

Minutes: NMEG meeting Date: Thursday October 12 th , 2023 Time: 09:00 – 11:00 Place: GoToMeeting	 NMEG Nordic Market Expert Group
October 13 th , 2023	

Present: Bent Atle, Statnett (NBM)
Christian, Energinet
Henrik, Energinet
Jan (DK), Energinet
Jan (SE), Svenska kraftnät
Jon-Egil, Statnett (Convenor)
Mario, Elhub
Ove, Edisys (Secretary)
Teemu, Fingrid

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

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

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

Appendix A: Overview of Nordic memberships in international standardisation bodies

Appendix B: 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:

- Ediel ERRP Reserve Allocation Result Document, see item 11.6.
- Ediel ECAN Publication document, see item 11.7.
- New Reason codes, see item 11.8.

- Creating a strategy for the usage of ECP, see item 20.1 under AOB.

Focus items:

- NMEG roadmap, see item 4.
- Exchange of settlement information between the Nordic TSOs – prioritised item, see item 11.1.
- Ediel ERRP Reserve Allocation Result Document in NBS BRS for TSO-MO, see item 11.6.
- Ediel ECAN Publication document in NBS BRS for TSO-MO, see item 11.7.
- New Reason codes, see item 11.8.
- CIM for NBS, see item 15.1.
- Creating a strategy for the usage of ECP, see item 20.1 under AOB.

2 Approval of previous meeting minutes

The previous meeting minutes were approved.

3 Resolve matters related to close down of ebIX®

Background: ebIX® Forum decided at their meeting March 21st to prepare a plan for the closing of ebIX® by the end of 2023. The close down was confirmed at an ebIX® Forum meeting May 30th.

References (links):

What to decide,

discuss or inform: Discuss and resolve possible consequences NMEG.

The item was postponed.

4 NMEG roadmap

Jon-Egil had informed that NIT has asked NMEG to update the roadmap - and asked for NMEG comments:

Category	Strategic action	Description
Short-term	Establish new ECP requirements	NMEG will establish new ECP requirements to be sure that ECP will be compliant with the future TSO needs.
	Establish a secure Nordic Communication platform	NMEG will together with the Nordic TSOs specify and establish a secure Nordic Communication platform for secure information exchange between the Nordic TSO organisations in case of a major IT incident and/or any secure communication need between the Nordic TSOs.
Mid-term	Document local TSO – market participant exchanges	There is a need for documentation of national processes to see if there is a possibility for Nordic harmonisation, such as for settlement of TSO markets (aFRR, mFRR etc.).
	Draft a Nordic downstream market BRS	NMEG has made CIM based documents and related CIM XML schemas for all documents exchanged to and from the Danish Datahub and Energinet intends to implement these in the next major revision of the DataHub (version 3). These documents may

		be the basis for similar migrations to CIM by other Nordic datahubs.
Long-term		

There were no comments.

Update from Elhub (Mario):

- We have improvement task on our list for some time now to handle ECP, but, due to other burning issues, was not prioritized.

After internal discussion, status is unchanged: we hope to be able to push it to the top of the list after 15min changes are implemented, according to project plan.

Jon-Egil informed that:

- The new requirements for NBM have been changed to new requirements for Nordic TSOs. The project is mainly done by NEX, who in practice is a subgroup of NMEG.
- The secure Nordic communication platform will draft a secure ECP connection between the Nordic TSOs.
- If Elhub or anyone else have any comments or requirements, they are asked to forward these to the project.

Conclusion:

- We will discuss at our next meeting how NMEG will handle the new strategic actions.

5 Message for control of load in a Metering Point (from Fingrid)

The item was postponed.

6 Ediel.org Mysql issue

The item was postponed.

7 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.

The item was postponed.

8 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.

The item was postponed.

9 Support to the NBM project

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.

The item was postponed.

10 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.

The item was postponed.

11 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.

11.1 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:** Making an NMEG BRS for TSO-TSO settlement, describing common exchanges of settlement information between the Nordic TSOs, instead of having bilateral agreements.

Since eSett is using the ENTSO-E ESP Energy Account Report message (EAR), a namespaced version of EAR version 1.2, it would be relevant to get input from eSett regarding their possible updates and change to CIM.

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".

All were at our previous meeting asked to investigate if we need a “corridor” in the Planned exchange document? The conclusion was that we will identify a corridor by an Exchange Point ID (MarketEvaluationPoint ID).

Ove had as action made an MR for update of the FSKAR document. The MR will be handled at the next CIM WG.

Ove made a first draft of a BRS for TSO-TSO settlement and Jan (SE) had got the following comment to it:

I got the comment “We need to handle Bornholm 130 kV, in the format. This means that it should be possible to exchange more than corridors.”

And later: “it is not only electricity area boundaries that we want to report for, but also divided into different areas within the same bidding zone.” Not only then for Bornholm, but also for connections to Norway.

We should rather use:

- a) An attribute for each “connection” (not a MarketEvaluationPoint)
- b) Two attributes for Metering Grid Areas

...

And I think we have the latter.

After a short discussion we think this is covered by the BRS.

To be continued.

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

The item was postponed.

11.3 Status for new Nordic extended Schedule Outage Market Document

Review of the Nordic extended Schedule Outage Market Document to see if it should be published at www.ediel.org.

11.4 Update of NMEG code list

The item was postponed.

11.5 BRS for settlement not handled by eSett or the Nordic data hubs

The item was postponed.

11.6 Ediel ERRP Reserve Allocation Result Document in NBS BRS for TSO-MO

From Teemu:

Background: Activated aFRR energy is divided into Aof -and non-Aof volumes and amounts when connected to PICASSO

Change: Addition of two new reason codes (addition to current Z30) to the Ediel *ERRP Reserve Allocation Result Document* for reporting aFRR energy volumes and amounts to eSett.

Timetable: PICASSO accession/connection on 06/2024

For example:

ZXX aFRR AOF -activation – aFRR activated with aFRR cross-border marginal price set by AOF, which is settled based on pay-as-cleared.

ZXX aFRR NON-AOF activation – aFRR activated with higher price (up-regulation) / lower price (down regulation) compared to aFRR cross-border marginal price set by AOF, which is settled based on pay-as-bid.

The following codes was added to the Ediel ERRP Reserve Allocation Result Document in the NBS BRS for TSO-MO and to the code list:

Z77	aFRR AOF activation	Automatic Frequency Restoration Reserve (aFRR) activation with Activation Optimisation Function (AOF)
Z78	aFRR non-AOF activation	Automatic Frequency Restoration Reserve (aFRR) activation without Activation Optimisation Function (AOF)

Action:

- Ove will update the BRS for TSO-MO and the NMEG code list and sent to NMEG for one week of commenting before publication at the www.ediel.org.

11.7 Ediel ECAN Publication document in NBS BRS for TSO-MO

From Teemu:

Background: New energy prices for aFRR after PICASSO connection

Change: Addition of process type A29 Secondary reserve process to the Ediel ECAN Publication Document for reporting aFRR energy prices to eSett.

Timetable: PICASSO accession/connection on 06/2024

The process code “**A51** Automatic frequency restoration reserve” was added to the Ediel ECAN Publication Document in the NBS BRS for TSO-MO.

Action:

- Ove will update the BRS for TSO-MO and the NMEG code list and sent to NMEG for one week of commenting before publication at the www.ediel.org.

11.8 New Reason codes

From Jon-Egil:

A new information product for publication of unsatisfied demand must be established with reason codes.

The messages should be published as Merit Order List Market Documents (CIM message). Descriptions of the different codes in the message is in [Common Platform for manually activated restoration reserves IG \(entsoe.eu\)](http://entsoe.eu), page 41-44.

The following codes were agreed added to the NMEG code list:

Code	Text	Comment
Z79	AOF cannot satisfy the demand with available bids	The Activation Optimisation Function (AOF) cannot satisfy the demand with available bids.
Z80	Rejected by BSP	Activations are rejected by the Balancing Service Provider (BSP)
Z81	BSP is unavailable	The Balancing Service Provider (BSP) is unavailable (timeout)

Code	Text	Comment
Z82	Scheduled activation bids already chosen for direct activation	Bids selected by scheduled activation is already chosen for direct activation

Action:

- Ove will update the NMEG code list and sent to NMEG for one week of commenting before publication at the www.ediel.org.

12 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).

The item was postponed.

13 Common European Area project

Background: ebIX® has proposed a project plan for a common European Area project. ebIX®, ENTSO-E (CIM WG) and ENTSG 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 item was postponed.

14 XML schemas

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

The item was postponed.

15 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.

15.1 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.

Interim conclusions (to be discussed in NMEG):

- Validated data for settlement for Aggregator:
 - The best alternative seems to be basing the document on the NBM Measurement Data Market Document. 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 RGCE Measurement value document.
- 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.
- 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.

From first brief discussion in NMEG February 23rd:

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

The proposals and comments above were briefly discussed.

Conclusion:

- To be prioritised at our next physical meeting in Oslo.

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

The item was postponed.

17 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.

The item was postponed.

18 Information (if any)

The item was postponed.

19 Next meetings

NMEG:

- Wednesday November 1st and Thursday November 2nd, 09:00 – 16:00 (17:00?) and **09:30 – 16:00 (13:00^{1?})**, Oslo
- Tuesday December 5th, 10:00 – 15:00, GoToMeeting
- Tuesday January 9th and Wednesday January 10th at Svenska kraftnäts offices in Sundbyberg (Stockholm)

NMEG CIM XML subgroup:

- No meetings planned.

20 AOB

20.1 *Creating a strategy for the usage of ECP*

From Jan (SE):

I would imagine that we all accept that ECP can be used for providing market bids to a TSO.

But perhaps you also allow actors in your countries to use ECP for other purposes than bids, acknowledgements and activations?

Or plan to use ECP for more?

E.g. we recently got the question: “may we use ECP to send production plans to Svenska kraftnät?”.

Today the answer is no, since we are using DELFOR for those plans.

But next year I hope we can allow (new) actors to use “PlannedResourceSchedule_MarketDocument”, see chapter 6.2 in <https://ediel.org/wp-content/uploads/2023/06/BRS-for-Nordic-Scheduling-and-Ancillary-Services-Processes-v3r3A-20230626.pdf>

¹ The Danish participants expect to leave at 13:00.

But may those plans be sent into us over ECP? What should we allow to be sent over ECP?

I think we should have the same principles in the Nordic area: who can use ECP for what?

My suggestion would be:

- What does the present policy say? If not anything about this, should the Nordic ECP/EDX Group be given the task of suggesting an update of the present policy? A policy that we then can comment on and discuss in NMEG. (Or some other document than a policy, if this should be documented elsewhere.)

Response from Fedder:

Back in 2020, NMEG created a memorandum in collaboration with NEAT setting the scene for exactly this kind of data exchange. [NMEG recommendation for asynchronous communications](#). The document has subsequently been endorsed by MSG and RGN, so it is aligned with business requirements.

I believe that Statnett has used MADES for activations since 2019 but am unsure of the details.

MADES is by design payload agnostic, so it can transfer any kind of data without any specific considerations if the size is less than 50MB. It is possible to transfer larger files, but then the default parameters need to be adjusted. Data exchanges on the N-ECP network used for the Nordic Flowbased process routinely exchange data in hundreds of megabytes, as an example of this.

So, to answer your questions. Yes, there's an agreed policy on this. The MADES networks outlined in the memorandum has been established and are in production. Adding more exchanges to them is very straightforward.

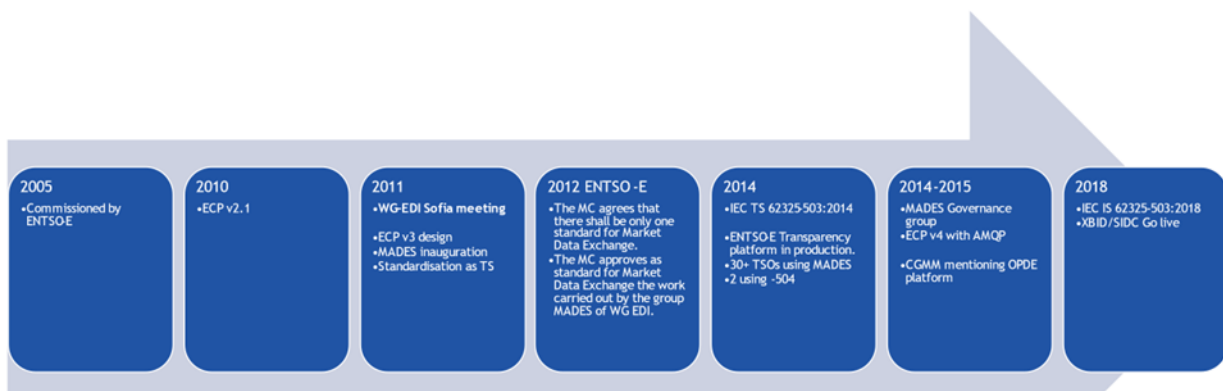
To emphasize that this is not just a Nordic position, the Market Committee of ENTSO-E noted two decisions back in 2012, which has subsequently paved way for using MADES as the foundation for the OPDE platform as introduced in the Common Grid Model Methodology (CGMM) as well as numerous other critical business processes.

Decisions of 21st Market Committee January 18th 2012:

- The MC agrees that there shall be only one standard for Market Data Exchange.
- The MC approves as standard for Market Data Exchange the work carried out by the group MADES of WG EDI.

Here's a brief timeline of events in the development of "ECP":

Origin of MADES / ECP



An overview of its use in the Nordics can be seen here:

ENERGINET

USE IN NORDICS

- N-ECP (Nordic-RPN)
 - Nordic flowbased
- I-ECP (Internet)
 - NBM
 - HVDC Scheduling
 - eSett
 - NEMO (Capacity release)
- O-ECP (ENTSO-E PCN)
 - CGM Program
 - CCR-HANSA
- X-ECP (Orange MPLS)
 - SIDC
 - HVDC Scheduling (Cobra)



Using the term ECP is a bit of a misnomer because the underlying standard (IEC IS 62325-503) is called MADES. ECP is an implementation of the standard, and there's nothing prohibiting another implementation to be done. As can be seen from the timeline, the ECP application have quite a bit of legacy attached, which unfortunately also carries some experiences with regards to its security posture and scalability. ENTSO-E is increasing the maturity of the development process of ECP by implementing a Software Security Development Lifecycle with the vendor in order to address these issues.

Energinet is currently exploring potentials for a new implementation of MADES that builds on experience accumulated over the years as well as utilizing contemporary technologies and development processes. The result of this work is expected to be presented to NIT later this year.

From discussion:

- Jon-Egil informed that the actors in Norway may use ECP between the actors after approval by the Statnett ECP manager.
- NMEG should make an announcement that we support the usage of ECP in the Nordic energy market, including communication between the actors.
- Henrik mentioned that there may be some configuration problems with ECP – probably to be investigated by NEX.
- It was also noted that Denmark is working on light weight version that is expected to be “100 times” more effective than what is used today.

Conclusion:

- We will discuss at our next meeting if we can make a NMEG recommendation for usage of ECP.

Action:

- All are asked to verify if it exists any policy for usage of ECP by (between) external actors in their country.

Appendix A 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 B 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 ²	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)

² 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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