



Diana Welander 8 May 2025 Public

Customer Committee meeting

14.05.2025 13:30 EE(S)T Date

Place Helsinki, Finland

Agenda

Time (EE(S)T) **Topic**

1	13:30 - 13:40	Welcome		
		Minutes of the eSett Customer Committee meeting 9.10.2024		
2	13:40 – 13:55	eSett news		
3	13:55 – 14:25	Market trends in imbalance settlement		
4	14:25 – 14:45	Open Data		
5	14:45 – 15:15	TSO and Member news		
	15:15 – 15:30	Break		
5	15:30 – 15:45	eSett API development workshop: Introduction to workshop		
	15:45 – 16:45	eSett API development workshop: Group work		
	16:45 – 17:30	eSett API development workshop: Summary of group work		
6	17:30 – 17:45	Summary and next meeting		

Distribution: Customer Committee



Agenda 2 (14)

Diana Welander 8 May 2025 Public

Agenda item: TOP 1

Minutes of the eSett Customer Committee meeting 9.10.2024.

Brief summary:

• Members will review and approve the previous minutes of the eSett Customer Committee meeting 9.10.2024 and discuss any open action points.





Diana Welander 8 May 2025 Public

eSett's Cust	tomer Committe	e meeting	9.10.2024
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Date 9.10.2024 13:00 EE(S)T

Place Microsoft Teams Meeting

Present Kristian Lund Bernseter Statnett SF

Jani Piipponen Fingrid Oyj Heikki Raatikainen (Deputy) Fingrid Oyj

Birger Fält Svenska Kraftnät
Jesper Vestergaard (Spokesperson) Danske Commodities

Anders Millgaard Modstrøm

Bård Mageli Volue Market Services AS

Jarmo Lapakko EPV Energia Oy

Olli Taipale Caruna

Lena Ingårda Vattenfall AB
David Lundgren (Deputy) E.ON Elnät AB

Minnakaisa Ahonen (Chairperson) eSett Oy
Diana Welander (Secretary) eSett Oy
Tuomas Lahti eSett Oy
Tuomas Pulkkinen eSett Oy
Tommy Gulin eSett Oy
Olli Komulainen (facilitator) eSett Oy

Absent Karsten Feddersen (Member) Energinet

Trond Marthinsen (Deputy)

Lyse Produksjon AS

Liv Marit Butveit (Deputy) Volue Market Services AS

Tarja Heinonen (Deputy) Sallilan Energia

Tom Backman (Deputy) Fortum
Naji Iskander (Deputy) Modstrøm
Jørn Klitgaard (Deputy) Ørsted
Håkan Eriksson (Member) Ellevio

Jonas Holmgren (Deputy) Vattenfall AB Morten Torgalsbøen (Deputy) Statnett SF

Robert Thelander (Deputy) Svenska kraftnät

Preben Høj Larsen (Deputy) Energinet



4 (14)



Diana Welander 8 May 2025 Public

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 Teams meeting.

Minnakaisa encouraged the members to review the customer committee rules and procedures, which can be found on eSett's website. She emphasized the significance of covering these topics in today's meeting, pointing out that the members' perspectives on the committee's operations—like the composition and diversity of the members—are highly valuable.

She highlighted that the committee's success relied on active member participation and diverse perspectives. The goal is to engage in active discussions and gather opinions, as the committee thrives on member participation and diverse perspectives. This small group setting is designed to ensure that everyone's voice is heard, making the meetings more interactive and informative.

The meeting minutes from the last Customer Committee meeting were approved without any comments or revisions.

2 eSett News

Diana Welander started her presentation by showing the changes in eSett's services since the start of eSett, highlighting the shift from eSett doing only imbalance settlement to now handling all kinds of settlement services in the Nordic electricity market. The expansion of services to include recalculation settlement and invoicing different reserves.

Data showing an increase in BRPs and BSPs in the Nordic market was presented, leading to the launch of a new customer portal. This portal simplifies the onboarding of new customers and the creation of service requests, improving customer interactions with eSett. Key benefits include an enhanced user experience, more efficient communication, and easy access to historical data.

The presentation continued by providing an overview of the customer satisfaction survey, which was open for two weeks and received a 10% response rate. Diana highlighted the positive feedback, including high satisfaction with customer service, communication, the website, and the quality of service provided by eSett. However, the survey also highlighted some areas for improvement, including data handling, user experience, and communication during updates or issues. Diana mentioned that eSett has scheduled a meeting to review the results in detail and create an action plan.

Diana then discussed recent market changes, including the implementation of the Picasso and mFRR EAM projects, the introduction of reserve capacity invoicing in Norway, and the modernization of reports in the online service. The Picasso







Diana Welander 8 May 2025 **Public**

> project, a common European energy activation market for aFRR energy, and its impact on invoicing and imbalance pricing in Finland and Denmark, was particularly noted. Additionally, the mFRR EAM project aims to automate bid selection and activation on a 15-minute basis, replacing the current one-hour regulation power market. The 15-minute mFRR EAM is a prerequisite for the 15minute trading in intraday and day-ahead markets, as well as for 15-minute imbalance pricing. Furthermore, the introduction of reserve capacity invoicing in Norway was mentioned, with eSett handling this and providing options for BSPs regarding currency preferences for invoices. Diana also highlighted the modernization of reports in the online service, which will include interactive settlement data and an improved user experience.

> The presentation shifted to providing an overview of the API development project, which aims to create APIs based on customer feedback to improve data access and usability. Diana emphasized the importance of customer feedback in shaping the API development, noting that a consultancy group has gathered input from interviews and forms from the customers. She mentioned that the most requested API type is the Restful Open API, which offers more control over data extraction for market participants. Diana outlined the project timeline, with customer testing planned for 2025 and a full release in 2026, coinciding with the renewal of eSett's back office.

> Attention then shifted to developing the Production Plan KPI, addressing customer concerns over varying threshold values across different countries. A TSO working group has been aligning these values for the Nordic area. The new thresholds have been agreed upon and will be introduced this Autumn. eSett will soon announce the exact implementation date.

> Diana concluded her presentation by giving an update on the collateral workshop held at the last Customer Committee meeting. Following the meeting, the Finnish Energy Authority issued a decision on terms for balance responsible parties (BRPs), setting the multiplier 'm' to 1/7, effective by 30 November 2024. Fingrid, as requested by the Finnish Energy Authority, commissioned a study on considering production in collaterals. AFRY Management Consulting conducted interviews and analyzed data, concluding that production should not affect collateral requirements currently. In Sweden and Norway, the existing collateral model will remain unchanged.

3 Practical use-cases in Danske Commodities and possible API implementations

Jesper Vestergaard from Danske Commodities continued the meeting and presented an evaluation of eSett's services from a BRP perspective, emphasizing the need for detailed data to validate trades and settlements, and the importance of streaming data for real-time monitoring, allowing BRPs to identify and address mismatches quickly.



Agenda 6 (14)

Diana Welander 8 May 2025 Public

Jesper provided examples of API requirements, including the need for underlying data at the lowest granularity and robust handling of time zones and units. He cited the Balance Report as the first example, where data is manually transcribed and used for validation of internal data every month, especially for customers with complex setups, such as those behind the meter. He mentioned that the granularity should align with the ISP and provided some examples of output columns as well as a method for configuring eSett APIs.

Furthermore, Jesper mentioned that the fees used in the billing data are manually retrieved from eSett's system. This manual process occasionally causes settlement issues, especially at the turn of the year when the fees changes. By automating the extraction of fee data for specific periods, these problems could be mitigated, ensuring a smoother and more accurate billing process for Danske Commodities.

Next, Jesper further elaborated on the practical use cases for the data provided by eSett, particularly focusing on the finance department's utilization within Danske Commodities. The Finance department conducts several SOX controls using data from eSett's Online Service portal, ensuring compliance and accuracy in their financial reporting. He emphasized the need for detailed data to validate trades and settlements, highlighting the importance of matching internal data with eSett's calculations. Instead of relying solely on weekly invoices, the team validates these on a monthly basis, which also allows them to split an invoice when a week spans across two months, ensuring more accurate financial reporting. Jesper also noted the importance of detailed imbalance and settlement data for compliance with B2B Sox requirements, enabling accurate allocation of volumes and prices. He suggested improvements, such as access to all data behind the summarization of the invoicing report and the availability of data at the ISP (Imbalance Settlement Period) level for all products, to ensure detailed and granular insights for better decision-making.

During the discussion, a member highlighted the importance of having data available at both the aggregated level and in detailed series. This dual approach allows for comprehensive analysis and comparison, ensuring that both high-level trends and granular specifics are captured. The consensus was that both detailed data and aggregated data are essential for the customers.

Jesper concluded his presentation by adding some other relevant examples. For instance, to track their collaterals, Danske Commodities is currently collecting the relevant numbers through an automated robot. However, any minor changes to the service portal result in a process breakdown. He emphasized that an API solution would provide a more dependable and stronger alternative. Jesper also provided example output columns to illustrate how data could be structured and retrieved efficiently through an API.

Following Jesper's presentation, there were discussions regarding additional changes requested by a Norwegian customer. They mentioned experiencing occasional problems with the two-step SMS authentication code needed for accessing the Online Service and expressed a desire for alternative identification



Agenda 7 (14)

Diana Welander 8 May 2025 Public

methods. eSett responded that they are currently investigating alternative login methods to enhance system accessibility.

Another discussion was raised regarding the need for a BRP to receive volumes on activated system services as data packages from eSett. This is necessary so that BRPs can perform a bilateral settlement against independent BSPs to be compensated for imbalances the BSP imposes on the BRP when the BSP fails to deliver on the activated system services bid. eSett informed that they have plans to bring back the data package for BRPs regarding the activated resource. This will possibly happen at the beginning of next year. Information will be sent out once there is a date for the change.

The publication of prices related to system services was then discussed. Currently, only the imbalance price, upward and downward regulation prices for activated system services, and the system's main direction are published in the Open Data. There was a request for eSett to also publish the market prices set by the TSOs in the capacity market for system services. eSett responded that this matter needs further discussion with the TSOs.

4 Nordic Balancing Model roadmap

Karri Mäkelä from Fingrid, a member of the NBM group, held the next presentation about the Nordic Balancing Model roadmap. He began by explaining that the electricity market is undergoing significant renewal. As part of the green transition, the Nordic electricity system and its balancing method will be renewed, giving individual TSOs more accountability for managing consumption and production within their regions.

Karri explained that the Nordic countries have adopted a single price model for balance settlement, streamlining the process and creating uniformity. The procurement of reserve capacity has been significantly ramped up to ensure system stability.

He proceeded by discussing that new reserve marketplaces have been established both nationally and pan-Nordic to facilitate better resource management. The 15-minute balancing has been implemented, and the 15-minute wholesale electricity market is on the horizon, enhancing market responsiveness and efficiency. These changes result in a more sustainable, competitive, and Europe-wide integrated electricity market that aligns with EU regulations.

The presentation shifted to a summary of the reserve products and the new reserve marketplaces. In 2022, new aFRR and mFRR capacity marketplaces were launched, requiring entities with an accepted bid to react automatically or commit to participate in the subsequent energy activation market. In 2024, 15-minute aFRR and mFRR energy markets will open, necessitating resources to



Agenda 8 (14)

Diana Welander 8 May 2025 Public

deliver per market requirements upon activation. By 2026-2027, the mFRR and aFRR energy markets will transition to European platforms.

Karri followed up with the transition of the wholesale market to 15-minute trading, highlighting its significance for enabling market participants to balance within this shorter timeframe. The 15-minute trading period will be introduced on electricity exchanges in Q1 2025, covering the day-ahead market and intraday continuous trading within the Nordic countries. Additionally, intraday auctions will also incorporate this trading period. Karri noted that from 2023, some Nordic countries have already begun trading 15-minute products in the intraday market, setting the stage for a smoother transition to the new standards.

Lastly, Karri presented the roadmap leading to the changes in imbalance pricing and some dependencies for these significant changes. He detailed how the shift to a 15-minute trading period will enhance market responsiveness and accuracy in balancing supply and demand. This transition is a critical component of the broader effort to create a more sustainable, competitive, and Europe-wide integrated electricity market that aligns with EU regulations. Karri underscored that these developments are not just immediate improvements but foundational changes that will support the future stability and efficiency of the Nordic electricity market.

5 Independent aggregator – draft model and project status

Tuomas initiated the discussion by presenting the implementation timeline. Internal testing is set to begin in October, followed by possible external testing with Fingrid in December. Soon after, there will be Open market tests for independent aggregators and system vendors. The initial go-live for the Finnish aFFR market is expected to occur in March or April.

Tuomas then continued the presentation by providing an overview of the independent aggregator model, which allows BSPs to operate without contracts with conventional supply chains or being BRPs themselves. The independent aggregator, acting as a Balancing Service Provider (BSP), activates resources from another supplier or BRP without needing an explicit agreement.

Delivering balancing services as an independent aggregator entails several key elements. It involves payment for balancing services to or from the BSP independent aggregator. Additionally, there is an imbalance adjustment for the BRP and compensation between the BSP independent aggregator and the related BRP. Moreover, there is a possible regulation imbalance for the BSP independent aggregator.

Next up, Tuomas explained the compensation mechanism between BSPs and BRPs, including payments for balancing services and compensation for lost income due to activations. He included a few example cases, such as up regulation with "under delivery" and up regulation with "over delivery."



Agenda 9 (14)

Diana Welander 8 May 2025 Public

The presentation shifted to addressing the future changes in data exchange due to the new model. A new DERI data flow will be introduced, which will handle Delivered Reserves. This data flow may be sent by the TSO, Datahub, and/or BSP, and it will be based on the ENTSO-E Activation Market Document. The documentation for this data flow will be published in CIM format. Several new outgoing data flows from eSett will also be established. Additionally, a dependency matrix outlining differences in Data exchange among the Nordic countries was displayed.

This was followed by an explanation of showing new Online Service views for BRPs, BSPs, and REs that compile activated reserve data and offer drill-downs, which can be used to verify the data.

Tuomas concluded by presenting a table that summarized the national differences and regulations in the Nordic countries concerning the independent aggregator model as it stands today, although further changes are anticipated.

6 General market analysis and Open data

The next presentation was held by Tommy Gulin 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.

Tommy started by showing statistics on the number of active market party roles in every NBS country. He highlighted that the number of registered BRP branches per country has increased, mainly due to a lot of new customers entering as traders in Denmark. Additionally, the number of BRPs with branches in multiple countries surged between 2020 and 2024, with figures rising from 11 to 17, then to 22, 31, and finally 36. Typically, these BRPs begin by establishing a branch in Denmark before expanding to other Nordic countries. He also pointed out that the portfolios for the BRPs vary significantly, with Denmark having numerous traders, while in other Nordic countries, portfolios are more focused on consumption and production.

Tommy moved on with showing graphs with the average monthly imbalance price per day and per area. The graph showed that the prices have stabilized again after the energy crisis.

The second graph, showing the average monthly imbalance price per area, divided Norway and Sweden into north and south. It highlighted that northern Sweden and Norway had consistently lower prices, especially during the 2022 energy crisis. Denmark's prices were slightly higher, likely due to its closer ties with Central Europe and the UK. Finland experienced more volatility compared to the other countries over the past two years.

The presentation moved on to comparing consumption and production data across each NBS country, using a single graph for all countries followed by separate graphs for each country. Denmark was excluded due to the lack of



10 (14)



Diana Welander 8 May 2025 Public

detailed production data from the Datahub. The graph highlighted yearly variations and an increasing share of wind production.

In conclusion, Tommy compared the trade volumes of the PX market and BIT and reported that there have been no significant changes compared to the previous analyses presented in the earlier Customer Committee meetings.

7 Upcoming Customer Committee Meeting: Workshop Topics and Group Assignments

The members were split into smaller groups to brainstorm the format and efficiency of future customer committee meetings and review rules and procedures. The following topics were discussed:

Rules and Procedures: What existing rules work well? What needs to change to ensure clarity and transparency?

To foster a more dynamic and effective committee, it was proposed that the tenure of members be extended beyond the current 2-year rule, allowing for the retention of experienced individuals whose expertise can significantly benefit the group. Additionally, it is suggested that the TSO appoints the same member who participates in other customer forums to ensure consistency and alignment across various committees.

Another critical change pertains to rule 1.3, which currently states that "The Customer Committee is an advisory body with no decision rights." It is recommended that the Customer Committee collectively agrees on common rules that can then be presented and possibly adopted by the TSOs, thus giving the committee a more influential role.

In terms of meeting structure, dedicating specific sessions to brainstorming and gathering innovative ideas from members could enhance the productivity of future meetings. This approach might also lead to a clearer understanding of the ideal outcomes of these gatherings and whether a more diverse range of competencies should be included within the group.

Generally, it was mentioned that eSett has done an excellent job in selecting agenda topics, ensuring they are relevant and engaging. It is important to maintain a good variation on the agenda by reflecting on past discussions while also looking ahead to future possibilities. Additionally, sharing as much material as possible with all members can foster transparency and informed decision-making.

Members: What is the ideal composition for the committee? Should we have a set term for members or allow for turnover?

It was recommended to skip the 2-year rule for member turnover in favor of a wellfunctioning group with continuous membership to maintain experience and



Agenda 11 (14)

Diana Welander 8 May 2025 Public

familiarity among members. Members should not change too often to build and preserve trust within the group. BSPs may need to be involved at some point. A balance is necessary between having a representative group and not having too many participants.

TSO appoints members; the procedure and understanding of this responsibility should be clear. TSO believes a smaller group might be more effective, but adding a few more market participant members could be beneficial. A slightly larger group would facilitate turnover, which could have positive effects.

One group shared their thoughts on the ideal composition of the Customer Committee. They suggested that it should include both a member from a large BRP and a representative for small BRPs. They also recommended integrating the BSP role into the committee. The discussion about the data hub's presence concluded that it wasn't essential for it to be included.

Member Involvement: How can we ensure members are more engaged and active? Should we assign roles or ask for voluntary presentations?

The group discussions emphasized the need for voluntary presentations where participants could freely share their viewpoints on various topics. It was agreed that additional roles would not necessarily benefit the process, and the existence of the Customer Committee should be clearly communicated. An "Idea Box" was suggested for market participants to anonymously provide feedback, alongside marketing efforts to promote the Customer Committee. Encouraging market players to deliver presentations and forming smaller, subject-focused working groups were seen as potential ways to increase engagement.

Another crucial aspect is promoting transparent discussions about potential issues while ensuring business confidentiality. The importance of members' responsibilities and expectations in staying active within their market sectors and expressing their own opinions or those gathered from the market was acknowledged as significant.

Frequency of Meetings: How often should we meet to stay productive while not overburdening members?

It was seen that the current state, meeting twice a year, is fine and allows for substantial progress without overwhelming participants.

Onsite vs Teams: What are the advantages and disadvantages of meeting in person vs virtually? What balance should we aim for?

The current setup with meeting twice a year is effective and manageable. One remote meeting ensures easy access for all participants without travel, while one





Diana Welander 8 May 2025 **Public**

> onsite meeting allows for deeper discussions and workshops. To avoid confusion, meetings should be either fully remote or fully onsite.

8 Summary and next meeting

The following Customer Committee meeting is set for 14th May 2025. This session will occur in person in Helsinki and will be followed by a dinner. A placeholder will be dispatched shortly after the meeting, with further details to be shared as we approach the Spring meeting.

Jesper Vestergaard will continue as the Spokesperson until the next meeting.

The Chairperson thanked the Customer Committee members for active participation in the meeting and ended the meeting.

Attachments: eSett News - Diana Welander (eSett)

> Practical use-cases in Danske Commodities and possible API implementations – Jesper Vestergaard (Danske Commodities)

Nordic Balancing Model roadmap – Karri Mäkelä (NBM group / Fingrid)

Independent aggregator – draft model and project status – Tuomas

Pulkkinen (eSett)

eSett Market Overview - Tommy Gulin (eSett)

Distribution: Customer Committee members and deputies



O E S E L L Agenda 13 (14)

Diana Welander 8 May 2025 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

Market trends in imbalance settlement

Responsible party: Markus Flyktman, eSett Oy

Summary:

The presentation reviews past developments in the Nordic electricity market from eSett's perspective. eSett will present the latest trends through imbalance data, covering for example prices, market party changes, and imbalance amounts.

Agenda item: TOP 4

Open Data

Responsible party: Sasu Saalasti, eSett Oy

Summary:

eSett will present the latest status and trends of the Open Data platform and API, and introduce future development goals of the platform. The presentation will have time for open discussion.



Agenda 14 (14)

Diana Welander 8 May 2025 Public

Agenda item: TOP 5

TSO News

Responsible party: TSOs

Summary:

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

Agenda item: TOP 6

eSett API development workshop

Responsible party: Ville Rahkonen, Rami Ayoub, Tuomas Pulkkinen, eSett Oy

Summary:

The workshop aims to discuss developing a new API to replace the current information service (INFS). We will review INFS's scope and usage, outline the eSett API project plan. We will identify needs and gather development ideas. A possible demo of the eSett API may be included.

Agenda item: TOP 6

Summary and next meeting

Responsible party: All

Summary:

- Discussion on any other business
- Next meeting