

Studsvik

Transportation of Spent Fuel Samples

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Objective

Presenting activities involved in an international transport of small spent fuel samples and outline bottlenecks and issues

- 1. Packaging**
- 2. Authority Approvals**
- 3. Transportation Regulations and Requirements**
- 4. Bottlenecks and Issues**

1. Packaging

- **Finding a suitable package**
- **Authority approvals**
 - Certificate
 - Package validation, countries concerned



2. Authority Approvals

- **Import license**
 - According to the subjective country legislation
- **Export license**
 - According to the subjective country legislation, dual-use
- **Transit permit**
 - According to the subjective country legislation
- **Transport permit**
 - According to the subjective country legislation
- **2006/117/Euratom**
 - Transfer of fissile material between member states of the EU and import/export to the union
- **Safeguard**

2. Authority Approvals - Safeguard for Members of the EU

- **Euratom**
 - For nuclear weapon state and countries outside the union
Advanced notification (incl. ESA reference No.) for quantities
> 1 effective kg fissile material/year and state
- **ESA (Euratom Supply Agency)**
 - < 200 g fissile, information about transfer of ownership and loan
 - > 200 g fissile, approval of transfer of ownership
- **Obligation code**
 - Approval of all movements of material outside the EU, except from code
N and P, from the country concerned
- **Advanced notification**
 - According to the subjective country legislation

3. Transportation Regulations and Requirements

- **IAEA Regulations for the Safe Transport of Radioactive Material** Good but.....
 - **IATA DGR**
 - State and Operator variations!
 - **IMDG Code**
 - **ADR**
 - **RID**
 - **CFR**
 - **Japan “The Law”**
- **Physical protection**
- **Nuclear Liability Insurance**
- **Advanced notifications for the transport**

4. Bottlenecks and Issues

- **Finding a package**
 - Few options
 - Limiting approved content
- **IATA DGR**
 - State and Operator Variations, additional approvals might be necessary
 - Denials!
- **Safeguard Obligation Code**
 - The handling procedure time is undefined
- **2006/117/Euratom and Export control**
 - 2006/117/Euratom unknown outside the EU
 - Handling time depending on responsible person at the Competent Authority

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