

# **BSS- Basic safety standards**

Council Directive laying down  
basic safety standards for protection against  
the dangers arising from exposure to ionising  
radiation

and repealing Directives 89/618/Euratom, 90/641/Euratom, 96/29/Euratom,  
97/43/Euratom and 2003/122/Euratom

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# **Basic safety standards for protection against the dangers arising from exposure to ionising radiation**

- 89/618/Euratom- Radiological Emergency
  - Informing the public on measures in the event of a radiological emergency
- 90/641/Euratom- Outside Workers
- 96/29/Euratom- BSS
- 97/43/Euratom – Medical Exposures
- 2003/122/Euratom- HASS
- Recommendations:
  - (Radon Recommendation 90/143/Euratom)



# BSS- Basic safety standards

## ***Considérant (5) :***

- As recognised by the Court of Justice of the European Union in its case-law, the tasks imposed on the Community by point (b) of Article 2 of the Euratom Treaty to lay down uniform safety standards to protect the health of workers and the general public does not preclude, unless explicitly stated in the standards, a Member State from providing for more stringent measures of protection. As this Directive provides for minimum rules, **Member States should be free to adopt or maintain more stringent measures in the subject-matter covered by this Directive**, without prejudice to the free movement of goods and services in the internal market as defined by the case-law of the Court of Justice.

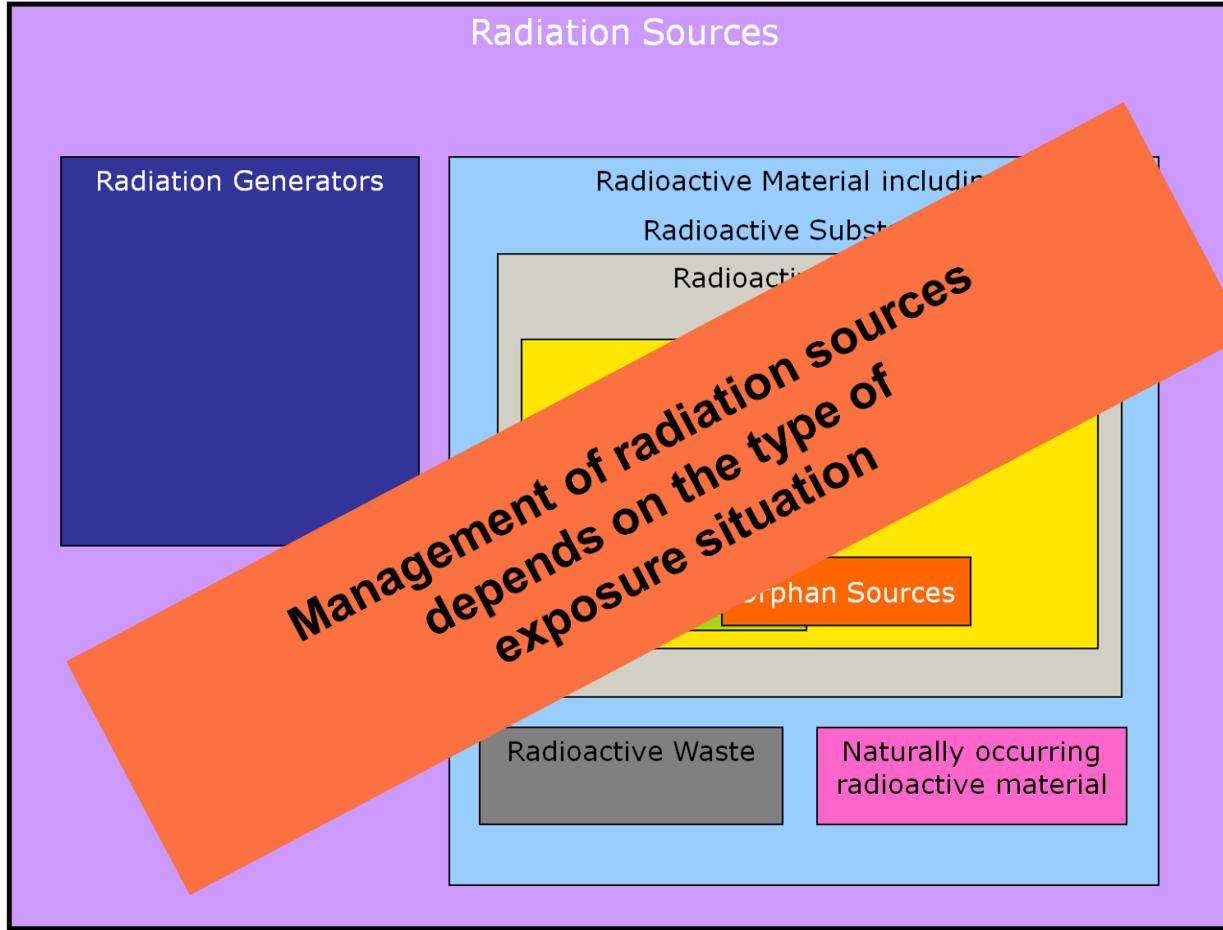
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# Radiation sources

→ Incorporate natural radiation sources



# Exposures Situations

ICPR 103 : rather than processes: practices/interventions

## 1. Planned exposure situations

- Practices
- New source or new pathway of exposure resulting from the activity:
  - NORM
  - operation of aircraft

## 2. Existing exposure situations

- Already existing when the decision on control has to be taken
- Indoor Radon exposure
- commodities managed together with the exposure situation:
  - building materials (gamma exposure, radon exhalation)
  - foodstuffs (post-accidental situation)

## 3. Emergency exposure situations

- Requiring urgent attention (unexpected situations, malicious acts)

# Structure

OCCUPATIONAL EXPOSURE	PUBLIC EXPOSURE	MEDICAL EXPOSURE
Planned exposure situations	Planned exposure situations	Planned exposure situations
Emergency exposure situations	Emergency exposure situations	
Existing exposure situations	Existing exposure situations	

# System of protection Principles

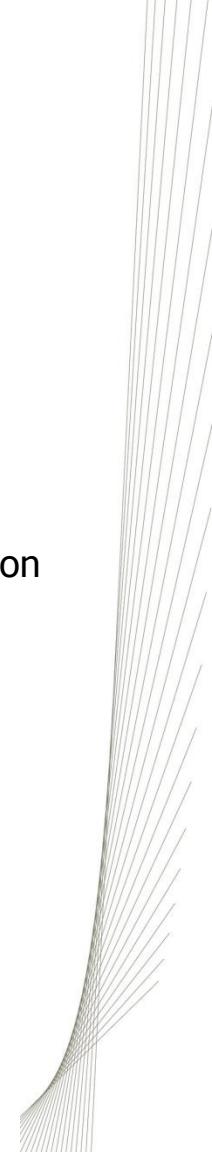
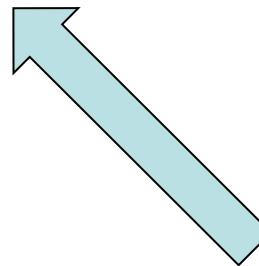
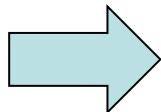
- Justification of practices
- Optimisation of protection
  - *constraints* in planned exposure situations
  - *reference levels* in existing or emergency situations
  - For medical exposure of patients: DRL's
- Dose limits
  - effective dose (stochastic effects)
  - organ dose (tissue effects)



# Dose limits

## Occupational exposure

- Age limit for exposed workers (>18 y)
- Effective dose limit
  - 20 mSv in any single year
  - 5-years averaging may be authorised for certain situations specified in national legislation
- Equivalent dose limit for **the lens of the eye**
  - 15 mSv in a year → students
  - 20 mSv in a year → workers >18 y
  - **Outside workers**
  - **Emergency worker**
  - **Radon workplaces**



# Existing Exposure situations

- Radon (workplace, dwellings)
- Building materials
- Living in contaminated territory

Reference Levels

# Radioprotection : Nouveaux scopes

- Principe de justification:
  - Nouveaux appareils
  - Produits de consommation
  - Justification générique
  - 3 niveaux de justification en applications médicales
- Principe d'optimisation:
  - Niveaux de référence (reference level):
    - Médecine
    - Situations d'expositions existantes
    - Sites contaminés
  - Contraintes de dose
- Graded approach for planned exposure situations:
  - Notifications/déclarations
  - “autorisation générique”
  - Simplification administrative (CIS, Sharepoint,...)

# Radioprotection: Nouveaux scopes

- Expositions professionnelles:
  - Outside workers
  - Emergency worker
  - Radon worplaces
  - Air and space crew
- Limites de dose au cristallin:
  - Travailleurs et public

# Radioprotection: Nouveaux scopes

- Formations et informations:
  - RPE
  - RPO
  - Domaine médical
  - Travailleurs externes, travailleurs d'urgence
  - Sources scellées de haute activité
  - ...

# Institutional infrastructure

- Competent authority
  - Communication to the Commission
  - Publication by the Commission
- Recognition of services and experts
  - Occupational health services
  - Dosimetry services
  - Radiation protection experts (RPE)
  - Medical physics experts
  - Specify the recognition requirements and communicate these to the Commission
- Radiation protection officer (RPO)
  - Tasks within undertakings, necessary means, reporting directly to the undertaking



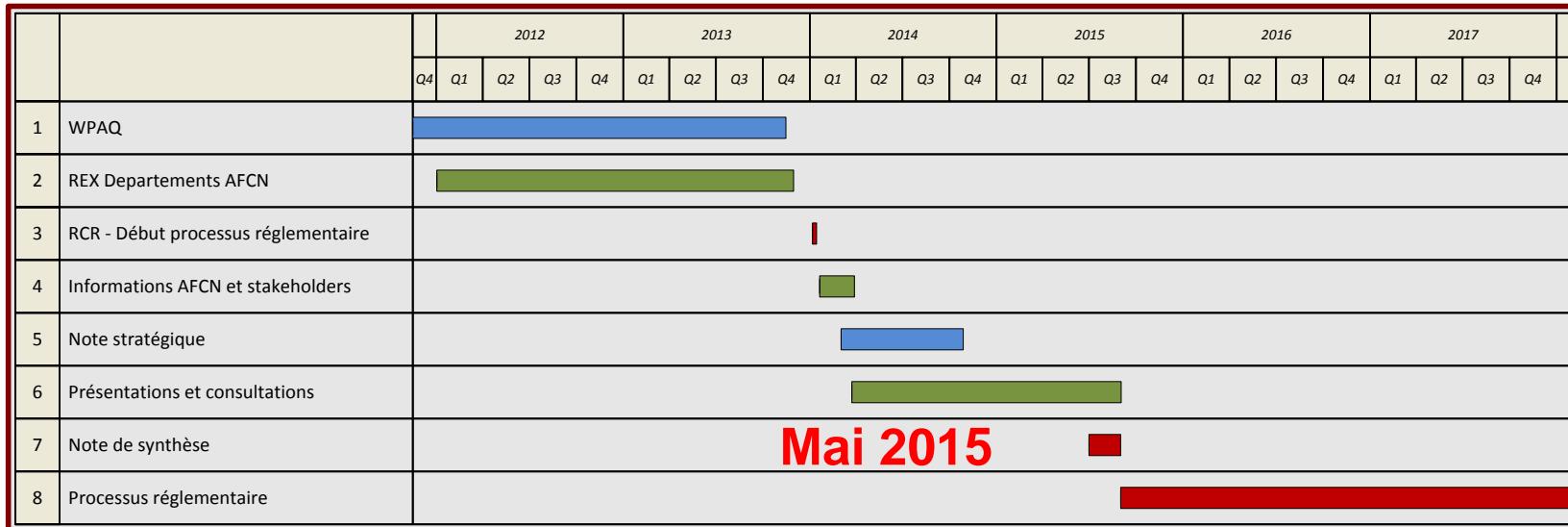
# Enforcement and Inspection

- Systematic inspection programme
- Findings available to the public
- Information to relevant parties of lessons learned from inspection and from incidents and accidents

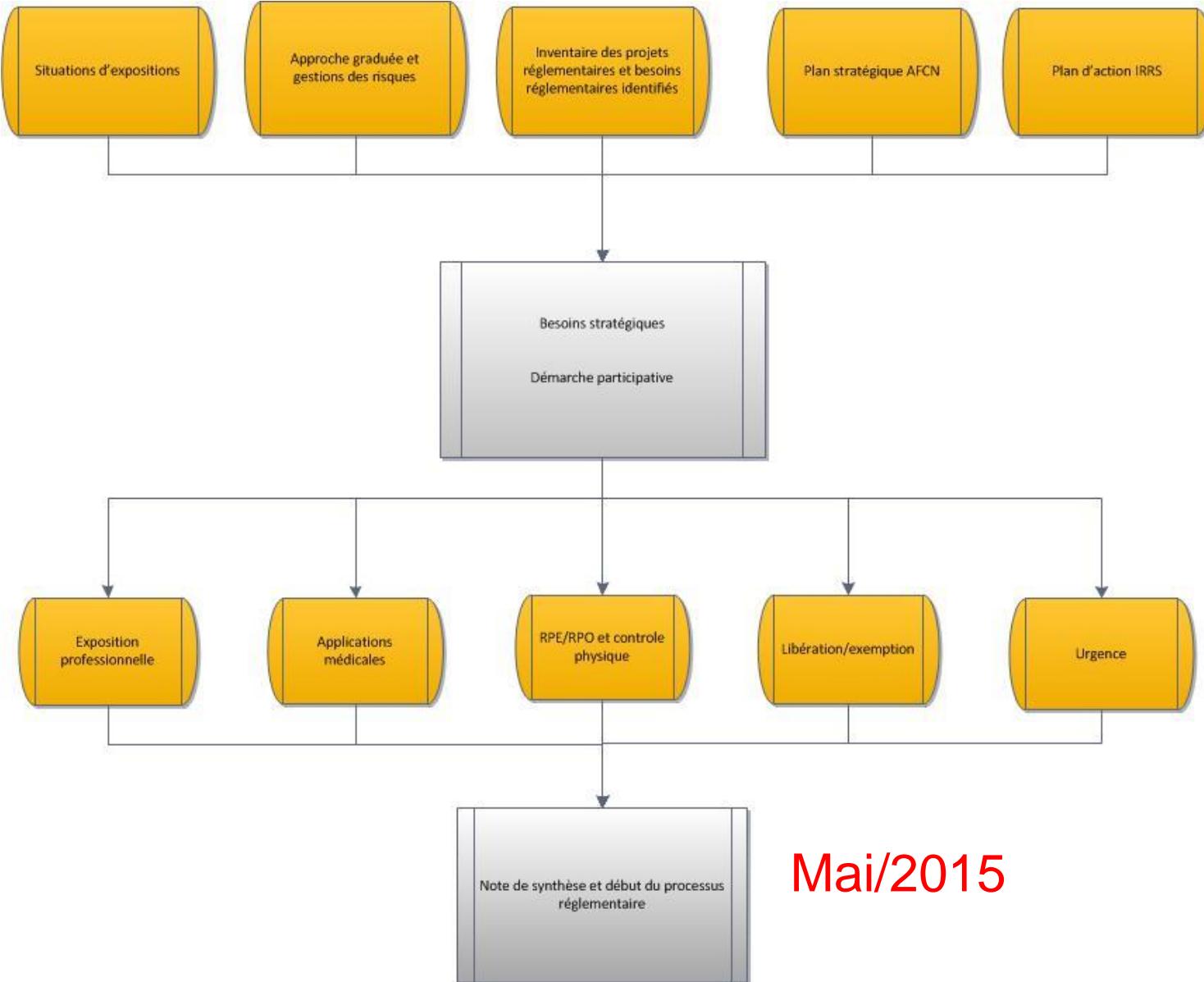
# AFCN ->Transposition

- Stratégie niveau de nos ambitions
- Inventaires des Projets réglementaires:
  - A.R produits de consommation signé le **30/09/2014** - (transpositon partielle )
  - Révision de l'AR Plan d'Urgence
  - CH VI new ( applications médicales)
  - Projet contraintes de dose dans le cadre médical
  - Niveaux de libération/exemption
  - ...
- Actions dans le cadre IRRS

# Politique réglementaire



06/02/2018



# Thèmes de réflexion

→ Généralités : (situations d'exposition, approche graduée, gestion des risques, ...)

- Activités professionnelles mettant en jeu des sources de rayonnement naturel (NORM, RADON, Produits de constructions)
- Urgence
- Applications médicales (y inclus "non medical exposure" à l'aide d'appareils médicaux)
- RPE et RPO – Contrôle physique
- Libération-Exemption
- Exposition professionnelle

# Transposition

- International:
  - Regulatory bodies
  - ENSREG
  - Herca : (EC workshop Q4 2015)
    - Emergency WG
    - Medical Applications
    - Non-medical sources/practices
    - Surveillance of collective doses from med. exposures
    - Passbook& Outside workers
  - European Radon Association



# Transposition

- Competent authorities in Belgium
  - Regions
  - SPF
  - FANC
  - Superior Health Council
  - Scientific Committee
  - Stakeholders
  - ...



# Organisation

## Interne:

- Tables de concordance législation nationale et BSS
  - Gap entre inventaire réglementaire et BSS
  - Besoins dans le cadre IRRS
- Note stratégique (10/2014)- Gestion dans le cadre d'un projet

## Externe:

- Groupes internationaux : HERCA, ENCO,EACA ...
  - Workshops/séminaires
  - Commissions bilatérales

# Organisation

- **Projet** pour transposition BSS
  - AFCN : Consultations/stratégies → **02/2015**
  - RIAD : Evaluation fine **05/2015**
- **DIRCOM → MAI 2015**
  - Projet BSS / Projet (PR 1077) - restructuration Réglementation?

→ Note de synthèse (05/2015 – 08/2015)
- **Processus réglementaire national (fin 06/02/2018)**
  - Consultations obligatoires
  - Conseil des Ministres
  - Conseil d'Etat
- **Rapport à la Commission Européenne**



Questions?