

19th EAN Workshop

Introduction to Working Groups

Innovative ALARA Tools
Demokritos Congress Centre, Athens,
Greece

27-28 November 2019

Sylvain ANDRESZ

Nuclear Protection Evaluation Centre
(C.E.P.N.), France

On behalf of the EAN Bureau

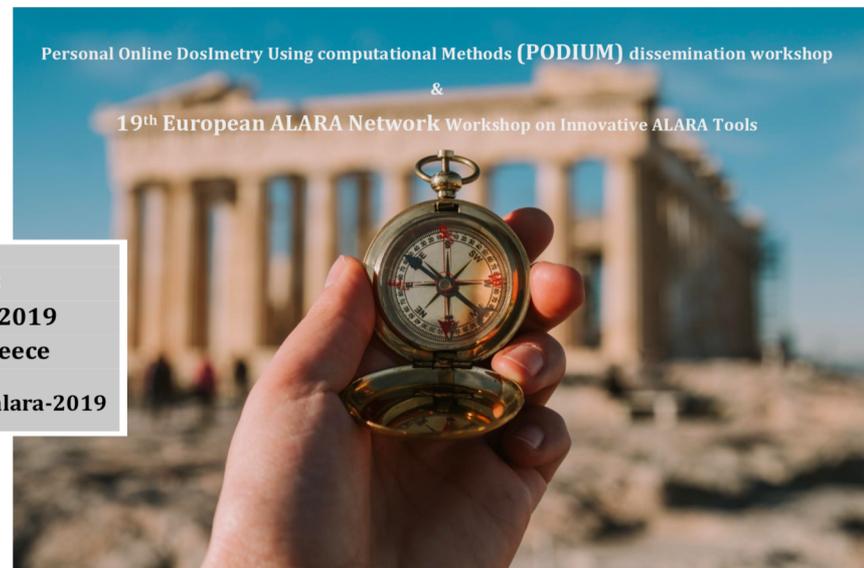


Personal Online Dosimetry Using computational Methods (PODIUM) dissemination workshop

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19th European ALARA Network Workshop on Innovative ALARA Tools

26 -28
November 2019
Athens, Greece
<https://eeae.gr/alara-2019>



Working Group: how does this work?

-  **Wednesday: 14:30 – 16:40** (incl. coffee break at 15:00)
 - (round table),
 - introduction and electing a **Rapporteur**,
 - preliminary discussions

(night thoughts)

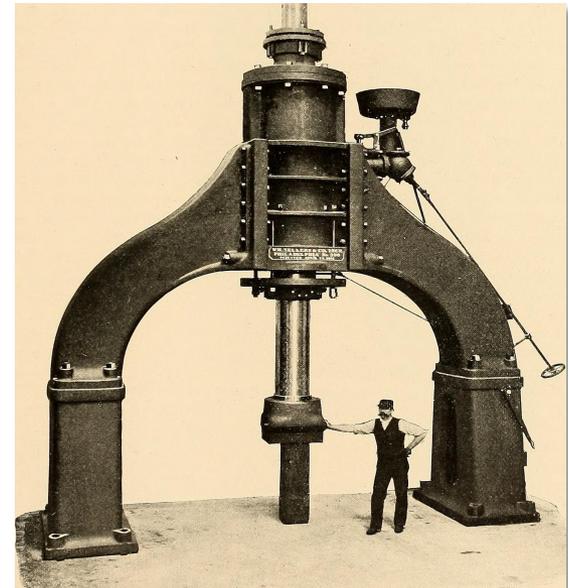
-  **Thursday: 13:30 – 16:00**
 - continuing discussions,
 - preparation of recommendations ( .ppt)
-  **Thursday: 16:00 – 17:00**
 - Working groups report (~ 15'/group)
 - Workshop conclusions & recommendations

Questions for use in discussion

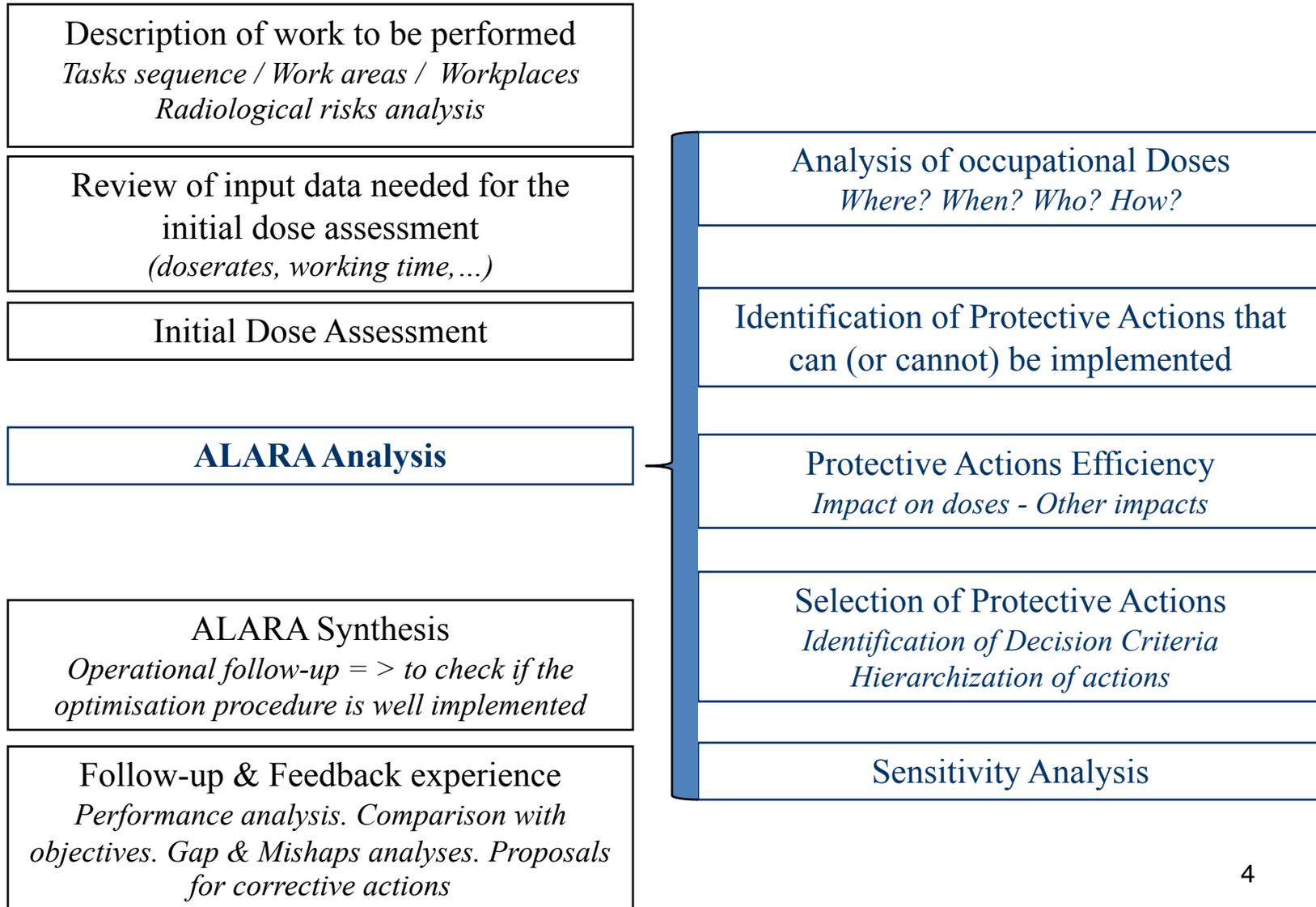
Topic 1 – Are there specific challenges in ALARA that may be solved by innovative ALARA tools?

- What and where are the remaining challenges in applying the ALARA steps?
- Are the challenges different between the sectors/the exposure situations?
- Thinking about case study and their specificities
 - Ex. nuclear installation in operation, medical diagnosis, post-accident situations etc.
- Always thinking about optimization!
 - ‘No need to use a canon to kill a fly’
 - Where is the equilibrium?

Participants		
Ms.	Miluse	Budayova
Mr.	Pascal	Croüail
Mr.	Antoine	Ghilardi
Ms.	Merce	Ginjaume
Mr.	Jan	Jansen
Ms.	Siria	Medici
Mr.	Benoit	Simony
Dr.	Rick	Tanner
Mr.	Olivier	Van Hoey
Ms.	Maria	Zankl
Mr.	Luka	Pavelic



Optimisation Procedure – Step by Step



Questions for use in discussion

Topic 2 – Are there specific issues which may limit the development and/or the use of innovative ALARA tools? How to deal with these issues?

- Several innovative ALARA tools have been presented:
 - Software, hardware, medical experiments, perspective and way of thinking etc.
- From prototype to a general use:
 - Is it possible?
 - Is it wanted?
- Classify the limitations and the concerns:
 - Are these technical? legislative? security (of information)? ethical etc.
 - And how to deal with it?

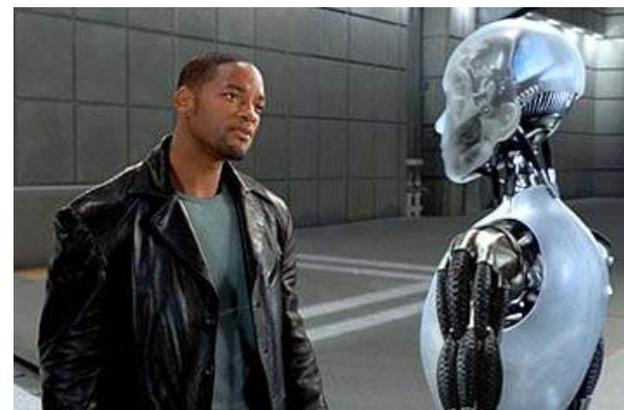
Participants		
Mr.	Tom	Grimbergen
Mr.	Bernd	Hoffmann
Mr.	Franz	Kabrt
Ms.	Una	O'Connor
Ms.	Eva	Zemanová
Mr.	Efstathios	Efstathopoulos

Questions for use in discussion

Topic 3 – What is the role of the radiation protection professionals (RPEs/MPEs/ RPOs, ...) with respect to these tools?

- When the innovation becomes a ‘black box’
 - Good or bad?
 - Does benefits > drawbacks?
- (re)Inventing the job of RP professional?
 - New tool = new training?
 - New tool = new responsibilities?
- Will the RP professional be replaced by a robot?
- Where is the RP professional (ir)replaceable?

Participants		
Ms.	Eleftheria	Carinou
Mr.	Aoife	Gallagher
Mr.	Fabio	Gueli
Ms.	Aggeliki	Manetou
Ms.	Zoi	Thrapsanioti
Mr.	John	Upton
Mr.	Fernand	Vermeersch
Mr.	Christos	Maramathas

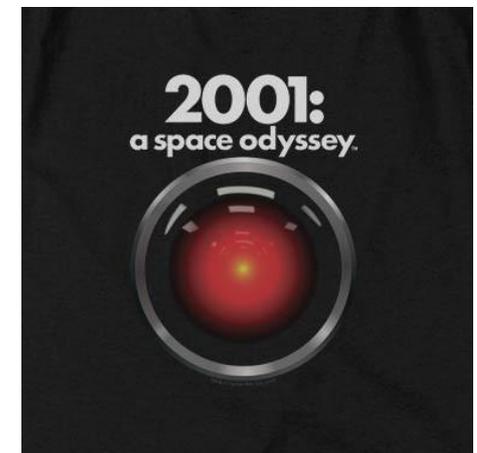


Questions for use in discussion

Topic 4 – There is currently a lot of focus on research and innovation in areas beyond that of traditional RP research, notably artificial intelligence. **Does AI have the potential to shape the ALARA process in the next year?**

- *AI = “informatic programme to perform task that are currently better solved by human beings” (M. Lee Minsky)*
 - = big data analysis, *chatbot*, computer prediction, ...
- Does AI has a role to play in ALARA?
- What could be the impacts?
- Imagine the future of ALARA with AI

Participants		
Mr.	Mahmoud	Abdelrahman
Ms.	Anja	Almén
Mr.	Martin	Andersson
Mr.	Sylvain	Andresz
Mr.	Panagiotis	Askounis
Ms.	Anna	Camp Brunés
Mr.	Benjamin	Chagneau
Mr.	Sotirios	Economides
Mr.	Robin	Hanzl
Mr.	Jim	Malone
Mr.	Filip	Vanhavere
Mr.	İlkay	Yildiz
Dr.	Johan	Camps



Questions have been provided (to start)

Do not limit yourselves in the discussion

Thinking about the recommendations

