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Minutes of End-Users Council meeting

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[PETRUS-III]

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ABSTRACT:

Minutes of the PETRUS III End-Users Council meeting in Lisbon (23-24 April 2015).

RESPONSIBLE:

Université de Lorraine (UL)

INTERNAL REFERENCES:

Signatures

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Abbreviations

[PETRUS-III]

PETRUS III
End-Users Council Extended Meeting
LISBON, Portugal.
23 April 2015 MINUTES

*For a list of attendees please refer to the separate document LIST OF PARTICIPANTS.
Participating members are first referred to in the Minutes by their full name and subsequently by their initials.*

End-Users Council Extended Meeting

Introduction and Agenda Review

Document – ‘EUECM – Intro – NZ.doc’

Nadja Zeleznik (NZ), REC, Bojan Hertl (BH), ARAO

Presentation 1

Management Systems for RWM

Document – ‘Hertl ARAO EEUCM PETRUS III Lisbon koncna.pdf’

Bojan Hertl (BH), ARAO

A short presentation of the basics. No comment made.

Presentation 2

Leadership and Safety Culture in RWM – Development, assessment, and managing interfaces

Document – ‘Leadership and safety culture in radioactive waste management.ppt’

Helen Rycraft (HR), IAEA

Tasked with revising GSR3, but not going to ‘reinvent the wheel’ by reviewing everything. Focusing on what safety measures a nuclear facility MUST have, as standard.

Safety must be integrated, across all areas. Different domains must not be isolated.

Procedures are often too long and technical, meaning that the important aspects can be lost. Security and safety have to go hand in hand, simply out of common sense.

Regular assessment required in order to change standards.

Pedro Dieguez Porras (PDP) – How are safety measures implemented across different cultures?

HR – ‘Cultural fit’ is taken into account when an international staff will operate facilities.

Presentation 3

How to facilitate access to expertise and to maintain competences in geological disposal

Document – ‘CMET of IGD-TP in EEUC MPalmu.pdf’

Marjatta Palmu (PMP), CMET

Trying to address Nuclear Waste Management (WM) needs to meet the IGD-TP vision.

Three fundamental documents of IGD-TP – Vision, Strategic Research Agenda (what we still need to know in order to achieve the vision), and Deployment Plan.

Finland and France are on the track to achieved vision date mentioned in Slide II, with Sweden not far behind.

Importance of the role of the EC in the IGD-TP. In the EC desires to combine public and private research funding (European Joint Programming).

Behrooz Bazargan-Sabet (BB-S) will later address joint programming. New Master Deployment Plan (joint activities) of the IGD-TP plan will be available in July.

Small community like geological disposal requires greater cooperation, as knowledge and expertise can more easily be lost. It is necessary to learn from each other and assist members who have less knowledge and experience.

Presentation 4

IAEA approach to learning programmes

Document – ‘PetursIII_IAEALearning-vf-b.pptx’

Stefan Mayer (SM), IAEA

People in WM have not necessarily been trained, but evolved into the role. This programme can help younger people profit from members' expertise

How to get more mileage out of the educational effort made? Must share basic learning segments, helping people to go deeper more quickly.

Cooperation in the nuclear field – EVERY country is implicated. National and international needs and requirements combine.

Discussion related to the Posiva construction license application:

PMP – In Finland, we are waiting for a new government (to decide on the construction license) before the construction of the facility can be started.

SM – They will hopefully make sound decisions allowing projects to move ahead

How can we replace the people who have built countries' nuclear programmes? The new players will need to learn on their feet.

Also, I must point out that there are many training networks in place, beyond those included in the slides shown. There are also 50-75 hours of online material available, covering a wide variety of areas. Though composed with very limited resources, they contain lots of good material, but work on presentation is required in terms of public viewing. In any case, online material very helpful for bringing workshop attendees up to speed efficiently.

Records of previous discussions available at www.iaea.org

Presentation 5

Education on RWM from faculties point of view – Challenges

Document – ‘Petrus_end_user_Council_Lisbon_2015.pptx’

Behrooz Bazargan Sabet, UL

Common courses in place – possible to distribute them internationally. However, not a question of homogenisation, but rather complementarity.

Limits of synchronous e-learning due to timing and organisational issues. 24 students at peak, now just 12-15.

New eLearning system being implemented – Lectures being recorded and distributed over time to different users. Students take courses by themselves, but there will nonetheless be direct contact online to answer questions, etc. This will be more efficient and more effective

It was decided that the scheduled presentation from Abdesselam Abdelouas (AA) should be moved to the main meeting. Details of this presentation can be found in the main minutes under WP1.

Presentation 6

Position from WMO – Challenges

Document – ‘ End user 2st meeting-WMO-NZ.ppt’

Nadja Zeleznik, REC

Fundamental problems: Common courses preferred to detailed knowledge, due to material limitations. Unwillingness to invest appropriately, in terms of both finance and manpower.

Strong emphasis on the long-term required.

BH – Believes that some of the points raised have been recognised and are now being worked on in Slovenia.

DISCUSSION

NZ – Do the presentations bring new ideas and new opportunities?

PDP – Difficult to meet objectives in the current economic circumstances. It is challenging, but we have a duty to meet this challenge. The loss of knowledge and expertise has been recognised, but public perception also plays an important role. As scientists, we can make a contribution to shift public perception.

SM – Are we talking about geologic disposal or waste management?

NZ – Both, really.

SM – In relation to educational programmes, there was talk about end-users' needs, but we did not really hear them. How can ideas be made into a concrete approach? There is a need to have trained professionals and replace an ageing workforce. They need to have a notion of safety culture before starting and full training completion times need to be shorter. What is **NZ**'s view on this?

NZ – We talked about this in Sweden [\(the last EUC meeting\)](#), could **Irena Hanusova (IH)** please talk about this.

IH – We need to send students to facilities straight away and not wait for them to gain knowledge of geological disposal.

NZ – So you need to have a more general approach, with specialists out-sourcing.

BB-S – I would like to say something about needs and how PETRUS addresses them. At the beginning of the initiative, there was an assessment of the needs, just tackling the scientific and technical subjects that had to be developed for interested, regular students. This is the content of the syllabus I showed in my presentation.

For the professional part, we made a general assessment in PETRUS II, but now we are going into detail by studying job profiles. **AA** has already produced one and we are working on a second one. Details of that will be given this afternoon in WP1.

There are different approaches to this need. One is what we are doing here, with end-users expressing their point of view. We try to have a holistic approach, going inside projects, producing job profiles, and giving a general view of what is needed. **NZ**'s presentation was interesting in this respect.

NZ – I would like to emphasise that my presentation was not a criticism, but an expression of the challenges faced.

BH – Cooperation with teams is required because we are a small group. In this way, students are learning not only how to cooperate with professionals, but they are also gaining experience of the areas they need to cover. Of course many areas need to be improved, but this is what we are trying to address. We are however limited because we are public servants and there are very strict rules regarding funding. Every euro must be accounted for. This is the reality we need to tackle.

In relation to a systematic approach, the government do not have the same direct goals as us and, on a more basic level, if we do not have a stable context, we need decision-makers to at least try to understand the problems we are facing in terms of time and money.

NZ – **PMP**, perhaps you can present your perspective.

PMP – I can express my institution's specific context, but we have already highlighted issues that prevent progress. The economic context and differing priorities also have an impact.

NZ – Does anyone else have more to offer?

Rosa Lo Frano (RLF) – Italy is not very advanced and needs links between **WMOs** and universities to help projects progress. It has been difficult to support this link. **BH** and **IH's** perspectives are completely different from mine. If you have to start from nothing, you need to identify different, more basic priorities.

NZ – We too started from zero, with no university programme available. We used different training opportunities to develop competence and developed numerous cooperative ventures, including with Belgium, in order to expand.

RLF – This is exactly the point. I am trying to develop links.

BH – The people we are hosting are very proactive and really try to gather experience in order to prepare themselves to start, but, as you say, it is a different perspective when starting.

RLF – There is much more proactivity and some actions are planned. From my personal perspective, I am trying to really approach the problems felt by users.

Concetta Fazio (CF) – My impression is that you have a lot of knowledge about users' needs, a lot of work has been done to define them. However, maybe the problem is to attract people. There is no career development, no financial motivation. In Europe, it seems there are different reasons we can't attract people. We need to develop strategies. We need to develop public awareness.

HR – Coming at it from a different angle, the IAEA has agreements with different member states and they have to sign on to safeguards and agreements. If you wish to get an issue raised, you need to lobby the **IAEA** council meeting. You need to think politically if you want things to move on and have your profile lifted. We all know that radioactive waste disposal is not something that politicians want to talk about, but, if you raise it in an international forum, this can help us move on.

CF – I'm not sure we need an international political discussion on this. We need to understand what is the best communication method. Does the public want to know every detail? I think a more positive approach is needed and I can feel a lot of frustration, but we need to move things on.

AA – In relation to **HR**'s comment, in France, politicians need to talk about waste. In relation to E&T, needs are closely related to R&D needs and the stage you are at in the programme. Needs must be addressed at each stage, with close cooperation between bodies.

NZ – I think you have raised a lot of good points and raised things we can discuss in future meetings.

BB-S – I think **Concetta** has put her finger on the button. We need to combine academic and professional expertise. But the main problem is where to find people interested by our programme. Remember, in PETRUS, we organised a programme for professional development, but we had just two students, after a lot of time and effort invested. This is not effective. Even in France, where there is a developed structure, there is a clear need to train new people. But how can we push people to come to these courses, this is the main problem we need to answer. I don't think the main problem is how to structure the programme. I think we can do that, but we can't find applicants.

Phil Vardon (PV) – From a university perspective, students are interested, but they don't see the job prospects. Part of PETRUS's objectives is trying to pool positions available, but sustainability is key. The interest is there, but the jobs aren't. So how do we achieve a through-put.

PMP – There is a new set of managers in place, who don't realise that their knowledge was created internationally, and believe that they do not need cooperation.

NZ – There is no money around to cover specially trained staff.

Radek Vasicek (RV) – Money informs everything. I am here as a provider and I must know my customers' demands. I need to know who is really willing to invest in E&T. What is the cost? What is the best approach? These need to be defined by end-users.

BH – In relation to **PV**'s comments, how can things be sustainable? I think that things should be merged and clarified on a European level. Can we offer the required programmes on a global level? Many countries, especially developing countries, would be interested. We have European money, but it will soon be gone, so we need to emerge further.

PMP – How much are you willing to invest in this, **BH**?

BH – I want to say that money won't be a problem, but worldwide I think we can find the customers.

PMP – Is it responsible to shift the responsibility to someone else? We can't expect others to develop a worldwide course, without assurances.

Tommy Claesson (TC) – We are producing students and will invite people from SKB to talk to students for free. This is for the basic levels. Then, at PhD level, students work with SKB and are partly financed by them. Then they are in the organisation and they can train them to be exactly as they wish.

We have a programme with SKB when students come to spend two weeks with us, when students spend a week doing lessons and then spend a week in the lab and underground. We think this is very good, but it is a big demand on supervisors, as students know nothing about RWM. 50% of teachers come from SKB and 50% from outside. Students are generally civil engineers with a nuclear background.

BB-S – You are talking about regular students. We have solved problems in relation to them. But what we are talking about is professionals, which is completely different. If you organise a course for professionals, you will find all the problems we mentioned. A high level of time and money is needed, and the content is not the same. We do not have any assurance that people will be interested in these courses. In the past, we have established programmes, but found, at the end of the day, that the funds were not available.

TC – What we propose is not set in stone and can be adapted.

PMP – We too have something like that, but we need more specialised knowledge. We do not get experts for free.

NZ – We have a fund available and education needs to be included there.

PV – How much of that is for training?

NZ – It was never assessed, but based on the cost of different components, and training should of course be a part of this.

PMP – When networks like Stefan's were losing funding, they had to find a way of engaging. With regard to national funding, this relates to national competences and needs to take place within the country. This funding cannot be spread elsewhere.

NZ – With us, this could take place.

SM – Agencies are talking about ageing staff, but at the same time they are also recruiting. So what did your customers tell you? What is your experience within the organisations? Is information on training available?

IH – We currently send people to these programmes.

Isabel Paiva (IP) – We have to think about the regulators of the future. We in state labs are being asked to provide them. And now somehow the universities have the responsibility for RWM. Also, nuclear physicists know a lot about their subject, but not about RWM. In the future, universities may be so attached to this area.

BB-S – I think we need additional brainstorming, but most of the most important questions are now on the table and we have found different ways to answer them.