

Nordic CCM Post Go-live Stakeholder Event

meeting minutes

February 5, 2025, 9.00-12.00 CET (Webinar)

Participants	
Total participation (including CCM project members):	216

The presentation has been uploaded on the Nordic RCC website: <https://nordic-rcc.net/flow-based/stakeholder-meeting-material-from-post-go-live-events/>

Text in non-italics are comments, statements, questions or claims from the stakeholder(s).
Text in italics are answers or comments provided by the Nordic CCM project.

Welcome and opening words
TSO reflection on DA market outcome
<p>SH question: Is it realized flows or DA flows (on slide 8)?</p> <p>CCM project: <i>The flows presented are DA flows and not physical flows in the grid. The slides were updated to reflect the answer to this question.</i></p> <p>SH question: To what extent is the increased DA-allocation on cut2 in SE connected to increased mFRR CM-volumes in SE3 and SE4?</p> <p>CCM project: <i>Increased DA allocation on cut2 is due to the capacity calculation shift from NTC to FB. Increased mFRR volumes in SE3 and SE4 are related to balancing needs and do not affect the RAM in the DA capacity calculation. Instead, larger mFRR volumes might lead to larger capacity reservations. Larger reservations would reduce the RAM in the DA capacity allocation.</i></p> <p>SH question: Where can we find the analysis and justification on these changes to for example FRM changes in Norway or Sweden, including the impact in for example SEW or any other parameters TSOS can provide to put this into context?</p> <p>CCM project: <i>The TSO analysis on the FRM adjustment focuses on the grid security, not on the socio-welfare analysis. You can read more about the upcoming FRM changes from SvK here: Updates and newsletter - Nordic Regional Coordination Centre</i></p> <p>Additional TSO reflection: <i>1. We know that an increase in FRM will lower SEW and vice versa. No need for an SEW analysis to see this. Moreover, it is not clear how to balance lower SEW with increased operational security. 2. If all parameter changes should be backed by deep analysis, the operation of CC will be too burdensome.</i></p> <p>Additional SH reflection: <i>But perhaps this should have been included in the extensive SEW-analysis that was made prior to GoLive? You have received plenty of feedback from market participants during the process focusing specifically on such risks</i></p> <p>Additional TSO reflection: <i>Maybe, but personally I don't see a big benefit; 1. no additional learnings in terms of FB. 2. we know that SEW will be lower.</i></p> <p>Additional SH reflection: <i>Not sure I fully agree to this, these FRM updates deviates from what was used during EPRs where there was a very high focus on these kinds of comparisons. Also, FRM is in a way a new tool for operators where they change all values on all CNECs in one instance, thus the need and burden for TSOs to do analysis is not that big!</i></p> <p>SH question: I have actually earlier been told that the border flows in the NTC are not fully comparable with the flows in the FB as they don't mean the exactly same thing anymore. But do you now imply with this presentation that actually they are fully comparable? This question refers to the slide 8.</p> <p>CCM project: <i>In the NTC market coupling outcome, the SDAC algorithm determines the net position as the market result. The same applies to the FB market coupling outcome. However, the key difference lies in how these net positions are translated into border flows. In the NTC framework, border flows (i.e., scheduled exchanges) are computed using the 'FlowDetermination' algorithm, which relies on predefined cost coefficients. It is important to note that these scheduled exchange values do not reflect the physical behaviour of the transmission grid. In contrast, in the FB framework, TSOs recommend determining border flows using the equation $PTDF$ (of border CNECs) \times NP. This computed flow provides a more accurate physical representation of the grid. Consequently, scheduled exchanges and physical border flows are not directly comparable. However, in the slide 8 where we present the total flows of a cut, the sum of the scheduled exchange of a cut is the same as the sum of the physical border flows of this cut, because both are derived from the same net position of bidding zones. For this reason, the analysis on the cuts remains valid.</i></p> <p>SH question: Are the announced changes to FRM:s by SvK only to replace IVA and would it be possible to give us data for at least one day with the anonymous cne:c:s and the corresponding changes to FRM?</p> <p>CCM project: <i>There will be new FRM values on 33 CNECs and they are meant to ensure adequate risk levels for operational security. The 3 IVAs provided by SvK since November 2024 will be discontinued when the new FRMs are applied from the 25th of February, so they do not completely capture the new FRM values. It is also important to state that some FRM values will be lowered compared to today's level. The news update posted on the RCC website on the 25th of January has now been updated so that it also includes the changes in FRM values</i></p> <p>SH question: SDAC price-coupling over interconnectors: we would welcome advise on how to judge correctly about the price-coupling between, e.g., DE and NO2; it is well understood that the interconnector ATC usage is not sufficient (e.g., with decoupling although the ATC is not fully exhausted) but we are wondering if there are specific PTDFs (a specific type or subgroup of PTDFs) beyond the NO2_NK net-position constraints (or other figures) one can or must consult for this</p>

CCM project: we will get back to you later.

SH question: PTDF sign convention: the signs of the single PTDF values have to be aligned to the actual sign-convention of the (virtual) bidding-zones' net-positions; can you state which BZs are modelled with a positive (negative) net-position to decode export (relative to the PTDFs published on JAO) - information we already got on this is not fully consistent

CCM project after the stakeholder event: the z2sPTDF of a physical hub and a virtual hub within this physical hub should be understood differently. For instance, using SE3 and the Fenno-Skan virtual hub within SE3 as an example, when SE3 exports 2000MW, the sign of its net position is positive, i.e. +2000 MW. Generally, there should be a CNEC defined to monitor the Fenno-Skan flow from Sweden to Finland. When there is flow being transferred from SE3 to FI via Fenno-Skan at 1000MW, the sending end of Fenno-Skan, located in SE3, is considered as a load, i.e. its netposition is -1000 MW. At the same time, its zone-to-slack PTDF should be -1. Looking at the receiving end of the cable in Finland, the virtual hub of Fenno-Skan in Finland is considered a generator, producing 1000MW, with a positive sign on its net position and its zone-to-slack PTDF, i.e. +1.

TSO reflection on ID market outcome

SH question: Is it fair to say that the ID capacities seem to a bit lower due to DA utilizing more of the capacity due to FB? Or is the ID values before and after too similar to make such a conclusion? If the flow is bigger than before due to FB, then i would expect there to be less capacity available to ID.

CCM project: Yes, it is fair to say that ID capacities seem a bit lower due to DA utilizing more of capacity due to FB. However, please note that when performing the ATC extraction, the resulting ID ATCs also ensure that loop flows and all potential scenarios are considered subject to the FB domain. The ID ATCs in the old NTC world do not always ensure the same level of operational security as in the FB world.

SH question: In the intraday statics, how do you capture impact on intraday trading if you have zero NTC capacity and look at border flows? Can you really conclude using this method of comparison on some of the borders?

CCM project: indeed, with 0 ID ATC on a border, its ID trade will also be 0. We cannot conclude if the 0 ID trade is due to lack of ID capacity or the need for ID trade is 0. However, on other borders with non-zero ID ATCs, they can indicate the ID trading needs are fulfilled or not.

SH question: Is it possible to see the intraday flows for NO5-NO1?

CCM project: the data are published on the JAO and ENTSO-E transparency platform.

SH question: has there been any correlation to (high) imbalance prices if the flows have been more or less fully utilized after DA?

CCM project: we will get back to you later.

SH comment: When analysing realised ID trade-volumes it's also important to consider the increased share of spreads in DA-prices, since traders have less/low incentive to trade in opposite direction to the price indication (where we normally see major parts of ID-capacities)

SH question: where in Sweden do you expect the balancing price spikes? Which bidding zones?

CCM project: it depends where the imbalance is and the available ATCs. For instance, if ATC is low from SE2 to SE1, and SE1 has a large imbalance, then the EAM allocation engine will select more (expensive) local bids in SE1. That will lead to a price spike in SE1.

SH question: General level question to Nordic RCC: Would it be useful to simulate winter 2024-2025 afterwards and check what the market results could have been with the old system if those were still in use (or have I missed something already mentioned or on agenda of Nordic-RCC in near future)?

CCM project: The Nordic RCC doesn't deem additional comparison between FB and NTC to be useful and would result in similar result as the comparison made during the EPR. With that said, some TSOs are looking into the possibility for additional comparison after go-live to see if some useful insights could be made or not. The corresponding TSOs will get back when and if some findings have been made.

SH question: More general question, is the delayed bidding zone review taking inputs from FBMC experiences?

CCM project: The bidding zone review is based on a reference year 2025 with Flow based market coupling.

SH question: one of the presenters mentioned the impact of FB on the ID market as a whole, but I wanted to ask if you have measured any impact specifically on the IDA1/2/3?

CCM project: The data is available for all market participants. The TSOs do not have any special data and do not have plans to review the impact on IDAs.

SH question: Will/have you updated the documentation about the ID method? This includes the changes mentioned today?

CCM project: You may find the latest updated ATCE description document on the NRCC website at https://nordic-rcc.net/wp-content/uploads/2024/11/ATC_Extraction_Description_20241129.pdf

The description document elaborates the method on the conceptual/descriptive level, but not on the IT implementation level.

Short-term analysis in FBMC environment: Service providers' challenges and solutions: Montel Syspower

SH question: Your colleague Aleksei on a previous presentation explained that it was very difficult for you to forecast prices and the FB domain by including UMMs and grid outages, is that still the case?

Montel Syspower: It is work in progress. We are developing models and tools that will allow for modelling changes in FB domain and including UMMs information is a first step there.

SH question: Are you ready for LT forecasts on prices?

Montel Syspower: At the moment we use NTCs and testing a possibility to use FB data as well.

Operational experience: Statkraft

TSO question: What kind of time resolution (of FB domains) would be sufficient for D+10? Would a few scenarios be sufficient or do you need every MTU?

Statkraft: we expect to have the same resolution as the current DA process, i.e. 24 MTUs per day, but for every day of the 10 days. As a starting point, a few scenarios would also be good.

SH question: Now both Statkraft and Vattenfall have ask for more information (for example static grid model, better information about UMMs), are the TSOs willing to meet these kinds of requests?

CCM project: *for the UMMs, the TSOs need to find better ways to communicate the capacities. We are working on it, and it will take time. We believe this is the right prioritization to provide the best value to the stakeholders.*

SH comment: Just a comment, thank you to the presenter for a great presentation that provides very clear examples of the challenges hydro producers are facing. Fully agree on the message, and good prioritization on the most burning topics.

SH comment: For the NRA reporting on impacts on ID, suggest TSOs to consider some more ways to actually show impact on ID markets, highlighted in this chat earlier today and other SHGs!

SH question: In which BZ do you see the biggest problems in forecasting?

Statkraft: no comments due to commercial sensitivity.

SH question: And when you say "less optimal" you mean you assume you bid too low? i.e. at the wrong times?

Statkraft: by 'less optimal', we refer to ending up putting (hydro) production in the hours where it's not needed the most, because we have less information in FB than we had before in NTC. Consequently, our forecast price and the derived water values are of lower quality than what they would have been with better information to predict the flow-based domain. In other words, it's about being wrongly positioned when optimizing the production, causing higher risk of overflowing and less available production for the highest priced hours.

AOB and closing words

CCM project final reflections: *Since go-live, the FB capacity calculation and market coupling has performed as expected, leading to improved grid utilization in the DA market while generally resulting in lower available capacity in the ID market. The challenge lies in managing the new data effectively and drawing meaningful conclusions for both market participants and the TSOs.*

In the balancing market, a shift towards more local balancing reserves is anticipated, ensuring reserves are placed/activated closer to the imbalance locations. Consequently, balancing prices will increasingly reflect local balancing reserve costs. The TSOs encourage balancing responsible parties to collaborate closely with the TSOs to pro-actively address the imbalance issues.

The CCM project thanked all speakers and participants for their valuable presentations and insightful discussions. The meeting concluded at 12:00.