

# Summer Workshop 2022

# Radioactive material dissemination – sea and atmosphere Radioactive waste

Cherbourg - France October 24-28, 2022

Version July 22, 2022

The ETSON ISP Summer Workshop is an annual networking event of young professionals from Technical Safety Organizations (TSOs). Program comprises given participants. presentations bv interactive group work and moderated workshops on a specific topic.

The Summer Workshop encourages intercultural interaction, exchange of expert knowledge and good practices and provides to participants a good opportunity to widen their professional network.

Participation to the Workshop is free of charge. Participants must be nominated by ETSON member organizations and should have basic knowledge of nuclear safety concepts and methodologies. Candidates are encouraged to contact their local ETSON JSP Delegate (information available at:

http://www.etson.eu/jsp).

### Venue

The Workshop will be held in Cherbourg, town located approx. 200 km distance from Paris. From Paris, Cherbourg can be reached by train (3 hours 30mn) through Saint-Lazare Station. The meetings will take place at the LE CERCLE Hotel in the center of Cherbourg.

Lunch is included, and transport for the technical tour on Wednesday. You cover travel, dinner and accommodation.

Please arrive on Sunday evening; departure will be on Friday afternoon.

### **Technical Tours**

A technical visit of EDF EPR Flamanville or else ORANO / high activity waste vitrification or ANDRA low activity waste repository is foreseen.

A visit of the « La Cité de la mer » will allow for a better approach with the marine environment.

## **Accommodation**

Cherbourg recommended hotels:

### Hotel Le cercle www.hotel-lecercle.com

13 Place de la République Tél: +33 (0)2 33 01 44 60 Fax: +33 (0)2 33 01 44 61 reception@hotel-lecercle.com

(a number of rooms are pre-booked)

### **Hotel Mercure Cherbourg Centre Port**

<u>Hôtel 4 étoiles à Cherbourg - Mercure</u> <u>Cherbourg Centre Port - ALL (accor.com)</u> Cherbourg, France

13 Quai de l' Entrepôt. Tel: +33 2 33 44 01 11 Fax: +33 2 33 44 51 00

Email de contact: H9622@ACCOR.COM

For further information, please contact: Nicolas Jenner (nicolas.jenner@irsn.fr)

	Monday	Tuesday	Wednesday	Thursday	Friday
09.00–10.30	OPENING SESSION  Welcome speech  Mr. Denis Maro, IRSN  Self-introduction of participants  ETSON organization and activities  Nicolas Jenner, IRSN	SECOND SESSION Chair: Danilo Ferreto  LOW LEVEL AIR RADIOACTIVITY MEASUREMENTS IN PRAGUE (SÚRO)  Radioactivity in the oceans: An Earth scientist's perspective (NNL)	TECHNICAL VISITS Departure 08:00 from the Hotel Le Cercle  Visit of the EPR Flamanville	Nuclear history and its importance for Gen IV reactors (SÚRO)  Principles of post-accident management of a nuclear accident in France (ASN)	TECHNICAL VISIT  La Cité de la Mer Sea Ecology  The Ocean of the Future From the surface of
10.30-11.00	Coffee break	Coffee break		Coffee break	the sea
11.00-13.00	General presentations of the TSOs by ETSON JSP Delegates	Case study 1 Simulations of consequences of a long term blackout in a VVER 1000 in Ukraine (SÚRO)		Case study 2 Atmosphere and sea interactions in material dissemination (IRSN)	down to the ocean depths
13.00-14.00	Lunch at the Hotel	Lunch at the Hotel	Lunch in Octeville	Lunch at the Hotel	Lunch at the Cité de la mer
14.00–15.30	FIRST SESSION Chair:Antonio Cervone  ATMOSPHERIC TRANSFERS OF RADIONUCLIDES: AN OVERVIEW (IRSN)	SECOND SESSION  Improving Contrast and Localisation within Airborne Gamma-Spec Surveys (NNL)	Visit of the IRSN laboratory for sea ecology and radioactive material dispersion Octeville	FOURTH SESSION Chair: Aurélie Galzy Disposal facilities  VTT's district heating reactor design LDR-50 (VTT)	Departure
15.30-16.00	Coffee break	Coffee break		Coffee break	
16.00–17.30	Radiological consequence analysis with the Atmospheric Radionuclide Transport Model ARTM and Computational Fluid Dynamics (CFD) simulations (GRS)	THIRD SESSION Chair: Nicolas Jenner Safety of installations  Deep Geological Repositories overview (SÚRO)  Geological Disposal Facility Regulatory Framework and Challenges in the UK (Jacobs)		Study on best-estimate thermal-hydraulic evaluation for nuclear power plants (NRA, Japan)  Surface Disposal Facility Long-term management of low-level radioactive waste (BEL V)  French Surface Disposal Facilities from CSM ro CSA: Lessons learn (IRSN)	
17.30-18.30		ETSON JSP Delegates meeting (hybrid)			
Evening	Free	Free	Dinner	Free	