissy-Charles de Gaulle airport:

- By taxi (about 50 minutes)
- Take the Air France shuttle bus to *Porte Maillot* then bus *PC1*. Get off at *Porte Dauphine*.

### Access from Orly airport:

- By taxi (about 45 minutes)
- Take the Air France shuttle bus to *Porte Maillot* then bus *PC1*. Get off at *Porte Dauphine*.



On November 13 & 14,  
the forum secretariat  
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## EUROSAFE

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# Useful Information

## Registration and fee

Please send us your binding registration on the attached reply card by **22 October 2006**.

The registration fee is **€500** (402 net + 19,6% VAT = €98). The fee covers participation in the Forum, conference documents, dinner on November 13, lunch on November 14. This sum must be paid at the time of registration. You can pay

### • either by Bank transfer:

Please ask your bank to indicate your name, first name and your company.

Bank: HSBC Opera

IBAN International Bank Account Number:  
FR76 3005 6000 6200 6220 0558 318

The VAT-Ident-Number is FR94422808154

### • or by check only for French bank account (at the name of PLEON)

Send to:

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[eurosafe@pleon.com](mailto:eurosafe@pleon.com)

## Hotel reservation

We advise you to make your hotel reservation as early as possible.

Please send your requests directly to the reservation centres:

Either:

### • ATI ABOTEL Paris (with pre-payment for booking)

They will find an hotel for you in Paris, according to your specific request.

Tel: +33 (0)1 47 27 15 15

Email : [eurosafe@ati-abotel.com](mailto:eurosafe@ati-abotel.com)

Website: [www.ati-abotel.com](http://www.ati-abotel.com) (password: eurosafe)

Or:

### • ACCOR Group (with pre-payment for booking)

Hotels chain gathering: Campanile, Ibis, Libertel, Novotel, Mercure, Sofitel.


Book a room directly on their website:

[www.accor.com](http://www.accor.com)









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