

[GAS Network Codes Functionality Platform](#)

**REPORTED ISSUE ID: 02/2019. BRS
for balancing**

Reported by: Equinor ASA
Status: SOLVED

Table of Contents

Issue Details	3
SOLUTION - Issue Solution Note	5
SOLUTION - Solution Supporting Document - Evaluation of issue	7
SOLUTION - Solution Supporting Document - ENTSOG recommendation	16

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ISSUE DETAILS

ABSTRACT

The business requirements specification for nomination and matching procedures is referencing the Network code on Gas Balancing of Transmission Networks but is only describing small parts of the network code. This can create a situation where TSO's think they are compliant with the network code by implementing what is included in the nomination and matching BRS but that is only covering the nomination and matching process and is missing out on many of the other balancing parts.

Category: European

REPORTED ISSUE

In our opinion the BRS is missing descriptions on how to handle the withinday obligations described in article 25, 26, 28, 29, 30, 31, and 32-39 of the network code.

Today information given to network users are many times based on information on websites instead of using edig@s. It will also be a big improvement if all processes that already is covered by edig@s is harmonised.

CONCERNED ENTITIES

Network Code / Guidelines concerned:

Network Code on Gas Balancing of Transmission Networks, Commission Regulation (EU) 2014/312

Member State(s) concerned:

- Austria
- Belgium
- Bulgaria
- Croatia
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Northern Ireland
- Poland
- Portugal

- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- United Kingdom

IP(s) concerned:

None selected

NOTIFIED PARTIES

Informed NRA(s):

None selected

Informed TSO(s):

None selected

SUGGESTED ACTIONS

Who should act:

- ACER
- ENTSOG

Suggested solution or action:

- Adjustment of implementation

SOLUTION

With reference to the solution supporting documents below, it has been found that amending the existing BRS for Nomination and Matching or drafting a new BRS is not warranted at this point in time.

Adopting a Union-wide data exchange format could however bring benefits for the parties involved in the balancing processes. Therefore, ENTSOG have issued a recommendation note addressed to TSOs recommending the use of the latest version of edig@s® format, currently edig@s® 6.1 version.

ACER and ENTSOG have concluded that the recommendation note issued by ENTSOG on the adoption of edig@s® 6.1 is an appropriate solution to the issue request, given the current regulatory framework of both INT&DE NC and BAL NC allowing for different data exchange solutions.

Solution publication date: 2022-10-14

DOCUMENTS

[SOLUTION - Issue Solution Note](#)

[SOLUTION - Solution Supporting Document - Evaluation of issue](#)

[SOLUTION - Solution Supporting Document - ENTSOG recommendation](#)

Gas Network Codes Functionality Process Issue Solution

Issue details	
Number:	470-19-05-15-1247
Name:	BRS for Balancing
Reporting party:	Equinor SAS
Network Code / Guidelines concerned:	Network Code on Gas Balancing of Transmission Networks, Commission Regulation (EU) 2014/312
Article of the Network Code / Guidelines	Articles 31-37
Category:	European issue
Abstract:	
The business requirements specification for nomination and matching procedures is referencing the Network code on Gas Balancing of Transmission Networks but is only describing small parts of the network code. This can create a situation where TSO's think they are compliant with the network code by implementing what is included in the nomination and matching BRS but that is only covering the nomination and matching process and is missing out on many of the other balancing parts. In our opinion the BRS is missing descriptions on how to handle the within day obligations described in article 25, 26, 28, 29, 30, 31, and 32-39 of the network code.	

Issue solution(s)	
Publication date:	14 October 2022
ENTSOG and ACER, together with NRAs and TSOs, have engaged in several discussions with the issue posters Equinor and Engie, as well as collected extensive information on the usage of edig@s[®] format. As has been concluded in the solution supporting document, it has been found that amending the existing BRS for Nomination and Matching or drafting a new BRS is not warranted at this point in time. ENTSOG and ACER do however share the view of Equinor and Engie that adopting a Union-wide data exchange format would bring benefits for the parties involved in the balancing processes. Therefore, ENTSOG have issued a recommendation note addressed to TSOs recommending the use of the latest version of edig@s[®] format, currently edig@s[®] 6.1 version.	

The solution supporting document also outlines the current use of the various edig@s[®] versions and other formats, and TSOs implementation migration plans already in place for edig@s[®] 6.1, which will allow the effects of the ENTSG recommendation and evolution of edig@s[®] usage to be followed up on. It has also been found reasonable to allow for different implementation times given the different needs of different TSOs and their network users.

ACER and ENTSG therefore conclude that the recommendation note issued by ENTSG on the adoption of edig@s[®] 6.1 is an appropriate solution to the issue request, given the current regulatory framework of both INT&DE NC and BAL NC allowing for different data exchange solutions.

Evaluation of FUNC Issue “BRS for Balancing”

Contents

1. INTRODUCTION	2
2. ISSUE IDENTIFIED BY EQUINOR SA AND POSTED ON THE FUNC PLATFORM	2
3. BACKGROUND ON EXISTING BRS FOR NOMINATION & MATCHING	3
4. EVALUATION OF THE ISSUE	3
4.1. Development of Business Requirement Specifications	4
4.2. Harmonisation of formats to exchange balancing information with NUs	4
5. CONCLUSIONS	6
6. APPENDIX	7
6.1. Current edig@s® status of implementation and migration plans to 6.1	7
6.1.1. Current status of edig@s® legacy formats amongst TSOs	7
6.1.2. Planned migration time frames for edig@s® 6.1 version	7
6.1.3. Rationale for migration to edig@s® 6.1	9

1. INTRODUCTION

On May 15, 2019, Equinor SA reported an issue on the Gas Network Codes Functionality Platform (FUNC platform):

“In our opinion the BRS is missing descriptions on how to handle the within day obligations described in article 25, 26, 28, 29, 30, 31, and 32-39 of the network code.

Today information given to network users are many times based on information on websites instead of using edig@s®. It will also be a big improvement if all processes that already is covered by edig@s® is harmonised.”

The issue is also supported by ENGIE SA.

2. ISSUE IDENTIFIED BY EQUINOR SA AND POSTED ON THE FUNC PLATFORM

Issue subject as described by Equinor SA on the FUNC platform:

BRS for Balancing.

Abstract on the FUNC platform:

The business requirements specification for nomination and matching procedures is referencing the Network code on Gas Balancing of Transmission Networks but is only describing small parts of the network code. This can create a situation where TSO's think they are compliant with the network code by implementing what is included in the nomination and matching BRS but that is only covering the nomination and matching process and is missing out on many of the other balancing parts.

General information:

- *Member states concerned: Austria (AT), Belgium (BE), Bulgaria (BG), Croatia (HR), Cyprus (CY), Czech Republic (CZ), Denmark (DK), Estonia (EE), Finland (FI), France (FR), Germany (DE), Greece (GR), Hungary (HU), Ireland (IE), Italy (IT), Latvia (LV), Lithuania (LT), Luxembourg (LU), Malta (MT), Netherlands (NL), Northern Ireland (NI), Poland (PL), Portugal (PT), Romania (RO), Slovakia (SK), Slovenia (SI), Spain (ES), Sweden (SE), United Kingdom (UK)*
- *Network Code concerned: Network Code on Gas Balancing of Transmission Networks, Commission Regulation (EU) 2014/312*

Issue description by Equinor SA on the FUNC platform:

In our opinion the BRS is missing descriptions on how to handle the withinday obligations described in article 25, 26, 28, 29, 30, 31, and 32-39 of the network code.

Today information given to network users are many times based on information on websites instead of using edig@s®. It will also be a big improvement if all processes that already is covered by edig@s® is harmonised.

Suggested actions by Equinor SA on the FUNC platform:

Adjustment of implementation.

3. BACKGROUND ON EXISTING BRS FOR NOMINATION & MATCHING

The Network Code on interoperability and data exchange (INT&DE NC) assigned ENTSG the task to develop common network operation tools (CNOTs) for the relevant data exchange requirements identified within the developed network codes. For each identified data exchange requirement, the CNOTs may include a business requirement specification (BRS) and a technical implementation guideline (IG).

The Business Requirement Specification (BRS) for the Nomination and Matching Procedures was developed by ENTSG based on the legal framework provided by the relevant Network Codes (BAL NC, CAM NC, INT&DE NC) and on the experience of TSOs of (re-)nomination and matching processes in place at interconnection points.

The document streamlines the business requirements that are necessary in order to ensure a harmonised transmission of information between parties participating in the nomination and matching processes and is intended for use by parties involved in such processes.

The Nomination and Matching BRS was first published on ENTSG website in February 2014 and amended in June 2016 based on additional business requirements identified by TSOs in the process of implementing the mechanisms needed in order to comply with the BRS and the underlying Network Codes.

The current version of the BRS was updated in 2021 to incorporate minor editorial changes and was published in 2022 on the ENTSG website [here](#).

4. EVALUATION OF THE ISSUE

In order to better understand the issues experienced by Equinor and Engie and to clarify the aim of their request, ENTSG together with ACER, NRAs, and TSOs have engaged in several discussions with Equinor and Engie.

As a result of these discussions, ACER and ENTSG understand that the request from Equinor is twofold:

- To extend the scope of the existing BRS beyond the *nominations and matching* processes to encompass the processes detailed in the existing Message Implementation Guidelines

developed by EASEE gas in relation to data exchange on *balancing and settlement* processes.

- To achieve greater harmonisation of formats and communication solutions implemented to provide network users with relevant data related to the above-mentioned processes, by adopting edig@s® as a common data exchange message format.

Therefore, it has been considered appropriate to evaluate this issue focusing on each of the requests.

4.1. Development of Business Requirement Specifications

In relation to the request to draft a BRS covering the additional balancing processes, it has been found that amending the existing BRS for Nomination and Matching or drafting a new BRS is not warranted at this point in time.

The following reasons have been identified:

- There has not been any amendment of current Network Codes (BAL NC, INT&DE NC) or new NC developed that would require the identification of new data exchange requirements.
- In the initial assessment conducted by ENTSG in 2013 to identify the scope of data exchange requirements definition to support the BAL NC implementation, ENTSG concluded that there was no need for drafting additional BRS, besides the one already covering nominations and matching processes. This view was based on an assessment of the data exchange processes contained within the BAL NC and the selection criteria (i.e., compliancy with INT&DE NC, applicability of voluntary development). As a result of the scoping activity, the processes for which data exchange requirements were identified within the BAL NC besides nominations and renominations processes, were found to be non IP-related processes, and therefore outside the scope of data exchange provisions detailed in Article 1.2 of the INT&DE NC.

4.2. Harmonisation of formats to exchange balancing information with NUs

ENTSG and ACER share the view of Equinor and Engie that adopting a Union-wide data exchange format would bring benefits for the parties involved in the balancing processes.

ENTSG and TSOs, in dialogue with stakeholders, are committed to continue working towards improvement of current technological solutions and explore the feasibility of a progressive adoption of a common data exchange format.

It is observed in current business practice that most TSOs/balancing operators, have already implemented edig@s®-based data exchange solutions, alongside equivalent solutions providing an identical degree of interoperability, as provided in the INT&DE NC.

Therefore, ENTSOG supports further application of the edig@s® format to enable efficient exchange of commercial data amongst all relevant parties involved in balancing operations and processes. With this aim ENTSOG has issued a recommendation note addressed to TSOs detailing how edig@s® format responds to the industry's needs and listing the balancing processes that can benefit from the implementation of the latest version of edig@s® format, namely edig@s® 6.1 version. The recommendation note can be found [here](#).

ENTSOG is regularly in contact with EASEE-gas, the provider of edig@s® XML. The two organisations have a long-standing Cooperation agreement (first signed in 2013) related to the development of data exchange messages. The scope of the cooperation is the development and revision by EASEE-gas of edig@s® XML messages for data exchange to meet the needs identified by ENTSOG for the due implementation of the Gas Regulation and in particular the network codes.

Furthermore, ENTSOG is a member and can ensure a fit for purpose evolution of edig@s®, monitor the progressive implementation of edig@s® format and sharing of best practices. In particular, the EASEE-gas Message Workflow Design Working Group (MWD WG) collect information on the use of edig@s® 6.1, both current and intended future implementation, including timescales for implementation. For this issue solution note, also ENTSOG have collected complementary information through its Information Technology & Communication Kernel Group (ITC KG).

As edig@s® 6.1 is a very recent release (Feb 2022) there are no current live implementations, however:

- 38 TSOs report usage of the versions 4, 5.1 and 6.0
- 4 TSOs claim to use only Interactive¹

25 TSOs have expressed they already have implementation migration plans in place for edig@s® 6.1 which can be broken down as follows:

Planned adoption of edig@s® 6.1: Nr of TSOs and target migration Quarters and Year

- | | |
|---|-----|
| ○ Uses edig@s® already and 6.1 adoption planned for 2022 | =13 |
| ○ Uses edig@s® already and 6.1 adoption planned for 2023 | =9 |
| ○ Uses edig@s® already and 6.1 adoption planned for 2024 | =3 |
| ○ Uses edig@s® already but have no plans yet to migrate to 6.1 | =14 |
| ○ Uses Interactive only and plan to migrate to edig@s® 6.1 | =1 |
| ○ Uses Interactive only and do not plan to migrate to edig@s® 6.1 | =3 |

¹ One of these Interactive TSOs however, has plans to migrate to edig@s® 6.1 for some processes.

5. CONCLUSIONS

Based on the information collected during the evaluation of the issue, ACER and ENTSG conclude that the recommendation note issued by ENTSG on the adoption of edig@s® 6.1 is an appropriate solution to the issue request, given the current regulatory framework of both INT&DE NC and BAL NC allowing for different data exchange solutions. Due to the fact that ENTSG and EASEE-gas are already collecting data and monitoring the evolution and implementation of edig@s® it will be possible to verify whether the TSOs implementation plans are being followed or not and address possible issues along the way. It has also been found reasonable to allow for different implementation times given the different needs of different TSOs and their network users.

6. APPENDIX

6.1. Current edig@s® status of implementation and migration plans to 6.1

6.1.1. Current status of edig@s® legacy formats amongst TSOs

As it stands (July 2022), it can be seen from the graph below that the vast majority of TSOs use edig@s® 5.1 messages in various process areas with 4 TSOs claiming to only have implemented interactive data exchange.² There is one TSO that claims to have implemented some messages in the 6.0 version but it is believed to be inactive at this time.

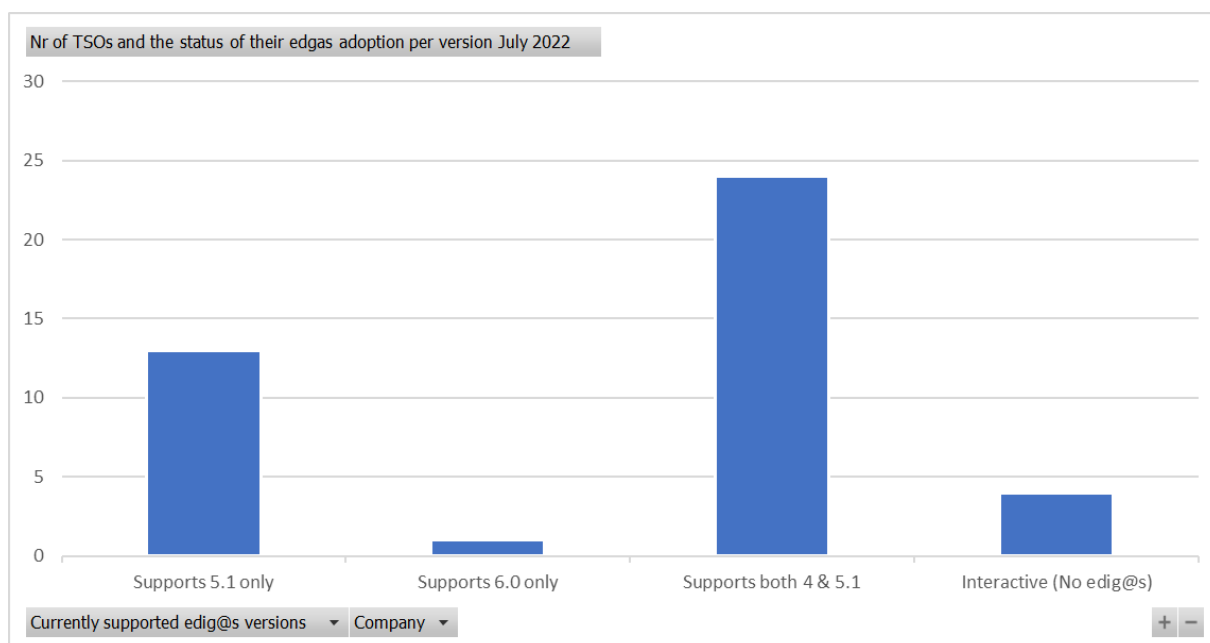


Figure 1: TSO support of edig@s® versions

6.1.2. Planned migration time frames for edig@s® 6.1 version

Out of the 42 TSOs who provided data, 25 have edig@s® 6.1 migration plans in place which shows a good level of interest to move to the edig@s® 6.1 version within the next 1-2 years (2022-2024). However, TSOs will generally have a phased approach, i.e. moving some messages over in one quarter and another set in another quarter, hence the migration plans illustrated below in figure 2 are rough estimations. The rationale for moving from one edig@s® version to another will be further explained below in chapter 5.3.

² One of these interactive TSOs has a migration plan in place to move some processes over to edig@s®

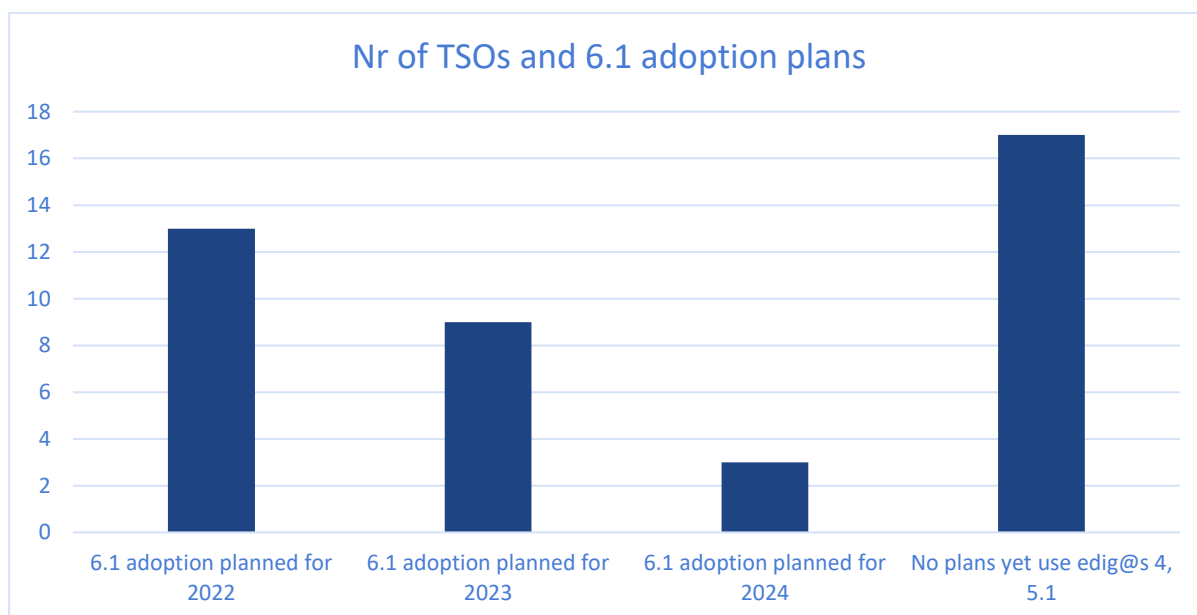


Figure 2: TSOs planned adoption of edig@s®

6.1.3. Rationale for migration to edig@s® 6.1

6.1.3.1. edig@s® maintenance cycle – end of life support for older versions

One prime reason for migration to the latest edig@s® version is the way that EASEE-gas have set up their maintenance cycles for their releases.

As per the Common Business Practice (CBP) released by EASEE-gas in 2007, it is described how the edig@s® releases shall be managed and maintained. The main principle is that the EASEE-gas edig@s® working group will provide support and maintenance of the current official release, and for the previous release to the official one. This 'dual maintenance' is a contributing factor as to why not all TSOs migrate 'instantly' to the latest version. edig@s® has this feature in order to facilitate better migration planning over a longer period.

6.1.3.2. Drivers and motivational factors affecting migration decisions of TSOs

The following drivers and motivational factors have been identified when asking TSOs why they would migrate/not migrate to edig@s® 6.1.

6.1.3.2.1. A 4.0 (or 5.1) TSO **would migrate** to 6.1;

- a) If the TSO require a new feature not supported by version 4.0. As version 4.0 is no longer maintained they would need to migrate to a supported version.
- b) If 4.0 or 5.1 users require the 6 new message types in 6.1. balancing and forecasting.
- c) If 4.0 or 5.1 users need the code values in 6.1 to unlock new functionality which is not in 4.0 or 5.1.
- d) A move from 4.0 to 5.1 would not be logical to invest in due to the relatively limited life/maintenance period of version 5.1. It would be better to invest in the recommended version 6.1. where the ROI on the implementation could be extended through a longer (supported) life of the release.

6.1.3.2.2. A 4.0 or 5.1 TSO **would not migrate** to 6.1;

- a) If the TSO (and its customers) has no need for the new features of the new versions.
- b) If the TSO has no need to raise a work request to add more features in 5.1 (small changes).
- c) If 4.0 or 5.1 users have sunk costs in these versions and need to recoup the investments (given that there are no functional or legal reasons to migrate).

TSOs will generally not move to a new version unless there is a business-related reason, nor migrate just to be updated with features they (and their customers) do not require at this stage.

ENTSOG recommends the use of edig@s[®] for balancing and settlement processes

The Commission Regulation (EU) 2015/703 on Interoperability and Data exchange rules (INT&DE NC) gives Transmission system operators and their counterparties three types of data exchange that can be implemented: Document based (EDI), Interactive (Systems) and integrated (Peer to peer EDI). To further facilitate the technical harmonisation and efficiency in the gas sector, ENTSOG supports the harmonisation of EDI data exchange message formats based on edig@s[®] 6.1 for balancing and settlement processes. edig@s[®] is a tailor-made XML EDI solution for the gas market which is a tried and trusted method of data exchange.

The rationale for recommending the edig@s[®] messaging format

The following is covered by edig@s[®] XML messages:

- **Business Process Coverage** – edig@s[®] is developed by industry experts for data exchange in gas processes.
- **NC Compliance** – edig@s[®] has been already identified in the INT&DE NC as an efficient solution ensuring an optimal degree of interoperability.
- **Communication protocols** – edig@s[®] is aligned with ENTSOG's AS4 communication profile which also has validation tools to help implementation of edig@s[®] payloads.

edig@s[®] XML provides stakeholders with an efficient technical tool for the automatic transmission of balancing and settlement data from one application directly to another. Through the application of edig@s[®]'s harmonised message formats, data is communicated efficiently and accurately irrespective of users' internal hardware and software.

The use of edig@s[®] provides benefits for transmission system operators and their counterparties, including:

- **High speed integration:** Large volumes of gas data can be communicated from one computer to another at a speed that enables fast process cycle times and near real time data exchange.
- **Accuracy:** edig@s[®] can reduce errors resulting from manual data input or errors derived from non-edig@s[®] based data models where the information that is sent is not readily understood by the recipient.
- **Communication:** If used by both parties, edig@s[®] can eliminate data interpretation errors and improve partner communication.

In addition, within the European gas sector, the edig@s[®] message format has already been widely adopted and implemented on a community basis upstream and downstream in the gas value chain. ENTSOG promotes further application of edig@s[®] in the gas community.

Resolution and recommendation

The recommendation targets the Balancing and settlement processes and the associated edig@s[®] 6.1¹ messages and documents as seen below.

Non-binding Message Recommendation for Balancing & Settlement Processes

edig@s [®] Message	Document type	Document
METRED	Meter reading document	Measurement Information
MARSIT	Market situation document	Balancing action forecast
MARSIT	Market situation document	Within day Balancing action results
MARSIT	Market situation document	Emergency clearing confirmation (not referenced in BAL NC)
MARSIT	Market situation document	Operational Balancing Agreement (not referenced in BAL NC)
MARSIT	Market situation document	Market area position
MARSIT	Market situation document	Account position report
MARSIT	Market situation document	Non daily metered forecast
MARSIT	Market situation document	End of day Balancing results
MARSIT	Market situation document	Reconciliation notification (not referenced in BAL NC)
MARSIT	Market situation document	Provisional allocation report
MARSIT	Market situation document	Definitive allocation report

It is with the aforementioned technical evolution in mind that ENTSOG wishes to recommend the use of edig@s[®] as an efficient data exchange format. Whilst ENTSOG supports the adoption of edig@s[®], each transmission system operator and each counterparty involved in balancing data exchange are still fully entitled to use whichever format they see fit out of the three data exchange solutions outlined in Article 21 of the INT&DE NC.

¹ This recommendation is based on the latest version of edig@s[®] 6.1. If new edig@s[®] versions are published this recommendation may be updated.