

ANNEX XIV: UNDERSTANDING AND FACILITATING THE ENERGY TRANSITION TO ACHIEVE THE
'WELL BELOW 2°C' GOAL

72ND EXECUTIVE COMMITTEE MEETING

Date: Tuesday, December 12, 2017 (14.00 - 18.00)
Venue: PSI, Zurich, Switzerland.
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Kenneth Karlsson, [keka@etsap.org].

MINUTES OF THE 72ND EXECUTIVE COMMITTEE MEETING

held on Tuesday, December 12, (14.00 - 18.00), 2017, at
ETH, Zurich, Switzerland

TABLE 1: PARTICIPANTS

N.	Country	Participant	Delegate	Attended	Stand-ins
1	Australia	CSIRO	Mr. Luke REEDMAN	Yes	
2	Belgium	VITO/SPW/Brussels	Mr. Jan DUERINCK	Yes	Ms. Natalie Arnoucd
3	Denmark	DEA	Mr. Aksel Laurids BECK	Yes	Mr. Kenneth Karlsson, OA
4	EC	JRC Directorate	Mr. Wouter Nijs	No	
5	Finland	VTT/TEKES	Ms. Pia SALOKOSKI	Yes	Ms. Tiina Koljonen
6	France	ADEME/EDMP/ DGEMPEAD	Ms. Nadia MAIZI	Yes	Mr. Gilles Guerassimoff
7	Germany	IER	Mr. Markus BLES�, Vice chair	Yes	
8	Greece	CRES	Mr. Philip Siakkis	Yes	Mr. George Giannakidis
9	Italy	ENEA	Ms. Maria Rosa VIRDIS, Vice Chair	Yes	
10	Ireland	SEAI	Mr. Brian Ó GALLACHÓIR, Chair	Yes	Skype
11	Japan	IEEJ	Mr. Yuhji MATSUO	Yes	
12	Kazakhstan	NURIS	Mr. Yerbol AKHMETBEKOV	No	
13	Korea	KEA	Ms. HoChul Shin	Yes	Mr. Yoon-Jung Na
14	Netherlands	ECN	Mr. Bob van der ZWAAN	No	
15	Norway	IFE	Ms. Kari Aamodt ESPEGREN	Yes	
16	Russian Fed.	ERI-RAS	Mr. Sergey FILIPPOV	No	
17	Spain	CIEMAT	Ms. Helena CABAL	Yes	
18	Sweden	STEM	Ms. Josefin THORESSON	Yes	Ms. Anna Krook-Riekola
19	Switzerland	PSI	Ms. Anne-Kathrin FAUST	Yes	
20	UK	DECC	Mr. Alec WATERHOUSE	Yes	Mr. Steve Pye, UCL (Skype)
21	US	DOE	Mr. Ian Mead	Yes	
22	Sponsor	ENEL Foundation	Mr. Carlo PAPA	Yes	Mr. Giuseppe Montesano, ENEL
23	Sponsor	GE Global Research	Mr. Trevor KIRSTEN	No	
Officers:					
		Mr. Gary Goldstein	ETSAP, Liaison Officer, GAMS, MARKAL, DWI		
Guests:					
	Mr. Uwe Remme	IEA	Mr. Maurizio Gargiulo	E4SMA, Italy	
	Mr. Amit Kanudia	Kanors	Ms. Birte Jørgensen	DTU, Denmark	
	Mr. Kannan Ramachandran	PSI, India			

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AGENDA AS OF 26 NOVEMBER 2017

No.	ITEM	DOCS
1	QUORUM COUNT	
2	ADOPTION OF THE AGENDA	
3	FOR THE RECORD	
3.1	<i>Minutes of the 71st Executive Committee</i>	H1
4	IEA-ETSAP IMPLEMENTING AGREEMENT	
4.1	<i>Communication from the Secretariat</i>	
4.2	<i>ETSAP Participation and Outreach activities</i>	H2
4.3	<i>Strategy for the Development of ETSAP's tool</i>	
5	ANNEX XIV (2017-2019): UNDERSTANDING AND FACILITATING THE ENERGY TRANSITION TO ACHIEVE THE 'WELL BELOW 2°C' GOAL	
5.1	<i>Progress of current projects and ETSAP tools</i>	H3
5.2	<i>Progress on ETechDS technology sheets and collaboration with IRENA and DEA</i>	
5.3	<i>Annex XIV 2017 and 2018 Budget and general status from OA</i>	H4
5.4	<i>Selection of new projects</i>	H5+H6
5.5	<i>Confirmation of the participation fee for 2018</i>	
6	OTHER BUSINESS	
6.1	<i>Next workshop and ExCo meeting: Summer meeting 2018</i>	
6.2	<i>Successive meetings: Fall meeting 2018.</i>	
6.3	<i>Others</i>	
ATTACHMENTS		
H1	<i>Minutes of the 71st ExCo meeting, held in Maryland Tuesday, July 11, 2017.</i>	
H2	<i>ETSAP Participation and Outreach activities</i>	
H3	<i>Progress of current projects and ETSAP tools</i>	
H4	<i>Annex XIV programme of work and budget for 2017 and 2018</i>	
H5	<i>New project proposals selection</i>	
H6	<i>Migration VEDA to new platform</i>	

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Opening

The Chair, Mr. Brian Ó Gallachóir, opened via Skype the meeting at 14:00 welcoming the delegates and guests and thanking.

1. Quorum Count

The chair asked everyone representing a country to mention name and country.

ETSAP has twenty-three Participants comprising twenty-one Contracting Parties (CP) and two Sponsors. The quorum is one-half of the members plus one, i.e. twelve. 8 delegates attended in person and 9 participated through their stand-ins (see above, Table 1).

A quorum was present.

2. Adoption of the agenda

The Chair presented the agenda for the Executive Committee (ExCo) meeting. Proposal of discussing World Bank interest in uncertainty and Well below 2C future under "Any other business" was suggested.

The agenda including the suggestion was adopted.

3. For the record

3.1 Minutes of the 71st Executive Committee

H1

The chair apologised for the delay of the minutes and in the future will relay to get the minutes out more quickly. There were no further comments and the minutes were adopted.

4 IEA-ETSAP Technology Collaboration Programme

4.1 Communication from the Secretary

There was no written communication from the secretariat, but it was presented on the meeting by Mr. Uwe Remme from IEA.

IEA is in a process of streamlining the communication from the TCP's and are planning a report from the TCP's twice a year. It will be prepared by Diana Louis who is coordinating the TCP's from IEA side. The report for the second half of 2017 was sent to the delegates shortly after the ExCo meeting.

Under the Chairmanship of Ibrahim Baylan, Swedish Minister for Policy Co-ordination and Energy, the IEA 2017 Ministerial Meeting brought together Ministers from the IEA's 29 member countries, seven Association countries (Brazil, China, India, Malaysia, Morocco, Singapore and Thailand), partners and more than 30 CEOs from the world's leading energy companies. The theme of the two-day meeting was "Bolstering energy security for sustainable global growth."

Some highlights from the Ministerial Meeting:

- Ministers endorsed further strengthening of the IEA's role as the global clean energy hub, including its focus on technology, policy, and market design. As regards technology development and innovation, Ministers endorsed the new IEA Medium-Term Strategy for Energy Research and Technology 2018-2022
- Mexico has been invited to join the IEA. (Note: Mexico became the IEA's 30th member on 17 February 2018.)

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- A new TCP was launched at the ministerial on Clean Energy Education and Empowerment (C3E) focusing on gender balance in the energy sector. Sweden, Italy and Canada are the TCP founding members.
- The IEA also announced a new Clean Energy Transitions Programme, a multi-year, EUR 30 million plan to support clean energy transitions around the world. Backed by many member countries committed to promoting the development of clean energy, the new Programme is intended to leverage the IEA's unique energy expertise across all fuels and technologies to help accelerate global clean-energy transitions, particularly in major emerging economies. A work-stream is being developed on the capacity building in energy modelling and IEA is interested in a close collaboration with ETSAP on this as ETSAP is already doing training with modelling tools.

The second TCP universal meeting was held in fall 2017, bringing together 31 TCPs, the CERT, Working Parties, partner countries, as well as by each the Clean Energy Ministerial and Mission Innovation Secretariat to discuss strategies, communication and collaboration. One theme was how to increase exposure and visibility of the TCP's outside IEA.

Recent publications were noted including:

- WEO2017 including two special reports on energy access and South East Asia. WEO introduced a new scenarios called Sustainable Scenario (450ppm).
- There will not be an ETP in 2018. IEA will likely go back to a two-year publication cycle for ETP. The modelling and scenario work will continue next year focusing on industry, CCS and material demands in the coming period. Ongoing is work on global technology roadmaps for the iron and steel sector and the cement sector.
- Nordic EV outlook (NEVO) is on the way. A Nordic version of the Global EV Outlook (GEVO).

ETSAP chair was representing ETSAP at the TCP universal meeting and at the following CERT meeting. The response to ETSAP's work was very positive. It is positive that IEA is reaching out to ETSAP for closer collaboration in emerging countries. In relation to the TCP meeting, it is important to advance ways ETSAP can collaborate closer with other TCP's. ETSAP has held joint sessions at ETSAP workshops (in Maryland with IEA GHG TCP and in Zürich with IEA Bioenergy TCP) and should continue pursuing this path. There is a suggestion for a focus session at the next meeting in Gothenburg together with other TCP's. The Swedish host of the next ETSAP meeting is also very interested in a session on biomass and Power to X.

The chair suggested that parties interested in organizing a session or maybe a full day at the next workshop together with the IEA Bioenergy TCP and Advanced Fuel Cell TCP go together and contact ETSAP Project Head, the Chair or OA for how best to progress on this.

The Wind TCP could also be interesting for ETSAP, perhaps to invite for fall meeting. The scope could be widened to cover RE integration.

The chair was asking for reaction from the floor on further collaboration with IEA, the TCP collaboration and the topic is slated for discussion for next ETSAP workshop. There was positive response from all commenting.

4.2 ETSAP Participation and Outreach activities

ETSAP organised a joint session at the Expo 2017 in Astana, Kazakhstan.

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US re-engagement was welcomed, EIA are the new contracting party from US and is now represented in the ExCo by Mr. Ian Mead.

There was a meeting with ministry of energy in Mexico and arising from that a planned training in end January 2018, where a one day workshop could be attached to this. IEA has a close collaboration with Mexico and can support trainings and workshops there (contact Uwe and Diana).

IEA is also trying to engage more in Brazil.

In general a shared calendar between the TCP's and IEA could help when organizing workshops in the different collaboration countries.

There is an interest from Morocco to host an ETSAP workshop and training - this will be followed up.

4.3 Strategy for the Development of ETSAP's tool

Migrating VEDA to a new Platform

H4

The current version of VEDA is about 15 years old and is built on a VB6/MS Access platform. VB6 has been discontinued by Microsoft several years ago and MS Access is not really meant to support the database sizes that our models have grown to. So, there is a clear need to migrate to a more robust platform, for the user interface (UI) as well as database.

The migration of VEDA will cost 300k€ and a partial prototype will be ready within 1 year. It will still be based on the same license system, KanORS-EMR keeping the Intellectual Property rights etc. The architecture of the new VEDA could be open part of the system so others can develop add-ons.

The two underlying principles will guide the migration:

- The basic functionality of VEDA will not change (much), however current software tools will improve the look-and-feel as well as the performance, and
- Existing models will be able to be ported by the user simply by SYNCing once the new system is available.

It was decided to set up a supervisor entity (Maurizio and Gary) and a steering group (SG) of ETSAP members. The SG was elected and the members will be Markus Blesl, Tom Kober, Luke Reedman, Kari Espegren, Paul Dodds and George Giannakidis. George will be the contact point of the SG.

It was decided to approve the migration undertaking with the following details:

- The project will run over 2 years, so it finishes within the current annex;
- The supervisor entity will receive 5k€ per year for their service;
- KanORS-EMR will be paid 150k€ a year for the migration, and
- SG has to approve a working program each year before contract and payment can be approved and will monitor progress and deliverables.

Medium term VEDA improvements: can be delivered within 1 month, 60k€. APPROVED
Amit will hold a session on power modelling at next ETSAP workshop focusing on the new features.

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The technical support for ANSWER user is extended for 2018 at a cost of 6k€. Proposal was approved.

5 ANNEX XIV (2017-2019): UNDERSTANDING AND FACILITATING THE ENERGY TRANSITION TO ACHIEVE THE 'WELL BELOW 2°C' GOAL

5.1 Progress of current projects and ETSAP tools H3

Project Head and the Operating agent gave an update on the running projects. The update should in the future include expected date of deliverable. There was not much to report as the signing of the contracts was delayed and thereby the projects. At this point only one contract was missing signature.

The ETSAP book is progressing thanks to all the authors and Maryse and it will be available sometime before summer 2018, with the target be for release at the IEW.

5.2. Progress on ETechDS technology sheets and collaboration with IRENA and DEA

The ETechDS data normalization phase 2 was cancelled and the money not spent. This leaves an open discussion on what should happen on technology data in ETSAP. IRENA is interested in collaboration on technology data and a common workshop could be an option. Brian will contact IRENA to discuss options. The Danish Energy Agency (DEA) might also interested in collaboration on technologies.

5.3 Annex XIV 2017 and 2018 Budget and general status from OA H4

OA gave an overview of the status for taking over the responsibility as operating agent. A power point on this was shown.

The ETSAP budget was discussed:

- The VEDA migration project was added to the budget sheet and it was decided to increase the secretary budget in 2017 by 5 k€ because of extra start-up costs. Training budget was increased to 15 k€ a year because of increase in number of courses. "Other" is increased to 10 k€.
- The challenge of project contracts was discussed, in particular how the project lead on a ETSAP project can more easily sub-contract with other partners. Alternatively the OA could split the contracts, but this would increase administration for the OA. OA will investigate this further to find some potential solutions.

5.4 Selection of new projects H5+H6

Around 98k€ can be spent from 2017 budget on the prioritized project. The final number depends on all payments for 2017 are received.

There was a discussion about when projects are beneficial for ETSAP and how detailed the presentation of the projects should be.

It was deemed important that projects focus on improvement of TIMES code and to engage several ETSAP members. All these parameters are included in the evaluation in the scoring so are taken into consideration when evaluation proposals.

The project proposals were evaluated by the ExCo members and the total scores collected by the project head. Four projects reached the threshold with a budget summing up 185k€.

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It was decided to fund the two projects with the highest score “ETSAP-TIAM phase II” (67.25 k€) and “Introducing Ancillary Services in TIMES” (38.5 k€) summing up to 105k€.

5.5. Confirmation of the participation fee for 2018

The Chair suggested that the annual ETSAP participation fee remain 20k€ in 2018. It was discussed whether to have a lower rate for non-OECD. In general it would be good to reduce the barriers for joining ETSAP as much as possible. The costs of GAMS and VEDA has already been reduced for non-OECD's.

ETSAP should consider other options like free training and support to travels as we are already doing.

It was decided that a group should come up with a proposal for how to handle alternative participation fees for non-OECD on the next ExCo June 2018 in Gothenburg. The group consists of Brian, George and Gary.

It was approved to maintain the participation fee at 20k€ in 2018.

6 OTHER BUSINESS

6.1 Next workshop and ExCo meeting

17-18 June 2017 Gothenburg, Sweden together with IEW 2018 (19-21 July).

6.2 Fall meeting 2018

Should be in early November 2018 due to other meetings coming up (COP etc.).

Germany, Australia, Belgium offered to host the workshop. After voting it was decided that Germany will be the host for the ETSAP workshop in fall 2018.

6.3 World bank paper on uncertainty

Marian Fay (chief economist World-bank) approached Gary asking if ETSAP was interested in offering a paper on uncertainty. A quick search on the ETSAP web-page gave some 10 page description on uncertainty using ETSAP tools. UCC with collaborators had already prepared a review paper on uncertainty in energy system models. Gary suggested to follow up on how ETSAP can feed into the World Bank on this topic. It was suggest to prepare a short concept note for World Bank about what ETSAP can do with its tools with respect to assessing Uncertainty towards a well below 2C world.” Gary will interact with Brian on how to proceed with this.