

**Final**

**TERMS OF REFERENCE (ToR)**

**COMPETENCE MAINTENANCE, EDUCATION AND TRAINING  
WORKING GROUP (CMET)**

**Version 3.0  
31 August 2016**

## 1 BACKGROUND

The Competence Maintenance, Education and Training group (CMET) is a working group continuing the work first deployed by the Executive Group (EG) of the IGD-TP in June 2011 and closed in April 2016. These Terms of Reference (ToR) take into account the voluntary interest of the members of the CMET Working Group to continue to pursue cooperation to avoid the loss of knowledge and to ensure that competence is maintained in geological disposal and in the related education and training (E&T).

The CMET Working Group is based on voluntary participation of its members and continues to operate so. By April 2016, representatives from 19 different organisations had volunteered to be members of this Working Group. They represent waste management (WMOs), universities, research institutes and consulting companies from 12 different European Union Member States and from Switzerland.

## 2 OBJECTIVES, RESPONSIBILITIES AND POWERS

The overall goal of the CMET Working Group is to continue promoting European cooperation in this cross-cutting area in support of the IGD-TP's "Vision 2025" and in support of its commitment to *"facilitate access to expertise and technology and maintain competences in the field of geological disposal for the benefit of Member States."*

In addition, the group aims promoting the sustainability of existing and new E&T initiatives in geological disposal by collaboration and by sharing common interests. The main objectives of the co-operation within CMET are to:

- Carry out transfer of state of the art strategies and activities for Competence Maintenance, Education and Training related to the implementation of Vision 2025. This includes producing input information on current and future Knowledge, Skills, and Competence (KSC) needs of the geological disposal community and collaborating within the CMET group and with other stakeholder groups in producing a knowledge-base about these needs to geological disposal community.  
A specific aim under this objective is effectively to identify the shortfalls and needs in KSC to undertake the planned research, development and demonstration activities and programmes.
- Continue to assess the feasibility of developing the quality assurance of training aimed at new and experienced professionals in the field of nuclear waste management and especially geological disposal by working quality assurance procedures and criteria for the mutual recognition of learning outcomes, training (and education) in geological disposal.

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- Develop the content of training i.e. a type of "curricula" for professionals in geological disposal for the development of joint training or alternatively engage educators and trainers into developing Education and Training (E&T) to meet the expertise needed to carry out Research, Development and Demonstration (RD&D) activities towards implementation of safe repositories. The different training needs (different jobs) of the different target groups need to be addressed in the "curricula" development.
- Follow-up the developments in the European education and training legislation and tools for mutual recognitions. Competence and/or capabilities cover a wide range of activities beyond E&T. However, in the formal competence development E&T activities play a major role. It is also acknowledged that education in Europe is a matter of subsidiary of the Member States and it is decided on a national or regional level, depending on each national legal framework.
- Communicate about the state-of-the-art in CMET issues inside the group and about the CMET activities to external stakeholders in order to increase interest in geological disposal education and training opportunities within the member organisations and in other stakeholder groups.

As described above, the CMET group is formed on a voluntary and in-kind basis for working together on activities that promote the objectives.

Each CMET member acts under the authorisation of its own organisation. In the event CMET or its members receives external support for the activity, the contractual requirements need to be taken into account in the CMET member's responsibilities and activities as stipulated in the contract(s).

A CMET working group can and shall cooperate with the existing and new E&T initiatives and provide improved accreditation schemes and consistency in learning outcomes (LO) within the geological disposal community, which already is very multidisciplinary and international in its requirements and activities. The cooperation is done within the limits of the resources available by the CMET members and their organisations.

### **3 GUIDELINES**

Implementing safe geological disposal includes meeting the regulatory qualification and competence requirements during the different stages of repository development. Specific competences are needed to carry out the different stages of repository development (see e.g. IGD-TP SRA 2011 p. 16).

The CMET aims to contribute to the benefits from the maintenance and cooperative development of resources in this field by working jointly on the:

- Maintenance and development of expertise over the long lifetime of the waste management programmes at different stages of repository development.

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- Ensuring that capabilities, infrastructures, research and educational facilities are available for the RD&D for implementation of deep geological disposal and waste management programmes.
- Development of new KSC's in the field of geological disposal as the waste management programmes shift their activity from RD&D to operating repositories and disposal facilities.
- Pooling of expert resources and increasing the mobility of experts in Europe to assist achieving the Vision 2025 and maintaining the critical human resources and competences needed for these tasks.
- Promoting quality of education and training by sharing education and training experiences and resources for educating new experts and new educators and trainers to work in all the aspects of geological disposal e.g. by developing a common basis for accreditation and recognition of KSC's for the interested parties.
- Supporting the availability of education and training in geological disposal and in related infrastructures like underground research laboratories despite the changing circumstances and changing level of activities in different waste management programmes.

## **4 ROLES OF CMET AND ITS TASKS**

### **4.1 CMET ORGANISATION**

The CMET consists of any individual or representative of an organisation willing to contribute on a voluntary basis to the CMET objectives and activities. of in-kind contribution to achieve the CMET objectives by working in the group. The group can be joined by contacting its chair.

The members of the CMET recorded on to the document sharing system OWL that is provided by CTU. This electronic forum together with the group's e-mailing list will provide the main internal communication means between the group members.

The members and their organisations are responsible for the use of the results of the work and for providing resources for participating in the CMET work.

### **4.2 DRIVERS OF CMET'S WORK**

The CMET mission is to indirectly contribute to that the necessary knowledge (KSC), facilities and providers for Competence Maintenance, Education and Training exist and new personnel will be available for the future by maintaining the CMET network and transfer of knowledge on needs.

In addition, the CMET will seek to develop further the application of learning outcomes and mutual recognition with the help of the ECVET approach and

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taking into account the development of the European professional card as a part of the quality assurance of training activities and of individual's learning outcomes in geological disposal in Europe.

### **4.3 CMET CHAIR AND SECRETARY OF MEETINGS**

The CMET selects a chairperson either for a fixed term or the chair can rotate between the members and between meetings according to decisions within those meetings on the means for decision making. The first chair selected by the IGD-TP's EG to initiate the CMET Organisational Working Group was Ms. Marjatta Palmu (Posiva), who continues during the initiation of the new CMET in 2016.

The chairperson is responsible for the planning of the next meeting with support from the IGD-TP's Secretariat. The acting chair is also responsible for following up actions from the previous CMET meeting.

The CMET group selects a secretary for its annual meetings from the group for record keeping.

The selection of the chair and secretary convening and communicating the CMET group activities within the group will be decided jointly at the CMET meeting in spring 2017. Participation via remote connection is foreseen as a means of convening by the group or part of the group. External communication responsibilities are also agreed within the group.

### **4.4 CMET MEETINGS**

The CMET meets at least annually at a member organisation willing to host the meeting or in connection with a convenient venue like the IGD-TP Exchange Forum, NestET conference or in connections with meetings or training venues by the group members or by other European initiatives that include several CMET members as participants.

### **4.5 CMET WORKING MODES AND TASKS**

The CMET working group continues to follow its action list and to study the feasibility of implementing the recommendations made in the CMET StrAP (D3.2) and feasibility study on voluntary accreditation body (D3.5).

The Working Group's modes of working may consist of setting up different task forces for the Working Group's future dissemination activities as per the organisation of the CMET exchange forums or workshops in line with the IGD-TP's "Vision 2025", SRA, DP and the objectives of the CMET working group. This may take place in conjunction with other European initiatives (as defined earlier) in the field of Competence Maintenance, Education and Training.

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The tasks that may be included in the CMET action plan(s) are to be agreed biannually at the meeting preceding the following two year period.

- Promotion to sustain a sufficient critical mass in CMET in geological disposal in Europe to meet the needs for all stages of the repository development;
- Development and maintenance of quality guidelines and criteria for the accreditation of the CMET activities, especially training programmes in geological disposal in Europe following the Bologna and Copenhagen processes;
- Initiation of the development of joint CMET activities among its members or with other stakeholder groups to meet the identified needs including proposals for funding of these activities;
- Strengthening of existing E&T activities and initiatives by providing input and information on future needs and trends in education and training in the field of geological disposal; exchange related experiences and include participation of professionals from the member organisations in these activities;
- Disseminating information about accreditation and other recognition tools and to assist in the acknowledgement of the Europass<sup>1</sup> and European professional card in their relevant sector together with other European initiatives;
- Initiating the organisation of venues or exchange forums, workshops or similar events at least once a year to help achieve the CMET objectives and for disseminating information about CMET.

The CMET Working Group will promote its activities and communicate on suitable forums to stakeholders outside the group and towards related sectors via the established European networks.

## **5 MANAGEMENT AND APPROVAL OF CMET SPECIFIC DOCUMENTS AND RESULTS**

The CMET meetings are recorded in minutes that are sent for comment and approval of the working group members. In addition, a CMET membership list is maintained and distributed in connection with the ToR also to stakeholders outside the CMET group.

English shall be used in all documents produced by the CMET and in meetings.

The CMET group documents and stores the outcomes of its current work to the OWL CMET workspace. Access to the OWL workspace is provided to the signed in CMET members.

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<sup>1</sup> European Skills Passport <http://europass.cedefop.europa.eu/fi/home>

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In addition, an e-mail list will be used for notifying the CMET members of meetings and other activities.

**6 TERM OF CMET**

The CMET is a Working Group whose work is intended to have a long lifespan. The CMET group will cease to exist, when the members do not find it serving their interest and the group members does not convene anymore.

*The CMET group work has received financial support during 2016 from the EURATOM 7<sup>th</sup> framework programme grant under Petrus III (EC GA 605 265) Project.*