

Diana Welander

1 October 2025

Public

Customer Committee / Autumn 2025

Date 15.10.2025 13:00 EE(S)T

Place Teams meeting

Agenda

	Time (EE(S)T)	Topic
1	13:00 – 13:10	Welcome
		Minutes of the eSett Customer Committee meeting 14.05.2025
2	13:10 – 13:25	eSett news
3	13:25 – 13:45	Customer Committee News
	13:45 – 14:00	Break
4	14:00 – 14:45	The role and implementation of independent aggregators
	14:45 – 15:00	Break
5	15:00 – 15:30	Market Analysis: 15 min transition
6	15:30 – 15:45	TSO News
7	15:45 – 16:00	Summary and next meeting

Distribution: Customer Committee

Diana Welander

1 October 2025

Public

Agenda item: TOP 1

Minutes of the eSett Customer Committee meeting 14.05.2025

Brief summary:

- Members will review and approve the previous minutes of the eSett Customer Committee meeting 14.05.2025 and discuss any open action points.
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eSett's Customer Committee meeting 14.05.2025

Date 14.05.2025 13:30 EE(S)T

Place Hotell Lilla Roberts, Helsinki

Present	Kristian Lund Bernseter Jani Piipponen Birger Fält Safwat Majid Jesper Vestergaard (Spokesperson) Bård Mageli Kamilla Solumsmo Jarmo Lapakko Teija Pelkonen Lena Ingårda Håkan Eriksson Naji Iskander (Deputy) Minnakaisa Ahonen (Chairperson) Diana Welander (Secretary) Jonni Laine Tuomas Lahti Tuomas Pulkkinen Sasu Saalasti Markus Flyktman Ville Rahkonen Rami Ayoub	Statnett SF Fingrid Oyj Svenska Kraftnät Svenska Kraftnät Danske Commodities Volue Market Services AS Skagerak Kraft AS EPV Energia Oy UPM Energy Oy Vattenfall AB Ellevio Modstrøm eSett Oy eSett Oy eSett Oy eSett Oy eSett Oy eSett Oy eSett Oy eSett Oy
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Absent	Karsten Feddersen (Member) Preben Høj Larsen (Deputy) Morten Torgalsbøen (Deputy) Robert Thelander (Deputy) Heikki Raatikainen (Deputy) Trond Marthinsen (Deputy) Liv Marit Butveit (Deputy) Tarja Heinonen (Deputy) Tom Backman (Deputy) Anders Millgaard (Member) Jørn Klitgaard (Deputy) David Lundgren (Deputy) Jonas Holmgren (Deputy)	Energinet Energinet Statnett SF Svenska kraftnät Fingrid Oyj Lyse Produksjon AS Volue Market Services AS Sallilan Energia Fortum Modstrøm Ørsted E.ON Elnät AB Vattenfall AB
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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 that was held at Hotell Lilla Roberts in Helsinki.

Since there were new members attending the meeting for the first time, everyone presented themselves shortly to get roles, names and faces familiar. The new members representing the Norwegian BRPs and the Finnish BRPs were welcomed to be a part of the Customer committee.

2 eSett News

Diana Welander opened the session by looking back at key events since the last Customer Committee meeting and giving a brief preview of upcoming activities. She highlighted the continuous development of eSett's role in the Nordic electricity market - from its original focus on imbalance settlement to now covering a broad portfolio of settlement-related services.

The Annual Review for 2024 was published in April, offering a comprehensive overview of key achievements and metrics. The report also presented insights into customer satisfaction and recent market changes. Among the highlights were interviews with Kari Suominen, CIO of Fingrid and Chairman of eSett's Board, and Jesper Vestergaard, Customer Committee member from Danske Commodities, sharing their reflections on the past year and future developments.

In May, an updated version of the NBS Handbook was published. Key changes include clearer definitions and distinctions between imbalance settlement, balancing service settlement, and Swedish reconciliation settlement. The update reflects the implementation of the independent aggregator model in Finland's aFRR market and introduces new terminology such as "Aggregation", "Independent Aggregation" and "Regulation Imbalance". Additional updates include revised pricing for imbalances in Denmark and a new time schedule for collateral provision. A full list of updates is available in the handbook's change log.

Diana then highlighted the upcoming change in collateral deposit timing. Starting 25 April 2025, BRPs will have until 11:00 CET the day after publication to provide required collateral, instead of the same day as practiced earlier. The update gives BRPs more flexibility while maintaining the integrity of collateral management. All other procedures remain unchanged. More information is available in Appendix 2 of the Imbalance Settlement Agreement and Chapter 9 of the NBS Handbook.

Attention then shifted to the eSett Customer Portal, which is a very useful tool especially for customers that are in regular contact with eSett's customer service.

Customers can easily view their previous cases in the Customer Portal, and the onboarding process for BRP and BSP roles has been made more interactive and userfriendly.

A new initiative, “Tips and Tricks from eSett”, has been launched to help customers work more efficiently. These bite-sized insights cover for example how to navigate the Online Service more easily, make smarter use of Open Data, and optimize the platform’s features. The tips are distributed through the Newsletter and the Online Service News widget. Customers are encouraged to submit suggestions for future topics.

In addition, Diana introduced the eSett Q & A – a newly launched section on both the Online Service and website. Based on the most frequent customer tickets from 2024, it aims to improve efficiency by offering quick and practical answers. The Q & A is designed to deepen customer understanding of how eSett’s processes work in practice.

Lastly, Diana emphasized strengthening collaboration across the Nordic Balance Settlement (NBS). eSett visits on a regular basis BRPs in all NBS countries to build trust and gain direct insight into customer needs. These visits are tailored based on feedback and current trends. eSett also continues its knowledge-sharing with TSOs, including hosting the “eSett Experience” day and organizing exchange visits with TSO professionals.

3 Market trends in imbalance settlement

Markus Flyktman gave an insightful overview of current market trends in imbalance settlement, focusing on market party activity, price developments, and trading patterns across the Nordic countries.

The presentation began with an overview of the growth in active market party roles within imbalance settlement. The total number of BRPs has increased steadily, with a notable jump in 2024. While many new BRPs operate in just one country, the number of BRPs active in multiple NBS countries has grown from 11 in 2020 to 36 in 2024 - highlighting the continued integration of the Nordic market.

Markus noted a particularly strong increase in trader BRPs, especially in Denmark, which saw the largest growth in this category. Many of these traders are now expanding into other countries. Compared to Denmark’s trader-heavy profile, the other Nordic countries show a more balanced BRP composition. Across the region, the trader role is on the rise, reflecting a shift toward more flexible and trade-oriented participation in the market.

Markus then presented data on imbalance prices, highlighting two key trends: the increasing price spread between Market Balance Areas (MBAs) and rising price volatility. These developments have accelerated in connection with the implementation of the mFRR EAM project, which has impacted price formation in all countries. Sweden, Denmark, Finland, and both northern and southern Norway

have all experienced noticeable shifts in price behavior following the go-live of mFRR EAM.

The presentation continued with a discussion on activated reserves, where Markus highlighted a clear trend shift following the go-live of mFRR EAM. Historically, it was common to see ISPs without any clear dominating regulation direction. However, since the beginning of this year, such periods have nearly disappeared. All Market Balance Areas (MBAs) in the NBS now show a dominant regulation direction in nearly every ISP, with a strong move toward downward regulation.

Markus explained that while the quantities of activated reserves have remained relatively stable, there has been a noticeable increase in settled amounts - particularly related to downward regulation. This is largely driven by negative prices, where BRPs now receive income for down-regulation instead of paying imbalance costs. The net amount settled by eSett has therefore shifted direction: in the past, down-regulation created a money flow from BRPs to TSOs, but now it flows from TSOs to BRPs. This change is most visible in Sweden and Denmark, where large volumes of wind power frequently lead to excess production and a need for more downward balancing. As a result, downward regulation has become not only more frequent, but also more financially significant for market participants.

In terms of trading behavior, intraday volumes continue to grow steadily in all countries, with Denmark showing particularly strong growth. Markus also noted that Energinet began procuring countertrade energy in the intraday market between DK1 and Germany in May 2023, a move that has likely contributed to the increased activity. Meanwhile, the share of intraday trades relative to day-ahead volumes is rising, especially in Denmark, where ID trading now represents a significant portion of the market. In Norway, intraday auction volumes are also on the rise.

Markus concluded his presentation by announcing that eSett has launched a new Quarterly Market Data Review, with the first edition already published on eSett webpage under News. The goal is to provide regular insights into key trends in imbalance settlement, based on market data across the NBS countries. eSett aims to release a new edition every quarter and encourages readers to share comments and feedback to help improve the content and format going forward.

In addition, enhancements to the KPI reports are planned for the near future. These improvements will include not only the traditional PDF format but also interactive visualisations, with embedded charts designed to make the data more accessible and easier to interpret. One Customer Committee member raised a concern about the current difficulty of viewing one MBA per country per week. Markus confirmed that this feedback is already part of eSett's development roadmap, and that future versions of the reports will address this issue by providing aggregated and streamlined overviews.

4

Open Data

Sasu Saalasti began his presentation by introducing the Open Data initiative, a key offering from eSett that combines a web application and API interface to provide transparent access to settlement data. He provided a historical overview, beginning with the launch of Public Data in September 2020, followed by major milestones such as the introduction of Single Balance Volumes and Prices in November 2021 and the initial development of a renewed solution in May 2022.

The development continued steadily with the introduction of the BSP view in October 2022, and further improvements in November 2022, including new views for consumption and production data along with API endpoints. In May 2023, Open Data 1.0 was officially launched, featuring OpenAPI specifications and support for 15-minute ISP. By November 2023, the platform had been expanded to include Load Profile and Reconciliation views, and in April 2024, Open Data 2.0 was released with plans for monthly updates going forward.

Sasu then elaborated on how the Open Data system is built. He explained that it is designed to serve market parties and their systems through a scalable and robust cloud-based infrastructure. Key components include a cloud database, a Kubernetes cluster, a UI web application, and an API gateway. The system also integrates with the settlement system to provide time series data and structures, managed by backend and synchronizer microservices. While write access remains restricted, the API offers read-only access through clearly defined OpenAPI specifications. All user interface elements retrieve data via these APIs.

He emphasized the agile development process, where updates follow a two-to-fourweek cycle. Future development will focus on improving the user interface for better usability and accessibility, enhancing backend performance, and maintaining a high level of security through continuous testing and dependency updates. The team's core objective is to ensure the application remains lightweight, high-quality, and available around the clock.

Sasu concluded by sharing his vision for Open Data. The top priority is to ensure that the data provided is accurate, accessible, and truly useful for customers. He underscored that the platform is built to serve the needs of its users. Additional goals include optimizing performance to accommodate growing data volumes and user traffic, strengthening DevOps practices to uphold system quality, and improving how data is presented in the interface. The aim is for the UI to deliver relevant information swiftly and effectively through well-designed graphs and aggregations.

The discussion turned to customer engagement with Open Data, where it was noted that following March, there was a noticeable increase in users accessing Nordic price information through eSett's platform. This prompted a broader conversation around visibility and usage. Minnakaisa questioned whether Open Data should be more actively promoted, and if so, how. Lena suggested that providing concrete examples of practical use cases could be helpful, while Teija raised the importance of clarifying the distinction between Fingrid's and eSett's

open data - particularly whether the datasets are the same and when each should be used.

The session concluded with an open invitation for feedback from the audience - what works, what could be improved, and what they'd like to see next.

5 TSO and Member news

The TSO and Member News section began with two Committee members sharing topics they had received from other market participants.

The Swedish DSO noted that in discussions with Ei's reference group, the issue of fault correction times was raised in connection with the new EU regulation on access to metering data. Extending correction times for smaller installations could reduce costs for network owners, who currently must provide approved readings within 12 days. A central correction settlement handled by eSett was proposed to replace the current manual process. Ei has updated regulations to allow 30 days for faults requiring site visits but noted that correction settlement is a matter for Svenska kraftnät and eSett.

It was discussed that Datahubs in other countries handle such corrections retrospectively for up to three years. A separate meeting will be arranged with eSett and the local TSO to explore this further.

The Norwegian BRP raised concerns about the local time difference in Sweden, where customers enter the system from 01:00 local time (SNT) instead of the standard midnight used in other countries. This causes a mismatch between spot nominations and metering points, potentially leading to both the old and new BRPs invoicing the same imbalance volumes, or causing risks due to differences between spot and imbalance prices if both nominate. They asked if there is an agreed standard practice to handle this or whether Svk should align with other TSOs to avoid these issues. The TSO noted that these rules are legally defined but will investigate how others have managed similar situations.

Another topic raised by the Norwegian BRP concerned the handling of Bilateral Trade data. In cases where one BRP submits a trade volume and the counterparty does not, a delta is created. However, if the counterparty later updates the value, no new notification is triggered. This behavior relates to how trades are accepted in the Online Service - accepting or updating values does not generate a BICO message for either party. eSett agreed to investigate whether this is a system design issue and assess if it can be addressed with a simple solution.

The group also discussed differences in unit reporting for bilateral trades. In Norway, bilateral trades are exchanged in MWh with 15-minute resolution, while eSett requires reporting in MWh. This creates a need for two separate time series. Participants confirmed that in Sweden and Finland, MWh is used consistently both

bilaterally and towards eSett, making this a Norway-specific issue. The topic raised questions about potential alignment across countries.

The agenda then moved on to updates from each TSO representative, who presented the latest developments and insights from their respective countries.

Fingrid began by informing the group that the national BRP and BSP terms and conditions are currently under consultation. Upcoming stakeholder events include a webinar next Thursday focusing on changes for BSPs, a Reserve Day on Wednesday 21.5.2025, and the annual BRP Day on Thursday 22.5.2025, all aimed at engaging market participants and supporting implementation of ongoing changes

Statnett provided several key updates, starting with the postponement of 15-minute cross-border day-ahead trading, now rescheduled from 11 June to 30 September 2025. Statnett also mentioned that a public consultation is currently underway regarding a new tariff model, which includes a proposal to shift more reserve-related costs to BRPs and BSPs. This may affect existing fees, including the imbalance fee, which Statnett is currently reviewing. Statnett also announced upcoming changes in capacity market settlement: from 26 May 2025, aFRR capacity settlement will be transferred to eSett, followed by FCR capacity settlement on 8 September 2025.

Svenska kraftnät shared that imbalance prices have received increased public attention recently. A new project to establish an independent BSP role has been launched, with a possible go-live in 2028, aiming to succeed where previous efforts faced challenges. Additionally, the current peak load reserve fee is expected to be replaced with a new reserve-related fee, potentially as early as next winter. A question was raised about whether a hub is planned ahead of implementing the BSP role. Svenska kraftnät responded that while a full datahub may not be necessary, some form of centralized solution will likely be needed, and discussions have been reinitiated.

6 eSett API development workshop

Ville Rahkonen opened the workshop by presenting the agenda, which included an introduction to the eSett API project plan, a summary of questionnaire results, and an interactive workshop session.

Rami Ayoub introduced the background and objectives of the eSett API development initiative. He explained that the project is driven by long-standing customer feedback and the need for a modernized API solution. As part of the upcoming settlement system renewal, the current Information Service - based on the older SOAP protocol - will be phased out. This transition presents an opportunity to design a more flexible and efficient system by decoupling the API layer from the core settlement system. This architecture allows eSett to present data in a more user-friendly way and implement new features more effectively.

Rami also shared a high-level timeline for the API development. The project will follow an advancing step-by-step approach, with the first version focusing on replicating existing Information Service and Online Service functionality in a modernized format. Continuous development will follow, with additional data types and features introduced based on customer input. While no exact release dates were confirmed, the goal is to deliver a usable first version earlier rather than waiting for full functionality, ensuring value to customers as soon as possible.

The initial scope of the new API is to replicate the data currently provided by the Information Service but using a RESTful API with a JSON format and improved structure. Over time, the service will be expanded based on input from customers through questionnaires and workshops. While not intended to replace core messaging or data packages, the new API is part of eSett's broader goal of continuous improvement and eventually enabling two-way communication capabilities.

Tuomas Pulkkinen then presented the results of the customer questionnaire that was conducted earlier this year. The feedback showed that customers prioritize access to a wide variety of data over the availability of multiple time aggregations. For example, providing 15-minute resolution data for the most critical 10–20 data types was preferred over broader aggregation options. The responses also indicated interest in developing a bidirectional API in the future, especially among BRPs and BSPs, though this is not seen as an immediate priority. During the session, a member asked how many responses had been received, and Tuomas confirmed that only 17 participants had answered the survey.

The workshop portion of the session was organized into three discussion groups. Participants were asked to reflect on several key topics, including feedback on the API project plan, preferences for identification codes when fetching data (e.g., MEC ID vs. Market Party ID), expectations for testing, and risk mitigation strategies. Other questions addressed long-term visions for API-based data exchange with eSett and the potential role of Open Data - its perceived value, awareness among users, and ideas for improved visibility.

All workshop questions and a summary of the group responses will be listed below for reference.

1. What is your feedback on the eSett API project plan?

All groups appreciate the step-by-step approach where features are released early and improved over time. It is important to avoid breaking changes after a feature is launched. The project is seen as prioritizing the right functionalities, such as bilateral trades in/out. Some noted that system vendors need time to adapt to the API, and emphasized the importance of clear documentation (Swagger) and effective communication for a smooth rollout.

2. Detailed questions on eSett API usage:**2.1 When fetching data what identification codes are preferred, MEC ID or market party ID or PU/RO code?**

MEC ID is generally seen as problematic because it can change and is not widely used internally by market participants. Market party IDs and PU/RO codes are preferred as they are more stable and better understood. It is desirable to have filters supporting multiple identification types, and if MEC ID is used, its historical changes should be trackable.

2.2 How far back in time should data be fetchable, and why?

There is a consensus that data should be accessible at least 3 months back, with some suggesting up to 3 years to accommodate corrections and adjustments made well after initial settlements. While 13 days was mentioned as a typical short-term period, the industry needs longer access for error handling and historical analysis.

2.3 What information is critical and what is less critical?

Prices, trading data, and all imbalance settlement data are considered most critical for automation and operational purposes. Production and consumption data also have high priority in countries that do not have datahub. Capacity and reserve market data are valuable but less critical, while administrative data such as bank details are seen as less important. Clear unit indication (MW vs. MWh) is essential, especially for rapidly changing data like production plans.

3. What is your expectation on the testing of the new eSett API?

Users want early access to test data, preferably production-like, and a stable testing environment. Workshops or discussions involving service providers (software vendors) are recommended. Clear communication about testing scenarios, schedules, and ongoing support through hotlines or Q&A channels is important.

4. What risks do you see in the eSett API project and how could they be mitigated?

Security is the top priority; ensuring that market parties can only access their own data is critical. Risks include limited data availability reducing usefulness, background data changes (e.g., PU attribute updates), and poor communication with users. These risks can be mitigated by robust security measures, clear documentation, proactive updates, and responsive customer support.

5. What is the best possible long-term vision for the eSett API and data exchange? What would be reasonable to manage through a bi-directional API in the long term?

The ideal vision includes making all relevant data available via a bi-directional API, allowing market parties to filter and retrieve data by their role and market

party code. Some envision fully replacing current data packages with APIs. Early publication followed by iterative feedback is recommended to reduce rework. Transparency around system status and error handling (e.g., clear indications when data is missing) is important.

6. How do you perceive the role of open data? Is it beneficial, and is there enough awareness?

Open data is generally considered useful for many parties, including TSOs and market participants, especially for quick lookups and analysis. However, awareness remains low, and better marketing is needed. Promoting open data through channels like TSO events (e.g., Finnish BRP day and Nordic conferences) and increasing visibility via TSOs' communications are suggested.

7

Summary and next meeting

The minutes from the previous Customer Committee meeting were approved without any comments or revisions. It was agreed that the next meeting will take place on 15 October 2025 as a Teams meeting, with both Customer Committee members and deputies invited to participate.

Kamilla Solumsmo was elected as the new spokesperson for the Customer Committee.

A discussion followed regarding whether eSett should hold a webinar to review the Customer Committee materials for other market participants or if sharing the material online is sufficient. The members emphasized that the committee represents the broader market participants, who bring forward topics through their representatives. It was noted that while reaching everyone directly is challenging, the material is already shared online on eSett's webpage, but it could be beneficial to highlight upcoming agenda topics in an engaging way to attract attention.

Suggested topics for the next meeting:

- A market report including insights from the first two weeks of 15-minute day-ahead trading after the postponed go-live on 30 September 2025 was requested. In addition, members expressed interest in an analysis of how data patterns have evolved one year after the transition from 60-minute to 15-minute Imbalance Settlement Periods (ISPs).
- More detailed information on the Swedish Hub project.
- The role and implementation of independent aggregators

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

Diana Welander

1 October 2025

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Attachments:	<p>eSett News – Diana Welander</p> <p>Market trends in imbalance settlement – Markus Flyktman (eSett Oy)</p> <p>Open Data – Sasu Saalasti (eSett Oy)</p> <p>eSett API development workshop – Ville Rahkonen, Rami Ayoub, Tuomas Pulkkinen (eSett)</p>
Distribution:	<p>Customer Committee members and deputies</p>

Diana Welander

1 October 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

Customer Committee News

Responsible party: Customer Committee Members

Summary:

This slot is reserved for the members to raise any current topics, questions, or concerns they would like to discuss with the committee. Members are encouraged to share updates, propose new agenda items, or highlight any matters requiring collective input.

Agenda item: TOP 4

The role and implementation of independent aggregators

Responsible party: Tuomas Pulkkinen, eSett Oy

Summary:

An introduction to the Independent Aggregator concept, its role in enabling flexibility in energy markets, and key considerations for settlement, regulation, and future implementation in the Nordic context.

Diana Welander

1 October 2025

Public

Agenda item: TOP 5

Market Analysis: 15 min transition

Responsible party: Olli Vainikainen, eSett Oy

Summary:

The presentation reviews past developments in the Nordic electricity market. We will present data on prices, reserves, and trading with emphasis on how this data has changed along with the change to 15 min resolution.

Agenda item: TOP 6

TSO News

Responsible party: All TSOs

Summary:

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

Agenda item: TOP 7

Summary and next meeting

Responsible party: All

Summary:

- Discussion on any other business
- Next meeting