



Exchange Forum 5 CMET Session – Report on the Outcomes of the Walkabout

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(c) Marjatta Palmu



Recap of the CMET session objective

Purpose of today's session was:

- To give a brief overview of voluntary accreditation and about ECVET and foremost
- To collect multiple perspectives that would contribute to the feasibility study of the voluntary accreditation scheme and related work by the CMET working group

The main outcomes from each walkabout station are presented in the following:



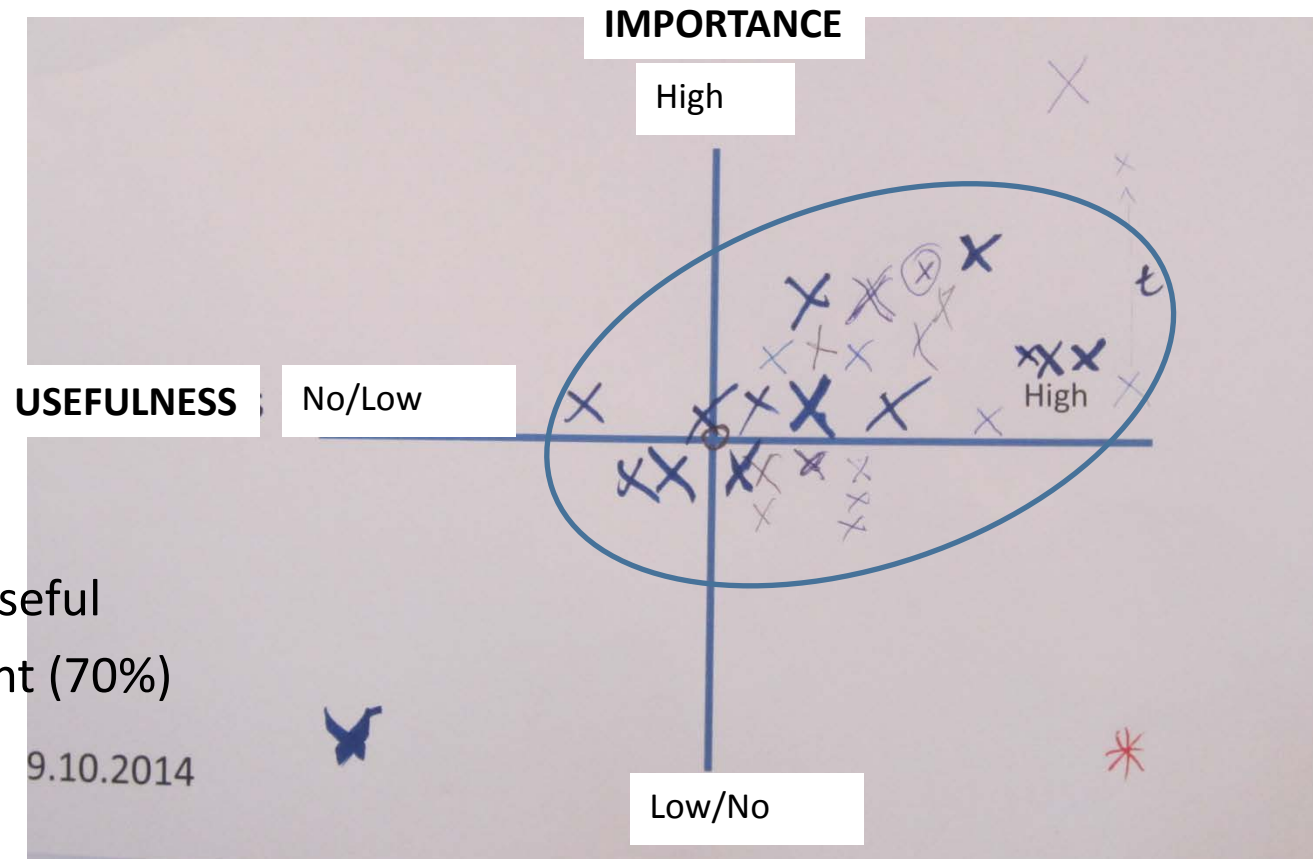
Station 1 (1)

Do we need an accreditation system?

Usefulness and importance of an accreditation scheme/system

- in general?
- to you?

- Considered more useful (80%) than important (70%)





Station 1 (2)

What would motivate you to apply such a system?

► *Motivations*

- *of a company to get staff to learn (+)*
- *is it worth it? cost vs. benefit*

► *Credibility*

- *favorable to public acceptance*
- *regulator acceptance*

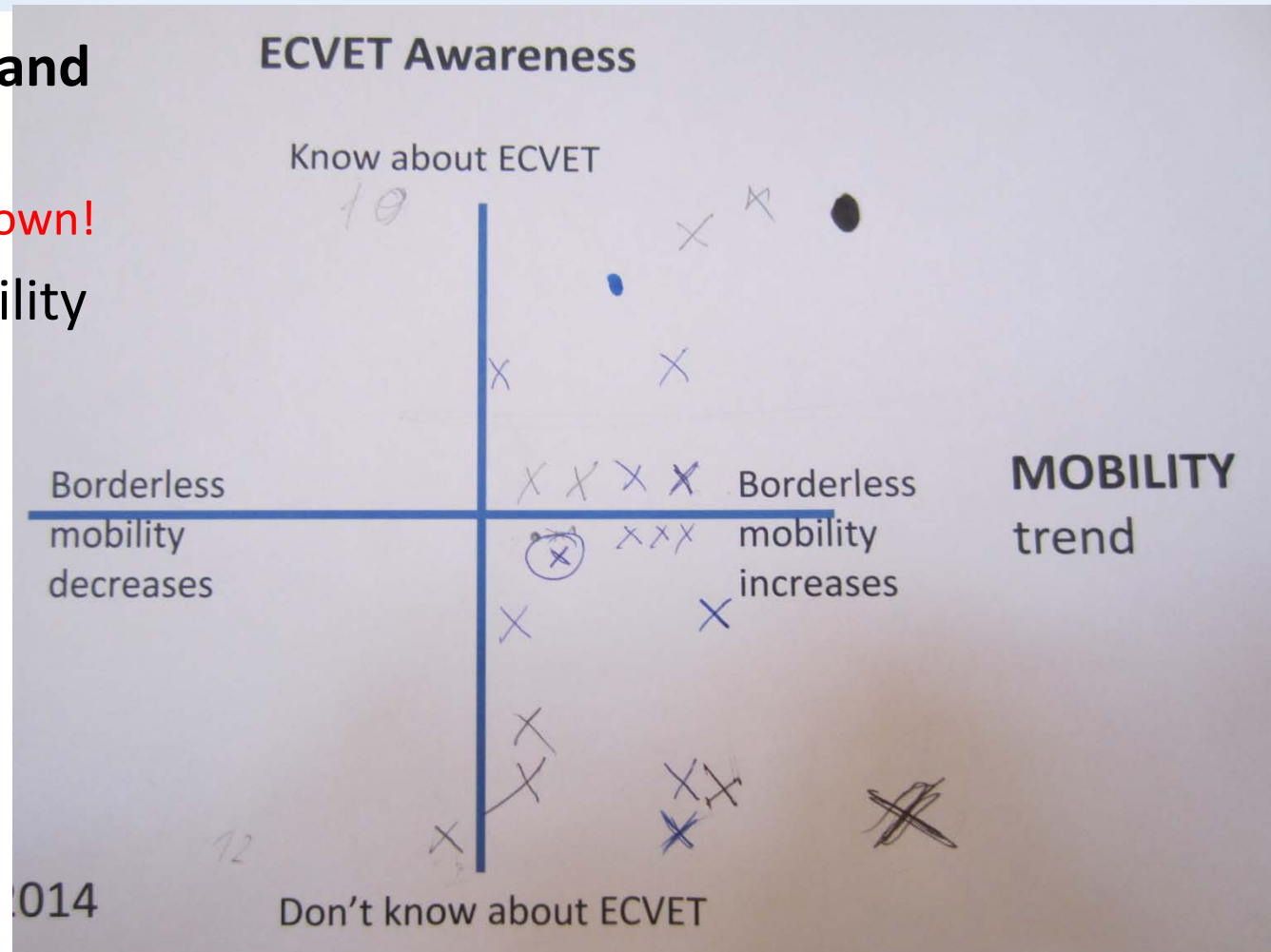
► *Mobility*

- *favorable for early career professionals*
- *+/- it is already happening*

► *View that it is very implementation dependant – the time/effort needed could be the constraint*

Station 2 (1)

- Do you understand what ECVET is?
- **Mostly not well known!**
- Borderless mobility increases





Views about Human Mobility and Life Long Learning

- ▶ 12 positive notes
 - “good concept”
 - Enables maintenance of critical mass and knowledge
 - Both in a perspective of individual and organization
- ▶ 3 doubtful
 - Does it really work
 - How country specific items concerned
- ▶ 2 concerned
 - How it effects individual workers
 - Brings stress, (unhealthy) competition, problems to personal life



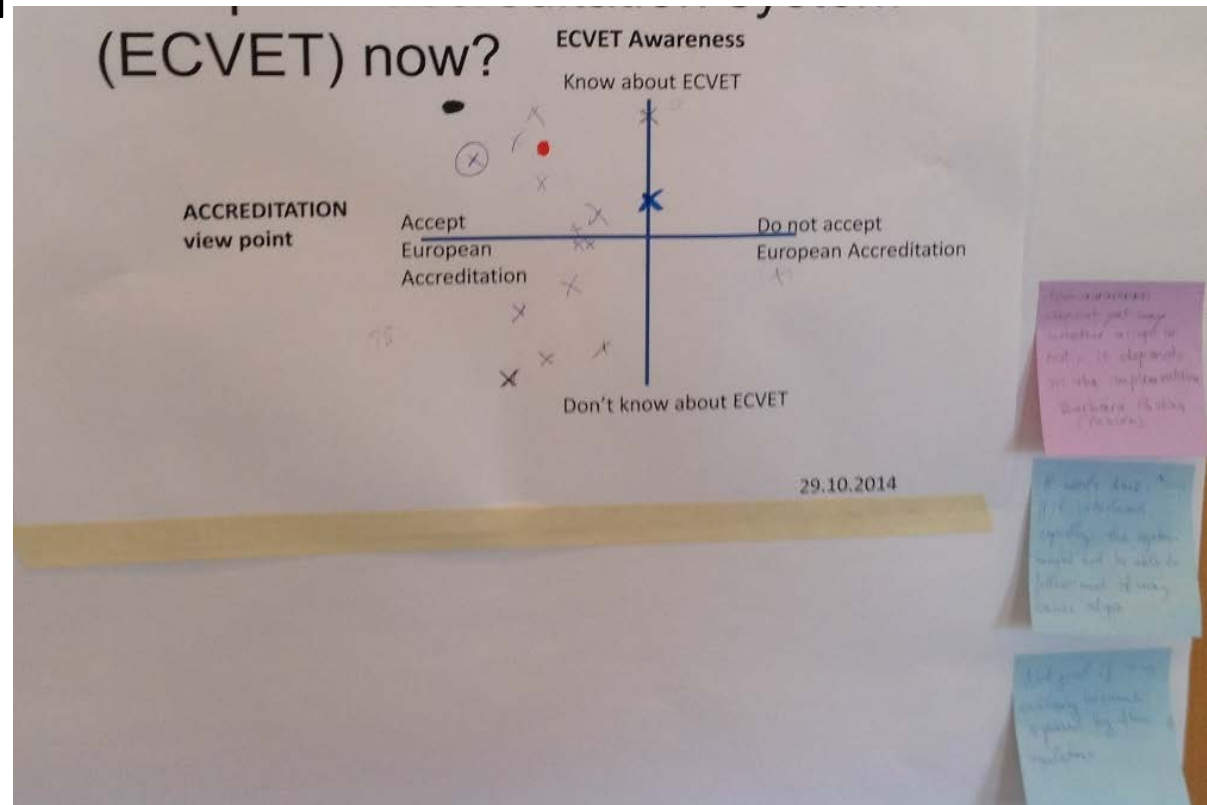


Station 2 (3)

Would you be willing to accept a European accreditation system (based on ECVET) now? **16 positive, 1 neutral, 1 negative**

ACCREDITATION
view point in the sticker notes: does it work, needs time to be introduced to the practice.
Problems if adopted too fast by the regulators

ECVET Awareness





Station 2 (4)

Those aware of the ECVET system to respond on:

What are your views about the proposed EU instrument ECVET (European Credit System for Vocational Education and Training)?

- ▶ *Those who are aware about ECVET willing to accept an European accreditation system?*
- ▶ *Also most of those who do not know about ECVET willing to accept it. "a good concept"*

Does your organisation currently collaborate with others in setting up a system using the ECVET tool?

- ▶ **Posiva and Petrus III-consortium**
- ▶ **Not adopted by organizations: 12 "No" responses**





Station 3 (1)

What is the current competence maintenance approach used in your organisation? Do you have one?

- ▶ *YES n=19; NO n= 2 ; Unsure n = 1*
- ▶ *Two groups identified: A: current professionals in the organisation and B: new entrants to the organisation*
- ▶ *Several approaches (> 25) – major approaches are*

A –current professionals	B – new entrants
Internal courses (N =7)	Choose students (PhD) (N = 8)
Seminars related to the dev. of competence (N = 2)	Training/supports to achieving educational goals (N = 7)
Chartership with professional bodies/ professional progression (N = 2)	University degrees in science (N = 5)
PhD (sponsoring, sabbaticals)	TSO training education (experts to starters) (N =2)



Station 3 (2)

To what extent would you/your organisation apply a competence assessment (accreditation) system, if a widely accepted scheme was available?

Number in favor: $N = 12$; NO $N = 4$, Do not know: $N = 6$

Where in the job hierarchy of your organisation does accreditation fit?
(*identify the 2-3 most frequent levels here*)

► *levels: Experts a top level*

Would you prefer/require/push your staff to be accredited? Would you require accreditation from new staff on entry, if accreditation was available?

How many would require accreditation? $N = 16$

How many would make it voluntary for the staff? $N = 7$

How many would require as an entry requirement? $N = 7$



Station 3 (3)

Would you be willing to integrate or do you see benefits in integrating your current system into a European accreditation system?

How many would integrate? (N = 12)

Benefits identified:

▶ *none identified*



Station 4 (1)

What are the appropriate approaches to find out/to measure/to distinguish (objectively?) if someone has achieved a required standard of mastering certain KSC (Knowledge, Skills and/or Competence)?

- ▶ **CV (12)**
- ▶ **Interview (12)**
- ▶ **Work Portfolio (7)**
- ▶ **References (publications, recommendation letters, ...) (7)**
- ▶ **Discussion on practical examples (case solving, ...) (6)**
- ▶ **Education (3)**
- ▶ **Probation period (3)**
- ▶ **Independent expert body (Accreditation, professional institutions) (3)**
- ▶ **Continuous appraisal (on the job) (1)**
- ▶ **Public presentation of previous works (1)**



Station 4 (2)

In which areas is the definition of learning outcomes most urgently needed, and why?	N= for each learning outcome
Safety Case Knowledge	7
Environmental areas / issues	5
Safety areas	3
Independent learning ability	3
Applied sciences	2
Interdisciplinary thinking	2
Modelling / numerical competences	2
Material sciences / design	2
Safety case understanding	1



Station 4 (3)

In which areas is the definition of learning outcomes most urgently needed, and why?	N= for each learning outcome
International framework	1
English language knowledge	1
Mathematics	1
Quantification of uncertainty	1
Hydraulics / Fluid mechanics	1
Performance Assessment	1
Quality assurance	1
Monitoring	1
Geography	1
Hydraulics / Fluid mechanics	1
Relationship between safety case/ repository concept	1



Station 4 (4)

In which areas is the definition of learning outcomes most urgently needed, and why?	N= for each learning outcome
Team work ability	1
Quantification of uncertainty	1
Chemistry	1
Geosciences	1
Performance Assessment	1
Basic Nuclear engineering sciences (reactor techniques, nuclear physics, ...)	1
Basic knowledge of fuel and fuel cycle	1
Project management	1
Public awareness / societal questions	1
Construction / operation	1



Station 5 (1)

What is your interest in having a voluntary accreditation for the geological disposal community?

POSITIVE

- ▶ *Ease exchange and mobility of experts in Europe*
- ▶ *Allow to learn about different methods, education styles, regulations and standards*
- ▶ *Preserve, maintain and train newly hired people.*
- ▶ *Promotes confidence building.*



Station 5 (2)

What is your interest in having a voluntary accreditation for the geological disposal community?

LIMITED:

- ▶ *What is the added value with regards to existing education systems and mobility tools (e.g. training courses in the framework EC funded research programs (matter of cost and dedicated subjects) ? -strongest comment-*
- ▶ *Preference for academic profiles*
- ▶ *Preference for mobility promoted by financial benefits*
- ▶ *Might restrict availability of experts*
- ▶ *Intercultural difficulties*
- ▶ *Language barriers*
- ▶ *Acquired skills are only fit for their specific program (country).*

What constraints do you see for such an accreditation system?
What type of risks do you see related to an accreditation system, if such a system existed?



Station 5 (3)

**What constraints do you see for such an accreditation system?
What type of risks do you see related to an accreditation system,
if such a system existed?**

CONSTRAINTS

- ▶ *Should be a complement to existing accreditation systems in some countries*
- ▶ *Requires times and resources to implement and maintain.*
- ▶ *Might be difficult to apply because the geological disposal program is a very specific and narrow field.*
- ▶ *Should take into account the national regulations.*



Station 5 (4)

Would you see the implementation of such a European system as a risk of decreasing the flexibility of your existing (staff qualification) system? (E.g. administrative burden?)

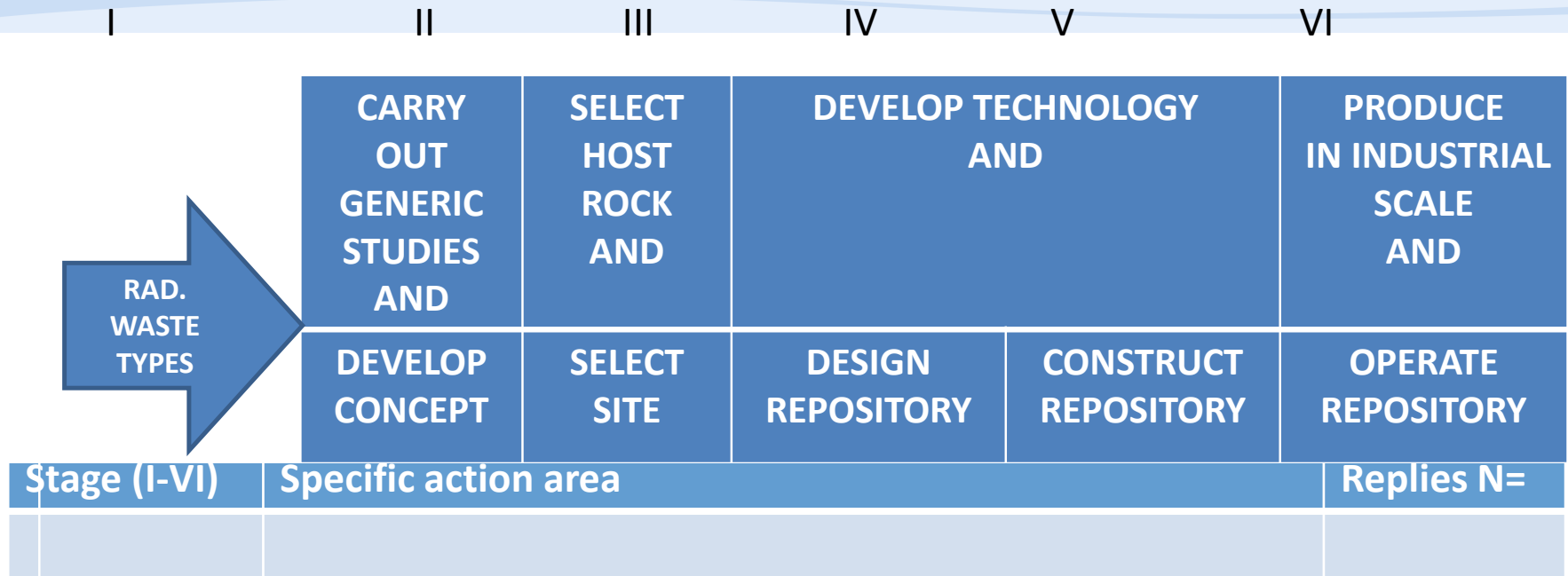
No impact N = 7 ,

What suggestions do you have to overcome the constraints and/or the risks (including resource constraints)?

to be addressed later



Station 6 (1)



Several comments on having too little time to reflect on this

Many topics picked from the Deployment plan especially under Key Topics 3 and 7



Station 7 (1)

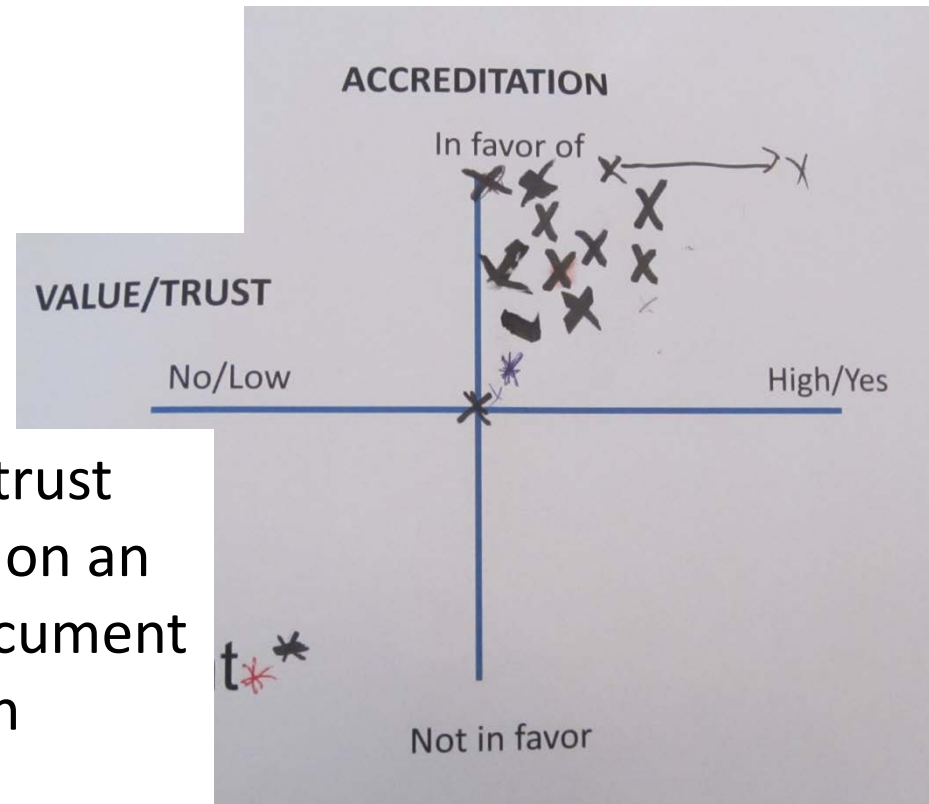
Are you in favour of accreditation?

Favor N = 17

Not in favor N = 3

Not sure N = 1

What value and trust would you place on an accreditation document issued by such an accred. body?



- Fear of the process becoming bureaucratic.



Station 7 (2)

Trust and value of an accreditation document?

- ▶ *depends strongly on the type of accreditation system implemented and who accredits (e.g. in IAEA high trust)*
- ▶ *difficult to answer due to the difficulties to measure learning outcomes*

Who should make up the accreditation body [so that you would trust their decisions]?

- ▶ *Expert groups, end-users; IAEA, an independent agency*
- ▶ *combination of universities (incl. ENEN, IAEA) and end-users; universities*
- ▶ *WMOs*



Station 7 (3)

What type of credentials should the members possess, who make up such a body?

- ▶ *interdisciplinary scientific competences, with expertise in waste management (like professors coming from university) and related*
- ▶ *experts for the IGD-TP or WMOs*
- ▶ *higher education institutions*
- ▶ *lot of replies saying don't know, need to think about it*

Where should this body reside in order to be trusted by your organisation?

- ▶ *an international and independent organisation*
- ▶ *IGD-TP organisation*
- ▶ *IAEA*
- ▶ *EU*
- ▶ *In a nuclear country*
 - » *No idea*



Station 7 (4)

What type of organisational form should the body have?

- ▶ *independent – most important, recognised by all relevant institutions*
- ▶ *an informal network*
- ▶ *part of EU (Energy division)*
- ▶ *Public and transparent*



Station 8 (1)

How should an accreditation scheme/system be financed?

- ▶ *European level funding (EU) i.e. our taxes $N = 10$*
- ▶ *ENEN special account*
- ▶ *By cost sharing – WMOs, industry, individuals ($N = 5-10$)*
- ▶ *Public private scheme*

And by whom?

- ▶ *WMOs; Government; Member states;, Nuclear fund...*
- ▶ *individuals themselves ($N = 7$)*
- **Risks:**
 - ▶ *should be affordable to the participants*
 - ▶ *time consuming*
- **Constrain:**
 - ▶ *keep at national level*



Station 8 (2)

What would be your willingness to invest into getting an accreditation?

For you N=	For your staff/organisation member N =	For a training programme N =	For something else:
9	5		1



Station 9

Other thoughts and views related to the voluntary accreditation scheme and competence maintenance in geological disposal from the participants:

- ▶ *Timing / timetable of such a scheme*
- ▶ *Lower level of EQF (attention to specific areas like RP, social sciences...)*
- ▶ *Lead organisations to get the other WMOs on board*
- ▶ *Advertise this*
- ▶ *Pilot and lessons learned*
- ▶ *Equally available for everyone*
- ▶ *Risks: Lack of flexibility, lack of heterogeneity (like in training); danger of narrow specialisation*



Quick conclusions

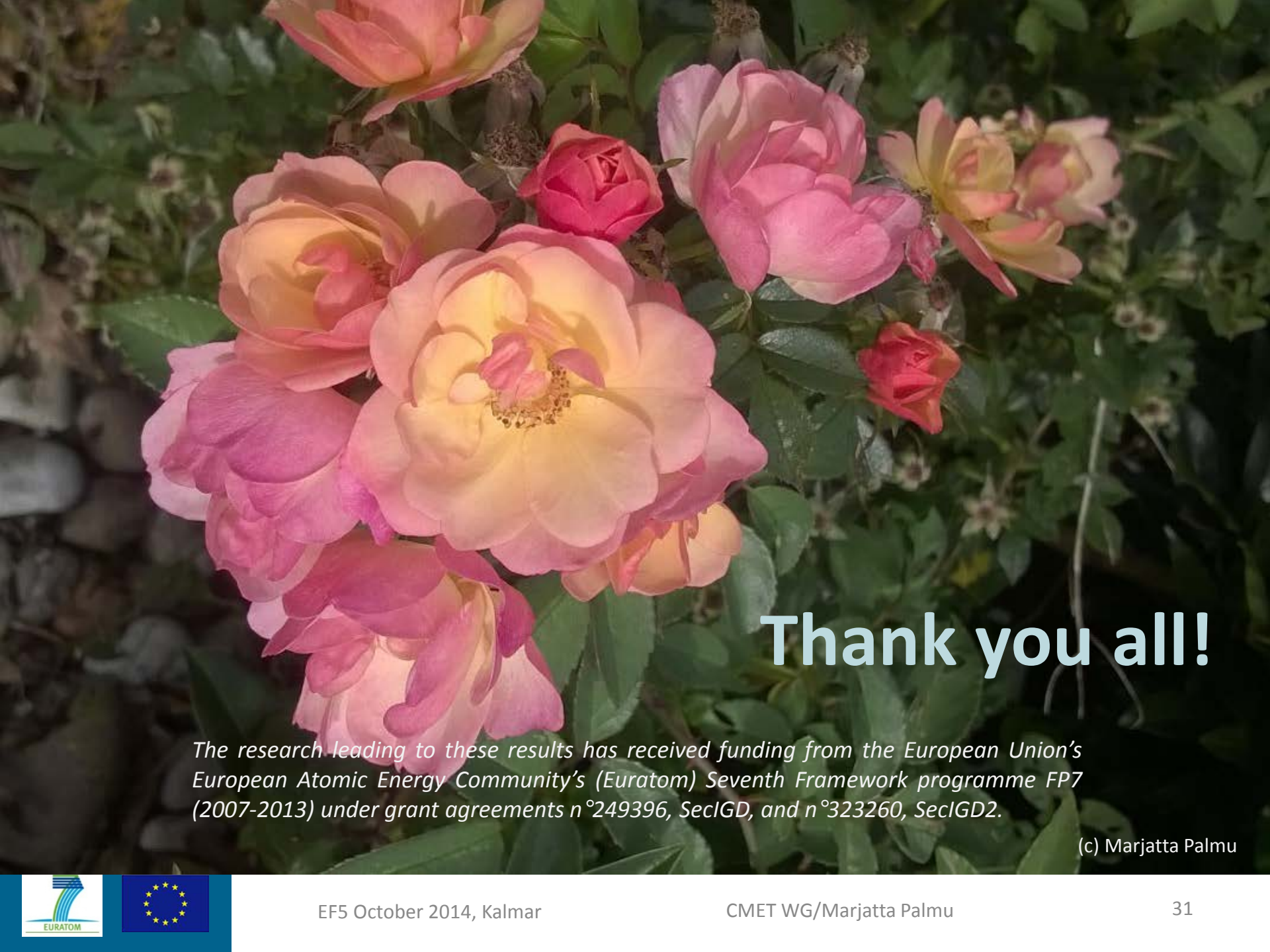
- to be determined at a later stage, not totally against – more cautious due to lack of information and awareness
- for several participants a new topic
- hopeful the awareness has increased now



The way forward after today

- Your detailed views will be now recorded, then
- Analysed and the final results handled at CMET no 4 on 26 Nov. in Paris (registration by 19 November 2014)
- Further discussions will take place in CMET no 5 in April 2015 in Lisbon back-to-back with Petrus III (either week starting 13 April or 20 April 2015);
- The report on the feasibility study on the voluntary accreditation schem will ready by end of 2015 with recommendations
- After that the decision will be much depending on you – the IGD-TP how to proceed.

The research leading to these results has received funding from the European Union's European Atomic Energy Community's (Euratom) Seventh Framework programme FP7 (2007-2013) under grant agreements n°249396, SecIGD, and n°323260, SecIGD2.



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