

HERCA

Heads of the European Radiological protection Competent Authorities



Ongoing efforts of HERCA on the Harmonisation of the Radiological Monitoring Systems for Outside Workers

**A. Fremout; I. Amor Calvo; B. Griciene; G. Frasch; R. Havukainen;
M. Lehtinen; S. Léonard; S. Mundigl; M. Nettleton; M.-L. Perrin; I.
Petkov; M. Skarzewski; N. Svilicic; C. Thijssen; S. Walker**

Outline

- Who is HERCA ?
- Methodology
- Radiation passbook
- Transition to an electronic exchange of radiological monitoring data
- Summary

HERCA

Heads of the **E**uropean **R**adiological protection **C**ompetent **A**uthorities

- 47 Competent Authorities from 29 countries
- Board of Directors + topical working groups
 - WG1 Outside workers and Radiation Passbook
 - WG2 Non-medical sources and practices
 - WG3 Medical Applications
 - WG4 Emergencies
 - WG5 Surveillance of collective doses from medical exposures

 www.herca.org

HERCA : objectives

- build and maintain a network of chief radiation safety regulators in Europe
- promote exchange of experience
- express consensus opinion on significant regulatory issues
- develop a common approach to radiological protection issues within the States of HERCA members
- involve, as appropriate, the European Commission and other relevant stakeholders in its activities

1st mandate of WG1

- Provide **recommendations** as to the **viability of implementing an European wide** (plus any other European country or worldwide country wishing to do likewise) **Radiation Passbook** for the exchange of information between Outside Undertakings and Undertakings based on the requirements in Annex 1 to the European Council Directive 90/641/EURATOM **through harmonization where possible**
- In the **first instance** the Radiation Passbook would be a **paper based** system. However, **were practicable**, the participating country(ies) could **opt** to use **(in part or completely) an electronic (possibly web-based) system.**

Harmonization ?

- to what extent should we force Member States to change their current system and to what extent harmonization can mean a mutual understanding ?
- what level of binding requirements is necessary on the dose passbook within the EU ?



In the first instance :

Common language for exchanging information

-Terminology

- What data fields are necessary/optional ?

⇒ Define a **minimal data content**

Milestones in the development of a harmonized radiation passbook

- Questionnaire on transposition of directive sent to all MS



WG1 report – available on www.herca.org

- Description of the approach in these countries (Section I-II)
- Good practices (Section III)
- **Minimal data content** of radiation passbook (Section IV)
(+ **model** of radiation passbook)

Minimal data content of radiation passbook

- Endorsed by HERCA – 06/2010
- Press release + stakeholder information – 10/2010
- Stakeholder comments – 11/2010
- Sent to the EC - Integration of mandatory fields in draft Basic Safety Standards – 09/2011
- Final version : 12/2012



HERCA WG1 Outside Workers & Dose Passbook

Report on the progress to draft a European
Radiation Passbook for Outside Workers to meet
the requirements of
Council Directive 90/641 Euratom

*Section IV of this report was endorsed by HERCA
on the 30th of June 2010*



Minimal data content of a radiation passbook (+ passbook model)

Mandatory fields are given in black – optional fields in grey

Sections in the passbook :

1. Details of the radiation worker
2. Issuing details of the radiation passbook
3. General information
4. Current outside undertaking
5. Health surveillance
6. Official dose record up to the radiation passbook issue date
7. Operational doses in the Operator's controlled area(s)
8. Information regarding training in radiological protection

FRONT COVER (Identification of Radiation Worker)



Window to allow to see picture on next page

Radiation worker
[SURNAME] [2nd SURNAME]
[First name] [Middle names]
[Unique identification number of the worker]

Ref. of domestic Legislation under which Radiation Passbook is issued

RADIATION PASSBOOK
BELGIUM
[Country code (ISO3166) - Passbook number - Passbook sequence number]
[bar code or RFID]

If found, please return to last named employer (see section ..)

Radiation passbook

Stakeholder information

HERCA Press Release (Sept 2010)

⇒ Stakeholder comments : authorities, undertakings, RP experts,...

Led to modifications to « Data to include » and Passbook model

- No implications for BSS

Need for guidance document (RP-series) to

- advise Member States on how to implement a radiation passbook
- advise the users (undertakings, employers, workers,...) on the practical use of Passbook model

More fundamental questions :

- Dose limit of country of employer or of country of undertaking ?
- How to ensure transfer of legal doses from undertaking to employer ?

2nd mandate for WG 1

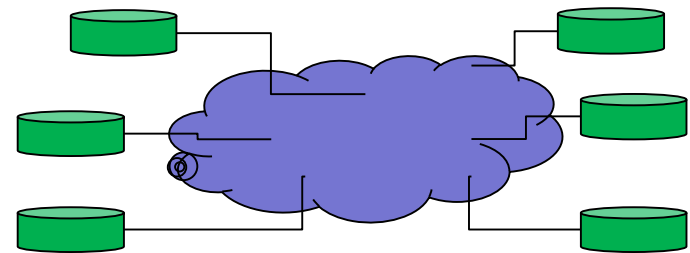
Outside Workers and Radiation Passbook

Carry out a **feasibility study** for the **transition** from a radiation passbook to **electronic information exchange** between countries to **guarantee a protection of cross-boarder outside workers equivalent to the protection of other workers** (both internal workers and outside workers).

This feasibility study should define the **general principles of this electronic information exchange**, i.e. the data to be exchanged, the format, the use cases and the workflows, and provide a **framework** for it.

This work should be carried out in close collaboration with the EC and with ESOREX, which has already experience in exchanging data.

Starting from 2012, the EC can take this feasibility study as a starting point to look more closely to the technical solutions for such an electronic information exchange system.



Problems to solve ?

- Dose limits can be exceeded without being aware
 - Workers employed by more than one employer at the same time
 - Cross-boarder workers
 - Multiple issue of passbooks
 - workers moving fast from one facility to another
- Delay in or absence of transition from operational to legal doses
- Prior evaluation of worker doses before granting access (not at the gate)

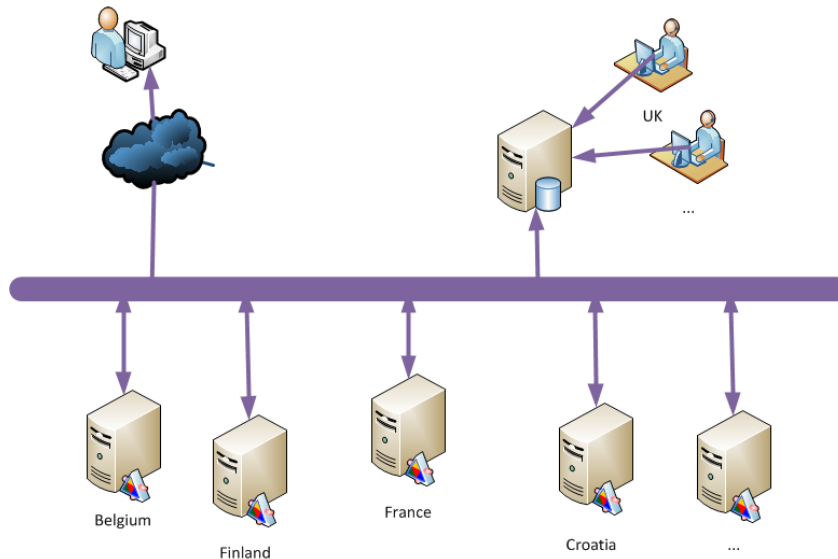
Way to go ?

- **Magnetic card** replacing paper passbook
 - Privacy level similar to paper passbook
 - All data on card = risk
- **Issuing database**
 - Low-level solution to prevent multiple issuing
- **Central dose database** (possibly with magnetic card as key)
 - How to keep it up-to-date ?
- **Fully web-based system**
 - Online/realtime access
 - Privacy issues

Way to go ?

Architecture

- sTesta network of the EC
 - examples of applications : Tachonet, EESSI, FIU, Europol, Eurojust, SIS,...
- Enterprise service bus in a Service Oriented Architecture



A questionnaire
will be launched
soon

Phased
approach



Data to exchange and use cases defined

Issue : unique identification of legal and natural persons

Summary

- HERCA = Heads of the European Radiological protection Competent Authorities
 - common solutions for practical/regulatory problems
- Radiation passbook for outside workers
 - Minimal data content
 - Radiation passbook model
 - Guidance document
- Future : evolving to an electronic data exchange

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