


Minutes: NMEG meeting Date: Wednesday and Thursday, February 22 nd and 23 rd , 2023 Time: 09:00 – 16:30 and 09:00 – 14:00 Place: Svenska kraftnäts offices in Sundbyberg (Stockholm)	 NMEG Nordic Market Expert Group
March 1 st , 2023	

Present: Christian, Energinet
Jan (DK), Energinet
Jan (SE), Svenska kraftnät
Jon-Egil, Statnett (Convenor)
Ove, Edisys (Secretary)
Teemu, Fingrid

To (NMEG): Anne Stine, Elhub
Christian, Energinet
Jan (DK), Energinet
Jan (SE), Svenska kraftnät
Jon-Egil, Statnett (Convenor)
Miika, Fingrid
Ove, Edisys (Secretary)
Pamina, Energinet
Teemu, Fingrid

CC: Bent Atle, Statnett (NBM)
Fedder, Energinet
Fredrik, Fingrid
Hans Erik, Elhub
Mario, Elhub
Tage, Energinet

To (Invited guests): Antti, eSett, FI
Søren, Nordic RCC
Tommy, eSett, FI
Tuomas L, eSett, FI
Tuomas P, eSett, FI

Appendix A: Update of NBS BRS for TSO-MO – comments from eSett

Appendix B: Overview of Nordic memberships in international standardisation bodies

Appendix C: Overview of the usage of xml-schemas in the Nordic countries

Attachment: None

1 Approval of agenda

The agenda was approved with the following additions:

- Review of mismatch between sequence diagram and attribute table and the Outage Document in BRS for schedules, see item 7.6.
- CIM for NBS, see item 11.1.
- Common Energy Data Space, see item 16.1 under AOB.

2 Approval of previous meeting minutes

The previous meeting minutes were approved after correction of some spelling errors found by Jan (SE).

3 Status from NEX (Nordic ECP/EDX Group)

Background: NIT has taken over the responsibility for NEX (Nordic ECP/EDX Group), former "ECP/EDX Centre of Excellence". However, the group is still below NMEG in the "formal hierarchy". NMEG will be kept informed of progress in the group.

References (links):

What to decide, discuss or inform: Status from NEX.

Jon-Egil informed that NEX is active for the moment, i.e. having weekly meetings. Main topic is clean up of the service catalogue.

4 Nordic RCC

Background: The Nordic RCC is working on TSO data exchange regarding Long-term Capacity Calculation process and need changes to ESMP and CIM.

References (links): None.

What to decide, discuss or inform: Update of ESMP and CIM based on Nordic RCC needs.

Noting reported.

During this item Appendix B Overview of Nordic memberships in international standardisation bodies was updated.

5 Support to the NBM project – prioritised item

Background: The NBM-project (Nordic Balancing Model) is going forward and there is a need for a number of new CIM based documents.

References (links): <http://nordicbalancingmodel.net/>

What to decide, discuss or inform: Status for the NBM project and possible task for NMEG.

5.1 Update of NMEG BRSs based on NBM input

Ove had made MR NMEG 2022/206 for changing the version number of the documents where Measure_unit is changed to Measurement_unit, i.e. the new version should be a major version, since this change is not backwards compatible.

The MR was reviewed and forwarded to Jon-Egil for submission to ENTSO-E.

Review of updates of the BRS for Operate and the BRS for Determine transfer capacity were postponed until next NMEG meeting.

6 Status for MRs to ENTSO-E

Background: NMEG has sent several Maintenance Requests (MR) to ENTSO-E during the last years and some of these (about 10 MRs) has been postponed by CIM WG.

References (links): The MRs can be downloaded from Statnett's eRoom.

What to decide,

discuss or inform: Review and update of statuses in NMEG MR Overview document.

Status:

MR #		Status
NMEG 2022/197	<p>Add new Asset type codes (update 20230222):</p> <p>Commercial operational load (A resource using commercial operational load, such as heat pumps in office buildings, air conditioning, cooling devices).</p> <p>Electric vehicle battery (A resource using electric vehicle batteries, commercial and private. The reason for separating vehicle batteries and non-vehicle batteries is that the vehicle batteries not necessarily is connected to the charger at all times).</p> <p>Private heat pumps (A resource using private heat pumps. It is assumed that private heat pump customers will get paid directly, hence has a higher probability to lower the usage than commercial customers).</p> <p>Reserve power (A resource having an alternative power source).</p> <p>Cogeneration (Combined Heat and Power) (A resource using cogeneration, combined heat and power).</p> <p>Commercial load (industry) (A resource using commercial load (industry)).</p>	<p>20220304:</p> <ul style="list-style-type: none"> Postponed since Jan (SE) was sick. <p>20220602:</p> <ul style="list-style-type: none"> Action: Jan (SE) will verify if the still is OK. If yes, Jon-Egil will submit the MR to CIM WG. <p>20220823:</p> <ul style="list-style-type: none"> MR sent from Ove to Jon-Egil August 26th for forwarding to CIM WG. <p>20221006:</p> <ul style="list-style-type: none"> Jon-Egil will verify the MR is sent. <p>20230124:</p> <ul style="list-style-type: none"> The MR is sent. However the MR was rejected, since these are not technology codes <p>20230222:</p> <ul style="list-style-type: none"> The codes are used in Sweden for flexibility services for Resources. The “aggregation information” must be handled by using the Object Aggregation attribute, such as MGA, BZ, SA or Resource type. The latter must be combined with an Asset type (PSR type). Action: Ove will make a new MR for new Asset types (PSR types), see names and definition for the new codes to the left.
NMEG 2022/201	Rename Asset Type B25 to “ B25 Permanent energy storage ”	<p>20220321:</p> <ul style="list-style-type: none"> Sent to Jon-Egil for forwarding to CIM WG <p>20220823:</p> <ul style="list-style-type: none"> Forwarded to WG16, proposed having permanent and temporary as separate codes in PSRType. <p>20221006:</p> <ul style="list-style-type: none"> Ongoing <p>20230124:</p> <ul style="list-style-type: none"> Still ongoing <p>20230222:</p> <ul style="list-style-type: none"> Action: Jon-Egil will ask Alvaro for a status.
NMEG 2022/202	Add Asset Type “ B?? Temporary energy storage ”.	<p>20220321:</p> <ul style="list-style-type: none"> Sent to Jon-Egil for forwarding to CIM WG <p>20220823:</p> <ul style="list-style-type: none"> Forwarded to WG16, proposed having permanent and temporary as separate codes in PSRType <p>20221006:</p> <ul style="list-style-type: none"> Ongoing

		<p>20230124:</p> <ul style="list-style-type: none"> • Still ongoing <p>20230222:</p> <ul style="list-style-type: none"> • Action: Jon-Egil will ask Alvaro for a status.
NMEG 2022/205 (CIM WG)	Addition of a Category attribute to TimeSeries in IEC62325 and ESMP	<p>20220907:</p> <ul style="list-style-type: none"> • Forwarded by Ove to Jon-Egil for submission to CIM WG <p>20221006:</p> <ul style="list-style-type: none"> • Ongoing <p>20221031:</p> <ul style="list-style-type: none"> • The MR is awaiting approval in the ENTSO-E ESMP SG before it is sent to CIM EG, hence it will probably still take a few weeks before it is handled <p>20230124:</p> <ul style="list-style-type: none"> • Not agreed – Jon-Egil, Jan (SE) and Alvaro will draft a new proposal. • To be continued <p>20230222:</p> <ul style="list-style-type: none"> • Ongoing
NMEG 2023/206 (CIM WG)	Change version number for documents where Measure_unit is used in ESMP	<p>20230126:</p> <ul style="list-style-type: none"> • Sent to Jan (SE), Bent Atle og Jon-Egil for QA before submission to CIM WG. <p>20230222:</p> <ul style="list-style-type: none"> • Ongoing
NMEG 2023 207 (CIM WG)	Add version number to the class diagrams in ESMP	<p>20230126:</p> <ul style="list-style-type: none"> • Sent to Jan (SE), Bent Atle og Jon-Egil for QA before submission to CIM WG.

Ove had as action made MRs for:

- MR NMEG 2023/206: Changing the version number of the documents where Measure_unit is changed to Measurement_unit in ESMP, i.e. the new version should be a major version, since this change is not backwards compatible.
- MR NMEG 2023/207: Addition of a version number in the class diagram in ESMP.

The MRs were sent to Jan (SE), Bent Atle and Jon-Egil for QA before Jon-Egil submit them to CIM WG. However not yet dealt with by the CIM WG.

Action:

- Ove will make a MR for new Aset types, ref. MR 197 above.

7 Status and update of Nordic BRSs and other documents if needed

Background: NMEG is responsible for a set of BRSs that are published at www.ediel.org.

References (links): None.

What to decide, discuss or inform: Update of BRSs and other documents if needed.

7.1 Exchange of settlement information between the Nordic TSOs – prioritised item

Background: Svenska kraftnät is using an older ebIX® based xml document towards two TSOs and plan using a newer ebIX® and CIM based document towards a third TSO. The

codes used for the two older xml exchanges are ebIX® codes, while the third TSO wants to use ENTSO-E codes.

An alternative is using the EAR (Energy Account Report) document, which among others is used between Energinet and TenneT and expect it to be used for the Viking-link.

References (links): None.

What to decide, discuss or inform:

Assuming we (the Nordic countries) will use EAR (in a CIM version) for most of our exchanges of settlement information between the TSOs, can we agree upon some common codes and usages of that message, instead of having bilateral agreements? And since eSett also is using that message (a namespaced version of the ENTSO-E ESP Energy Account Report version 1.2) it would be relevant to get input from eSett regarding their possible updates and change to CIM.

Bilateral discussions between Denmark and Sweden have just started, perhaps that should be “part of” a more general Nordic discussion, and documentation, of how to exchange settlement information?

At the NMEG meeting in November, it was proposed to add an in_Area and an out_Area to the EAR document. Alternatively it may be an option using the ERRP Allocation Result Document.

Since we will do updates due to changes from 60 minutes to 15 minutes resolution, why not also do something about the exchange of e.g. MSCONS messages to something more modern”.

See documents from Jan (SE):

- PowerPoint presentation “Settlement information between TSOs.pptx”, which was distributed to NMEG February 28th, and redistributed October 6th.
- Excel sheet showing settlement related information exchanges with the following columns: “Description”, “Per (MP, SO...)”, Unit, Partis for Svk exchange” and “Comments Svk”, distributed June 2nd, and redistributed October 6th.

Teemu had updated the excel sheet from Jan (SE) – continued action for Jon-Egil and someone from Denmark.

Continued action:

- Jon-Egil and someone from Denmark is asked to fill in the Excel sheet from Jan (SE) with today’s exchanges and the content (information) behind it.

7.2 Usage of Reason codes in NBS BRS for TSO-MO– prioritised item

Status for addition of new reason codes to NBS BRS for TSO-MO:

Z58 Scheduled activation
Z59 Direct activation
Z60 Faster activation
Z61 Slower deactivation

+ proposed additions from Norway:

Z62 Slower activation
Z63 Period shift activation

+ proposed additions from Sweden:

Z75 aFRR correction
Z76 mFRR correction

Ove had sent the updated NBS BRS for TSO-MO after previous meeting to eSett and asked for their comments. The response was reviewed and agreed, see Appendix A. The changes include correction of allowed Reason code combinations to make the BRS more readable and update of the dependency matrix.

From discussions at the meeting:

- The code **Z62** was added as proposed Reason code from Norway
- Addition of **Z75** aFRR correction and **Z76** mFRR correction
- Reason codes “**Z74** Disturbance reserve”, (called Driftsforstyrrelsesreserve (DFR) in Norway and Störningsreserv in Sweden) must be further discussed.

Action:

- Ove will ask Tuomas if we can publish the update BRS and if we need to specify when new codes are valid from, ref:
 - Z58** Scheduled activation, **Note:** Valid from May 2023
 - Z59** Direct activation, **Note:** valid from May 2023
 - Z60** Faster activation
 - Z61** Faster deactivation
 - Z62** Slower activation
 - Z63** Period shift activation
 - Z75** aFRR correction
 - Z76** mFRR correction
- Ove will publish an updated code list.

7.3 Rename of Market Balance Area to Bidding Zone or Scheduling Area (to remember item)

Ove had as action gone through the BRSs and checked if Market Balance Area still is used. The conclusion was that we must review the NBS BRS and the NBS BRS for TSO-MO.

- The BRSs were updated, i.e. renamed Market Balance Area (MBA) to Bidding Zone (BZ).

Action:

- Ove will ask Tuomas if the rename of Market Balance Area (MBA) to Bidding Zone (BZ) in the NBS BRS and the NBS BRS for TSO-MO needs to be done also in the Handbook and/or other places.

Item closed.

7.4 Update of NBS BRS with the option of sending negative losses

Status for update of NBS BRS, “5.2 NEG (ebIX® based) Aggregated Data per MGA (E31, E44) – consumption”:

- a) Shall we remove the note saying that quantity can be negative for Business Type **A07**:
Note:
 - Business type “**A07** Net production/ consumption” uses signed values, i.e. will be negative when pumping.**Continued action for Jon-Egil:**
 - Jon-Egil will verify if Norway is sending negative **A07**
- b) Can we Replace Process Type “**Z05** Bilateral Trade” with “**A59** Internal trade reporting”

- To be investigated when we can Replace Process Type “Z05 Bilateral Trade” with “A59 Internal trade reporting” in NBS BRS, “5.2 NEG (ebIX® based) Aggregated Data per MGA (E31, E44) – consumption”.

From Tuomas November 17th, 2022:

We’ll most likely need a transition phase (several months) where BRPs may use either old code Z05 or new code A59 as sudden ‘forced’ go-lives have proven to be difficult.

- This might not need to impact the BRS, but only eSett on a system level.
- ‘A forced go-live’ is however necessary for reporting from eSett back to market parties, as we need to decide which code we should apply during different time frames.

I support that we’ll do this change, but first we’ll need to plan it, communicate it clearly to market and give them enough time to react and adjust on their end.

Ove had as action asked Tuomas for a plan regarding item b) above, i.e. for when we update the NBS BRS and when the transition period will be, with the following response:

We discussed the topic of process type change together with our TSO expert group on 9th of February.

It was concluded that the change can be done earliest in H1/2024 and in two phases with adequate transition period. Transition period meaning in this case that both Z05 and A59 are supported during some interim period.

There were remained some open questions as some of the TSOs need to discuss both internally and with their vendors before committing to a more detailed time plan.

Hopefully, I can get back to this topic with more accurate plans soon once we have received replies from the TSOs.

Conclusion:

- We must await more info from Tuomas.

7.5 Final (?) review of update of NBS BRS for Master Data

Ove had as action updated the NBS BRS for Master Data with the conclusions from previous meeting’s reviews. However, there is a few comments to resolve before the BRS can be published.

- Ove will ask Tuomas if the Party Master Data is sent to (or downloaded by) the Retailer (Energy Supplier and/or Trader)
- Ove will ask Tuomas to verify the sender and receiver of Resource Master Data and Generator Group master data.
- If agreed by eSett, Ove will send the BRS for master data on circulation for comments to NMEG for one week before publishing it.

7.6 Review of mismatch between sequence diagram and attribute table and the Outage Document in BRS for schedules

Ove has found some mismatches mismatch between the roles found in the sequence diagrams and attribute tables in BRS for schedules.

The changes were review and the BRS will be republished.

Action:

- Ove will republish the Scheduling BRS after one week of circulation for comments to NMEG.
- Ove will make a xml schema of the extended Nordic CIM based outage document, drafted at the NMEG meeting February 23rd, before Jon-Egil will discuss it within NOIS at a meeting March 6th.

8 Status for Swedish Flexibility project

Background: Sweden has two ongoing "Flexibility projects" that now want to use CIM based messages for the exchanges to/from the flexibility platforms. Among others one called Stockholm flex where Vattenfall is candidate for making CIM documents for the project(s).

To keep document exchanges as harmonised as possible in the Nordic countries, NMEG has offered them NMEGs help in making the needed CIM based xml schemas.

References (links): None.

What to decide, discuss or inform: Status report from Jan (SE).

Nothing new reported.

9 Common European Area project

Background: ebIX® has proposed a project plan for a common European Area project. ebIX®, ENTSO-E (CIM WG) and ENTSO-G has confirmed participation and the new EU DSO Entity is trying to fine member(s).

References (links):

What to decide, discuss or inform: Status for the project.

The first (kick off) meeting was supposed to be held the day before (February 21st) but due to sickness the kick off meeting was postponed.

10 XML schemas

Background: The NMEG set of schemas, including extended table with TSO columns, are shown in Appendix C.

When we start a project together with NBM (Nordic Balancing Model), everyone are asked to find what versions of xml-schemas are used to day in different projects and come up with proposals for new schemas and/or sets of schemas that should be published at www.ediel.org.

References (links):

What to decide, discuss or inform: Verify the list of proposals for new schemas and/or sets of schemas, from the NMEG participants, which should be published at www.ediel.org.

Ongoing task:

- All are asked to find what versions of xml-schemas are used to day in different projects and come up with proposals for new schemas and/or sets of schemas that should be added to Appendix C and be published at www.ediel.org.

- Ove will update the table based on NBM documentation received from Bent Atle (NBM/Fifty), when the NMEG BRSs are updated with NBM documents.

11 NMEG CIM-XML Subgroup

Background: At the NMEG meeting November 2019, it was agreed to establish a NMEG CIM-XML Subgroup that will make Nordic CIM based XML documents. The following tasks are prioritised (updated at NMEG meeting March 2020):

- a) Update the NMEG model with the latest ebIX® extension.
- b) Make a road map for making CIM documents for the Danish Datahub version 3.0.
- c) Continue with NBS documents:
 1. NBS ebIX® based documents.
 2. NBS documents based on older ENTSO-E schemas.
 3. NBS master data documents.

The members of NMEG CIM-XML Subgroup are Christian, Jan (DK), Jan (SE), Teemu and Ove.

References (links):

What to decide,

discuss or inform: Status for looking into making CIM based document to replace the ebIX® XML documents used towards eSett today.

11.1 CIM for NBS

The NMEG CIM-XML Subgroup has made a proposal for how to migrate from old ebIX® documents to CIM documents for the NBS ebIX® based documents, see item 11.4.

Interim conclusions (to be discussed in NMEG):

- Validated data for settlement for Aggregator:
 - The best alternative seems to be basing the document on the **Error! Reference source not found.**, see **Error! Reference source not found.**. However this is a Nordic document, and it may require some efforts to get it approved by ENTSO-E.
 - The second-best alternative seems to be sending a set of MRs for update of the **Error! Reference source not found.**, see **Error! Reference source not found.**.
- Aggregated data per MGA:
 - It doesn't seem to be any existing CIM documents that fits the need; hence we will probably have to make our own Nordic CIM document, see proposal in **Error! Reference source not found.**
- Aggregated data per neighbouring grid
 - Of the existing ENTSO-E alternatives, the FSKAR document seems to be closest to the NBS need.
 - Suggest discussing in NEMG if should continue with the Nordic document made for the Danish DataHub or try to update the FSKAR document.
- Confirmation of aggregated data per neighbouring grid
 - The confirmation of aggregated data per neighbouring grid document has exactly the same attributes and associations as the Aggregated data per neighbouring grid, hence we should use the same document, possibly with a different document type.

The “Memo - CIM for NBS 20230210” was briefly discussed:

- We should avoid using the RGCE document, since this is a specific RGCE document.
- For Aggregated MGA data, we should investigate the EAR document.

To be continued.

11.2 Issues related to update of Energinet (DataHub) CIM model with Accounting Point and Exchange Point – To be discussed at next physical NMEG meeting

The item was postponed.

11.3 Report from NMEG CIM-XML Subgroup; Teams meeting January 25th, 2023

Participants: Christian, Jan (DK), Jan (SE) and Ove.

The main topic for the meeting was making CIM versions of NBS document.

The basis for the discussions was a memo drafted in February 2022, however with updated diagrams according to latest ESMP from Alvaro and latest ebIX® BRs. In addition a few new class diagrams that were not available a year ago had been added.

The documents currently being exchanged with eSett was compared with the existing alternatives and need changes were noted. The memo is attached. The comparison will continue at our next meeting.

Next meeting: Friday February 10th, 10:00 – 11:30.

11.4 Report from NMEG CIM-XML Subgroup; Teams meeting February 10th, 2023

Participants: Jan (DK), Jan (SE) and Ove.

The Memo - CIM for NBS 20230210.docx was finalised and will be distributed to NMEG before our next physical NMEG meeting in Sundbyberg.

12 Addition of an “archive folder” at Ediel.org

Continued action:

- Teemu will try making an “archive folder” where older documents are stored, i.e. every time a new document version is uploaded to the document folder, the old version is move to the archive folder.

13 Review of documents from CIM WG subgroups and IEC groups

Background: At the NMEG meeting August 2020 it was agreed that NMEG needs to be more proactive regarding commenting on new ENTSO-E and IEC documents. Hence it is added a fixed item on the NMEG agenda for review of documents from CIM WG subgroups and IEC groups that is of interest for the Nordic market.

References (links):

What to decide, discuss or inform: Review of documents from CIM WG subgroups that is of interest for the Nordic market.

13.1 Prepare Nordic positions before coming CIM WG meetings

The agenda for next CIM WG meeting the coming week was reviewed, including review of a new ToR for the ENSTO-E CIM Retail market workgroup, however without any NMEG comments to it.

14 Information (if any)

Ove informed that Mario Pranjic is added as new observer (CC) in the NMEG distribution list. Mario is information model responsible in Elhub.

15 Next meetings

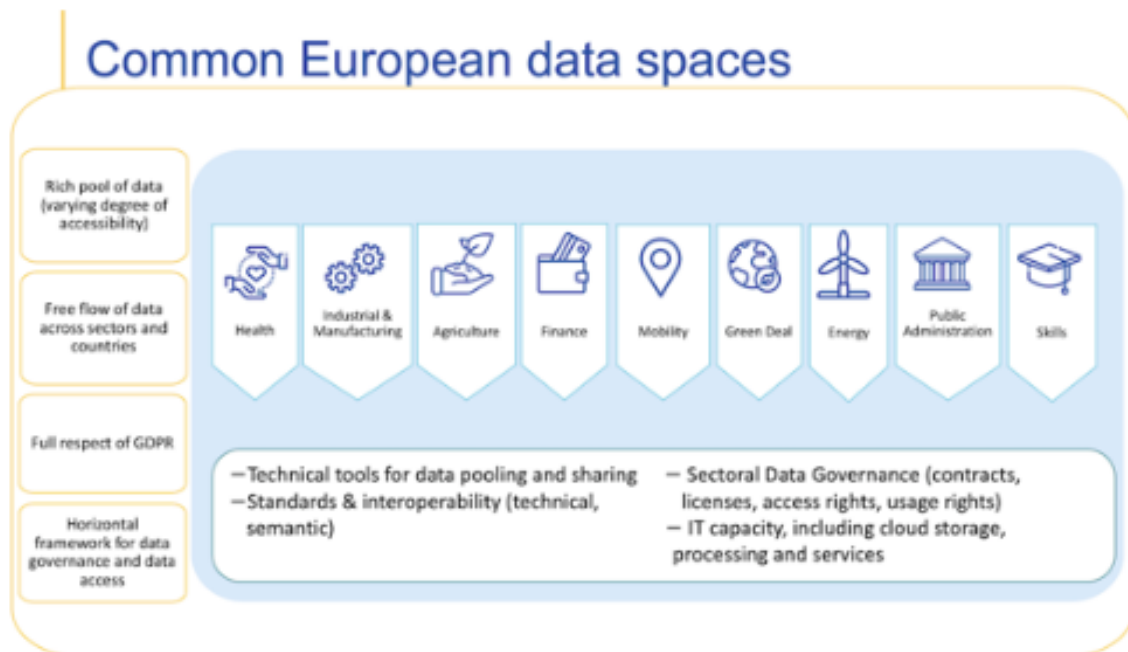
- Tuesday April 11th 10:00 – 12:00 + 13:00- 15:00, GoToMeeting
- Tuesday May 23rd and Wednesday May 24th, Helsinki – **Changed from GoToMeeting to physical meeting and extended with one day**
- Tuesday June 20th, 10:00 – 12:00, GoToMeeting – **Changed from physical meeting to GoToMeeting (earlier scheduled for June 14th and 15th)**

16 AOB

16.1 Common Energy Data Space

Jan (SE) asked if anyone know anything about “Common Energy Data Space”? Was anyone participating at the brainstorm discussion February 8th, see <https://dataspaces.info/>?

Some information from the website were reviewed and discussed - the intention is making a data space for sharing information between sectors:



Kalle Kukk from Estonia is responsible for drafting an ENTSO-E response to the Common Energy Data Space.

Item closed.

Appendix A Update of NBS BRS for TSO-MO – comments from eSett

From Tuomas:

In general I can confirm that publishing of the new codes/BRS is okay to eSett.

However, I must say that the BRS for the new part is not too easy to understand correctly, meaning the allowed Reason code combinations.

Are the correct combinations following?

Also, shouldn't the dependency matrix be updated?

Process type	Business type	Document Type	Direction	Reason Code	Reason Code 2	Tendering Party	Reserve Object	Used in			
								DK	FI	NO	SE
A30 (Tertiary reserve process)	A10 (Tertiary control)	A38	A01 or A02	Z22 Supportive power		TSO	N/A		P		
				Z26 Transit triangle		TSO	N/A			P	
				Z27 Transit redispatch		TSO	N/A			P	
				Z28 Transit SB Loop Long		TSO	N/A			P	
				Z31 FRR-M, Balancing Power (NO: Ordinary regulation)	Z58 Scheduled activation, or Z59 Direct activation, or Z60 Fast activation, or Z61 Fast deactivation	BRP	P	P	P	P	P
				Z34 FRR-M, Quarter regulation		BRP	P			P	
				Z35 FRR-M, Special Regulation (NO: Specially regulation)	Z58 Scheduled activation, or Z59 Direct activation, or Z60 Fast activation, or Z61 Fast deactivation	BRP	P	P	P	P	
				Z36 Hour Change Regulation (NO: Move of production)		BRP	P		P	P	
				Z37 Power Transaction		BRP	P		P		
Z38 TSO Internal Countertrades (Only used in Finland)		BRP	P		P						

Process type	Business type	Document Type	Direction	Reason Code	Reason Code 2	Tendering Party	Reserve Object	Used in			
								DK	FI	NO	SE
				Z39 Day Ahead Production Adjustment (NO : Production smoothing)		BRP	P		P	P	P
				Z63 Period shift activation		BRP	P			P	
		A81	A01 or A02	Z31 FRR-M, Balancing Power (NO : Ordinary regulation)		BRP or BSP	N/A	P			
				Z35 FRR-M, Special Regulation (NO : Specially regulation)		BRP or BSP	N/A	P			

Also, I'm a bit behind with reviewing the meeting minutes etc. so I'm not sure if following has been discussed already in NMEG.

Svenska kraftnät plans to move the settlement of balancing capacity to eSett (i.e. contracted reserves (**A81**)). This plan will also have impacts on this same section of NBS BRS for TSO-MO.

If I have understood correctly, there is a need for at least two new reason codes for contracted reserves (**A81**) that Svk would use:

- **Z??** FRR-A, correction
- **Z??** FRR-M, correction

Could you take this into NMEG agenda if it's not already in there?

So, an updated dependency matrix table would look like this for **A81** Contracted reserves.

Process type	Business type	Document Type	Direction	Reason Code	Tendering Party	Reserve Object	Used in			
							DK	FI	NO	SE
A30 (Tertiary reserve process)	A10 (Tertiary control)	A81	A01 or A02	Z31 FRR-M, Balancing Power (NO : Ordinary regulation)	BRP or BSP	N/A	✓			✓
				Z35 FRR-M, Special Regulation (NO : Specially regulation)	BRP or BSP	N/A	✓			✓
				Z?? FRR-M, correction	BRP or BSP	N/A				✓
A28 (Primary Reserve process)	A11 (Primary control)	A81	A01, A02 or A03	Z29 FCR	BRP or BSP	N/A	✓			✓
			A03	Z42 FCR-N, late			✓			✓
				Z43 FCR-N, early			✓			✓
				Z44 FCR-N, late correction			✓			✓

Process type	Business type	Document Type	Direction	Reason Code	Tendering Party	Reserve Object	Used in			
							DK	FI	NO	SE
			A01 or A02	Z45 FCR-N, early correction			✓			✓
				Z46 FCR-D, late			✓			✓
				Z47 FCR-D, early			✓			✓
				Z48 FCR-D, late correction			✓			✓
				Z49 FCR-D, early correction			✓			✓
			A01 or A02	Z56 FFR			✓			✓
A29 (Secondary reserve process)	A12 (Secondary control)	A81	A01 or A02	Z30 FRR-A	BRP or BSP	N/A	✓			✓
				Z?? FRR-A, correction	BRP or BSP	N/A				

Finally, we noticed that the description in the “attribute usage” table for Direction has a mistake. Instead of Z49, it should be Z45.

Direction	[1]	Direction	A01 Up A02 Down A03 UP and DOWN (symmetrical) For supportive power (incl. transit) the Direction is related to Up- or Down-regulation in the Connecting Area. When reporting Capacity Reserves (Document Type = A81) and Reason Code from Z42 to Z49 , the direction A03 (UP and DOWN (symmetrical)) shall be used.
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Appendix B Overview of Nordic memberships in international standardisation bodies

Name	Member of
Anders (SE)	CGMES, ESMP
Anne Stine	NMEG, ebIX®
Christian	NMEG, ebIX® observer (?)
Fedder	NMEG, CIM WG, IEC/WG16, CSSG, EEAT, ENTSO-E CIM tools, CIO/LIO
Jan (DK)	NMEG, IEC/WG16
Jan (SE)	NMEG, HG, ebIX®, IEC/WG16+14, ESMP, TFD, TK57
Jon-Egil	NMEG, CIM WG, IEC/WG16, ESMP, CCC, CIO/LIO, NEK, TPC, TFD
Martin (SE)	CCC
Miika	CIM WG, NEX
Moustafa (SE)	CGMES
Oscar	CIO/LIO, ebIX®, CIM WG, TK57
Ove	NMEG, HG, ebIX®, IEC/WG16, NEK
Svein (NO)	IEC/WG14+13, CGMES
Teemu	NMEG, CIM WG, EBG, ETC, CIO/LIO

Abbreviations:

CCC	Coordinated Capacity Calculation (project under CIM WG)
CGMES	Common Grid Model Exchange Standard (subgroup under CIM WG)
CIO/LIO	Central Issuing Office / Local Issuing Office
CSSG	Communication Standards (subgroup under CIM WG)
Dc	ENTSO-E Digital committee
EBG	ebIX® Business Group
EEAT	ENTSO-E Enterprise Architecture Team (subgroup under Dc)
ESMP	European Style Market Profile (subgroup under CIM WG)
ETC	ebIX® Technical Committee
HG	ebIX®, EFET and ENTSO-E Harmonisation Group
MC	ENTSO-E Market Committee
MIT	Market Integration and Transparency (subgroup under MC)
NEK	Norsk Elektroteknisk Komite
NEX	Nordic ECP/EDX Group
TFD	ENTSO-E Task Force Data Interoperability and Access,
TK57	Teknisk Komité 57
TPC	Transparency Platform Coordinators (subgroup under MIT)

Appendix C Overview of the usage of xml-schemas in the Nordic countries

#	XML schema	BRS	Version used by					
			NBS	NMA	Energinet	Fingrid	Statnett	Svk
1.	NEG ECAN publication document	NBS BRS for TSO/MO	1.0					1.0, 7.0
2.	NEG ERRP Reserve Allocation Result Document	a) NBS BRS for TSO/MO b) BRS for Trade	1.0					1.0
3.	NEG Area Specification Document	a) NBS BRS for Master Data b) BRS for Trade	1.0 ¹	2.0 (CIM)				
4.	NEG Bilateral Trade Structure Document	NBS BRS for Master Data	1.0					
5.	NEG Party Master Data Document	NBS BRS for Master Data	1.0					
6.	NEG Resource Object Master Data Document	NBS BRS for Master Data	1.1					
7.	ENTSO-E Acknowledgement Document	NEG Common XML rules and ...	6.0					7.0 (not complete)
8.	ENTSO-E ERRP Planned Resource Schedule Document	NBS BRS for TSO/MO	5.0					
9.	NEG ERRP Planned Resource Schedule Document	BRS for Schedules						
10.	ENTSO-E ERRP Resource Schedule Confirmation Report	BRS for Schedules	No NEG version					
11.	ENTSO-E ESS Anomaly Report	BRS for Schedules	No NEG version					
12.	ENTSO-E Outage document	BRS for Schedules	No NEG version					
13.	NEG ESP Energy Account Report Document	NBS BRS	1.0					
14.	ENTSO-E ESS Confirmation Report	NBS BRS	4.1					5.0
15.	ENTSO-E ESS Schedule Document	a) NBS BRS b) NBS BRS for TSO/MO	4.1					5.0
16.	ebIX® Aggregated Data per MGA for Settlement for Settlement Responsible	NBS BRS	2013pA					
17.	ebIX® Aggregated Data per Neighbouring Grid for Settlement for Settlement Responsible	NBS BRS	2013pA					
18.	ebIX® NEG Confirmation of Aggregated Data per Neighbouring Grid for ISR	NBS BRS	2013pA					
19.	ebIX® Validated Data for Settlement for Aggregator	NBS BRS	2013pA					
20.	NEG ECAN Allocation Result Document	BRS for Trade						
21.	NEG Currency Exchange Rate Document	BRS for Trade						
22.	NEG Auction Specification	BRS for Trade						
23.	NEG Spot Market Bid Document	BRS for Trade						
24.	ENTSO-E ERRP Reserve Bid Document	BRS for Trade						1.0
25.	ENTSO-E ERRP Activation Document	BRS for Operate						5.0 (not complete)

¹ The NBS version 1.0 is using dateTimeType for Validity Start/End (error correction), while the MO version 1.0 is using dateType. dateTimeType will be used from version 2.0.

26.	Capacity Market Document	???							7.1, 8.0
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