

Diana Welander

6 October 2023

Public

Customer Committee / Autumn 2023

Date 19.10.2023 13:00 EE(S)T

Place Microsoft Teams meeting

Agenda

	Time (EET)	Topic
1	13:00 – 13:10	Welcome Minutes of the eSett Customer Committee meeting 11.5.2023
2	13:10 – 13:35	eSett news
3	13:35 – 14:00	15 min settlement status analysis
	14:00 – 14:10	Break
4	14:10 – 14:35	Shortening of the reporting period, situation with 15 min data
5	14:35 – 15:00	General market analysis and Open data
	15:00 – 15:10	Break
6	15:10 – 15:30	Future communication channels: ECP, BRP API development etc.
7	15:30 – 15:50	TSO News
8	15:50 – 16:00	Summary and next meeting

Distribution: Customer Committee

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Agenda item: TOP 1

Minutes of the eSett Customer Committee meeting 11.5.2023

Brief summary:

- Members will review and approve the previous minutes of the eSett Customer Committee meeting 11.5.2023 and discuss any open action points.
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eSett's Customer Committee meeting 11.05.2023

Date 11.05.2023 13:30 EEST

Place Katajanokan Kasino, Helsinki City Center

Present	Kristian Lund Bernseter	Statnett SF
	Jani Piipponen	Fingrid Oyj
	Birger Fält	Svenska kraftnät
	Bård Mageli (Spokesperson)	Volue Market Services AS
	Espen Fjeld	Energi Salg Norge AS
	Jarmo Lapakko	EPV Energia Oy
	Olli Taipale	Caruna
	Jesper Vestergaard	Danske Commodities
	Naji Iskander	Modstrøm
	Minnakaisa Ahonen (Chairperson)	eSett Oy
	Diana Welander (Secretary)	eSett Oy
	Tuomas Lahti	eSett Oy
	Jonni Laine	eSett Oy
	Tuomas Pulkkinen	eSett Oy
	Markus Flyktman	eSett Oy
Kim Saarijärvi	eSett Oy	
Absent	Lena Ingårda (Member)	Vattenfall AB
	Håkan Eriksson (Member)	Ellevio
	Emelie Ekman (Deputy)	LOS Energy AB
	David Lundgren (Deputy)	E.ON Elnät AB
	Trond Marthinsen (Deputy)	Lyse Produksjon AS
	Liv Marit Butveit (Deputy)	Volue Market Services AS
	Tom Backman (Deputy)	Fortum
	Tarja Heinonen (Deputy)	Sallilan Energia
	Jørn Klitgaard (Deputy)	Ørsted
	Anders Millgaard (Member)	Modstrøm
	Karsten Feddersen	Energinet
	Morten Torgalsbøen (Deputy)	Statnett SF
	Robert Thelander (Deputy)	Svenska kraftnät
	Heikki Raatikainen (Deputy)	Fingrid Oyj
	Preben Høj Larsen (Deputy)	Energinet

1 **Opening the day, recap of the meeting minutes from the last Customer Committee meeting**

eSett CEO and Chairperson of the meeting Minnakaisa Ahonen opened the meeting and welcomed all Customer Committee members to the meeting. Last meeting it was decided to try out a new concept of having the Autumn meeting via Teams and the Spring meeting on site with a dinner afterwards. In addition, the Deputies will have the opportunity to participate in the Autumn meeting.

It was mentioned that during the last meeting Bård Mageli was chosen as a Spokesperson for the Customer Committee. Therefore, eSett and the Spokesperson Bård had a Teams call before the meeting, to go through the agenda and to add a discussion topic to the agenda. The Spokesperson will also participate in the upcoming eSett Board meeting in June and briefly inform the Board what had been discussed during the Customer Committee meeting.

The meeting minutes from the last Customer Committee meeting were approved as they were, since no one had any comments on them.

2 **eSett News**

Diana Welander started the agenda with the latest news from eSett. The first topic was a short introduction to eSett's annual review, and a copy of the Annual review was given to each Customer Committee member.

The presentation continued with giving the latest status on the development of the account model. The topic has also been discussed in the previous Customer Committee meetings and the material from the previous meetings is available on eSett's Customer Committee web page. Diana mentioned that the model has been applied for Nordea Finland, Nordea Norway and a new settlement bank Nykredit. SEB will also soon be ready to take the new account model into use. As a highlight Diana mentioned that eSett's Board previously decided that the settlement bank no longer have to be a Nordic bank but can be also from other European countries (in EEA area) if all other requirements for being a settlement bank are fulfilled.

Diana continued her presentation by showing a timeline with the most current projects that eSett are working on. The timeline included projects as for example the transition to 15 min ISP in eSett, Sweden and Norway, as well as ongoing projects and changes concerning Swedish settlement.

Next up, the three upcoming changes in Sweden were presented in more detail. The Swedish settlement of balancing capacity will be moved to eSett in Q3 2023 with a target go live date currently set to 1.9.2023. eSett will also take over the profiled consumption and monthly BRP reconciliation process from Svk from 1.11.2023. The last project in line is taking merged production in use in Sweden on 1.4.2024. More information about the upcoming changes in Sweden can be found from respective project's project web page.

Diana continued with presenting some of the recent Online Service improvements as well as a few upcoming improvements. There will be several improvements in Online Service coming up, i.e. better filtering options in the Balance report and more clear information about the data packages in the Data package overview. In addition, there will also be several notification improvements. A more detailed view of the improvements can be found from the material.

Diana concluded her presentation by informing the members that eSett has published the latest version of the NBS Handbook in April. Diana also asked the Committee members how they use the NBS Handbook and to give some feedback on it. It was commented by all members that it is very important to have the document available in the local language. It appears that most people use the PDF version as it provides the possibility to easily find information using ctrl + f search function. Also, the English version is being used especially for the translations. It was suggested that market parties could contact eSett directly if they find anything wrong or unclear in the local version of the Handbook, as there is always a risk that some change is missed when several versions are used. It was also noted that eSett usually updates the Handbook twice a year, once during Spring and once during Autumn.

3 15 min status before go-live

Tuomas Pulkkinen continued the meeting with a brief presentation of the 15 min status before the 15 min ISP go-live on 22.5.2023. He started by showing the timeline for the overall project as well as for the resolutions in eSett's system. The timeline on a Nordic and a National level was presented with the latest information including the imbalance prices.

Tuomas continued with going into more detail on what will happen on the 22.5.2023 when eSett's system will switch to 15 min resolution. He highlighted that although the system will switch to 15 min, the market will still have the possibility to report in hourly values after this day. Also, there will be no financial impacts for BRPs until pricing shall be in 15 min (plan: Q2/2024).

The presentation continued with presenting in more detail the impacts of the transition 22.5.2023. In Denmark and Finland metering and reporting will switch to quarterly resolution as stated in the national regulations. In addition to this, there are some impacts on all countries around the go live date 22.5.2023. There will, for example, be reporting limitations towards eSett around 22.5.2023. Also, the outgoing data from eSett is partially affected by the change of resolution. Tuomas also mentioned that minor rounding differences may occur for hourly reported data after the transition.

Tuomas finished his presentation by going through the open market tests. He clarified that testing will continue for Norwegian and Swedish market parties also after 22.5.2023. Swedish parties are recommended to test 15 min reporting during the Summer together with the switch of Swedish monthly settlement from Svenska kraftnät to eSett.

There was a question from one member if most actors have started testing already. Tuomas answered that only around 25 market parties are testing so far, but several system vendors are represented in this number. It was also asked if eSett has received production data in 15 min already. Tuomas confirmed that Energinet, Fingrid and the NEMOs are all reporting in 15 min. Also, a couple of other market parties have reported some values in 15 min.

One member pointed out that it had been difficult to keep track of which rules and times apply in each NBS country, and that the TSOs had not been clear enough about how they want the reporting to be handled. The TSOs summarized the schedule in each country. eSett tries to update the Commissioning plan as soon as there is knowledge of any change in the timeline.

Minnakaisa concluded with stating that the 15 min transition period is the most complicated part in the system. Although eSett's system has been ready already for a long time, one can never know what will happen when a lot of market parties are reporting data that needs to be aggregated at the same time. This can be tested in practice with the market only on the go live. eSett is still positive that the transition will be smooth.

4 **eSett: electricity market overview**

The next presentation was held by Markus Flyktman who presented an overview of the electricity market in the NBS countries, using imbalance data, covering for example prices, market party changes, and other imbalance data.

Markus started with some statistics on the number of active market party roles in every NBS country. He showed that there is an increasing trend in the BRPs that are operating in multiple countries.

Markus continued with presenting yearly absolute production / consumption imbalance quantities in the NBS countries. First the two-balance data were presented on a yearly level, followed by monthly absolute imbalance quantities from after the switch to the single balance model in November 2021. He clarified to the members that the Top 10 BRPs in the graph refer to the BRPs with most imbalances and not the size of the company.

Markus moved on with showing graphs with the average monthly imbalance price per day and per area. The first graph revealed price peaks in the imbalance price. The first peak was on 26.11. when the imbalance price peaked 5 000€ for two hours in FI, SE1-3, NO3,4 (north). Other peaks were in August 2022 and during the winter 2022-2023. Another highlight in the opposite direction was the negative prices on 10.4. when all MBAs except Southern Norway had a price of – 2 200 € for two hours. The second graph containing average monthly imbalance price per area split Norway and Sweden into two price areas (north and south) to make the picture more reader friendly. This graph shows that there are huge price differences between the southern and northern areas.

Markus then continued with comparing consumption and production data in each NBS country. Denmark is not included on this slide as eSett does not get the

production data per type from the datahub. The graph shows the yearly variation and that the share of wind production has doubled since year 2018.

The next slide compared production and consumption data from 2021 and 2022. The graph shows that as asked by the authorities, the consumption decreased a lot during 2022 while the production remained at similar level as in 2021.

Also, PX market trade and BIT trade volumes were compared. The graph shows that the quantity of Bilateral trades has a decreasing trend compared to Day-Ahead trading. As in previous years, 2022 also included yearly variations in trading, with trading levels comparable to 2020.

Lastly, the weekly day-ahead trade volumes for the North Sea link between NO2 and Great Britain were presented. The volumes show that when the operation started in the fall 2022, the main flow was exporting. During the high prices in August 2022 the flow changed temporarily to import but changed back again to export.

5**TSO News**

Next up, the TSOs gave their latest status regarding the implementation of the BSP model.

The Finnish TSO member started by revealing that the invoicing of mFRR energy for non-BRPs will be moved to eSett by the end of 2023. As the BSP role is already implemented in Finland without the need for a BRP role, the transition to eSett should be quite straight forward. The agreement is currently being revised and the aim is that all BSP agreements are signed in September – October.

The Finnish TSO member continues stating that the invoicing of aFRR energy will be implemented at the go live of aFRR energy market in June 2024. The decision on the invoicing of reserve capacity mFRR, aFRR, FCR-N, FCR-D and FFR will be taken by the end of this year and more information will be shared when available.

The Norwegian TSO member carried on with informing that the BSP role is not formally implemented in Norway, but it exists in eSett as a role after the technical implementation last Fall. The BSP terms and conditions were sent out on public consultation on 4.5.2023. The terms and conditions claim requires that the BSP is also the BRP of the resource providing the balancing service. In Norway the FFR is the only balancing service where independent aggregation is permitted, for all other products a BRP role would be needed as well.

The Norwegian TSO member concluded his presentation saying that it is still not decided how and when further possibilities for independent aggregation will be implemented in Norway. Statnett is participating in the ENTSO-E work with new framework guidelines on demand response.

Next up, the Swedish TSO member continued by saying that they are in the same stage in the process as Norway as the BSP role is not formally implemented in

Sweden, but only exists in eSett as a role after the technical implementation. Svenska kraftnät is currently waiting for the approval of the terms and conditions from the Swedish NRA. Some feedback should be received back before Summer. After the regulator's approval, there is still a 12 month's implementation phase before the new role can be taken into use. The current wish is that the BSP role could be independent from the BRP. Target is to have a "verified delivery" in the future.

As the Danish TSO member was not present at the meeting, no status update was given for Denmark.

It was concluded that the NRAs are guiding the outcome of the BSP.

The next topic was the fees. The Norwegian TSO member explained that the main principles behind the approach for cost allocation has been harmonized already for a long time with some deviations in the practical implementation. A "polluters pay" principle as basis for the allocation of costs today.

There is a harmonized fee model in Finland, Norway and Sweden today, where the imbalance fee has been the same in all countries since the implementation of single balance and price on November 1st 2021. The volume fee, however, differs significantly because of differences in the cost base.

The fees in Denmark differs from the other countries as the volume fee is collected from the retailers and the volume fee is kept as low as possible to support the green transition, since wind and solar power are causing the largest imbalances in Denmark.

There was a wish from one of the members to harmonize the use of normal/minor production in the fees. Another member asked if the Merged production in Sweden will change the fee behavior, to which eSett informed that it will not.

6 Future imbalance price design once connected to the European platforms MARI and PICASSO

The meeting continued with Erica Schandorff Arberg from NBM calling in. Erica started her presentation by showing the roadmap leading to the needed changes. The roadmap gave a historical overview of when it all started and continues until the future imbalance pricing design will be introduced in the Nordics.

Erica then described the starting point of the project, when the Nordic countries implemented the Single Price Model on 1.11.2021, implementing single imbalance pricing and single balance/position. She also explained that the current Nordic imbalance settlement model is based on the mFRR balancing energy prices and the application of an exception rule to set the direction of imbalances (dominating direction) based on the uncongested area. The presentation continued with explaining the ending point – a connection to MARI and PICASSO

and implementing a future imbalance price design, reflecting the new balancing energy pricing rules.

However, there are several steps and tasks in between, and a design needs to be formed. Firstly, the method for imbalance price calculation must be selected from the three current options. Secondly, it needs to be decided whether to consider balancing energy prices for which you have a satisfied demand equal to zero. Thirdly, a design on how to set the Value of Avoided Activation (VoAA) is required. Erica presented the four design approaches which are currently being investigated at NBM; the volume weighted average (VWA) approach, the Combined approach 1, the Combined approach 2, and the Max/Min approach.

Moving forward, a timeline for TSO work and stakeholder interaction was presented. The current state is that the final design proposal has been established and the start of the official consultation processes will begin after Summer. Erica also shared some recent development material where the market can find more information about the topic.

Erica finished her presentation by asking the Committee members for feedback and their input. This can be sent to ear@energinet.dk before Tuesday 16.5.2023. It was mentioned that this is a very complex change where the 15 min price will have a huge impact. It was proposed to raise this topic at the Customer Committee meeting again after the 15 min price has been implemented for a more thorough overview.

7 BSP Agreement draft; market's comments and discussion

Kim Saarijärvi started his presentation by giving some background information to the topic. He explained that eSett is building its readiness to support the balancing service providers (BSP) in the electricity market in the future. The first step towards this was the BSP technical go live on 10.10.2022 which introduced the BSP role in eSett's system. However, although the technical go live has already passed, the business go live schedule for the BSP role is still open. After business go live date, individual BSPs are allowed to enter in the market settled by eSett. This date will be separately decided for each country.

As a next step towards BSP business go live, eSett has published a draft of the balancing service provider agreement for market participants' comments. This agreement will be used for the individual balancing service providers in Nordic countries when the transition to the BSP model takes place in each country. The agreement will not affect currently active balance responsible parties in imbalance and capacity settlement, as they can continue their operations under the current imbalance settlement agreements. The BSP agreement follows the same structure as the current imbalance settlement agreement (for BRP), but it has been adjusted to fit the balancing service provider concept.

The draft of the BSP agreement has been published on the BSP project place since April, and market participants are invited to provide comments to eSett

regarding the agreement before 17.5.2023. So far, eSett has not received any comments or input on the agreement.

8 Open discussions about relevant imbalance settlement topics

The Spokesperson Bård Mageli had prepared some open questions for the Committee members to discuss during the meeting. Bård started the discussions with bringing up the importance for the TSOs to harmonize the market as much as possible.

There was a suggestion from a member that eSett could take a more central role in the NBS model and more invoicing products could be centralized towards eSett. This topic led to a discussion that the reserve market is very broad and includes several steps and legislation in each country, as well as different goals, which makes it hard to fully harmonize. The TSOs highlighted that this topic is actively discussed between the TSOs, and therefore groups have been founded such as the NBM group. It was also mentioned that the TSOs are moving several tasks to eSett during the near future, as for example the upcoming changes concerning the Swedish settlement.

The Spokesperson also brought up the collateral. It was discussed that eSett is the financial counterpart in the imbalance settlement towards all BRPs which implies a significant counterparty risk for eSett. Each BRP is responsible for its own obligations, and collaterals ensure that the inability to pay is not a loss for other BRPs. In this way the collateral helps to ensure that eSett can always complete the imbalance settlement in an orderly manner.

The collateral formula was very carefully analyzed during the last Winter months. The analyses nevertheless indicated that the collaterals do reflect the actual counterparty risk in the market. Long-term developments, as i.e., the possibility of a faster invoicing cycle, have been discussed with the market and eSett is analyzing the metering data to see if this could be developed.

The TSOs concluded that the collateral formula is a highly complex formula, and that they are happy to receive concrete improvement proposals from the market participants.

9 eSett's customer meetings

The last presentation of the meeting was held by Tuomas Lahti, introducing the outcome of eSett's customer meetings from last year and Spring 2023. Tuomas started his presentation by giving some background information about how the project started and that eSett now sees this not only as a project, but as a part of eSett's routines. He explained that eSett so far has had about ten customer meetings, almost evenly from each four countries.

Tuomas shared that the experiences from the bilateral customer meetings have been very encouraging and positive. He mentioned that the customers appreciate e.g. eSett's documentation, communication and openness, a clear

Online portal with good usability, fast and professional customer service as well as a customer-oriented approach.

Tuomas continued with sharing that the customers expect e.g. more flexibility and adjustability of the Online Service i.e., customization for each user, advanced data transfer abilities, less user accounts in case of a large corporation with many legal companies or subsidiaries and improved settlement data quality and KPIs. He informed that eSett has noted all the given feedback and will review all suggestions for improvement carefully. He also mentioned that several system related improvements ideas have been placed on the roadmap and expected to be completed during this year, as was already informed in the eSett News part of the meeting.

Tuomas concluded his presentation with declaring that the meetings have helped eSett understand better how our customers work and what is important for them. Tuomas also mentioned that in addition to continuing these meetings, eSett will keep participating in energy industry events and conferences to meet the customers and promote eSett's services.

10 **Summary and next meeting**

The meeting was concluded with a short summary of the topics. It was agreed that the next meeting will be held on 19.10.2023. Proposed topics for the next meeting were:

- Collaterals
- 15 min ISP
- BSP
- BRP API
- Market analysis
- Experience on go-live of capacity settlement in Sweden

The next meeting will be held on Teams only, and both Customer Committee members as well as Deputies are welcome to join the meeting. The placeholders for the meeting will be sent out shortly after the meeting.

The Chairperson thanked the Customer Committee members for active participation in the meeting and ended the meeting as no more topics were raised at this point.

Attachments:	<p>eSett News – Diana Welander</p> <p>15 min status before go-live – Tuomas Pulkkinen</p> <p>eSett: electricity market overview – Markus Flyktman</p> <p>News from the TSOs – The TSOs</p> <p>Future imbalance price design once connected to the European platforms MARI and PICASSO – Erica Schandorff Arberg, NBM</p> <p>BSP Agreement draft; market's comments and discussion – Kim Saarijärvi</p> <p>Open discussions about relevant imbalance settlement topics – Spokesperson Bård Mageli</p> <p>eSett's Customer meetings – Tuomas Lahti</p>
Distribution:	Customer Committee members and deputies

Diana Welander

6 October 2023

Public

Agenda item: TOP 2

eSett News

Responsible party: Diana Welander, eSett Oy

Summary:

eSett will present settlement news since the last customer committee meeting and revise the status of the most essential ongoing projects and changes.

Agenda item: TOP 3

15 min settlement – status and initial impact analysis

Responsible party: Tuomas Pulkkinen, eSett Oy

Summary:

eSett will present the project status regarding the 15-minute imbalance settlement period and its remaining parts. Additionally, a quick impact analysis was done during the summer 2023 after Denmark and Finland transitioned into 15 min. Findings of that initial analysis will be presented as well as some reflections of the reasons behind the results.

Agenda item: TOP 4

Shortening the reporting period

Responsible party: Olli Vainikainen, eSett Oy

Summary:

This presentation shows how "Data Readiness", the amount and quality of input data received by eSett, changes during the reporting period. By studying Data Readiness, it is possible to identify if shortening the reporting period could be done and what impact this would have on imbalance settlement. Additionally, the effect of 15 min imbalance settlement period on Data Readiness is assessed.

Agenda item: TOP 5

General market analysis and Open data

Responsible party: Tommy Gulin, eSett Oy

Summary:

The presentation takes a look at past developments in the Nordic electricity market from eSett' perspective. We will present the latest trends through imbalance data, covering for example prices, market party changes, and BRPs imbalance performance.

Agenda item: TOP 6

Future communication channels: ECP, BRP API development etc.

Responsible party: Rami Ayoub, eSett Oy

Summary:

eSett currently provides interfaces to fetch data using the Information Service, which is SOAP/xml based. We are always working to add and improve existing APIs to provide a better user experience.

To help us know and plan our improvements, some input on how the APIs is being used by the market would be greatly appreciated. We have collected a few questions below to help us better understand the preferred way of using our APIs.

- How often, approximately, does data need to be fetched from the API (for example, average number of requests per hour)?
 - This will help us define and set our rate limits.
- What is the estimated time interval for each request (for example, the last two weeks, the last month)?
 - This is for performance tuning, to determine the approximate volume of data for each request.
- How often is data older than a few months required?
 - This is also for performance tuning.
- The current information service provides data in xml format and the requests are made using SOAP. Would you prefer a more modern RESTful API approach with JSON data? In this case an OpenAPI specification would be provided.
- What level of real-time accuracy is required? Is the primary focus on accessing the most current data for the present day?
- Is there any data missing from the current Information Service that you would like to see in possible future APIs?

Agenda item: TOP 7

TSO News

Responsible party: TSOs

Summary:

The TSO representatives will present upcoming news and important market information.

Agenda item: TOP 8

Summary and next meeting

Responsible party: All

Summary:

- Discussion on any other business
- Next meeting