Module 6 – Integration

The challenge: to ensure that the partners have a common and coordinated vision of the project, that information is shared freely and regularly and that technological solutions developed within ESDRED have the broadest possible application

ESDRED is the first "Integrated Project" with a technological focus, to be supported by the European Community. The objective of Module 6 is to ensure the development of the technical modules in the context of commonality, consistency and compatibility. In other words, wherever possible, a technological solution developed in one module can be coupled with the technology developed in another module to obtain a final usable product or concept.

In order to achieve maximum integration, each technical module will define and document, in a first instance, a corpus of "Input Data and Functional Requirements", which will then be cross-examined with similar documents produced by the other technical modules. Similarly, the same exercise will be carried out later with the "Design Studies" data to identify the common features.

This integration work will be assessed for soundness and relevancy by a panel of independent experts appointed by the ESDRED Governing Board.

The ESDRED integration concept has a strong practical focus based on information sharing, on working together and on understanding the similarities and differences between the various concepts that are integral to the project. This goes hand in hand with the fundamental objective of the ESDRED Project which is to develop and to demonstrate certain technologies for which relevant industrial examples do not exist today. Here too the panel of experts will be called upon to assess the progress of the work and the performance of the demonstrations.

An example of integration between one aspect of Modules 1, 2 and 3 is shown below with the following phases:

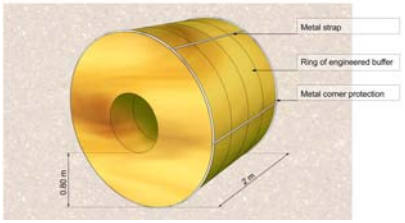
- engineered barrier fabrication (Module# 1)
- engineered barrier emplacement with aircushion technology (Module# 3)
- engineered barrier fabrication anticipating the "inner sleeve" installation (Module#1)
- vitrified waste canister emplacement with pushing robot (Module# 2)

This sequence highlights that the engineered barrier rings, which are the results obtained from Module# 1, are an input data to the technology being developed in Module# 3 for their emplacement and to Module # 2 where the emplacement of vitrified waste canisters is demonstrated.

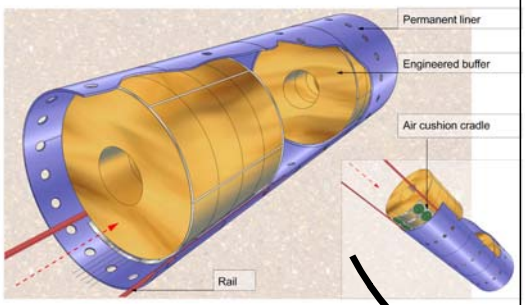
Links Between Modules # 1, 2 & 3 - Integration of Design, Construction & Demonstration

LINKS BETWEEN MODULES 1, 2 & 3

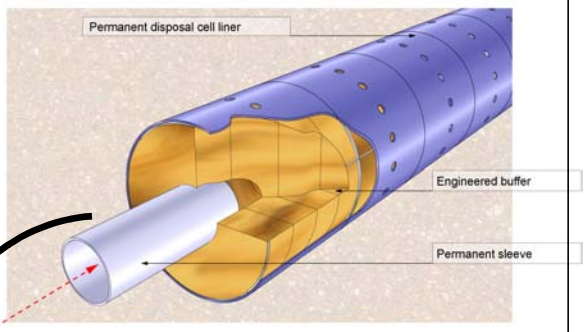
MODULE 1 Buffer fabrication

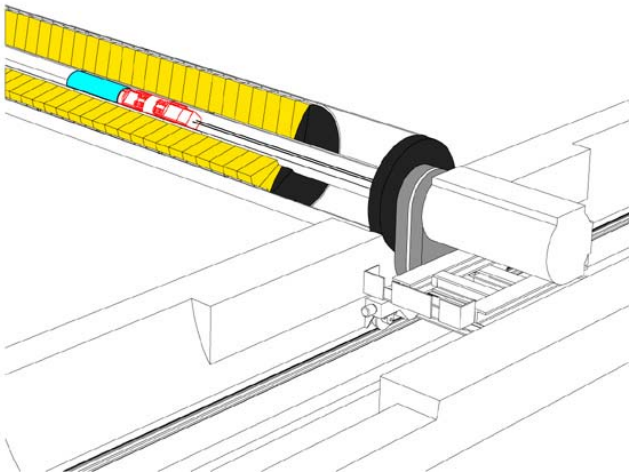


MODULE 3 – Buffer emplacement



Buffer equipment (inner liner)





MODULE 2 Waste Canister Emplacement in Buffer