



Responsibilities and Legal and Financial Liabilities

P. Salzer, DECOM, a.s.; C. McCombie, ARIUS

Initial Assumptions

(as discussed at the SAPIERR II Kick-off and Middelburg meetings)

- Need to update information gathered in SAPIERR I Project
- Need to work independently, without relying on information other than official documents; use only information from
 - the HERALD Project
 - JC review processes (+ published Q&A)
 - the web
- Countries studies selected on the ground of accessible information

The Study - two parts

- **Factual** – see appendices
- **Discussion** of selected aspects within the main text (national and international; responsibilities and liabilities):
 - Ownership (land, wastes)
 - Transport
 - Implementation and operation
 - Financing

Linkage to WP 1 – scenarios for allocation of responsibilities

Factual Part

List of appendixes:

- 1: Recent relevant EU legislation
- 2: Legal commitments in EU countries
- 3: Financial liabilities in specific EU countries
- 4: Ownership issues in specific EU countries
- 5: Import, export and transportation issues in specific EU countries
- 6: Example case studies of bilateral arrangements

App. 1: Recent relevant EU legislation

Discussion of:

- COUNCIL DIRECTIVE 2006/117/EURATOM of 20 November 2006 on the supervision and control of shipments of radioactive waste and spent fuel
- COMMISSION RECOMMENDATION of 24 October 2006 on the management of financial resources for the decommissioning of nuclear installations, spent fuel and radioactive waste (2006/851/Euratom)
- COUNCIL REGULATION (EURATOM) No 300/2007 of 19 February 2007 establishing an Instrument for Nuclear Safety Cooperation

App. 1: Recent relevant EU legislation

The most significant:

COUNCIL DIRECTIVE 2006/117/EURATOM of 20 November 2006 on the supervision and control of shipments of radioactive waste and spent fuel

- Spent fuel shipment also covered
- Shipment to the third countries – significant for former “Soviet Block” countries:
Appraisal of situation in the country of destination by the regulatory body of the state of origin.

Key fact: formal barrier for shipment of spent fuel to Russian Federation (i.e. for continuation of the past practice)

App. 2: Legal commitments in EU countries

Updating the SAPIERR I tables:

- Membership of countries in international organizations or initiatives
- Ratification/adoption of international conventions and treaties
- List of the regulators and implementing bodies for disposal of radioactive waste
- Export, import, transfer of RAW/SNF, attitude towards international repository

App. 3: Financial liabilities in specific EU countries

Study of the financing schemes for:

Austria, Belgium, Bulgaria, Czech Republic, Hungary, Italy, Latvia, Lithuania, Netherlands, Romania, Slovak Republic, Slovenia and Croatia, Switzerland

App. 4: Ownership issues

Brief description of ownership issues
for same countries as in App. 3

App. 5: Import, export and transportation issues i specific EU countries

Legislative cover of the given issues in same countries as in App. 3

App.6: Example case studies of bilateral arrangements

1. “Story” of Hungarian spent fuel export to Russia – demonstration that political/economical/practical solutions cannot be in contradiction with the legal frame (export-import stopped according the decision of the Russian high court of justice)
2. Slovenia/Croatia

The WP 2 study: Discussion Part

The intention of the report was to look at the organizational structures suggested for an EDO in Work Package 1 and then to:

- identify the responsibilities to be borne throughout the long development process (legal, financial, ethical, etc.)
- identify the various bodies that together must bear the responsibilities and carry the financial liabilities
- propose an option (or options) for the allocation of responsibilities and financial liability;
- discuss which aspects are peculiar to multinational projects and which are common also to national waste management programs.

The WP 2 study – Stakeholder organizations

- National waste management organizations
- ERDO/ERO
- Host country government, regulator, local community
- Government, regulator and population of partner countries
- International organizations

Ownership of land: four options for the long term

- Option 1: Title to the land is held by the repository implementer and reverts to the Government on closure (possibly after an extended monitoring period);
- Option 2: Title to the land is held by the repository implementer; after closure the land can be released for further use and transferred to other owners, but the host Government must maintain records and institutional controls;
- Option 3: The host Government holds title to the land from inception and grants rights to the repository implementer;
- Option 4: The host Government cedes ownership or leases the land to an international organization for the duration of operations. In the long term, ownership must revert to the national government.

The WP 2 study – responsibilities and liabilities

Discussion of:

- Issues regarding the ownership of wastes
- Issues of the transport to the repository

The WP 2 study – responsibilities and liabilities

In the frame of repository implementation:

- Siting issues
- Licensing
- Verification of the characteristics of wastes
- Operational safety
- Pre-closure inspection, post-closure activities
- Retrievability

Financing issues

- Up to construction and commissioning
- During operation
- Post closure (monitoring, inspections):
 - A post-completion activity fund is established as a special purpose trust fund, charged to secure the repository implementer's obligations, and administered by the implementer alone from inception;
 - A post-closure activity fund is established as a special purpose trust fund, charged to secure the repository implementer's obligations, with administration of the fund passing from the repository implementer to the host country Government only on repository closure (perhaps including a first period of "confidence monitoring");
 - A post-completion activity fund is established as a special purpose trust fund, charged to secure the repository implementer's obligations, and administered by the host Government from the beginning of repository operations.

The WP 2 study – responsibilities and liabilities

- Public communication and involvement
- Scenarios for allocation the responsibilities discussed for two options:
 - Repository operation by a commercial ERO
 - Repository operation by a non-profit ERO

Conclusions (1a)

There are national challenges that apply equally also to a multinational program:

- Creating a structured framework defining the roles of all relevant entities – regulators, implementers, national governments, local communities, supranational organizations, etc.
- Implementing a facility that is safe and secure during the operational and post-operational phases
- Gaining sufficient political and public acceptance at all necessary levels for the siting
- Securing financing for construction of the repository and allocating the costs in a fair way to all repository users

Conclusions (1b)

There are national challenges that apply equally also to a multinational program:

- Ensuring adequate flow of funds throughout the operational period and proper oversight of the funding arrangements
- Establishing mechanisms to ensure that segregated funds are available for post-closure requirements
- Developing institutional control and knowledge preservation measures for the very long time period – a task that requires close cooperation with the host Government.

Conclusions (2)

Additional challenges for shared repositories arise for the following reasons:

- Complex procedures may be needed for assuring that waste packages transported from varied sources meet the acceptance requirement at the repository
- Fair mechanisms for sharing development, capital and operating costs must be agreed. These must allow for subsequent expansion of the partner organizations should further nuclear power companies be established
- Arrangements (practical and financial) must be made for the acceptance at a deep repository of long-lived wastes produced outside the nuclear fuel cycle, e.g. from medicine, industry and research.
- Users must be obligated to transfer their stored wastes to the repository on agreed schedules in order that the repository operations can be optimized

Conclusions (3)

For multinational repositories, the further (most problematic) issues are:

- Supranational bodies such as the EC and the IAEA must play a more direct role
- Regulators from a number of nations may have to be informed and even to approve the repository project
- Political and public acceptance may be harder to achieve, in particular in the repository host country
- Legal mechanisms to ensure that all users have sufficient assets to cover potential future liabilities may be weaker than in the national case

Conclusions (4)

- There are no fundamental reasons why assurance can not be provided that a multinational repository can meet all its responsibilities and liabilities.
- When a group of potential participants in a formalized EDO is established, then explicit negotiations on legal responsibilities and liabilities will be an immediate top priority. These negotiations will require participation of technical, legal and financial experts from the partnering organizations.