

European Commission Harmonisation of standards at regional level

Euratom Basic Safety Standards



Directorate-General
for Energy
and Transport



EUROPEAN
COMMISSION

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● Rôle of the EU

- Euratom Treaty (1957):
 - » allow the development of nuclear energy while protecting the Health and Safety of workers and members of the public
- Establish uniform Basic Safety Standards
 - » and ensure that they are applied
 - transposition; implementation;
 - recommendations on drafts submitted by Member States (Article 33 Euratom);
 - infringement procedure
- Ensure the protection of the “environment”
 - » “air, water, soil”

● Rôle of other Agencies

- ICRP

- » since 1959, ICRP recommendations have been promptly transposed in Euratom legislation

- IAEA

- » first and later IAEA standards very similar to Euratom

- NEA

- » no legislative responsibilities

● International harmonisation

- Common basis: ICRP/UNSCEAR
 - » need for international consensus
- International Standards not directly applicable
 - » through ILO Convention
 - » through EURATOM Directives
 - » through national legislation, regulatory authorities
- Focus:
 - » IAEA: whole world, developing countries
 - » EC/NEA: industrial nations
 - » WHO/PAHO: medical applications; health policy
- Co-sponsorship
 - » So far no co-sponsorship as a consequence of the binding nature of EU Directives
 - » Safety fundamentals (2007)
 - » Basic Safety Standards (2009?)

● Subsidiarity

- The EC's rôle is not to protect the citizen!
 - » but to impose harmonised legal requirements on MS's
 - » Directives set the objectives, to be transposed in national law
- EC Stakeholders:
 - » Science
 - » National authorities
 - » Industry/Workers organisations
 - Economic and Social Committee
- European Parliament (consulted, no co-decision!)
- Decision by Council (qualified majority)

● Revision of Euratom BSS

- Allow for ICRP/IAEA
 - » Planned, emergency and existing situations
 - » Incorporate natural radiation sources
 - and strengthen the requirements
- Review of regulatory control system
 - » Graded approach to regulatory control
 - » Harmonise exemption and clearance
- Consolidation of current Directives

● Consolidation of Euratom BSS

- Better legislation: simplification of “acquis” by codification or recast
 - » BSS Directive 96/29
 - » Directive 97/43 (MED)
 - » Directive 89/618 (Public Information)
 - » Directive 90/641 (Outside Workers)
 - » Directive 2003/122 (HASS)
- Revision of BSS Directive 96/29
- Radon:
 - » Commission recommendation 90/143/Euratom

● Exposure situations

- Distinguish:

- » Planned

- Identified NORM industries
- Aircrew

- » Existing (Radon, building materials, contaminated areas)

- » Emergency

- Transition:

- » Existing situations develop into planned situation

- NORM industries
- placing on the market of goods

- » Planned situation may give rise to an emergency situation

- » Emergency situation in the long term becomes an existing situation

- » Planned situation leaves behind an existing situation

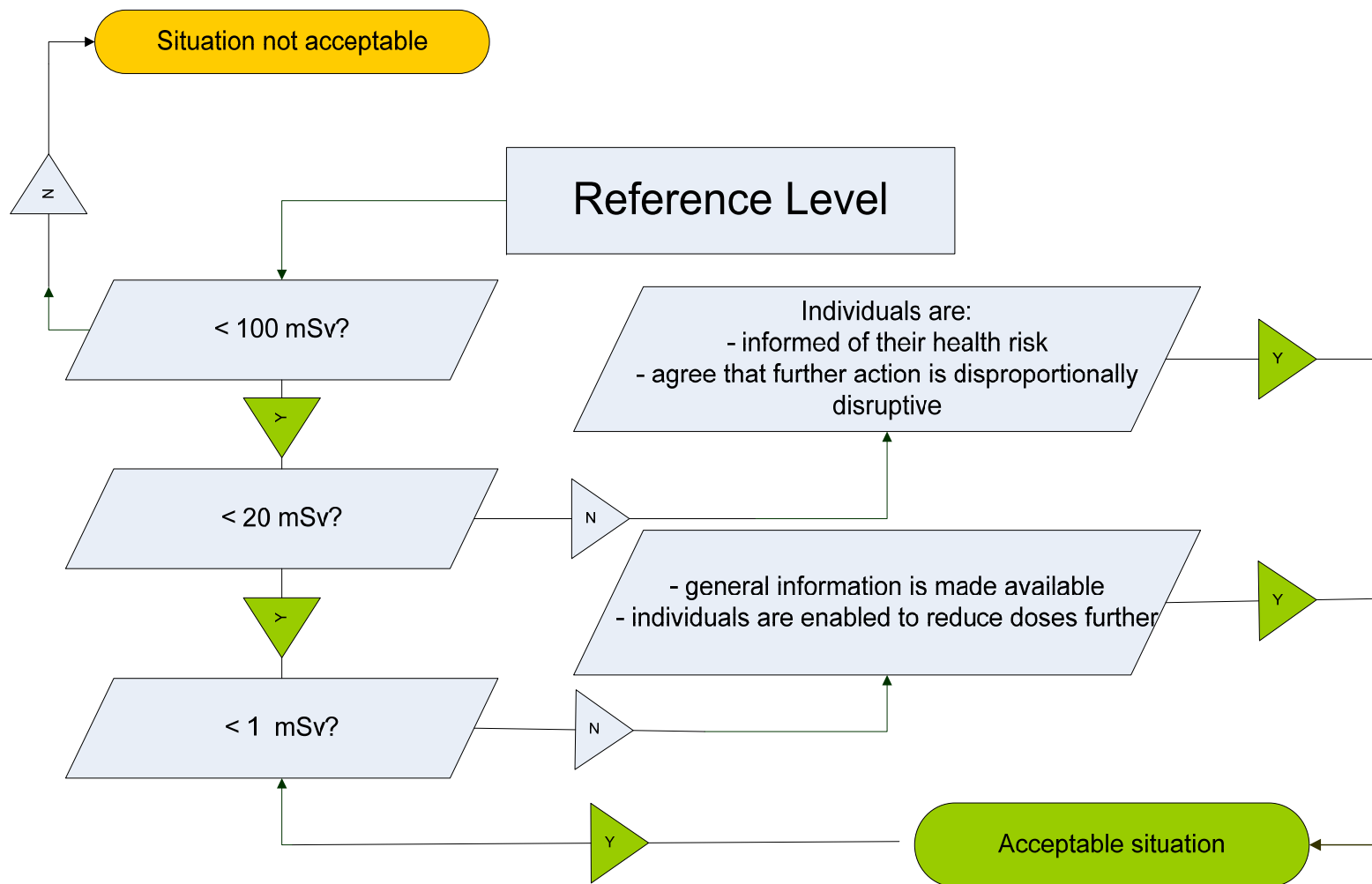
● NORM-industries

- “Positive list” of types of industries
- Activity concentrations above 1 Bq/g
 - » (10 Bq/g for K-40)
 - » not applicable to (recycling in) building materials
- Assessment of effluents and disposal of waste
 - » constraint of 0.3 -1 mSv
 - » recycling rather than radioactive waste disposal
- Assessment of doses to workers
 - » 1-6 mSv: keep under review /ALARA
 - » > 6 mSv: controlled areas

● Constraints/Reference Levels

- Source related prospective tools for optimisation
- Societal basis (bands of constraints):
 - » equity (dose distribution)
 - » information/training, individual dosimetry
 - » involvement in the management of exposures
 - » benefit (individual, societal)
- Constraints: subject to dose limitation
 - » operational tool for occupational exposure
 - » established by regulatory authority for public exposure

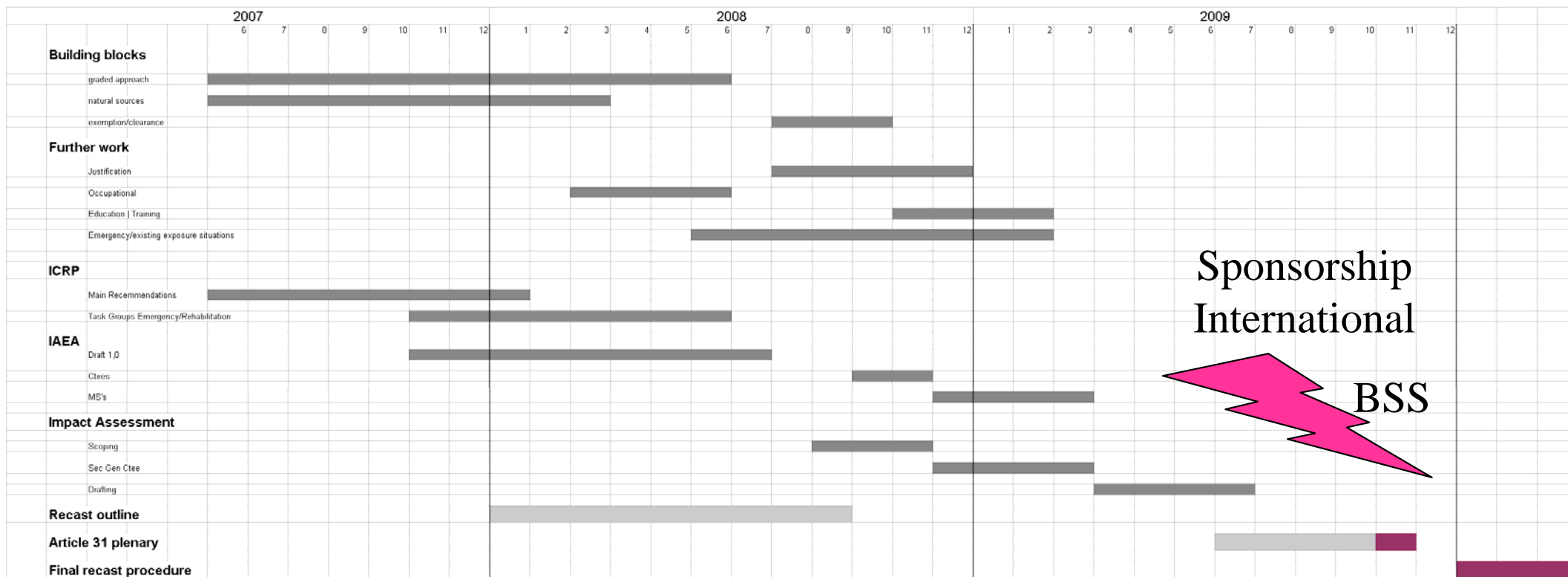
Societal Criteria



● Exemption and clearance

- Total activity: current exempt quantities (Bq)
- Concentrations (kBq/kg): same levels for both concepts
 - » basis: RS-G 1.7 (close to RP 122)
 - » however: a study has investigated the differences
- Higher values (MS's, not harmonised) for:
 - » Specific practices (radio-immuno-assay)
 - » Specific materials (e.g. metals, small amounts of building rubble)

● Timeline revision/recast BSS



Sponsorship
International
BSS

Conclusion

- High level of harmonisation/uniformity in the EU
- Important rôle in the prompt implementation of international standards at regional level (27 MS's)
- Time to revise the Euratom Basic Safety Standards
 - » to consolidate all existing legislation
 - » offer a solid overall framework
 - little need for amending national legislation
 - » integration of natural and artificial sources
- Impact of new ICRP recommendations
 - » Especially for emergency planning and response

