

## **ZEP Advisory Council Meeting #39**

Minutes of meeting

Date and time: 18 June 2014, 10.30 – 17.00 hrs. Venue: Centre Borschette, Brussels

Status: draft, endorsed by CG

The list of attendees is attached as annex 1.

### 1 Introduction and aims

### 1.1 Welcome

Chairman opened the meeting, explained the emergency procedures, welcomed everyone and noted that the AC was quorate.

## 1.2 Adoption agenda, minutes AC#38

AC adopted the agenda for the meeting and approved the minutes of AC#38

### 1.3 review meetings: ACEC, ZEP-C

Chairman invited AC to comment on the minutes of the ACEC away day, the 3 ACEC meetings / telcos that were held since the last CG/AC meeting cycle and specifically pointed at the decisions taken by ACEC at those events. He also summarised the report of his meetings, included in the pre read and the current developments around energy security.

The AC raised no issues on this. **DECISION: AC approved the 2014 priority work programme that was agreed by ACEC at the away day.** 

Chairman invited the ZEP taskforces and working groups to identify their key activities beyond the agreed priority items in the course of the year and to explicitly inform CG/AC during next meeting cycle..

### 1.4 ZEP organisation

Nicolas Vortmeyer has informed ZEP that he steps down as an AC member because his term has expired. AC thanked Nicolas for his efforts.

### DECISION: AC confirms Corinna Grajetzky as co chair of TF PC

Chairman notifies AC that the ZEP bylaws have been changed. Following the ZEP-C General assembly, on 26 May the AC members were asked via email to vote to agree with a change of article 3.2.8 of the ZEP bylaws. The ZEP AC members agreed: 16 votes in favour, no votes against. The updated ZEP bylaws are included in the pre read.



### Review decisions, forward view CCS events

All decisions taken at the previous AC meeting were followed up.

To be added to the list of upcoming CCS events:

- The members meeting of GCCSI on 19 June
- The energy security storyline will play out over the summer
- ZEP may undertake some events around the crew change in the EC
- The opening of the Boundary Dam project early October. ZEP is invited to deliver a key note speech.

## **Report European Commission**

### **3.1 DG RTD**

Vassilios Kougionas updated AC on the following

- H2020:
  - The 1st call has been closed. On the topic of CCS and shale gas over 40 proposals were received. DG RTD considers this as a proof that there is a lot of interest of industry in CCS. The 1st stage evaluation of these proposals has been completed, EC will soon send the letters to submitters to inform them about the results and for inviting successful proposers to submit the 2<sup>nd</sup> stage proposal.
  - EC will open the call for proposals for 2015. It will close on 30 September 2014.
- International cooperation:
  - Last week DG RTD had a meeting with the ministry of Science of China. The Chinese government has expressed its wish to cooperate with EC on the topic of CCS. Vassilios will travel to China next week to discuss the cooperation.
  - o At the moment DG RTD is discussing a potential cooperation with Korea on CCS. Mr. Yong-Ki Park of the Korean research institute of chemical technology will make an intervention under agenda point 3f. EC and the Korean delegation have decided to set up a workshop of scientists in the course of 2015 to discuss cooperation between Korea and EC.

Philippe Vannson, head of unit in DG RTD, has recently succeeded Wiktor Raldow. Philippe has worked previously with ZEP, in the time in which he was head of the steel & coal fund. He mentioned the possibility to utilise structural funds. This has been discussed for several years. It is quite difficult but not impossible. It requires that stakeholders or project partners integrate their plans at an early stage. There are a few examples that prove that this is possible.

### 3.2 DG ENER

Michael Schuetz updated AC:

- He underlined that ENER acknowledges the importance of CCS. In the energy security paper that was recently published CCS is seen as very important since coal can only be aligned with decarbonisation targets if it is applied with CCS. The paper on energy security mentions that CCS should be supported and refers to the ROAD project.
- ENER is trying to secure the CCS demonstration projects. The EEPR funding of the Compostilla project has ended, unfortunately with a negative investment decision. The project did however



deliver very useful testing facilities. ENER is busy with finding funding for the Road project and the Don Valley project, no definitive results have been achieved yet.

 Adas Pangonis has left DG ENER, and is now working with REA (executive agency). He will likely deal with CCS projects.

### 3.3 DG CLIMA

Alexander Jevsejenko temporarily replaces Beatrice Coda who left DG CLIMA and moved to DG ENER. His update:

- The implementation of the CCS directive has now been completed in the vast majority of the member states. EC is in the process of doing the conformity check.
- The review of the CCS directive:
  - By March 2015 DG CLIMA is required to present the review of the CCS directive to the EP and the council.
  - The review is part of a bigger operation: REFIT, which addresses the question: is the regulation fit for purpose.
  - In April EC hired an external consortium of consultants to collect the data, make a retrospective assessment and provide recommendations. Key steps:
    - Mid-May to mid-July: on-line consultation & interviews
    - 1st half of Sep: 1st stakeholder meeting, probably to be followed by a 2<sup>nd</sup> stakeholder meeting in the 1<sup>st</sup> half of November in which the recommendations of the consultant will be discussed.
    - Early December the consultants will deliver their final recommendations
  - The commission will then deliver its views in March 2015.
  - o What can ZEP do?
    - ZEP can provide its views not only via the questionnaire but also by submitting a paper.
    - Participate in the process. The consultants intend to organise specific events (focus groups) for those areas that require creative thinking. Those areas are yet to be identified.
- CLIMA and ENER are holding a series of workshops on carbon leakage and competitiveness. The 1<sup>st</sup> one has already been, the 2<sup>nd</sup> workshop will be on 10 July. At these workshops the potential follow up of the NER300 scheme will be discussed. On 10 July the afternoon session will be dedicated to the design of such a scheme (what would it look like). Jevsejenko strongly recommends that ZEP attends in order to ensure that such a scheme focuses not only on CCS in industry but also provides opportunities to the power sector.
- Embedding CCS in the 2030 FW: EC has done its part. It is now up the council. If ZEP would like to improve the position of CCS in the 2030 FW it should lobby the member states, should attend the hearings in the EP and it should attend the hearings at EP with the new commissioners. At those meetings the portfolios of the new commissioners will be discussed.

### Comments:

- Some of the questions can be read in various ways and are therefore misleading.
- Representatives of Clima have been heard to say that the White Rose project is internally approved by CLIMA, awaiting approval by commissioner
- Last week, a representative of DG Clima at a workshop in le Havre stated that the internal CLIMA working assumption is that by 2030 Europe should have 3 to 4 CCS demo installations. This raises concerns with ZEP. Rather than having an ambition of a limited number of demo plants CLIMA



should aspire to realise a certain percentage of energy production with CCS. ZEP is now doing some modelling that underlines the importance of CCS and will bring it to the attention of DG CLIMA.

### **3.4 DG ENT**

Aurelien Genty of DG ENT explained about SILC-II, a H2020 programme that supports development of low carbon technologies. The programme is not limited to CCS and targets EnII (not power industry). The call for proposals is currently open.

- He would like good proposals, so that member states see that SILC-II meets a need.
- A recent media release has stated that EC is thinking about a follow up. Whether this will actually happen will depend i.a. on the new commission and on the wishes of member states.

#### Comments:

- ZEP is keen to expand ZEP beyond power.
- SILC-II is not directly connected to the steel action plan. It was developed before the steel action plan was conceived. However it fits well.
- Within DG ENT unit B1 deals with horizontal issues, in particular climate and energy issues. Aurelien will pass on the name of the person/unit for the steel sector.
- The focus of SILC-II is on making industry rethink its production processes. Fuel, fuel switching and the use of biofuels are of less importance.
- In the presentation it was stated that projects are preferred that are applicable in other industry sectors as well. ENT would like to see applicants to think outside the box and outside their sector.
- The presentation of Mr. Genty is considered as a starting point for conversations in the future

### 3.5 Chris Davies

Chris Davies addressed the ZEP Advisory Council

- Unfortunately he will leave the European Parliament shortly.
- ZEP has achieved much over the years. ZEP has done good work. It has brought the message across that CCS is a valid, practical, cost-effective technology that could play a role in the sbstrmrnt of carbon emissions. Nevertheless politically ZEP hasn't had the maximum impact. Many in EP don't understand what ZEP does: bring the CCS community together. It has the expertise and is the single organisation that pushes for CCS.
- Chris is impressed by the work of ZEP and the details but would like ZEP to pay more attention to the bigger picture.
- He considers the opening of the Boundary Dam project as a key event for CCS. It is the world's 1<sup>st</sup> low emission coal power plant and is a game changer. It brings 2 messages
  - CCS is a proven technology;
  - Europe is being left behind. Europe has been talking about it, the Americans are actually doing it. The production of solar power panels went to China, now we are missing out on developing CCS technology as well. We can't allow this to continue.
- There are several points to be made:
  - CCS is a very competitive abatement technology. It can compete with renewable energies.
    Renewables can't deliver\_alone, they will always need backup. Every policy maker, at EC level and at MS level, should recognise this.



- Storage is safe. There is no evidence that any of the storage sites have leaked. ZEP should spell it out that storage is safe.
- ZEP should take the battle to the Member States.
- ZEP is a network that we don't sufficiently exploit. Make it all work. Get to the EC decision makers, the ministers, the key parliamentarians,

#### Comments:

- The ZEP AC thanks Chris Davies for everything he has done over the past years and for the inspiring speech at this AC meeting.
- Taking the battle to the MS is key. Over the next couple of months ZEP will have two pieces of collateral that need to be merchandised to the member states: The transportation and storage report and its work on the impact of CCS on energy security at national level.
- ZEP's strategic partners such as CCSA, GCCSI could help ZEP in getting the messages across.
- Internal ZEP challenges
  - to achieve consensus among its members has been a time consuming process but ZEP has proven to be good at it
  - CCS requires radical change of existing and working business models. Therefore not all organisations in ZEP appear to be equally supportive of implementation of CCS.
- ZEP, being an ETP, might not be the right platform to take the battle forward and do advocacy as Chris described. ZEP should continue to provide the ammunition but another organisation, dedicated to advocacy.

### 3.6 Delegation Korea

Park CTO of CCS Korean institute presented the situation as regards R&D on CCS in South Korea. Comments:

- A decision in Korea is being taken about upscaling CO2 injections in an aquifer. The decision is still pending. Jonas.
- It appears not to be easy to find suitable storage sites.
- ENEL has an MOU with Korean power corporation. There are opportunities to cooperate. Research could cover post combustion as well as coal gasification.
- ZEP also supports advanced technologies and should explore cooperation with Korea.

## 4 Progress priority items 2014

Tim Bertels informed AC about the progress of the execution of the priority items that were approved under agenda item that was agreed under agenda item 1c. The champions of each priority item commented on the progress:

- Work item 1, get CCS into 2030FW: Emphasis is on getting the ZEP collateral to the key persons at the EC and the capitals of Member states.
- Work item 2, EC & EP crew change. Corinna reports on behalf of champion Reinhold Elsen. She described the 3 activities that are now planned.
  - A congratulation package for MEP's is being prepared, in which letters will be sent to MEP's with the ZEP key messages, in the bigger context of the 2030FW and the energy security issue.



- o ZEP participates in the preparation of a round table debate. ZEP possibly co-hosts this event.
- o In the summer, end of July, ZEP will continue with its engagement programme. Graeme will meet a number of people of the new parliament, MS and EC.
- Work item 3, CCS in EnII: Jonas reported. Curently 2 processes are on-going:
  - get Enll to participate in ZEP's General Assembly at the end of the year, and
  - approach Enll's in order to discuss with them their structural participation at the highest level of ZEP. A prospectus was developed (see pre read). Comments: The prospectus could be improved. Everyone is invited to provide further comments to improve the prospectus.
- Work item 4, H2020: Nils reported.
  - ZEP will not receive funding under H2020 for the secretariat in the bigger part of 2015.
  - It will be important for ZEP to follow up on 2016 2017 calls.
  - He is also working on the SET-plan roadmap and the SET plan conference in November 2014.
  - ZEP has concerns about the H2020 funding spilt between fossil fuel technologies and renewables. The council decided on a 15/85 but in reality this is close to a 5/95 split. ZEP uses every opportunity to discuss this with EC.
  - The group is also working on CEF
- Work item 5, business case T&S: this nears completion. The final report will be discussed under agenda item 7
- Work item 6, CCS and EMR: Heinz reported:
  - the EMR report that was published earlier did get comments: the learning curve for solar energy was not sufficiently aggressive, storage was not adequately included, CO<sub>2</sub> reduction level and capacity constraints not always comparable for all scenarios and member states. Therefore the model is now being improved. The CO<sub>2</sub> reduction target is enforced at the same level for all new scenarios. The constraints used for photo-voltaics and assumptions in the model are now being adapted. First preliminary results are shown in a graph (see pre read). The results show that, even with aggressive learning curves for photo-voltaic energy and for energy storage, CCS is essential for low cost CO2 abatement and for avoiding black outs (for a secure electricity supply). The country by country analysis will follow at a later stage.
  - Comments: The intermediate results point at some messages that ZEP should bring across: ZEP is not against renewables but notes that renewables won't be sufficient for the final solution. Therefore it is essential that CCS is put on a level playing field with renewables.
- Work item 7. CCS policy review:
  - Graeme informed AC about the process: The ToR have been created and the TWG has started its work. The primary focus of the TWG is the review of the CCS directive but the scope is broader.
  - Lamberto Eldering reported about the progress of ZEP's input to the review of the CCS directive. The WG is broadly composed and representative and is now working on the ZEP position.

### **DECISION:**

- Work item 3: AC endorses the prospectus, recognising that it will be improved over time
- Work item 6: ACEC is mandated to approve the final results of the work on CCS and EMR so that it can be used for ZEP's messaging
- Work item 7, ACEC is mandated to approve ZEP's position on the review of the CCS directive



## **Prioritisation leveraging budget**

Marika Andersen presented on behalf of TF PC a proposal for using the comms budget for leveraging the work on the priority items that were agreed at the ACEC away day. The proposal entails that for leveraging the priority work items (agenda point 4) a set of 4 new deliverables is proposed with a cost of €31.250.

Graeme Sweeney additionally explained that the copy writing budget is planned to be reduced by €20.000 so that the comms budget needs additional €11.250 to cover the prioritization leveraging.

#### Comments:

- the process of budgeting is a big improvement compared to the budgeting processes of ZEP in the
- the importance of teaming up with other organisations such as CCSA and GCCSI is stressed as it could deliver more impact for less money

DECISION: AC accepts the proposed use of the communications budget for leveraging the priority items subject to approval of its budgetary consequences for the left over funds per end of 2014 and the funding of ZEP activities in 2015 as discussed under agenda item 10c

## CCS and energy security

This agenda item was skipped as it was already discussed at the start of the AC meeting under agenda item

## **Business models for transport&storage**

On behalf of the TWG Gardiner Hill presented the final report. Compared with the version presented to the AC at its meeting in March this version has a section added with recommendations. Comments:

- AC expresses its appreciation for the report that is seen as a high quality piece of work.
- There are items that could be clarified in the report:
  - The paper does not aspire to take a position on off/onshore. It assumes that offshore in the current society is probably where we should start.
  - Little attention is given to gathering CO2 to the trunk lines. This too is not dealt with to the full extent. Could be problematic going forward.
- Communication of the report and its main messages is crucial. In its present form it proposes some radical steps of governments, which could actually frighten governments, in particular where it is proposed that governments take on the role of market maker. Governments will want to avoid to get involved in such a complex future context. Instead:
  - o an entry approach should be proposed.
  - o Any comparison with the development of nuclear energy has to be avoided. They need a positive message, to present an opportunity.
  - It should be described as an incremental project. Gardiner notes that the team does advocate an incremental model. Some regions may need only a few, incremental, projects.



- Some of the proposed steps could be taken as part of the ROAD project, some could be part of another project.
- ZEP could work on an atlas of storage capacity. ZEP could at regional scale recommend evaluation methodology for storage capacity. Several universities are already doing work on

DECISION: AC adopts the report "Business models for commercial transport and storage" and asks the team and TF PC to rework the paper so that it can be communicated.

## **CCS** for gas

Gardiner presented the CCS for gas report that was developed by a sub group of TF T. Comments:

- In general the AC recognises the importance of CCS for gas. Surprisingly the gas sector has not picked up on CCS. The report could be used to draw attention to the importance of CCS for the gasfired power production in the long term.
- The report focuses on the technology. It does not have the narrative, the clarity of messaging, the tone to reach an audience beyond the technologists.
- The report needs to be seen in the right context: ZEP has always supported the application of CCS in a situation of multi fuels power generation. It understands that besides the need for CCS for coal there is a need for CCS for gas. ZEP aims to ensure that the need for CCS for gas fired power generation is properly understood. This report is developed with that purpose in mind and describes the characteristics of CCS applied to gas fired power plants.
- Points of improvement:
  - The key significance of gas-CCS is that it can be easily deployed in a multi-commodity energy system: renewables combined with fossil fuels. This could be better highlighted in the report. It should also be noted that gas-fired power plants lose flexibility when combined with
  - o The report suggests that CCS for gas-technology is less mature than CCS for coal technology. This is questionable.

DECISION: AC, being confident in the technical body of the report, asks that the comments, made by the AC regarding the CCS-for-gas report are taken into account, and that the report is merchandised so that it can play a role in galvanising the gas community to become more active as regards CCS.

## **General Assembly**

Corinna on behalf of TF PC presented the proposed concept of the General Assembly and asked for approval.

DECISION: AC, underlining the importance of securing the cooperation and support of Energy intensive Industry, agrees with the proposed concept for the ZEP General Assembly 2014. AC supports the use of the budgeted funding for the General Assembly subject to approval of its budgetary consequences for the left over funds per end of 2014 and the funding of ZEP activities in 2015 as discussed under agenda item 10c



## 10 organisational issues

### 10.1 Financial quarterly overview

Chairman summarised the present financial situation of ZEP. The overviews in the pre read indicate that everything is on track:

- ZEP-C is operating within its budget
- ZEP-C Cash management: At the current spending rate ZEP-C can operate for a minimum of 11.5
- ZEP secretariat is operating within its budget

AC accepted the overviews of the financial situation.

### 10.2 Change of bylaws

Chairman summarised the implications of the change of the bylaws that was brought to the vote via email prior to this AC meeting.

- He specifically mentioned that under the new bylaws payments for services to members require authorization by a qualified-majority decision of ETP ZEP's AC.
- Although in principle this does not have a bearing on decisions already taken (Bellona sponsoring and the payment of Ardnacraggan energy services for representing ZEP at the CSLF meeting in Washington), he considers it prudent to reconfirm the ZEP AC position on both decisions and offered to return the payment should the AC ask for this.

As a consequence of this chairman asked AC to reconfirm its decision DAC 37.6: AC will support Bellona with an amount of €40.000 to be given in return for Bellona's leadership and work regarding the NGO constituency, taskforce P&R, the energy intensive industry TF, and the cross-platform bio-CCS provided that a contractual basis in line with ZEP's bylaws can be found in order to deal with the concerns mentioned by AC members.

DECISION: The AC confirms the decision and agrees to sponsor Bellona for an amount of €40.000 in return for services, to be provided by Bellona in 2014, with 13 votes in favor, 3 against and 1 abstination.

Chairman recused himself from chairing the reconfirmation of the decision regarding the payment to Ardnacraggan energy services and asked ACEC vice chair Gardiner Hill to chair this part of the meeting. Gardiner Hill asked AC to reconfirm the decision to reimburse Ardnacraggan energy services for the services provided by Graeme Sweeney for representing ZEP at the CSLF conference in Washington.

DECISION: The AC confirms the decision and agrees to reimburse Ardnacraggan energy services for the services provided by Graeme Sweeney for representing ZEP at the CSLF conference in Washington, with 15 votes in favor, 1 against and 1 abstination



### 10.3 ZEP finances 2015

Secretariat and chairman presented the forward view on the ZEP finances in 2015 and discussed this with AC.

### 10.4 secretariat sponsoring

Chairman explained the situation with respect to the ZEP secretariat in 2015:

- the present secretariat will end its term on 31 January 2015;
- there will be a period of possibly 11 months for which there is no co-sponsoring by EC. After that, cosponsoring is likely to be available again;
- If ZEP would like to continue to have secretarial support at the present level it will have to take certain decisions.

DECISION: AC accepts the budgetary consequences for the left over funds per end of 2014 and the funding of ZEP activities in 2015 as discussed under agenda item 10c and approves the proposed spending on the communications budget (agenda item 5) and the General Assembly (agenda item 9).

DECISION: ZEP AC agrees to the use of 80% of the ZEP-C surplus for a partial replacement of the cosponsoring of EC in 2015.

DECISION: ZEP AC agrees to keep the annual contribution for the ZEP secretariat at the level of past years and to lower the budget for the ZEP secretariat in 2015 so that a funding gap for 2015 is avoided.

DECISION: ZEP AC agrees to start a process to procure secretarial services for the period 1 February 2015 to 31 December 2015. This will include:

- asking the assistance of a pro bono professional procurement service to manage the procurement process;
- development of the scope and the terms of reference for the secretarial services to be acquired. WG ORG to be responsible for this:
- installing a tender board, consisting of 2 members of each constituency excluding any of the ACEC members.

### 10.5 ZEP-C sponsoring

DECISION: ZEP-AC agrees to maintain the annual contribution for communications activities and secretariat services at the level of 2014.



### 11 Decisions

DAC39.1: AC approved the 2014 priority work programme that was agreed by ACEC at the away day.

DAC39.2: AC confirms Corinna Grajetzky as co chair of TF PC

DAC39.3: AC approves the progress on the following priority items:

- Work item 3: AC endorses the prospectus, recognising that it will be improved over time
- Work item 6: ACEC is mandated to approve the final results of the work on CCS and EMR so that it can be used for ZEP's messaging
- Work item 7, ACEC is mandated to approve ZEP's position on the review of the CCS directive

DAC39.4: AC accepts the proposed use of the communications budget for leveraging the priority items subject to approval of its budgetary consequences for the left over funds per end of 2014 and the funding of ZEP activities in 2015 as discussed under agenda item 10c.

DAC39.5: AC adopts the report "Business models for commercial transport and storage" and asks the team and TF PC to rework the paper so that it can be communicated.

DAC39.6: AC, being confident in the technical body of the report, asks that the comments, made by the AC regarding the CCS-for-gas report are taken into account, and that the report is merchandised so that that it can play a role in galvanising the gas community to become more active as regards CCS.

DAC39.7: AC, underlining the importance of securing the cooperation and support of Energy intensive Industry, agrees with the proposed concept for the ZEP General Assembly 2014. AC supports the use of the budgeted funding for the General Assembly subject to approval of its budgetary consequences for the left over funds per end of 2014 and the funding of ZEP activities in 2015 as discussed under agenda item 10c

DAC39.8: The AC confirms the decision and agrees to sponsor Bellona for an amount of €40.000 in return for services, to be provided by Bellona in 2014.

DAC39.9: The AC confirms the decision and agrees to reimburse Ardnacraggan energy services for the services provided by Graeme Sweeney for representing ZEP at the CSLF conference in Washington.

DAC39.10: AC accepts the budgetary consequences for the left over funds per end of 2014 and the funding of ZEP activities in 2015 as discussed under agenda item 10c and approves the proposed spending on the communications budget (agenda item 5) and the General Assembly (agenda item 9).

DAC39.11: ZEP AC agrees to the use of 80% of the ZEP-C surplus for a partial replacement of the cosponsoring of EC in 2015.



DAC39.12: ZEP AC agrees to keep the annual contribution for the ZEP secretariat at the level of past years and to lower the budget for the ZEP secretariat in 2015 so that a funding gap for 2015 is avoided.

DAC39.13: ZEP AC agrees to start a process to procure secretarial services for the period 1 February 2015 to 31 December 2015. This will include:

- asking the assistance of a pro bono professional procurement service to manage the procurement process;
- development of the scope and the terms of reference for the secretarial services to be acquired, WG ORG to be responsible for this;
- installing a tender board, consisting of 2 members of each constituency excluding any of the ACEC members.

DAC39.14: ZEP-AC agrees to maintain the annual contribution for communications activities and secretariat services at the level of 2014.



# Annex I, attendees

AC39	Andersen	Marika	Υ
AC39	Benelli	Giancarlo	Y, AC
AC39	Bergmann	Heinz	Y
AC39	Bertels	Tim	Y, AC
AC39	Blakey	Simon	Y
AC39	Constantin	Carmencita	Y, AC
AC39	Copin	Dominique	Y, AC, replaces Moutet
AC39	Сzop	Valérie	Y, AC, replaces Giger
AC39	Davies	Chris	Y
AC39	de Jongh	Jacob	Y
AC39	Dessens	Stan	Y, AC
AC39	Eldering	Lamberto	Y
AC39	Goldschmidt	Dirk	Y
AC39	Grajetzky	Corinna	Y, AC, replaces Elsen
AC39	Helseth	Jonas	Y, AC, replaces Hauge
AC39	Hill	Gardiner	Y, AC
AC39	Jevsejenko	Alexandr	Υ
AC39	Kalaydjian	François	Y, AC
AC39	Kougionas	Vassilios	Y
AC39	Langlais	Juliette	Y, AC, replaces Soothill
AC39	Littlecott	Chris	Y, AC
AC39	Røkke	Nils	Y, AC
AC39	Schuetz	Michael	Υ
AC39	Scowcroft	John	Υ
AC39	Skalmeraas	Olav	Y, AC
AC39	Skogen	Tone	Υ
AC39	St. Leger	Hermione	Y
AC39	Sweeney	Graeme	Y, AC
AC39	Tjan	Peter	Υ
AC39	Truffert	Catherine	Y, AC, replaces DeMarcq
AC39	van Bracht	Mart	Y, AC
AC39	van der Lande	Robert	Y
AC39	Vannson	Philippe	Y
AC39	Warren	Luke	Y
AC39	Wezel	Ralf	Y
AC39	Whiriskey	Keith	Y
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