

ANNEX XV (2020-2022):
ENERGY SYSTEMS AND SUSTAINABLE DEVELOPMENT GOALS



FINAL MINUTES OF THE 86TH EXECUTIVE COMMITTEE MEETING

Date: Monday, May 23, 2022 (14:00 - 17.05 CET)
 Venue: Hybrid meeting, Freiburg, Germany
 Contacts: Kari Espegren, (kari.espegren@ife.no), Brian Ó Gallachóir (b.ogallachoir@ucc.ie),
 George Giannakidis (ggiannakidis.gg@gmail.com)

TABLE 1: PARTICIPANTS

N.	Country	Participant	Delegate	Attended	Stand-ins
1	Australia	CSIRO	Mr. Luke REEDMAN	Yes	
2	Belgium	VITO/SPW/Brussels	Mr. Frank Meinke-Hubeny	Yes	Pieter Lodewijks
3	Denmark	ENS	Mr. Kristoffer Steen Andersen	Yes	Simon Andersen
4	Finland	VTT/Business Finland	Jussi Mäkelä	Yes	Tiina Koljonen, Vice Chair
5	France	ADEME/EDMP/ DGEMPEDAD	Mr. Emmanuel Combet Ms Nadia Maisi	Yes	Sandrine Selosse
6	Germany	IER	Mr. Markus BLESL, Vice chair	Yes	
7	Greece	CRES	Mr. Philip Siakkis	No	
8	Italy	ENEA	Ms. Maria Gaeta	Yes	
9	Ireland	SEAI	Mr. Brian Ó GALLACHÓIR, Chair	Yes	
10	Japan	IEEJ	Mr. Yuhji MATSUO	No	
11	Kazakhstan	NURIS		No	
12	Korea	KEA	Ms. HoChul Shin	No	
13	Netherlands	TNO	Mr. Bob van der ZWAAN	Yes	Francesco De la Longa
14	New Zealand	EECA	Mr. Vincent Smart	Yes	
15	Norway	IFE	Ms. Kari Aamodt ESPEGREN	Yes	
16	Russia			No	
17	Spain	CIEMAT	Ms. Yolanda Lechón	Yes	
18	Sweden	STEM	Ms. Josefin THORESSON	Yes	
19	Switzerland	PSI	Ms. Anne-Kathrin FAUST	Yes	Mr. Evangelos Panos
20	UK	BEIS	Mr. Barry-Jon de Souza	Yes	
21	US	DOE	Ms Angelina LaRose	Yes	
22	Sponsor	ENEL Foundation	Mr. Carlo PAPA	Yes	Mr. Claudio Pregagnoli

OFFICERS AND GUESTS

David Daniels	Chalmers Univ., Sweden	Paul Dodds	UCL, UK
George Giannakidis	ETSAP Project Head	Maurizio Gargiulo	E4SMA, Italy
Gary Goldstein	Decisionware. USA	Amit Kanudia	KANORS, India
James Glynn	Univ of Columbia, USA	Kristina Haaskjold	IFE, Norway
Antti Lehtila	VTT, Finland	Kathleen Vaillancourt	ESMIA, Canada
Christoph Jessen	FZJ, Germany	Anna Krook-Riekkola	Lulea Univ., Sweden
Pádraig Daly	SEAI, Ireland	Pernile Seljom	IFE, Norway

86TH EXECUTIVE COMMITTEE MEETING

AGENDA

No.	ITEM	DOCS
1	QUORUM COUNT	
2	ADOPTION OF THE AGENDA	
3	MINUTES OF THE 85TH EXECUTIVE COMMITTEE	T1
	3.1 <i>Final Minutes of the 85th Executive Committee</i>	
	3.2 <i>Matters arising</i>	
4	IEA-ETSAP IMPLEMENTING AGREEMENT	
	4.1 <i>Communication from the Secretariat</i>	T2
	4.2 <i>ETSAP Participation and Outreach activities</i>	
	4.2.a <i>Russian participation in ETSAP</i>	T3
5	ANNEX XV (2020-2022): ENERGY SYSTEMS AND SUSTAINABLE DEVELOPMENT GOALS	
	5.1 <i>Status report from Operating Agent</i>	T4
	5.2 <i>Status and next steps for ETSAP-TIAM</i>	T5
	5.3 <i>Economy and budget</i>	T6
	5.3.a <i>Funding ETSAP activities</i>	T7
	5.4 <i>Annual report 2020-21</i>	T8
6	ANNEX XVI (2023-2025)	
	6.1 <i>Discussion of work program and title</i>	T9
7	OTHER BUSINESS	
	7.1 <i>87th ExCo meeting: online 12. September at 12.00-14.00</i>	
	7.2 <i>88th ExCo meeting and Winter WS (in-person): 1-2. December 2022. Location to be decided.</i>	

Attachments

-
- T1 Minutes and Action list from the 85th ExCo meeting, February 23, 2022
 - T2 Communication from IEA Secretariat
 - T3 Participation of the Russian Federation in the ETSAP TCP
 - T4 Status report from Operating Agent
 - T5 Status and next steps for ETSAP-TIAM
 - T6 Economy and budget
 - T7 Funding ETSAP Activities
 - T8 Annual report
 - T9 Draft Annex XVI work programme (2023-25)

1. QUORUM COUNT

Quorum is 12. A quorum was present as 17 delegates were present.

2. ADOPTION OF AGENDA

Two items were added under ‘Other Business’:

- 1) The election of the Chair and Vice Chairs for the next year
- 2) A discussion on the GAMS engine for TIMES, since the current setup which is funded by an ETSAP project will come to an end towards the end of this year.

3. MINUTES OF THE 85TH EXECUTIVE COMMITTEE

3.1 Minutes of the 85th Executive Committee - (Attachment T1)

The ExCo adopted the minutes as presented.

3.2 Matters arising

Action List from 85 th ExCo Meeting	Owner	Action
If there is a delay in the meeting documents, the ExCo will be informed by e-mail.	Brian (ongoing)	Ongoing
Support existing ExCo members, send an invitation to Portugal	George/Brian/Kari (ongoing)	Reached out to the contacts in Portugal. Waiting for communication details of the Ministry to send the invitation letter
Seek to coordinate with IEA on joint training workshops for IEA Association Countries	George / Uwe (ongoing).	Ongoing process
ETSAP-TIAM to be removed from ETSAP website	George	Done
Organise a workshop with TIAM users to discuss the next steps and the creation of a users’ group.	George	Workshop organised. Report from workshop discussed under point 5.2
Submit an updated proposal for the ETSAP-TIAM (budget reserved up to €40k)	Markus	Discussed under 5.2
ExCo to use written procedure to decide on ETSAP-TIAM Proposal	ExCo Chair and CPs	Discussed under 5.2
Note on proposed process for future support improvements and updates of ETSAP-TIAM to be considered at 86 th ExCo meeting	TIAM-Users group / George	Submitted in the form of an MoU. Discussed under 5.2
Prepare an updated description for ETSAP in social media	Vincent Smart (new NZ ExCo rep.) will follow it up and see what the status is.	Project to be cancelled.
Follow up on invoices for 2021 membership fees. Still 2 members have not paid.	Kari/Linda.	
Follow up on the invoices for the 2022 fees.	Kari/Linda.	Some fees not paid yet. Kazakhstan informed the O.A. that they will not pay the fees for 2022. Some CPs requested more time for the payment.
ETSAP annual report published	Kari/Kathleen Brian/George	Discussed under 5.4. Report is still being finalised.
ETSAP Book to be considered	Interested CPs to contact Maryse	ETSAP book to be considered. No inputs were sent to Maryse.

CPs to submit ideas before the 86 th ExCo on 1. Process for funding projects 2. Process for extending delayed ETSAP funded projects including sunset clauses in the contracts	CPs / George / Kari	Attachment provided under 5.3.a and discussed. No input received from CPs.
CPs to submit ideas before 86 th ExCo meeting on the content of Work Programme of Annex XVI 2023-2025 to be discussed in the 86 th ExCo meeting	CPs / George / Kari	Nothing received from CPs. Draft proposal was submitted as Attachment T9, discussed under 6.1
Continue with ETSAP webinar series – encourage ExCo members to participate - ETSAP partners are encouraged to propose webinar topics to George.	George/Paul/ ETSAP CP	Webinars continued (three from the ETSAP funded project on SDGs and one on CPLX options). Next one being planned. Please send proposed topics to George
Send Doodle for the 87 th and 88 th ExCo meetings	Kari	Done. Dates have been identified.

4 IEA-ETSAP IMPLEMENTING AGREEMENT

4.1 Communication from the Secretariat (Attachment T2)

A presentation was provided by IEA Secretariat (Uwe) and was presented by ExCo Chair (Brian). This included a summary of recent publications by IEA (including Coal 2021, Renewables 2021, Electricity Market Report, Climate Impacts on South and Southeast Asian Hydropower and Climate Resilience Policy indicators). Also included are links to a number of blog articles, on EVs, carbon capture, SUVs, innovation, etc.

The IEA Ministerial Meeting took place at the end of March, with a focus on *Accelerating Global Action on Clean Energy and Energy Security*. Lithuania became a new (31st) member of the IEA and Argentina and Egypt were welcomed as the newest Association countries.

4.2 ETSAP Participation and Outreach activities

The invitation from the ExCo was communicated to Portugal, and we are waiting for the details of the relevant Ministry in order to send the official invitation letter.

The participation of Austria will be further encouraged.

The management team talked to Israel but we are still waiting for their decision.

Kazakhstan: ETSAP efforts to date to find new contact points were unsuccessful but will continue trying.

4.2.a Russian participation in ETSAP (Attachment T3)

The ExCo considered the background of the decisions of the IEA Governing Board regarding the suspension of the participation of the Russian Federation from a range the different IEA activities, in light of the Russian invasion into Ukraine.

ETSAP has not had direct interactions with the Russia Federation for some time and they have not paid the annual fees for more than 10 years. The Chair proposed the temporary suspension of the Russian Federations from ETSAP activities in light of the Russian invasion into Ukraine, with specific terms according to Attachment T3. ExCo members proposed adding explicit references to the participation in the training and workshops, which the ExCo approved. It was clarified that the

**ANNEX XV (2020-2022):
ENERGY SYSTEMS AND SUSTAINABLE DEVELOPMENT GOALS**

wording of the proposal was checked with the IEA Legal office, and it refers specifically to the Russian Federation as a CP to ETSAP. The ExCo unanimously approved the following:

In exercise of its authority to set the terms and conditions for participation under the Implementing Agreement at Article 8.1 and Article 2.3 of Exhibit A, the Executive Committee decides to that the participation of the Russian Federation in the ETSAP TCP will be subject to the following terms and conditions:

- i) access for the Russian Federation to the ETSAP-TIAM model is suspended.*
- ii) access for the Russian Federation to small group license of ANSWER, VEDA and VEDA 2.0 which is covered by ETSAP is suspended.*
- iii) participation by the Russian Federation in the Executive Committee meetings, workshops and training sessions is suspended.*
- iv) these terms and conditions will be reviewed at the 87th ExCo meeting.*

5. ANNEX XV (2020-2022): ENERGY SYSTEMS AND SUSTAINABLE DEVELOPMENT GOALS**5.1 Status report from Operating Agent (Attachment T4)**

The status report was prepared by the OA (Kari) and is attached as T4. The key points from the report are:

- The Management team has communications with the IEA regarding the status of the Russian Federation and on the analysis of critical materials studies.
- In total there were four ETSAP webinars organised so far this year.
- Two online ETSAP training sessions have delivered so far in 2022. The next training will be online next week. There are four more training session planned within the year, one of which will be in person.

5.2 Status and next steps for ETSAP-TIAM (Attachment T5)

In the 85th ExCo meeting the ExCo requested a project proposal related to ETSAP-TIAM and a proposal on the future of ETSAP- TIAM. The ETSAP Project head (George) organised three meetings of the TIAM Users-Group since the 85th ExCo to

- i) discuss the next steps in ETSAP TIAM,
- ii) identify the specification for a transparent and documented version of the model by the end of the year and
- iii) prepare an proposal for next steps in ETSAP-TIMA (in the form of an MoU).

The ExCo heard that a draft project proposal is under development to finalise ETSAP-TIAM (capped at €40k, as agreed at the 84th ExCo meeting. The ExCo agreed that this will be considered and decided on via an e-mail voting process. The ExCo was informed that this proposal will be received by the 1st July. The key points that will be included in the proposal are to build a Wiki as a key documentation framework sharing all existing documentation between the members of the users group. Improvements to the current version of the model will be also be submitted on a voluntary basis in order to have a model version that run the 1.5°C scenario.

The ETSAP Users Group considered that for the medium term development of ETSAP TIAM, establishing an MoU was a very important key step and during their deliberations they focussed on drafting and submitting the MoU to the ExCo.

The ExCo had an open discussion among the ExCo members about the future of ETSAP-TIAM and raised the following points:

- 1) Previously different TIAM versions diverged from the original TIAM and never re-merged. This raises key questions regarding how TIAM users could work together as a community (which is the key function of the MoU).
- 2) The immediate funding (€40k) will be used to develop the documentation and bring the model to a level acceptable by all as a starting point.
- 3) The MoU is an agreement of how the development of TIAM will be governed, how decisions will be taken, and the relationship between the modelling group and ETSAP. It was deemed important that the MoU be approved by ETSAP ExCo.
- 4) The TIAM Users Group has elected Markus Blesl as a Chair and Sandrine Selosse as Vice Chair.
- 5) The MoU proposes that the model will be available under an open license and the most flexible version of the license was chosen initially. Restrictions could be put in place if it is considered necessary. The interaction between this TIAM Users Group and the ExCo is yet to be fully considered and developed.
- 6) The Users Group requested that the ExCo decide to make ETSAP-TIAM available as open source, with the propped governance structure. It was noted that the legal ramifications of this should be also examined mainly regarding IEA licenses on data.
- 7) The ExCo was also informed that a model gatekeeper is needed, ideally as a long-term activity with funding for this function requested from ETSAP. It is envisaged that in general, model updates are to be funded from own contribution and other sources.
- 8) A new Horizon Europe funded project, DIAMOND was mentioned, which just began. This is not directly connected to the use of the TIAM model, but it does aim to develop an open-source TIMES based global model. In addition, the DIAMOND project community will aim to support stakeholders on using models and developing scenarios.

A number of ExCo members were very supportive of the initiative and commended the ETSAP TIAM Users Group for their efforts. It was deemed important to have a structure and avoid the risk of having diverging branches as had happened previously. Building an approach that enables the TIAM model to be updated regularly is ideal, but this would be challenging without ongoing projects or resources allocated. It is deemed important for a public version to be open source, however it is not envisaged possible to make ETSAP-TIAM open source in the next six months because of the work which is needed. There are currently discussions elsewhere (e.g. EIA) on making models open-source and there the same issues arise - license type, data licenses, and documentation. The efforts required in order to ensure that an adequate model is made available as open source cannot be understated, with the example of JRC EU-TIMES model being cited, which is now open source not readily usable and requires significant effort to addressing data issues and removing possible errors.

The Chair summarised the discussion by indicating that there is support for an open source ETSAP-TIAM but the ExCo had not clarity on whether this was legally permissible (due to use of IEA and other data sources). In addition, there are also other priorities, including the quality and availability of the ETSAP TIAM model to ExCo members. Previous experience has shown that some Contracting Parties joined ETSAP in order to get access to TIAM but expressed disappointment at the quality of the previous versions of the model. No ExCo member was against the principle of an open source ETSAP-TIAM.

There are a number of careful steps which the ExCo agreed should be taken.

- i) A revised proposal for the short term work will be submitted by the TIAM Users Group to the ExCo by the 1st July. This proposal will cover what remains to be done to finalise ETSAP TIAM and make it available to Contracting Parties and will be capped at the €40k budget allocation set aside for this.
- ii) The ExCo will organise an email voting procedure for the approval of this proposal

The TIAM Users Group in collaboration with the ETSAP management team, will further develop the proposed processes for progressing TIAM in the medium term (the MoU, gatekeeper, engagement processes, and understanding the challenges to make it open source (including licensing issues with IEA and other data used in the model). The Users Group will submit a revised document to the 87th ExCo.

5.3 Economy and budget (Attachment T6)

Balance (Budget)	2020		2021		2022	
Income Membership	Actual	400 000	Actual	360 000	Actual	120 000
Income (training, change OA, transfer funds)	Actual	642 919	Actual	11 650	Actual	37 400
Income (transferd)	Actual	-	Actual	584 219	Actual	869 281
Total		1 042 919		955 869		1 026 681
Base Activities (incl. late invoiced)	Actual	458 700	Actual	86 588	Contracted	141 700
Base Activities (commitments)	Commitments	37 760	Commitments	44 112	Commitments	119 199
Coordinated Projects	Approved	159 100	Approved	129 000	Application	-
Coordinated Projects (commitments)	Actual	311 555	Actual	497 655	Actual	626 655
Total		967 115		757 355		887 554
Transfer of funds for ETSAP-TIAM development	Budget		Budget	40 000	Budget	
Transfer Income (Core activities)	Budget	150 000	Budget	150 000	Budget	
Balance		-74 196		8 514		139 127
Commitments transferd to next year	Budget	508 415	Budget	670 767	Budget	745 854
Income actual transferd	Actual	584 219	Actual	869 281	Actual	
New Balance		0		0		884 981

A summary of economy report was provided by the Operating Agent (Kari). Regarding the payment of the 2022 fees, some countries have requested that the invoices are sent later in the year.

The O.A. also presented the audit report as requested by the ExCo. The main finding of the report was that the “expected income” associated with the assumption that all participants would pay their annual fees is higher than the actual income. However, the ExCo agreed that we should continue to budget assuming that most participants will pay their fees.

5.3.a Funding ETSAP activities (Attachment T7)

The Chair presented the breakdown of ETSAP expenditure for the past five years, allocated to

- i) the operation of ETSAP,
- ii) tools development and
- iii) collaborative projects

and asked for feedback from ExCo members. The key trends are that about half of the expenditure is allocated to model and tools development and one quarter is allocated to collaborative projects.

ExCo members reflected that the budget should reflect the long-term strategy of ETSAP and suggested checking what kind of project proposals have successful over the last years, anticipating it would point to projects that had more opportunities for multiple partners to join like organisation of workshops etc.

ANNEX XV (2020-2022): ENERGY SYSTEMS AND SUSTAINABLE DEVELOPMENT GOALS



The ExCo concluded that the breakdown of expenses in the three categories was considered reasonable. There was no main objection expressed to the way the project funding and budget allocation operates. The ExCo agreed to maintain the same processes going forward.

Regarding a possible sunset clause for projects, the ExCo suggested putting a cap to the extension time. There were two proposals for the length of this cap, i.e. 1) extension of 6 (or 12 months) 2) extension of up to 50% of the time duration.

The chair proposed to have a single maximum extension of 12 months and the ExCo delegates agreed. This sunset clause will be introduced into all new contracts only.

The ExCo discussed how to handle a project if only parts of the contract is fulfilled. As a general rule, projects are finished only when the whole project is successfully completed, and at that point the contracted amount is paid.

5.4 Annual report 2020-21 (Attachment T8)

The ETSPA annual report is progressing and Kathleen has received some comments from a number of ExCo members to date. The ExCo decided to allocate more time (agreed deadline is end of May) to the Contracting Parties to review and come back to Kathleen with any comments or additions on the report.

6 ANNEX XVI (2023-2025)

6.1 Discussion of work program and title (Attachment T9)

The Annex XVI work programme was distributed to ExCo members who are requested to review it and submit comments and proposals before the 87th ExCo meeting. The ExCo proposed to have the same OA and Project Head as in the previous Annex.

The proposed work programme has the tentative title: “*Aligning energy security with zero emission energy systems*”. The activities which have been covered by projects so far (in the timeframe of the current ETSAP Strategy were deleted and areas that have not been covered so far were kept in the newly proposed Annex.

ExCo members made a number of suggestions, namely:

- add terms relating to infrastructure, emission free energy carriers, and trading modelling.
- energy security, and energy independence issues should be also included in the work programme, which are currently highly relevant due to the geopolitical situation.
- include a topic on open data and open-source management for models and ETSAP-TIAM in particular.
- LULUCF should also be added in the topics together with agriculture.
- Just transition can be included explicitly under point 4 together with the energy system and social system interaction modelling.

The ExCo agreed the proposed title is acceptable, that IFE remains the OA and George remains the Project head for Annex XVI and that the ETSAP Management team will distribute a revised version of the Annex for approval at the 87th ExCo meeting.

7. OTHER BUSINESS

7.1 87th ExCo meeting: The ExCo agreed this will be held online on 12 September at 12.00-14.00 CET

7.2 88th ExCo meeting and Winter WS (in-person): 1-2. December 2022.

The US delegate kindly offered to co-host the 88th ExCo meeting (EIA in conjunction with Columbia University). The ExCo accepted the offer and hold the 88th ExCo meeting in the USA.

The ExCo members were requested to propose a new Chair and Co-chairs for the next year. After the proposal of the Swiss delegate, the ExCo decided unanimously to re-elect and appoint the existing Chair (Brian Ó Gallachóir) and Co-Chairs (Markus Blesl, Germany and Tiina Koljonen, Finland) for the next period.

7.3 Cloud computing

Mr Goldstein requested ETSAP consider opening up the platform of the GAMS engine to a wider audience. He proposed to discuss GAMS together with the Project Head and Amit for a solid package estimate for an annual cost for VEDA online and GAMS engine which ETSAP can offer. The current GAMS engine only has 14 ETSAP users.

The ExCo proposed that Gary reaches out to GAMS to explore what could be framed in terms of the proposal for the next ExCo and to inform more ETSAP members on the existing GAMS engine to increase the use in the next months in order to explore the extra value which it can offer.

The ExCo meeting was closed at 17:05 by the Chair thanking Fraunhofer ISE for the excellent hosting of the event.

8. AGREED ACTIONS

Action List from 86 th ExCo Meeting	Owner
If there is a delay in the meeting documents, the ExCo will be informed by e-mail.	Brian (ongoing)
Support existing ExCo members and engage with interested parties seeking to become Contracting Parties	George/Brian/Kari (ongoing)
Inform IEA of ETSAP decision to suspend Russian Federation from participating in ETSAP activities	Brian
Seek to coordinate with IEA on joint training workshops for IEA Association Countries	George / Uwe (ongoing).
Submit an updated proposal for the ETSAP-TIAM (budget reserved up to €40k)	Markus on behalf of ETSAP TIAM Users Group by July 1 st
ExCo to use written procedure to decide on ETSAP-TIAM Proposal	ExCo Chair and CPs
Coordinate with the ETSAP-TIAM users group to prepare a detailed costed proposal for the 87 th ExCo for the proposed processes for progressing TIAM in the medium term (the MoU, gatekeeper, engagement processes, and understanding the challenges to make it open source (including licensing issues with IEA and other data used in the model).	George/Brian/Kari and the ETSAP-TIAM Users Group
Consider ETSAP presence in social media	To examine alternative options George/Kari
Follow up on invoices for two outstanding 2021 membership fees and for 2022 fees.	Kari/Linda.
Finalise and publish ETSAP annual report.	ETSAP CPs, Kari/Kathleen Brian/George
Establish level of interest in a third ETSAP Book	Interested CPs to contact Maryse
CPs to submit ideas before 87 th ExCo meeting on the content of Annex XVI 2023-2025 Work Programme entitled <i>“Aligning energy security with zero emission energy systems”</i>	CPs
ExCo decided that IFE remains the OA and George remains the Project head for Annex XVI	Kari / George
Circulate revised Annex XVI draft to be discussed and approved in the 87 th ExCo meeting	George / Kari
ExCo agreed to maintain the same processes for ETSAP funding allocation going forward.	Kari
Introduce a sunset clause (with single maximum extension of 12 months) in all new ETSAP project contracts	Kari
Continue with ETSAP webinar series – ExCo members to encourage participation and to propose webinar topics to George.	George / Paul / ETSAP CP
87 th ExCo meeting to take place virtually on Sept 12 at 12.00 CET	Kari / Brian
88 th ExCo Meeting to take place in New York on Dec 1-2 hosted by USA (EIA and Columbia University)	Angelina / James / Kari