

LEGISLATION AND REGULATIONS

National responsibilities in an international context

September 14, 2020 • Bengt Hedberg, SSM



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ABOUT THIS PRESENTATION ...



- I work for the Swedish nuclear regulator and I sometimes refer to the Swedish 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 international 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 presentation represents my own understanding of things and my personal reflexions only,



CONTENTS OF THIS PRESENTATION

- LEGISLATIVE 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 Management 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)

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

CORPORATE LAW (REGULATING OPERATION OF PRIVATE, PUBLIC, STATE COMPANIES)

WORKERS SAFETY LEGISLATION

TRANSPORT LEGISLATION

BUILDING CODE

ENVIRONMENTAL LEGISLATION

- **Secondary legislation** defines general rules for operating activities within the primary/basic 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)...

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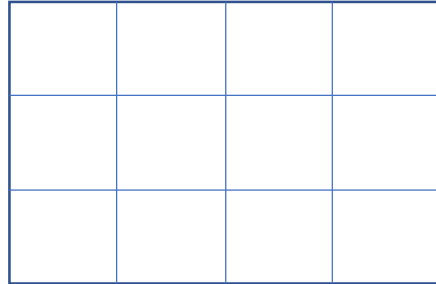
RADIATION PROTECTION

NUCLEAR LEGISLATION

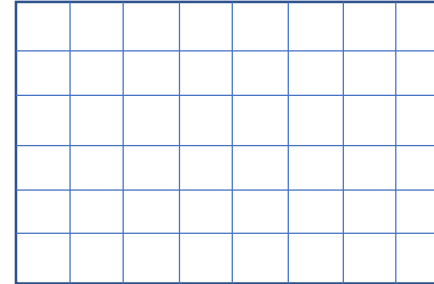
OTHER SPECIFIC LEGISLATION

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

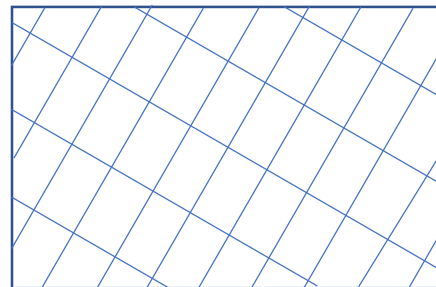
NATIONAL SPECIFIC LEGISLATIVE AND REGULATORY FRAMEWORKS (PRINCIPLE COMPARISON ONLY)



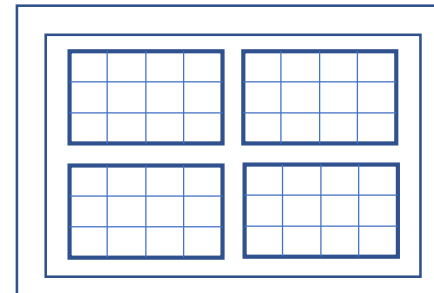
Target oriented – less detailed (e.g SE?)



Prescriptive – more detailed (e.g FI?)



Different approach - (e.g UK?)



Federal/regional approach (e.g DE?)

INTERNATIONAL TREATIES AND STANDARDS

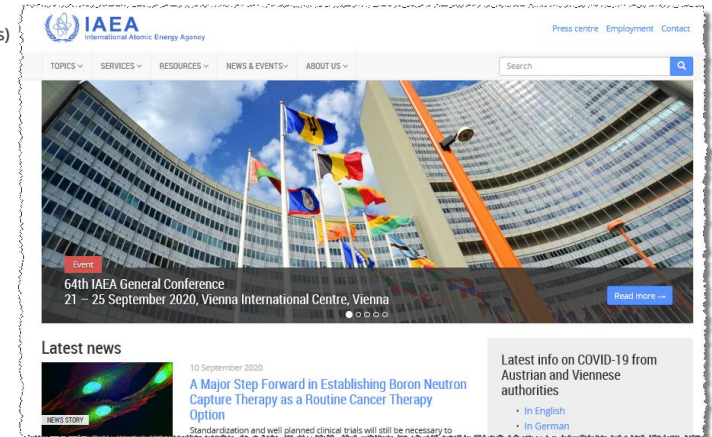


- **The International Atomic Energy Agency, IAEA**

- 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**

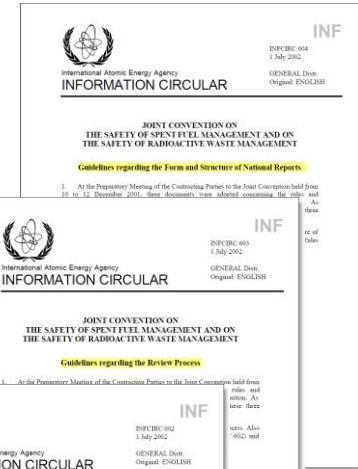
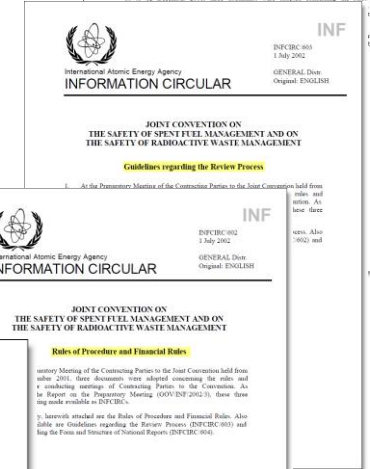
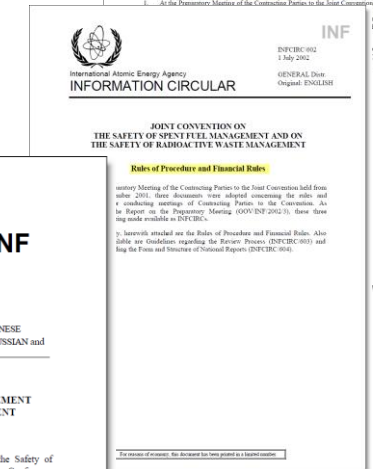
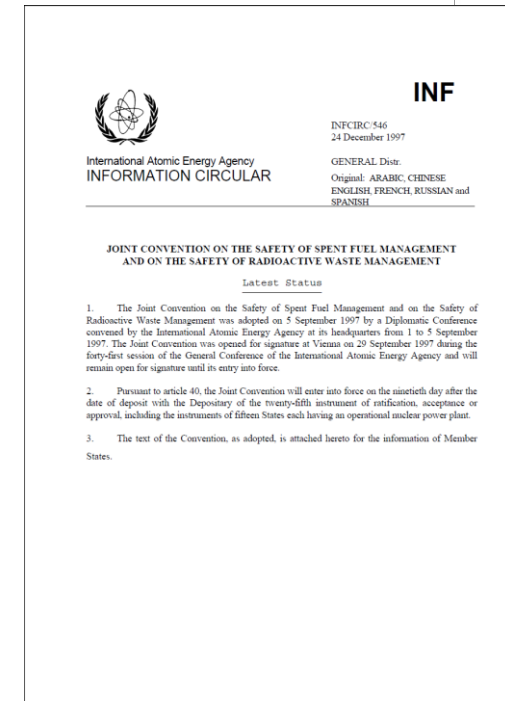
- IAEA Members States are expected to implement the elements in the IAEA Safety Standards in their national framework, but ...
 - ... the IAEA SS are not legally binding for IAEA Member States
- IAEA uses the Safety Standards as a reference when performing Peer Review services and in technical and other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



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 assessments by means of national reporting** followed by a **peer review process by Contracting Parties**
 - Questions and Answers process based on review of National reports

Review Meeting to follow-up on issues identified from the review of National reports and the and Questions and Answers process



REGIONAL LEGISLATION AND STANDARDS

- **The Western European Regulators Association, WENRA**

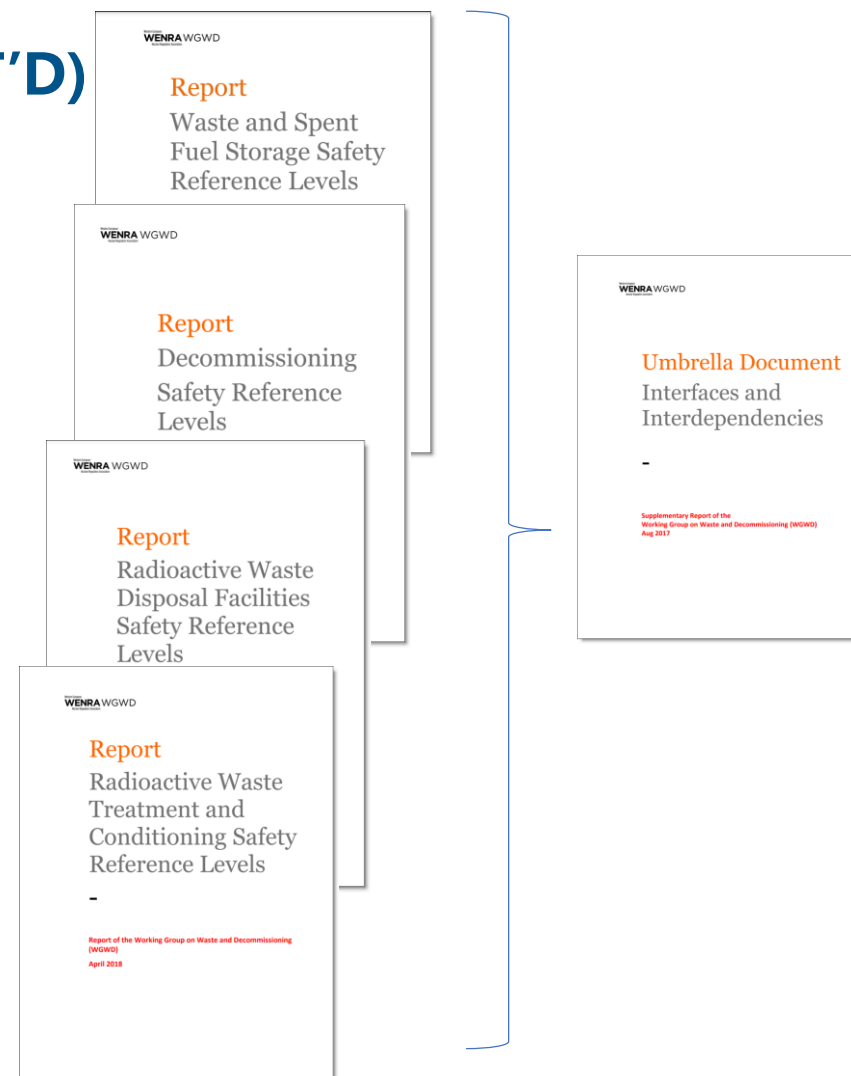
- Established in 1999 based on two main reasons;
 - Nuclear safety was included in the European Union set of enlargement criteria, and
 - National safety approaches had been developed from IAEA Safety Standards and the Convention on Nuclear Safety, but independently
- Objectives enlarged in 2003 to become 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/SRLs will be kept up to date and regularly reviewed with regard to experiences gained and updated IAEA Safety Standards



REGIONAL LEGISLATION AND STANDARDS (CONT'D)

- **The Western European Regulators Association, WENRA**

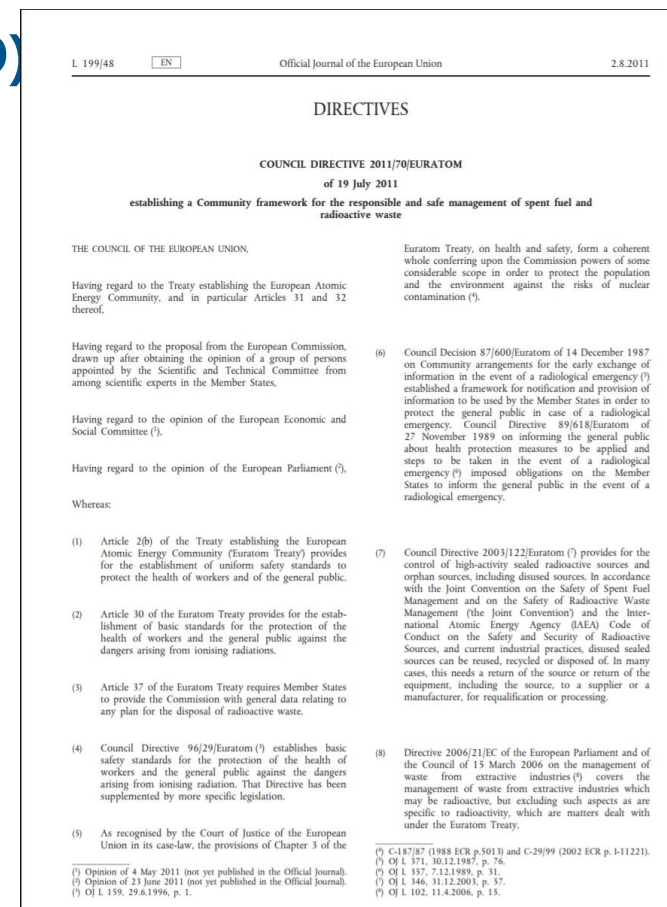
- Working Group on Waste and Decommissioning (WGWD)
- Has developed the following reports with Safety Reference Levels (SRL);
 - [Waste and Spent Fuel Storage SRL v2.2](#)
 - [Decommissioning SRL Report v2.2](#)
 - [Radioactive Waste Disposal Facilities SRL v2.2](#)
 - [Report Radioactive Waste Treatment and Conditioning SRL v1.1](#)
- 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 a comprehensive radioactive waste management programme



REGIONAL LEGISLATION AND STANDARDS (CONT'D)

• 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 by regulatory review of compliance of those transposed requirements



REGIONAL LEGISLATION AND STANDARDS (CONT'D)

- **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**
 - **Article 14 – Reporting every 3 years on progress in implementation of their National Programme (ENSREG WG2 guidelines)**

REGIONAL LEGISLATION AND STANDARDS (CONT'D)

- **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”

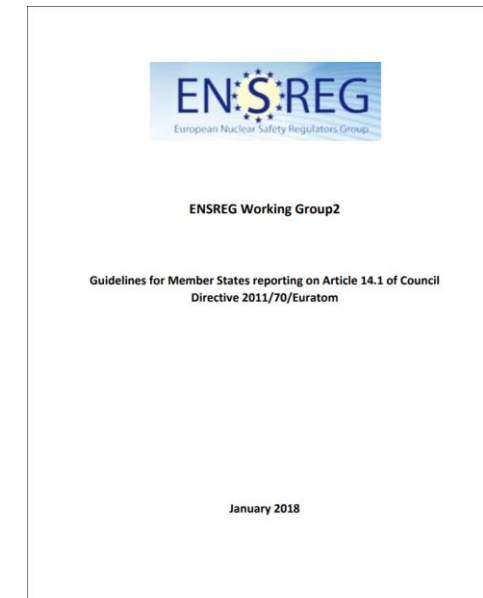
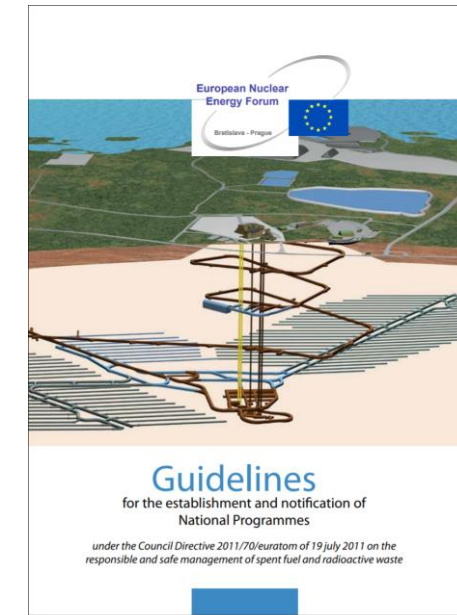
- Working Group 1 (WGNS) - Improving Nuclear Safety arrangements;

- 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

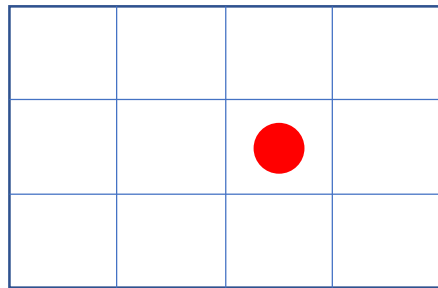
- Working Group 2 (WGRWMD) - Improving Radioactive Waste Management, Spent Fuel and Decommissioning arrangements;

- Involved in development of the Spent Fuel and Radioactive Waste Management Directive
 - Developed guidelines for reporting under the Spent Fuel and Radioactive Waste Management Directive

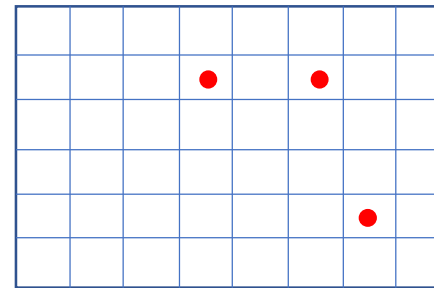
- Working Group 3 (WGTA) - Improving Transparency



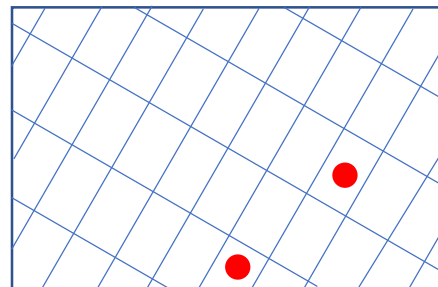
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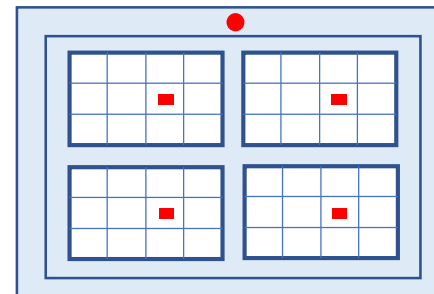
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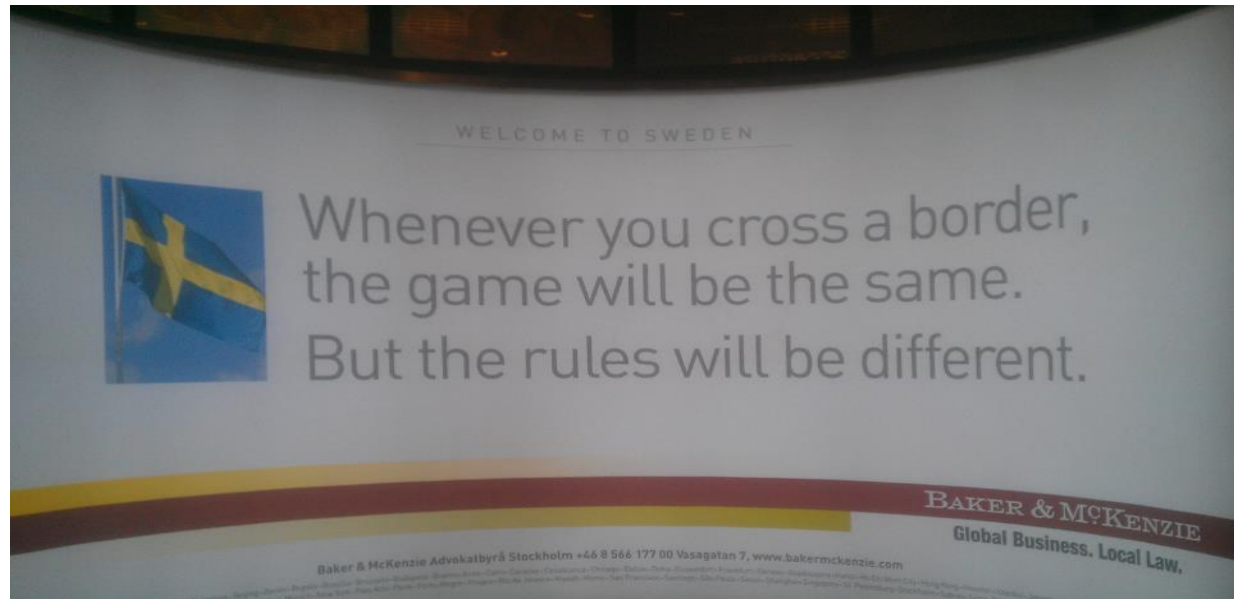


Federal/regional approach (e.g DE?)

- International/regional requirement implementation in national/federal framework
- International/regional requirement 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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