OPTIMIZATION IN DESIGN

PROGRAMME

Location: Tabloo, Dessel, Belgium
Date: April 22nd - 24th, 2026

SCHEDULE – Wednesday, 22nd April 2026

9h00 Registration – Welcome coffee

10h00 **Welcome**
Fernand VERMEERSCH (SCK CEN)

10h20 **Presentation of the EAN**
Fernand VERMEERSCH (SCK CEN)

THEME 1 – INTERNATIONAL STANDARDS, REGULATORY AND METHODOLOGICAL GUIDANCE
Chair: Laura Woodward

10h40 **Integrating and optimizing radiation protection at the design stage of installation**
Caroline SCHIEBER (CEPN)

11h00 **Drawing the map, not the maze: setting the bar as a regulator**
Frédéric SCHMITZ and Daan VAN DER MEERSCH (FANC)

11h20 **Demonstrating the ALARA/ALARP safety case in the design phase**
VAUGHAN Rees (ONR)

11h40 **Regulatory frameworks to ensure optimization in radiation technology applications**
Ronald PACHECO-JIMENEZ and Burcin OKYAR (IAEA)

12h00 Lunch

THEME 2 – CASE STUDIES: ACCELERATORS
Chair: Max Jaquenoud

13h00 **Shielding design and radiation monitoring: Radiation protection during design and operation of a new facility using the free-electron laser SwissFEL as example**
Christine HARM (PSI)

13h20 **Radiation protection motivated measurements for shielding optimization for IMPACT the future upgrade of PSI's high-intensity proton accelerator**
Sophie HARZMANN (PSI)

13h40 **ALARA in the design of HI-ECN3**
Claudia AHDIDA (CERN)

14h00 **From the experience of Long Shutdown (LS) 1 and 2 to major consolidation and upgrades in LS3**
Yann PIRA (CERN)

THEME 3 – CASE STUDIES: MEDICAL AND RADIOPHARMACEUTICAL
Chair: Tom Clarijs

14h20 **Design of the Molybdenum Production Facility (MPF) in Petten: Limitations and changing demands**
Folkert DRAAISMA (NRG|PALLAS)

14h40 **Optimization in design of an industrial producer of radio-isotopes**
Pascal FROMENT (BeSure)and Thibaut LIBBRECHT (Telix Pharmaceuticals)

15h00 **The Centralized Radiochemical Facility and its role in therapeutic radio-isotopes and radiopharmaceutical development**
Alexander AERTS (SCK CEN)

15h20 **Introduction to the working groups**
Laura WOODWARD (UKHSA) and Pascal CROUAIL (CEPN)

15h35 POSTER SESSION and COFFEE

TABLOO exhibition

16h15 **Guided visit group 1**

16h30 **Guided visit group 2**

17h30 **End of day**

19h00 **Gala dinner**

SCHEDULE – Thursday, 23rd APRIL 2026

9h00 Coffee

9h30 **RADAR video presentation**
Abdelrahman MAHMOUD and Lombardo PASQUALE

THEME 4 – CASE STUDIES: MODULAR AND SMALL MODULAR REACTORS
Chair: Franz Kabrt and Fernand Vermeersch

9h50 **Integration of radiation protection in LFR reactor design**
Anne-Claire SCHOLER (Newcleo)

10h10 **Optimization strategies for radiation protection in SMR design**
Gilles GENARD (Tractebel)

10h30 Coffee

11h00 **ALARA in design at SCK CEN for LEANDREA**
Bernard VAN DER WALT (SCK CEN)

11h20 **Investigating severe accident scenarios for NNRs: developing the GIROSCOPE methodological framework for ER&R**
Luke LEBEL and Lucian IVAN (Canadian Nuclear Laboratories)

11h40 **Operational Pathways for SMRs: Feedback from IAEA**
Burçin OKYAR (IAEA)

12h00 Lunch

THEME 5 – CASE STUDIES: REACTOR FACILITIES
Chair: Folkert Draaisma

13h00 **Optimization in the design of the PALLAS reactor**
Natasja VAN DER LINDEN and Folkert DRAAISMA (NRG | PALLAS)

13h20 **Status of ITER Radiation Safety and ALARA**
Subhash PUTHANVEETIL (ITER)

13h40 **Advanced computational tools for radiation protection motivated by nuclear decommissioning**
Lucian IVAN (Canadian Nuclear Laboratories)

14h00 **Introduction to working groups**

14h15 Coffee

WORKING GROUPS AND COFFEE

14h45 **WG 1 – International safety standards, regulatory and methodological guidance**
14h45 **WG 2 – Optimisation in design – accelerators**
14h45 **WG 3 – Optimisation in design – new build nuclear installations**
14h45 **WG 4 – Education and training**

17h00 Finalisation of presentations (for working group reporters)

17h30 End of the day

SCHEDULE – FRIDAY, 24th APRIL 2026

8:30 Coffee

Feedback from the Working Groups

09:00 **Working Group, no 1**

09:20 **Working Group, no 2**

09:40 **Working Group, no 3**

10:00 **Working Group, no 4**

10:20 Coffee

Closing

11:00 **Conclusions and recommendations of the workshop**
Laura WOODWARD (UKHSA)

11:45 **Closing remarks**
Fernand VERMEERSCH (SCK CEN)

12:00 Lunch

13:00 **Close (TABLOO Exhibition open for general admission - optional)**