

Work package 5 description

Work package number	5	Start date or starting event						Month 1
Work package title	Networking activities							
Activity Type	COORD							
Participant id	10,6	1,	7,8,9,12, 13	11	2	3,4,14,15	TOTAL	
Participant short name	ITC, POSIVA	INPL	ANDRA, ARAO, RAWRA ENRESA GRS	ENEN	CU	TUC, Micans, NDA, ITN		
Person-months per participant:	4	2.5	3	3.5	1	0.5	32	

Objectives

The first objective of this work package is to create several types of networks in the field of E&T in geological disposal. These are web-based, peer and E&T networks in the field of geological disposal and strengthen the link between a) end-users and E&T providers and b) education and training providers in the field. The second objective is to apply for mobility funding for students and teachers, participants and tutors to participate the envisaged training schemes and the modular courses at the providers Europe wide. The third objective is to provide a model for a long-term sustainability of the networks in E&T in geological disposal and maintain the momentum created by the PETRUS2 project.

Description of work

The PETRUS2 project strengthens the use of the existing web-based networks¹⁰ especially the ENEN association's and ITC School association's websites and databases by provision of mutual links and provision of input on services provided by the project related to the training schemes to be implemented and to the project outputs. The ENEN association website (www.enen-assoc.org) and database(s) format are compiled in the modular course descriptions so that these can be inserted into the database. Also a viable linking of the ITC School association website and the ENEN association website will be planned and implemented.

In the Petrus2 project, the aim is to strengthen the use of the existing web-based networks like the ENEN association's and ITC School association's websites and databases. The ENEN association website (www.enen-assoc.org) and database(s) form an important networking cross point in addition to the existing web sites of the consortium (especially the ITC School website www.itc-school.org). With a single point of contact in the web, the efficiency of the education and training market is improved. In addition, WP6 will survey further what secure, applicable, and low cost e-learning and collaborative forum infrastructures are available for e.g. internet videoconferencing for a wider use within the consortium and for networking during the project and in the future. Furthermore the inputs from WP6 (Knowledge Management) will be applied to the collaborative forums of the training schemes. Several e-learning projects have already addressed this area, but the knowledge about these developments has not been widely implemented within the waste management community partly due to information security concerns. The main partners involved in the development of this type of network are ENEN (especially UPM), INPL, ITC School, CTU and TUC.

The Net.Excel/CARD projects in the FP5 and FP6 framework programmes are the main examples of strategic research networks among peers and were formed by waste management organisations. Many of the network members also exercise tighter cooperation with each other based on bilateral and/or multilateral

¹⁰ Examples of web-based networks related to geological disposal are e.g. European Union websites, OECD/NEA websites, IAEA's NeWMDB - Waste Management Database, ENEN association's website and database, ITC School website, and different project websites like the OBRA project's (www.obraproject.eu) open discussion forum on governance issues.

agreements especially around research carried out in the Underground Rock Laboratories (URLs). Another of these peer networks is the IAEA URF Network of Excellence among operators of URLs or URFs, but the network also encompasses the recipient countries targeted for knowledge transfer and training to the countries with less developed waste management programmes. ITC School has a facilitator role in the network and the chairman of the network is from Cardiff University. Also several other consortium members are part of both of these networks. Strengthening the peer network's networking activities also in the field of E&T is one of the key objectives of this work package.

The CARD project that finished at the end of March 2008 has produced a feasibility study for the technology platform in geological disposal (IGD-TP) and the work on the vision document of the technology platform will be carried out in a joint effort between two WMOs: SKB from Sweden, taking the lead, and Posiva from Finland. The CARD project group consisting of the major WMOs in Europe will be in on-going interaction during the vision document production. All of the WMOs involved in Petrus2 project were also part of the CARD project group and thus a link to the IGD-TP already exists. In the CARD workshop, the importance of E&T, knowledge management, and knowledge transfer were emphasized in several comments. Therefore, also the Petrus2 project aims at forging ahead a tight link with the future technology platform (IGD-TP). A proposal for the technology platform structure exists but experience from other technology platforms (like SNE-TP) shows that the structure evolves after the TP is launched. The Petrus2 consortium aims at linking with the IGD-TP by the means of an End-user council that consists of not only of the WMO, but also of the members of the Exchange Forum, who present also other end-users of E&T. The CARD structure foresees a working group for support functions. The role of this support function is to provide the strategic implementation of oriented research needed support in Education and Training matters. Currently such support has been targeted to training (informative courses) and workshops aimed at disseminating the project results of the larger research project, but with the PETRUS2 schemes, wider scope of support activities can be developed. Taking into consideration the timeline of the PETRUS2 project and the launch of the technology platform, it is foreseen in the planning that the End-User Advisory Group, which has a role in the Project management (see WP1) takes also the initial role of the End-User Council as the PETRUS2 project proceeds. Some of the activities of the End-User Advisory Group/End-User Council can also be carried out in cooperation with the ITC -School Executive's activities. The main partners in this activity are all partner waste management organisations agencies (ANDRA, ARAO, ENRESA, POSIVA, RAWRA), but especially towards the technology platform and in relation to the ITC School Executive. POSIVA and ARAO and of course the ITC School association are in charge.

Regarding E&T in the nuclear field several associations operate, whose activities also form networks. Such examples are e.g. the ENEN Association in the nuclear education, consisting mainly of universities; the World Nuclear University focusing on a summer school for future leaders in the nuclear community; and the ITC School association as the only organisation focusing on training in geological disposal and underground storage and consisting of 57 members from all different types of organisations in geological disposal worldwide. A key objective in WP5 is to bring closer together the activities of the ENEN association members and the ITC School association to complement the E&T opportunities in Europe and to meet the future competence needs of the different end-users and stakeholders in geological disposal. In the consortium, the participation of ENEN association members enables the geological disposal community to link into the ENEN association's activities, to actors in the nuclear education in general, and make use of the work carried out in mutual recognition of studies, quality assurance and course database and related guideline strengthening the Knowledge Management capability of the network. ENEN activities are also important for the dissemination of the intermediate and final results of the project and for attracting participants to either the Master's common courses or to the professional development programme. The main partners involved in this networking activity are ENEN association and its member universities UPM, TKK, CTU and BME, the project coordinator INPL, and the ITC School.

To ensure mobility of the students and participants and the teachers and tutors in PETRUS2 E&T offering, a mobility funding application will be prepared and submitted to a relevant mobility funding scheme. Alternative programmes are the EC People programme for strengthening R&D capabilities or within a mobility scheme within the Lifelong Learning Programme (Erasmus, Leonardo or Grundtvig sub-programmes) that is applicable to the mobility needs of the fission E&T and is opened during the project's duration. The project follows the opening of such calls and sets up a suitable consortium for submitting the

application. The partner in charge of the application is INPL, UPM or TUC according to later agreement. Mobility schemes are followed, a consortium of the project partners is formed for an application for student/participant and teacher/tutor mobility, and an application is prepared and submitted to one of the EC's People or Lifelong learning programmes or like. The scope of the application is defined based on the scope of the available calls and prior to the implementation of the modular courses in either WP3 or/and WP2. The main target group for the mobility scheme is Master's students and teachers, but also the possibility to provide mobility opportunities for professionals/researchers is taken into consideration.

A sustainability model for the E&T network in geological disposal will be developed based on the launch and implementation results of the Technology Platform and on the success of the networking activities either within the current structure or in cooperation with the potential IGD-TP. This includes the success rate in the recruitment of students and participants into the training schemes and completion of the programmes within the time frame of the project.

Deliverables :

D5.1 Demonstration: Creation of linked between ENEN and ITC Websites	month 16 (ITC - ENEN)
D5.2 Creation of End-User Council (including TOR ¹¹)	month 12(WMOs + GRS)
D5.3 End-user Council meeting minutes	month 18,24,34 (WMOs + GRS)
D5.4 Preparation of mobility application	month 19 (INPL- UPM- TUC)
D5.5 Model for network sustainability	month 30 (WP leader - POSIVA - INPL)
D5.6 Link with the Implementing Geological Disposal - Technology Platform	month 34 (Posiva + other WMOs)

Milestones and expected result

M5.1 Single point of contact on the ENEN website for services provided by PETRUS2 and Agreement for link creation of sites	month 6
M5.2 Follow-up of the Technology Platform developments (in 2009)	month 9
M5.3 Agreement on intellectual property rights and other issues related to linking the ENEN and ITC School sites together	month 15
M5.4 Application deadline of the mobility programmes in People or Lifelong Learning programmes	month 24 (timing to be decided during the project and dependent on eligibility for funding)
M5.5 Presentation of accreditation schemes to the IGD-TP for approval	month 34

¹¹ Terms of reference