

LEGISLATION AND REGULATIONS National responsibilities in an international context

September 14, 2020 • Bengt Hedberg, SSM



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Introductory course on EURAD and Radioactive Waste Management

ABOUT THIS PRESENTATION ...

- I work for the Swedish nuclear regulator and I sometimes refer to the Swe situation ...
 - Things are likely to be arranged differently in other countries



- I have passed a basic course in law in the early 1990's but I am not an expert in law ...
- I have been involved in different internationational and regional contexts ...
 - National contact point and responsible/involved in Swedish interaction related to the Joint Convention process since 2001 ...
 - Involved in development of some IAEA safety standards and projects, member of WASSC from 2012- 2017 ...
 - Member of WENRA working group on waste and decommissioning (WGWD) since 2009
 - Swedish representative in **ENSREG WG2** (waste and decommissioning) since 2010 (chair 2013-2017) ...
- My presententation represents my own understanding of things and my personal reflexions only,

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CONTENTS OF THIS PRESENTATION

- LEGALISLATIVE AND REGULATORY FRAMEWORKS THE NATIONAL CONTEXT
- INTERNATIONAL TREATIES AND STANDARDS (IAEA Safety Standards and the Joint Convention)
- REGIONAL LEGISLATION AND STANDARDS (WENRA WGWD and the Spent Fuel and Radioactive Waste Management Directive)
- NATIONAL CONTEXT INTERFACE WITH INTERNATIONAL AND REGIONAL TREATIES AND STANDARDS
- SUMMARY AND CONCLUSIONS

NATIONAL LEGISLATIVE AND REGULATORY FRAMEWORKS

- COMPANY STRUCTURE
 - Company Owners
 - Company Board
 - Managing Director
 - Departments and Department Heads
- COMPANY GOVERNANCE
 - Integrated Mangement System (IMS)
 - Division of responsibilities
 - Procedures and processes
 - Internal Audits
 - Continuous
 improvements

- NATIONAL STATE STRUCTURE
 - Parliament
 - Government
 - Prime Minister
 - Ministries and Ministers

NATIONAL STATE GOVERNANCE

- Legislative and Regulatory Framework
- Division of responsibilities (e.g. Basic Law, Constitution)
- Administrative Act(s) (or the like)
- Regulatory Control
- Development & update of framework



NATIONAL LEGISLATIVE AND REGULATORY FRAMEWORKS (CONT'D)

BASIC LAW DEFINING LEGAL ENTITIES AND DIVISION OF RESPONSIBILITIES BODIES (PARLIAMENT, GOVERNMENT, COUNTRY ADMINISTRATIVE BOARDS, MUNICIPALITIES, COURTS, (CFR SAFETY ANALYSIS REPORT, SAR)...

ADMINISTRATIVE ACTS DEFINING HOW THE COUNTRY IS OPERATED AND MANAGED (CFR OPERATIONAL LIMITS AND CONDITIONS, OLCs)

 Primary/basic legislation defines the organisational structure (hierarchy) and how to operate the country

NATIONAL LEGISLATIVE AND REGULATORY FRAMEWORKS (CONT'D)

BASIC LAW DEFINING LEGAL ENTITIES AND DIVISION OF RESPONSIBILITIES BODIES (PARLIAMENT, GOVERNMENT, COUNTRY ADMINISTRATIVE BOARDS, MUNICIPALITIES, COURTS, (CFR SAFETY ANALYSIS REPORT, SAR)...

MINISTRATIVE	E ACTS DEFINING HOW THE COUNTRY IS OPERATED AND MANAGED (CFR OPERATIONAL LIMITS AND CONDITIONS, OL
CORPORAT	E LAW (REGULATING OPERATION OF PRIVATE, PUBLIC, STATE COMPANIES)
WORK	ERS SAFETY LEGISLATION
TR	ANSPORT LEGISLATION
	BUILDING CODE
	ENVIRONMENTAL LEGISLATION

 Secondary legislation defines general rules for operating activities within the primary/basic framework



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NATIONAL LEGISLATIVE AND REGULATORY FRAMEWORKS (CONT'D)

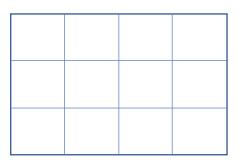
BASIC LAW DEFINING LEGAL ENTITIES AND DIVISION OF RESPONSIBILITIES BODIES (PARLIAMENT, GOVERNMENT, COUNTRY ADMINISTRATIVE BOARDS, MUNICIPALITIES, COURTS, (CFR SAFETY ANALYSIS REPORT, SAR)...

WORK	TE LAW (REGULATING OPERATION OF PRIVATE, PUBLIC, STATE COMPANIES) KERS SAFETY LEGISLATION RANSPORT LEGISLATION
	BUILDING CODE
	ENVIRONMENTAL LEGISLATION RADIATION PROTECTION NUCLEAR LEGISLATION OTHER SPECIFIC LEGISLATION

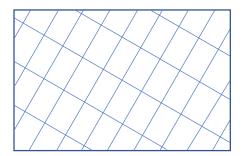
 Specific legislation is governed by, and adopted to, national-specific primary/basic and secondary legislation

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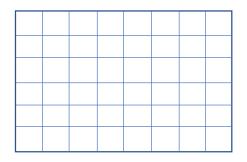
NATIONAL SPECIFIC LEGISLATIVE AND REGULATORY FRAMEWORKS (PRINCIPLE COMPARISON ONLY)



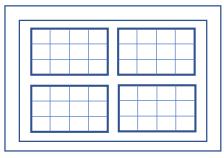
Target oriented – less detailed (e.g SE?)



Different approach - (e.g UK?)

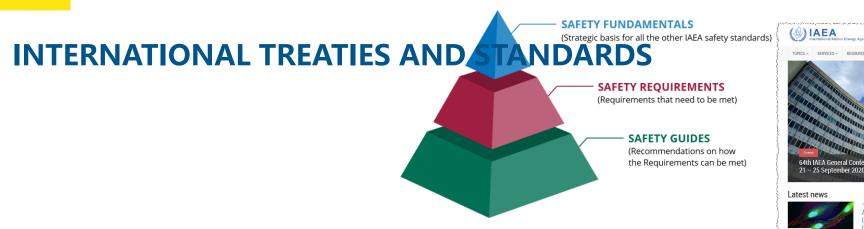


Prescriptive – more detailed (e.g FI?)



Federal/regional approach (e.g DE?)







The International Atomic Energy Agency, IAEA

 Internationally agreed reference levels for nuclear safety, radiation safety, transport safety and waste safety formalised by means of IAEA Safety Standards (IAEA SS)

Main international reference for legal and regulatory frameworks globally

- IAEA Members States are expected to implement the elements in the IAEA Safety Standards in thier national framework, but ...
 - ... the IAEA SS are not legally binding for IAEA Member States
- IAEA uses the Safety Standards as a reference when performing Peer Review services and in technical and other cooperation to support/assisst IAEA Member States Introductory course on EURAD and

September 14, 2020

Radioactive Waste Management



INTERNATIONAL TREATIES AND STANDARDS (CONT'D)

- The Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management, "the Joint Convention" (in force since 2001)
 - An **incentive convention**, i.e. encourages Contracting Parties to improve their activities and demonstrate fulfilment of the Joint Convention Articles
 - Supporting documents (Rules for Procedure and Financial rules, Guidance for the Review Process, and Guidance regarding the Form and Structure for National Reports)
 - Contracting Parties are obliged to implement the obligations in the Joint Convention articles
 - ... but there is no formal enforcement actions
 - Based on the elements of the IAEA Safety Standards
 - Focusses on safety of activities related to spent fuel and radioactive waste management
 - Based on a three-year cycle of self assessements by means of national reporting followed by a peer review process by Contracting Parties
 - Questons and Answers process based on review of National reports
- September 14, 202 Review Meeting to follow-up on issues identied from the review of National reports and the and Questons and Answers

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REGIONAL LEGISLATION AND STANDARDS

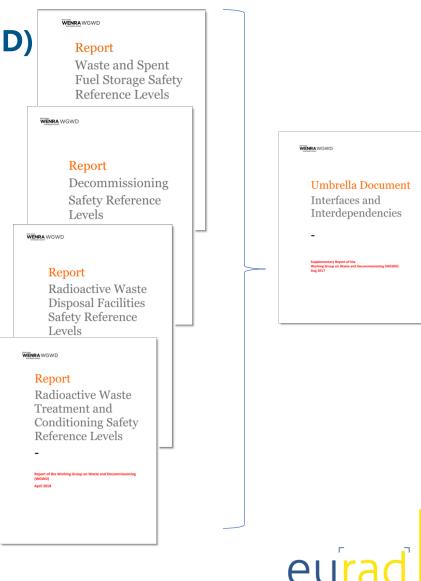
- The Western European Regulators Association, WENRA
 - Established in 1999 based on two main reasons;



- Nuclear safety was included in the European Union set of enlargement criteria, and
- National safety approaches had been developed from IAEA Safety Standards and the Convention on Nuclear Safety, but independently
- Objectives enlarged in 2003 to become a network of chief nuclear safety regulators in Europe exchanging experience and discussing significant safety issues
- Two working groups were launched to harmonise safety approaches between countries in Europe,
 - Reactor Safety Harmonisation Working Group
 - Working Group on Waste and Decommissioning
- Reactor Safety Harmonisation Working Group (RHWG) has developed safety Reference Levels (RL) for e.g.
 - Existing NPPs, updated as a consequence of the TEPCO Fukushima accident
 - For new NPPS
 - Long Term Operation
 - ...

• Recently revised WENRA objectives includes an effort to set up a arrangements by which the RLs September will be kept up to date and regularly reviewed with regard to experiences gained and updated IAEA Safety Standards

- The Western European Regulators Association, WENRA
 - Working Group on Waste and Decommissioning (WGWD)
 - Has developed the following reports with Safety Reference Levels (SRL);
 - Waste and Spent Fuel Storage SRL v2.2
 - Decommissioning SRL Report v2.2
 - <u>Radioactive Waste Disposal Facilities SRL v2.2</u>
 - <u>Report Radioactive Waste Treatment and Conditioning</u> <u>SRL v1.1</u>
 - SRLs are developed based on experiences and input from WENRA WGWD members and from the relevant IAEA Safety Standards
 - SRLs are directed towards the (presumptive) licensee
- A separate document has been developed to highlight the interfaces between the 4 WGWD thematic reports by summarizing their content against the background of band
- comprehensive radioactive waste montagement



- The Euratom Treaty and associated legislation
 - The Euratom Treaty provides the European Commission with mandate to establish secondary legislation by means of EC Directives, e.g.:
 - Especially for Nuclear Activities
 - European Council Directive 2009/71/Euratom of 25 June 2009 establishing a Community framework for the nuclear safety of nuclear installations, as amended (EC Directive 2014/87/Euratom),
 - European Council Directive 2011/70/Euratom of 19 July 2011 establishing a Community framework for the responsible and safe management of spent fuel and radioactive waste (the Radioactive Waste and Spent Fuel Management Directive)
 - The elements/requirements/obligations in EC Directives are to be transposed into national legislation
- Fulfilment of requirements in EC Directives are thus verified September by 25 gulatory review of compliance of those transposed and Radioactive Waste Management

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	COUNCIL DIRECTIVE	2011	70/EURATOM
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	establishing a Community framework for the res radioactiv		
Havi	COUNCIL OF THE EUROPEAN UNION, ng regard to the Treaty establishing the European Atomic gy Community, and in particular Articles 31 and 32 of,		Euratom Treaty, on health and safety, form a coherent whole conferring upon the Commission powers of some considerable scope in order to protect the population and the environment against the risks of nuclear contamination (%).
draw appo amoi	Having regard to the proposal from the European Commission, drawn up after obtaining the opinion of a group of persons appointed by the Scientific and Technical Committee from among scientific experts in the Member States,		Council Decision 87/600/furnation of 14 December 1985 on Community arrangements for the early exchange or information in the event of a radiological emergency (F stabilisted a framework for notification and provision or information to be used by the Member States in order to protect the general public in case of a radiologica emergency. Council Directive 89/618/laratom or 27 November 1989 on informing the general publi- about health protection measures to be applied an steps to be taken in the event of a radiologica emergency (*) imposed obligations on the Membe States to inform the general public in the event of a stability of the steps of the steps of the stability of the steps of the states to inform the general public in the event of a stability of the step of the steps to be the step of the step of the step of the step of the step of the step of the step of the step of the step of the step of the step of the step of the step of the step of the step of the step of the step of the step of the step of the step of the ste
Having regard to the opinion of the European Economic and Social Committee (¹). Having regard to the opinion of the European Parliament (²),			
Whe	reas:		radiological emergency.
(1)	Article 2(b) of the Treaty establishing the European Atomic Energy Community (Euratom Treaty) provides for the establishment of uniform safety standards to protect the health of workers and of the general public.	(7)	Council Directive 2003/122/Euratom (⁷) provides for the control of high-activity sealed radioactive sources and orphan sources, including disused sources, in accordance with the Joint Convention on the Safety of Radioactive Waste Management and on the Safety of Radioactive Waste
(2)	Article 30 of the Euratom Treaty provides for the estab- lishment of basic standards for the protection of the health of workers and the general public against the dangers arising from ionising radiations.		Management (the Joint Convention) and the Inte national Atomic Energy Agency (JAEA) Code c Conduct on the Safety and Security of Radioacti Sources, and current industrial practices, disued seale sources can be reused, recycled or disposed of. In man cases, this needs a return of the source or return of th equipment, including the source, to a supplier or manufacturer, for requalification or processing.
(3)	Article 37 of the Euratom Treaty requires Member States to provide the Commission with general data relating to any plan for the disposal of radioactive waste.		
(4)	Council Directive 96/29/Euratom (7) establishes basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionising radiation. That Directive has been supplemented by more specific kigalation. As recognised by the Court of Justice of the European	(8)	Directive 2006/21/EC of the European Parliament and of the Council of 15 March 2006 on the management of watte from extractive industrise (*) covers the management of waste from extractive industrise which may be radioactivity, but excluding such aspects as are specific to radioactivity, which are matters dealt with under the Euratom Treaty.
	Union in its case-law, the provisions of Chapter 3 of the pinion of 4 May 2011 (not yet published in the Official Journal).	(⁶) C-187/87 (1988 ECR p.5013) and C-29/99 (2002 ECR p. I-11221). (⁶) OJ L 371, 30.12.1987, p. 76.	
() 0	pinion of 4 May 2011 (not yet published in the Official Journal). pinion of 23 June 2011 (not yet published in the Official Journal).	000	J L 357, 712.1989, p. 31. J L 346, 31.12.2003, p. 57.

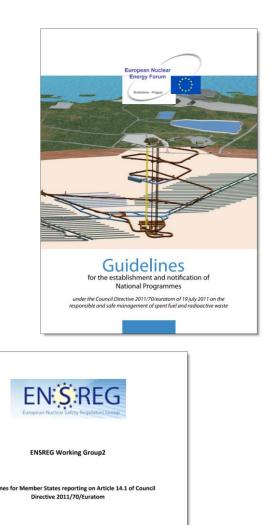


- Key elements in the Radioactive Waste and Spent Fuel Management Directive (EC Directive 2011/70/Euratom);
 - Article 5 Establish and maintain a national legislative, regulatory and organisational framework
 - Article 6 Competent regulatory authority (e.g. independence, legal powers, human and financial resources)
 - Article 7 License holders (e.g. prime responsibility, continuous improvement, "safety case", human and financial resources)
 - Article 8 Expertise and skills: Member States shall ensure that the national framework require all parties to make arrangements for education and training for their staff, as well as research and development activities to cover the needs of the national programme for spent fuel and radioactive waste management in order to obtain, maintain and to further develop necessary expertise and skills.
 - Article 9 Financial resources
 - Article 10 Transparency "... the public be given the necessary opportunities to participate effectively in the decision-making process regarding spent fuel and radioactive waste management in accordance with national legislation and international obligations.
 - ... e.g. pre-licensing consultation process but not in the decision making as such
 - Article 11-13 National programmes and their notification to the European Commission UI and
- September 14, 2020 Article 14 Reporting every 3 years improgress implementation of their National AND AND A (FNICDEC M/C) AND A LINA A

- European Nuclear Safety Regulators Group, ENSREG
 - Established in 2007 as an advisory group to the European Commission
 - Initiative after non-success with first initiative "Nuclear Package"
 - Working Group 1 (WGNS) Improving Nuclear Safety arrangements;
 - Involved in development of the Nuclear Safety Directive (NSD)
 - In principle limited to nuclear power reactors related issues
 - Developed guidelines for reporting under the NSD
 - Working Group 2 (WGRWMD) Improving Radioactive Waste Management, Spent Fuel and Decommissioning arrangements;
 - Involved in development of the Spent Fuel and Radioactive Waste Management Directive

• Developed guidelines for reporting under the Spent Fuel September 14, 202and Radioactive Waste Management Directive Radioactive Waste Management

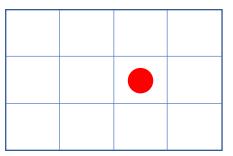
• Marking Group 2 (MGTA) Improving Transparancy



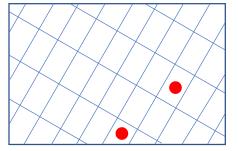
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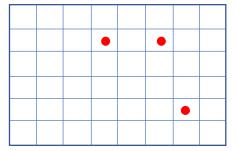
NATIONAL CONTEXT INTERFACE WITH INTERNATIONAL AND REGIONAL **TREATIES AND STANDARDS**



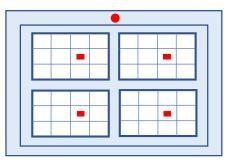
Target oriented – less detailed requirements (e.g SE?)



Different approach -(e.g UK?)



Prescriptive – more detailed requirements (e.g FI?)



Federal/regional approach (e.g DE?)

- International/regional requirement implementation in
- nationalionalional framework implementation in

states'/region's framework



SUMMARY AND CONCLUSIONS

- Just like companies are (very) different from each other, countries are also (very) different from each other, depending on e.g. historical/political development
- International treaties and standards as well as regional legislation and standards plays an important role in the development of a national framework
- International cooperation for implementing as well as regulatory organisations facilitates the way
 forward for countries to manage spent fuel and radioactive waste
- It is the responsibility of the individual country to develop necessary infrastructure to manage the spent fuel and radioactive waste arising in that country
- In doing so, each country is responsible for implementation of elements as required by international treaties and regional legislation, as well as for applying international and regional standards
- Each country is ultimately responsible to manage spent fuel and radioactive waste according to a country-specific defined and structured legislative and regulatory framework.
- Only national regulatory authorities have the (legal) competence to judge compliance with requirements in the country-specific defined and structured legislative and regulatory framework, according to a given mandate in the legal framework.



THANK YOU FOR YOUR ATTENTION !

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