

[GAS Network Codes Functionality Platform](#)

REPORTED ISSUE ID: 01/2019.
**Missing harmonisation of interfaces
on capacity platforms**

Reported by: Equinor ASA
Status: SOLVED

Table of Contents

Issue Details	3
PUBLIC CONSULTATION - Summary of public consultation results	7
PUBLIC CONSULTATION - Presentation of the public consultation results	33
SOLUTION - Issue Solution Note	54
SOLUTION - Annex I	56
SOLUTION - Annex II	63

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ISSUE DETAILS

ABSTRACT

Today there are 4 capacity platforms (Prisma, Gaz System, GBS (Gassco booking site) and a Hungarian platform). There is also more to come. In addition TSO's are also running some capacity processes like overnomination and interruptible capacities via their own sites. In the common data exchange solutions table from ENTSG it was decided that for capacity interactive data exchange should be used. In our opinion this have created a situation where some of the processes is harmonised but the data exchange and platforms are completely different. This makes it difficult for network users (Balancing responsible parties) to keep track of their capacity and to get an overview of options available for transporting the gas in Europe and also the cost involved to do so.

Category: European

REPORTED ISSUE

Capacity and transport rights are very important information that directly affect the gas prices that a network user can give to receiving part. Most network users that have portfolios in different European countries want to digitalise this process and to do that today is very costly because of the lack of harmonisation when it comes to data exchange.

We agree with the statement in the network code on interoperability network code that states:

Page 1:

(3): "The lack of harmonisation in technical, operational and communication areas could create barriers to the free

flow of gas in the Union, thus hampering market integration. Union interoperability and data exchange rules

should allow the necessary harmonisation in those areas, therefore leading to effective market integration. For

that purpose and for facilitating commercial and operational cooperation between adjacent transmission system

operators, this Regulation should address interconnection agreements, units, gas quality, odourisation and data

exchange. It should provide rules and procedures to reach an appropriate level of harmonisation towards efficient

gas trading and transport across gas transmission systems in the Union."

Because of this we think that this is missing for capacity data exchange and there is a need to harmonize the data exchange for capacity.

Missing information regarding capacity is affecting both the balancing and transport of gas.

CONCERNED ENTITIES

Network Code / Guidelines concerned:

Network Code on Interoperability and Data Exchange Rules, Commission Regulation (EU) 2015/703

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):

- Bayernets GmbH (DE)
- BBL Company V.O.F. (NL)
- Bulgartransgaz EAD (BG)
- Conexus Baltic Grid (LV)
- Creos Luxembourg S.A. (LU)
- DESFA S.A. (GR)
- Elering AS (EE)
- ENAGAS TRANSPORTE S.A.U (ES)
- Energinet (DK)
- eustream, a.s. (SK)
- FGSZ Natural Gas Transmission Private Company Limited By Shares (HU)

- Fluxys Belgium S.A. (BE)
- Fluxys Deutschland GmbH (DE)
- Fluxys Tenp GmbH (DE)
- Gas Connect Austria GmbH (AT)
- Gas Networks Ireland (IE)
- Gas Transmission Operator GAZ-SYSTEM S.A. (PL)
- GASCADE Gastransport GmbH (DE)
- Gastransport Nord GmbH (DE)
- Gasum Oy (FI)
- Gasunie Deutschland Transport Services GmbH (DE)
- Gasunie Transport Services B.V. (NL)
- GNI Limited (UK)
- GRTgaz Deutschland GmbH (DE)
- GRTgaz (FR)
- Infrastrutture Trasporto Gas SpA (IT)
- Interconnector Limited (UK)
- Lubmin-Brandow Gastransport GmbH (DE)
- National Grid Gas plc (UK)
- NEL Gastransport GmbH (DE)
- NET4GAS, s.r.o. (CZ)
- Nowega GmbH (DE)
- Ontras Gastransport GmbH (DE)
- OPAL Gastransport GmbH & Co. KG (DE)
- Open Grid Europe GmbH (DE)
- Plinacro (HR)
- PLINOVODI d.o.o. (SI)
- Premier Transmission Limited (UK)
- Regasificadora del Noroeste S.A. (ES)
- REN - Gasodutos, S.A. (PT)
- Snam Rete Gas S.p.A. (IT)
- Società Gasdotti Italia S.p.A. (IT)
- Swedegas AB (SE)
- TERÉGA (FR)
- terranets bw GmbH (DE)
- Thyssengas GmbH (DE)
- Trans Adriatic Pipeline AG (GR)
- Trans Austria Gasleitung GmbH (AT)
- Transgaz S.A. (RO)
- AB Amber Grid (LT)
- JordgasTransport GmbH (DE)

SUGGESTED ACTIONS

Who should act:

- ACER
- ENTSG

Suggested solution or action:

- Adjustment of implementation

Other suggestions: Edig@s should be implemented.

PUBLIC CONSULTATIONS

FINISHED

Public consultation to understand network users' preferences in having a common format and protocol for communication to Capacity Booking Platforms

SOLUTION

To achieve harmonisation ACER and ENTSOG propose the following steps to be undertaken in order to provide a solution for the reported issue:

- ENTSOG will propose to change the Common data exchange solutions table (CNOT) and propose document-based exchange solution for capacity (interactions between Network Users and Capacity Booking Platforms) and leave the interactive data exchange as a voluntary option.
- An amendment of the INT&DE NC as detailed in Annex I. It is proposed to amend the following Articles: 1(2), 20 (1) & (2) and 23(1) & (2). The amendment reflects the proposals provided for the previous FUNC case on data exchange at VTP and storage.
- In the future further studies can be developed to assess the impact of higher-level harmonisation of this issue.
- The proposed amendments for the specific processes are described in the Common Data Exchange Solution Table as detailed in Annex II.
- Please note that ultimate outcome of the proposals may deviate from the proposed solutions described in Annex I & II because additional process steps outside the FUNC process are required. Annex I has to go through a comitology process lead by the European Commission. Annex II has to be publicly consulted as this is the part of the amendment process of the Common Network Operation tools as stated in INT & DE NC Art. 24 (2). The results of the consultation on the Common Data Exchange Solution Table may trigger further amendments of the INT & DE NC next to those proposed in Annex I.

For further details, reference is made to the Solution note and Annexes below.

Solution publication date: 2020-12-11

DOCUMENTS

[PUBLIC CONSULTATION - Summary of public consultation results](#)

[PUBLIC CONSULTATION - Presentation of the public consultation results](#)

[SOLUTION - Issue Solution Note](#)

[SOLUTION - Annex I](#)

[SOLUTION - Annex II](#)

Summary of the Public Consultation – FUNC issue “Missing harmonisation of interfaces on capacity platforms”

Contents

1. Functionality Process.....	3
2. Introduction of the reported issue:.....	3
3. Public Consultation – main findings	5
3.1. Participants.....	5
3.2. Currently used formats and protocols	6
3.3. Support for future formats and protocols to communicate with Capacity Booking Platform Operators.....	8
3.3.1. Common Format (Edig@s as a format for Booking Platforms)	8
3.3.2. Additional Edig@s functionalities.....	9
3.3.3. Common Protocol.....	9
3.3.4. Choice of a Common Protocol.....	10
3.4. Usage of AS4 and Edig@s XML for business processes.....	11
3.5. Continue using the existing protocol of data exchange	11
3.6. The three most important issues	13
4. Further Results from the Public Consultation	15
4.1. How many messages do you exchange to each counterparty? (Question 10)	15
4.2. For which communication do you see a potential for improvement in regard to data exchange and why is this improvement needed? (Question 12).....	15
4.3. On how many Market Areas are you active? (Question 11)	17
4.4. If Edig@s-XML / AS4 was considered but not implemented, please, indicate reasons why? (Question 14).....	17
4.5. If Edig@s-XML / AS4 was NOT considered, please, indicate reasons why? (Question 15)...	19
4.6. How many Capacity Booking Platforms do you use? (Question 16)	20
4.7. IF Edig@s XML is chosen as common format for capacity platform for processes mentioned in the Common Data Exchange Solution Table that can be used all over Europe would you then want to implement the solution? Please explain your answer in the "Comments" field. (Question 19)	20
4.8. How much time will it take you to implement the new <i>format</i> ? (Question 20).....	20

4.8.1.	Please elaborate on the reasons for the implementation timeline (see question 20) .	21
4.9.	Would you want the existing method of data exchange to continue despite a common <i>format</i> being offered? (Question 22).	22
4.10.	Main criteria for having a common <i>protocol</i> (Question 26)	23
4.11.	How much time it will take you to implement the new <i>protocol</i> ? (Question 30)	23
4.11.1.	Elaboration on the reasons (Question 31)	23
4.12.	Would you want the existing method of data exchange to continue despite a common <i>protocol</i> is offered? If YES please elaborate on the reasons see question 33? (Question 32)	24
4.13.	Please elaborate on the reasons and desired timeframe (Question 33)	25
4.14.	In case you are already using Edig@s for business processes like Nomination & Matching, what other processes would you like to cover with this format? (Question 35)	25
4.15.	Please state any general comments (Question 36)	25

1. Functionality Process

The purpose of “The Functionality Process for Gas Network Codes” is to handle issues which are related to the way of working of the various Network Codes (NCs) and Guidelines (GLs) on gas transmission by involving stakeholders, National Regulatory Authorities and Transmission System Operators. The process is aimed at reaching proposal(s) for issue solution from ACER and ENTSOG on the cross-border, regional and European issues.

Within the Functionality Process, Stakeholders are provided a possibility to raise and discuss issues related to the NCs and GLs as well as being involved in elaboration on the proposal(s) for issue solution. This voluntary Functionality Process is not a substitute for a formal network code amendment procedure.

The prioritised/selected cross-border, regional and European issues are sent to the relevant ENTSOG Working Group and ACER Task Force for a joint development of the solutions.

2. Introduction of the reported issue:

Equinor ASA posted the following issue in the Gas Network Code Functionality Platform <http://www.gasncfunc.eu/>

Following the process described [here](#) the reported issue was validated by ACER and ENTSOG as an issue which falls under the scope of the FUNC process and categorised as an “European issue”.

Extract of the reported issue

Issue identification number: [01/2019](#) and [03/2019](#)¹

Reporting party name: Equinor ASA

The issue: Missing harmonisation of interfaces on capacity platforms

Abstract: Today there are 4 capacity platforms (Prisma, Gaz System, GBS (Gassco booking site) and a Hungarian platform). There is also more to come. In addition, TSOs are also running some capacity processes like overnomination and interruptible capacities via their own sites. In the common data exchange solutions table from ENTSOG it was decided that for capacity interactive data exchange should be used. In our opinion this have created a situation where some of the processes is harmonised but the data exchange and platforms are completely different. This makes it difficult for network users (Balancing Responsible Parties) to keep track of their capacity and to get an overview of options available for transporting the gas in Europe and also the cost involved to do so.

Who should act: ACER, ENTSOG

Suggested solution or action: Adjustment of implementation

Other suggestions: Edig@s should be implemented.

The above-mentioned FUNC issue required detailed information from the involved parties (Capacity Booking Platforms and their customers) which was shared at a stakeholder Workshop organised in September 2019, which included representatives of all Capacity Booking Platforms, ACER, EFET, and

¹ The issue was posted twice on the Functionality Platform by two separate users. On 1 July 2020 the Functionality Platform was updated, and all the issues previously posted on the old Platform were given new issue numbers. Issue 01/2019 was previously named 470-19-05-15-1056 and issue 03/2019 was previously named 496-19-06-03-0926

several network users. As a conclusion of this workshop all parties agreed to have a public consultation on this topic launched by ENTSG and ACER. The aim was to gain an understanding of having a

common format and protocol preference among the market participants to communicate with Capacity Booking Platforms.

This consultation focuses on data exchange between *Auction Office* and *Registered Network Users* as mentioned in the [Common Data Exchange Solution Table](#).

The Public Consultation was launched on 8 January 2020 and was open for responses until 28 February 2020.

The participants of this consultation had the choice to keep anonymity not disclosing their company names for the publication of the results, if they wished to do so. For this reason, some quotes below do not include the company name.

3. Public Consultation – main findings

3.1. Participants

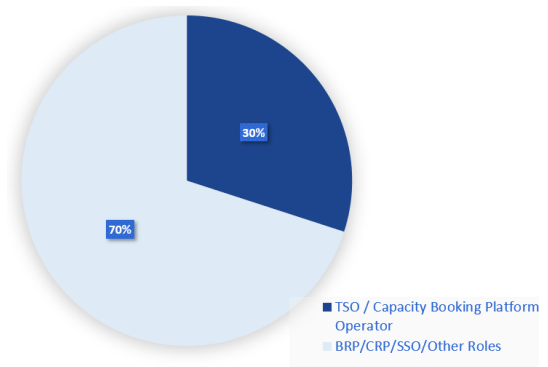
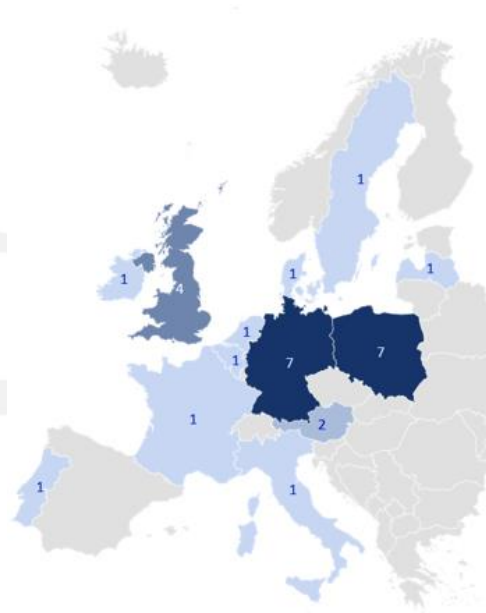
30 participants responded to the public consultation. The top three countries where the participating parties are located are Germany (7), Poland (7), and the United Kingdom (4).

The market roles indicated by the parties were Balancing Responsible Party (BRP) (15), System Operators (Transmission System Operators (TSO), LNG System Operators (LSO) and Storage System Operator (SSO)) (8), and Capacity Booking Platform Operators (CBPO) (3), while four parties indicated an “other” role than the ones available for selection such as “Shareholder”, “Software and Service Provider”, “Gas Seller”, “Producer” and “Customer”.

The role “Capacity Responsible Party” (CRP) was indicated by nine participants. As all CRPs indicated being active also as BRPs, all parties operating on Booking Platforms are also involved with Balancing and Nomination Processes in their roles as BRPs. For this reason, the role of CRPs was included in the numbers of BRPs.

One System Operator indicated having multiple roles (TSO, Capacity Booking Platform Operator (CBPO), SSO, Area Coordinator, Virtual Trading Point (VTP) Operator). The remaining System Operators indicated having only one role.

In order to have a better overview of the provided answers, two groups of market roles were established. Group A consists of the CBPOs and TSOs; Group B includes BRPs, LSOs, SSOs and “other roles”.



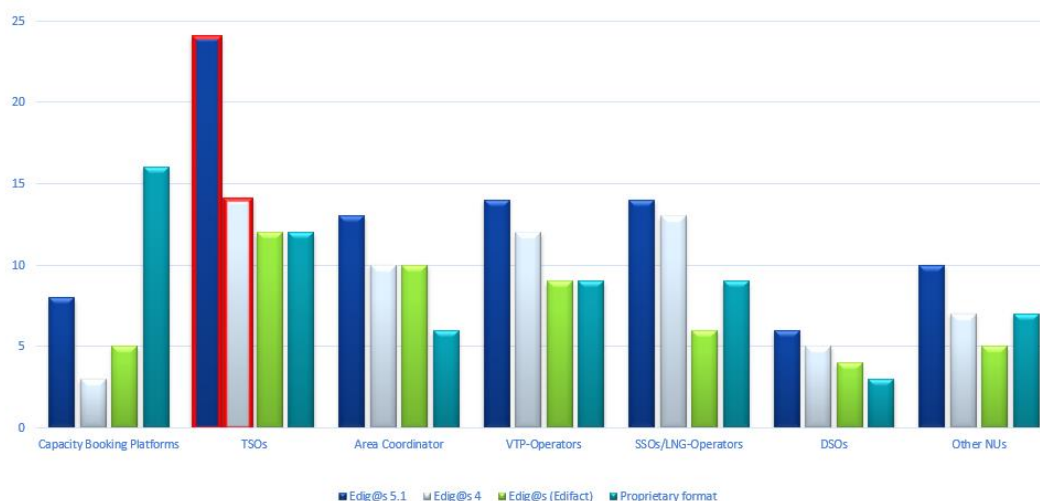
3.2. Currently used formats and protocols

The current situation across Europe regarding the used formats and protocols for communication to the questioned counterparties is displayed in the graphs below.

Formats: The most utilised format is Edig@s 5.1 followed by Edig@s 4 which are used to communicate with all counterparties but CBPOs. The most used format to communicate with a CBPO is a proprietary format (defined by one of the CBPOs) followed by Edig@s 5.1 and Edig@s 4.

The syntax of Edig@s called Edifact, which is no longer supported by the development team for Edig@s, since the introduction of Edig@s 5², is still widely used for communication to all counterparties.

The communication formats defined by the Interoperability and Data Exchange Network Code (INT & DE NC) or any national regulation are marked with a red outline below.

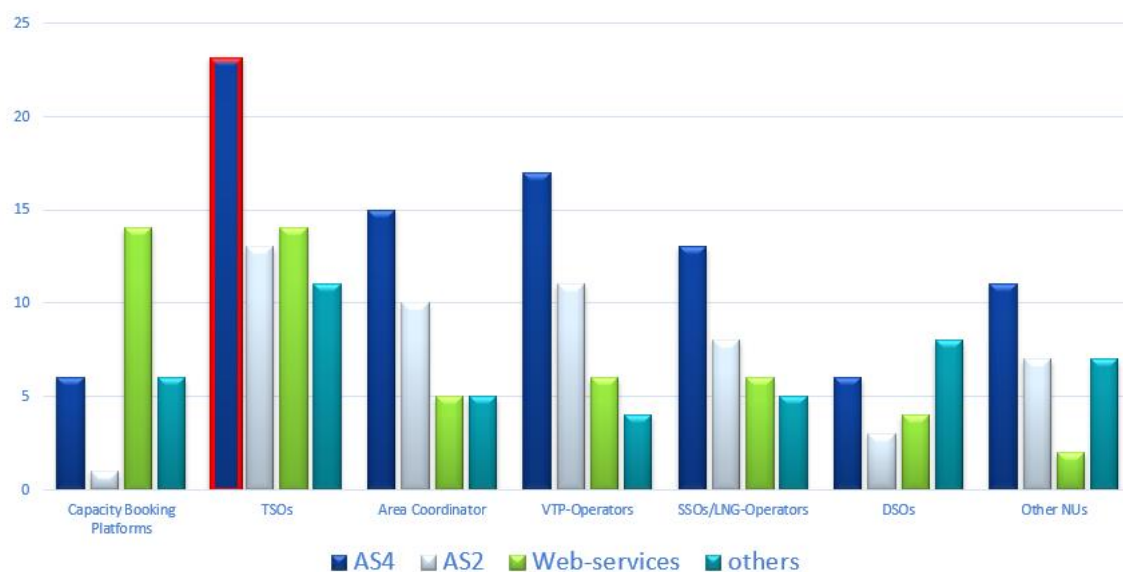


Protocols: AS4 was indicated as the most used protocol to communicate with all parties except CBPOs. The most used protocol to communicate with CBPOs is “web-services”, which is widely used to communicate to TSOs. AS2 is the second most used protocol to communicate with Area Coordinators, VTP Operators, SSOs/LSOs, and other Network Users (NU).

The remaining protocols provided as an option in the public consultation (SFTP, FTPs, SMTP (email)) were summarised as “others” since they are not mentioned in the INT NC or considered sufficiently secure.³

² Edig@s 4 supports the syntax Edifact and XML. Edig@s 5.1 supports only XML as a syntax. The INT & DE NC obliges the usage of Edig@s XML which means Edig@s 4 XML or Edig@s 5.1.

³ Due to the message encryption, AS2 provides security in terms of non-repudiation but is not mentioned in the INT NC.



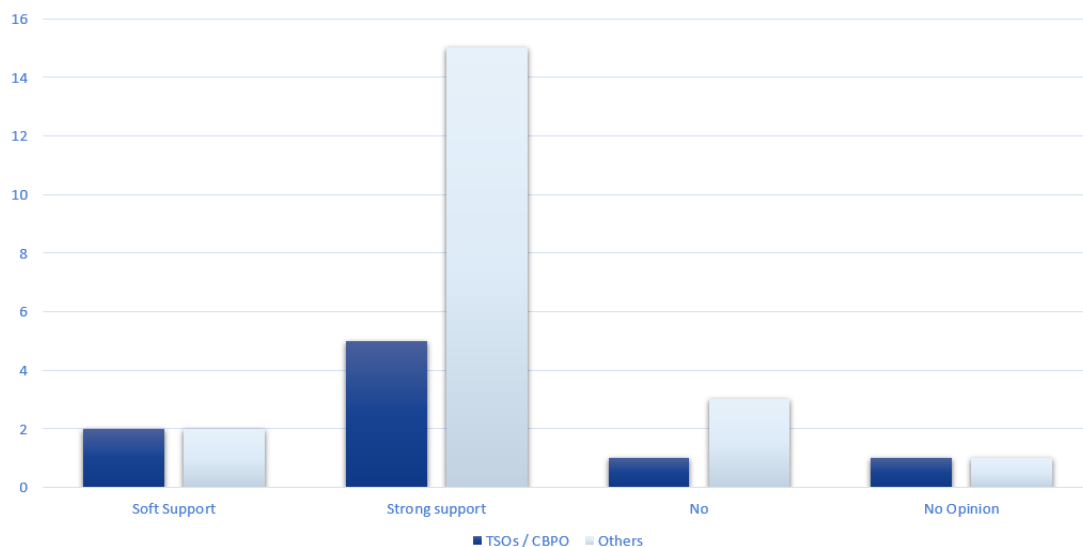
3.3. Support for future formats and protocols to communicate with Capacity Booking Platform Operators

The public consultation participants were asked about their support on a future format and protocols to communicate between Network Users and CBPOs.

3.3.1. Common Format (Edig@s as a format for Booking Platforms)

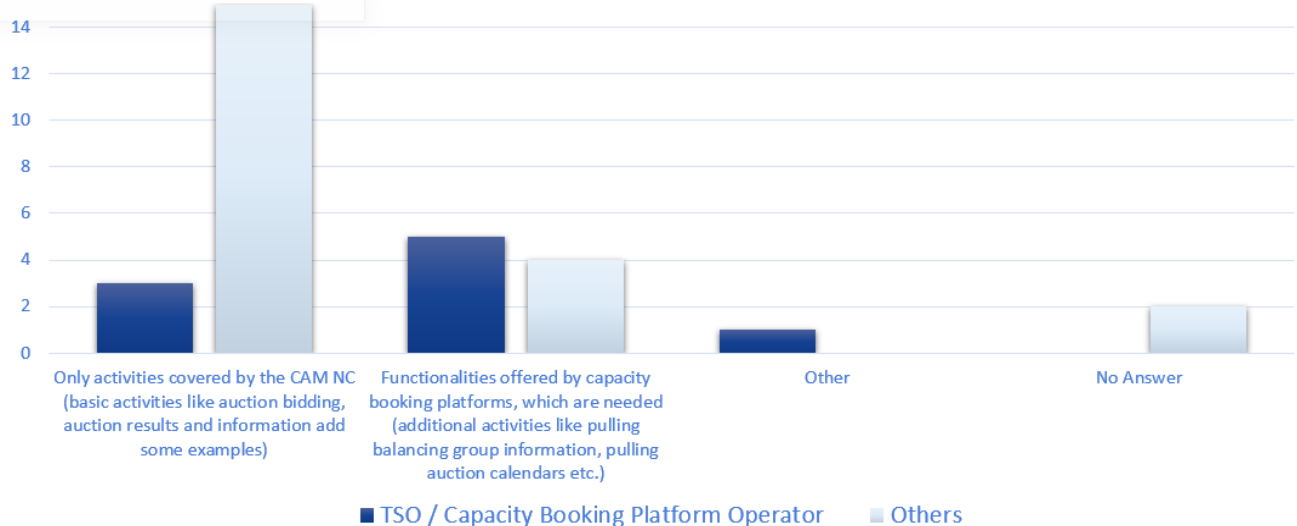
Both groups are in favour. The majority indicated strong support for Edig@s as the common format for future communication with CBPOs.

One TSO (REN) and three non-TSOs (Linz Strom Gas Wärme GmbH, GasTerra B.V., Gas Management Services Ltd) are not in favour of introducing Edig@s as a common format.



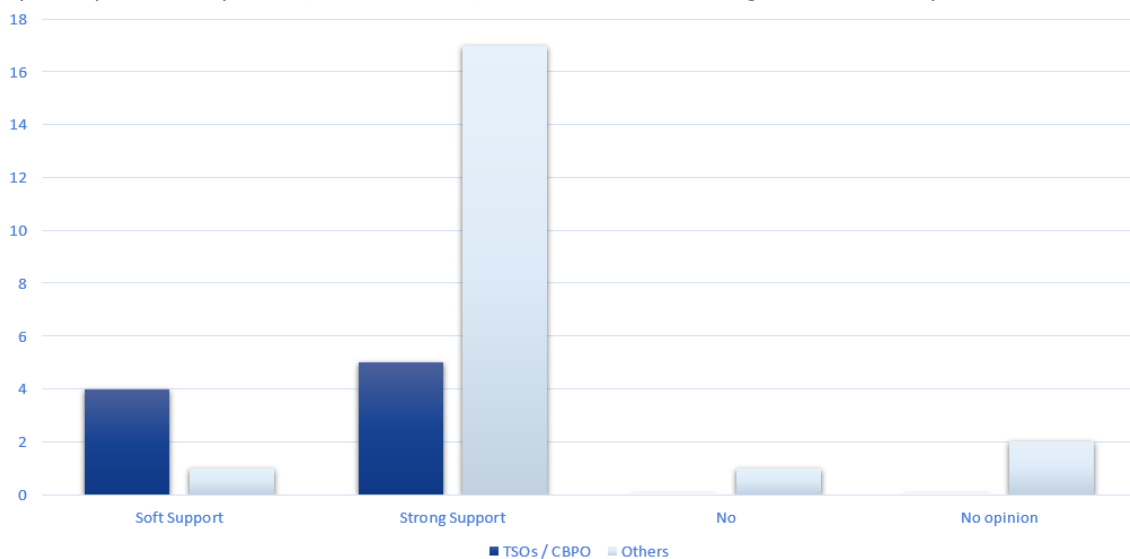
3.3.2. Additional Edig@s functionalities

The majority of the participants (60% - 18 participants) indicated that only activities mentioned in the Capacity Allocation Mechanism NC (CAM NC) should be covered by the format Edig@s. 30% of the participants (9) are requesting for additional functionalities which are needed such as pulling auction calendar data or balancing group information.



3.3.3. Common Protocol

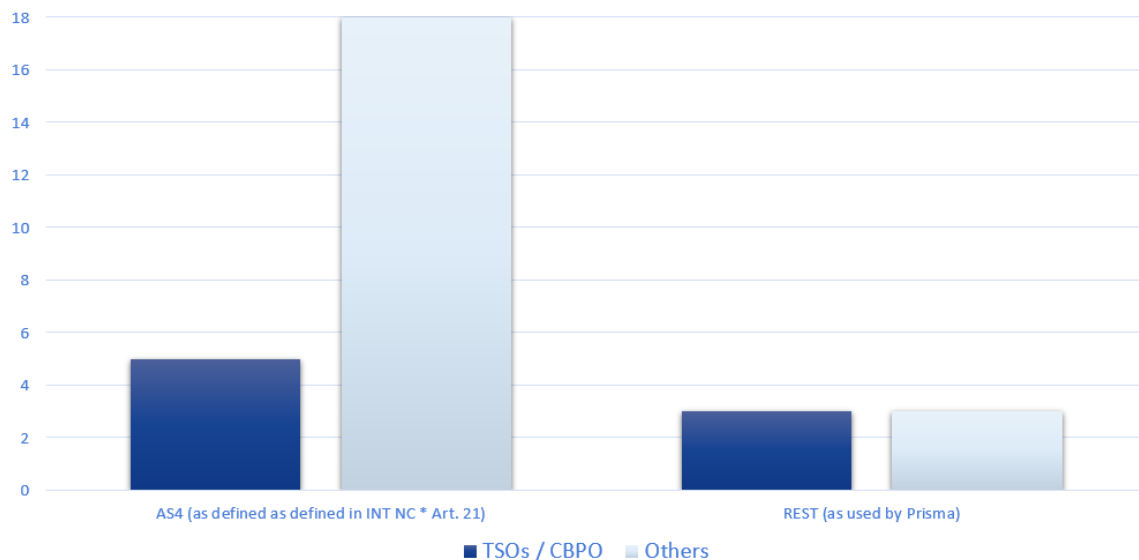
All participants except one (GasTerra B.V.) are in favour of having one common protocol.



3.3.4. Choice of a Common Protocol

Furthermore, the participants were asked to choose one of the two protocols which are currently used most to communicate with CBPOs (AS4 as defined by the INT NC and REST following the requirements defined by Prisma) as their preferred common protocol.

AS4 was indicated by the majority of both groups as the preferred protocol. REST is supported by three TSOs/CBPOs (i.e. Gas Networks Ireland, Prisma) and three non-TSOs classification for the propose of this exercise (i.e. GasTerra B.V., Thyssengas GmbH⁴).



The participants were asked to indicate the pros and cons about both protocols from their everyday perspective of operations. The following options were provided for selection: Costs for end-users, Costs for capacity booking platforms, Speed (implementation), Speed (processing message), Security (authentication), Security (Non-repudiation), and Interoperability (compatibility with other processes). The participants could also provide other answers if the predefined options were not applicable to them.

Protocol	Pros	Cons
AS4	- Interoperability (24) - Security (Authentication) (22) - Security (non-repudiation) (18)	- Speed of implementation (7) - Speed reg. processing messages (4)
REST	- Speed while processing messages (10) - Speed of implementation (9)	- Interoperability (12) - Security (non-repudiation) (10) - Security (Authentication) (9)

AS4 was indicated as the protocol ensuring a high level of security and interoperability.

⁴ Thyssengas is a TSO, but indicated its role as “Shareholder” of Prisma.

REST (as implemented by Prisma) was indicated as the protocol providing a faster initial implementation of the data exchange process.

3.4. Usage of AS4 and Edig@s XML for business processes

The participants were asked about their usage of AS4 and Edig@s in terms of business processes. The graph shows that next to the mandatory usage of AS4/Edig@s XML for Nomination & Matching, this communication type (document based) is also used for Balancing, Capacity Trading, Transparency, and Settlement processes.



The bars with a red outline are mandatory (INT NC / National regulation)

3.5. Continue using the existing protocol of data exchange

The participants were asked if they would like to keep the existing data exchange solution in place even though a common protocol/format is already offered.

56% (17) of the participants would like to continue using the existing format data exchange method in order to have a transition period, where several solutions are supported, which would mitigate transition risks and allow users not able to move to a new protocol to continue with the existing communication.

Some excerpts from the stakeholders' arguments:

- "For a transitory period, existing method should be continued." (BRP)
- "...keep backward compatibility/interoperability." (system operator)
- "The AS4 protocol is a heavy protocol requiring a middleware server running 24/7. This solution is not suitable for smaller companies and individual traders, that still want to automate their processes or connect new frontend implementations. A parallel, simpler and cheaper implementation is still needed to allow for stateless communication and information pulling without investments in the infrastructure." (Prisma and Thyssengas GmbH)
- "For a smooth transition, the cut-over period needs to be longer." (Swedegas)
- "Contingency in case of issues around implementation of new protocol." (BRP)
- "The current [existing] method does not generate new costs." (TAURON Polska Energia S.A.)

- “Because the platform users may need some time to adapt.” (REN Gasodutos)
- “[We] will probably implement a new common protocol – However, most likely will a new standard not meet [our] special requirements (since our booking platform also has other business processes)” (system operator)

Please note that some companies did not agree with the publishing of their name. Their quotes are therefore listed without any reference.

3.6. The three most important issues

At the end of the consultation, the participants were asked about their three most important issues in relation to the issue reported by Equinor.

The most mentioned keywords were:

- Costs (mentioned by 14 participants)
- One common standard ⁵(mentioned by 10 participants)
- Harmonisation (mentioned by 7 participants)
- Interoperability (mentioned by 6 participants)

Please find below the quotes supporting the above-mentioned arguments:

- “Whilst an AS4/Edigas.XML document-based data exchange solution for capacity trading processes now works for us, it may be an overkill for some network users who book capacity infrequently, or in just one market. So, the best solution could be to make it mandatory for those network users requesting it, but to keep the current interactive processes available for those network users who cannot justify document-based data exchange.” (RWE Supply & Trading.
- “Cost and benefit in the context of the whole market should be considered.” (Thyssengas GmbH and Prisma)
- “Having unified messaging principle / approach would significantly reduce costs of implementation and complexity for operations / Different standards and methods currently used creates additional complexity.” (anonymous participant)
- “Likelihood of errors and therefore costs/ Lack of common protocol / Ease of switching between platforms.” (Storengy UK)
- “Variety of protocols and formats to manage for a CRP / Increased IT costs (maintenance).” (ENGIE SA)
- “Harmonization is needed. Using Edigas is the best way to harmonize. / Interfaces should not cost extra money as a fee, implementation/maintenance costs are sufficient.” (VNG Handel & Vertrieb GmbH)
- “Mandating an AS4/Edigas.XML document based data exchange solution for capacity trading processes will improve our efficiency. It may also encourage TSOs who are currently resisting this solution for nominations and matching to finally adopt it.” (RWE Supply & Trading)
- “It is important to maintain a level playing field for companies of different sizes.” (Thyssengas GmbH and Prisma)

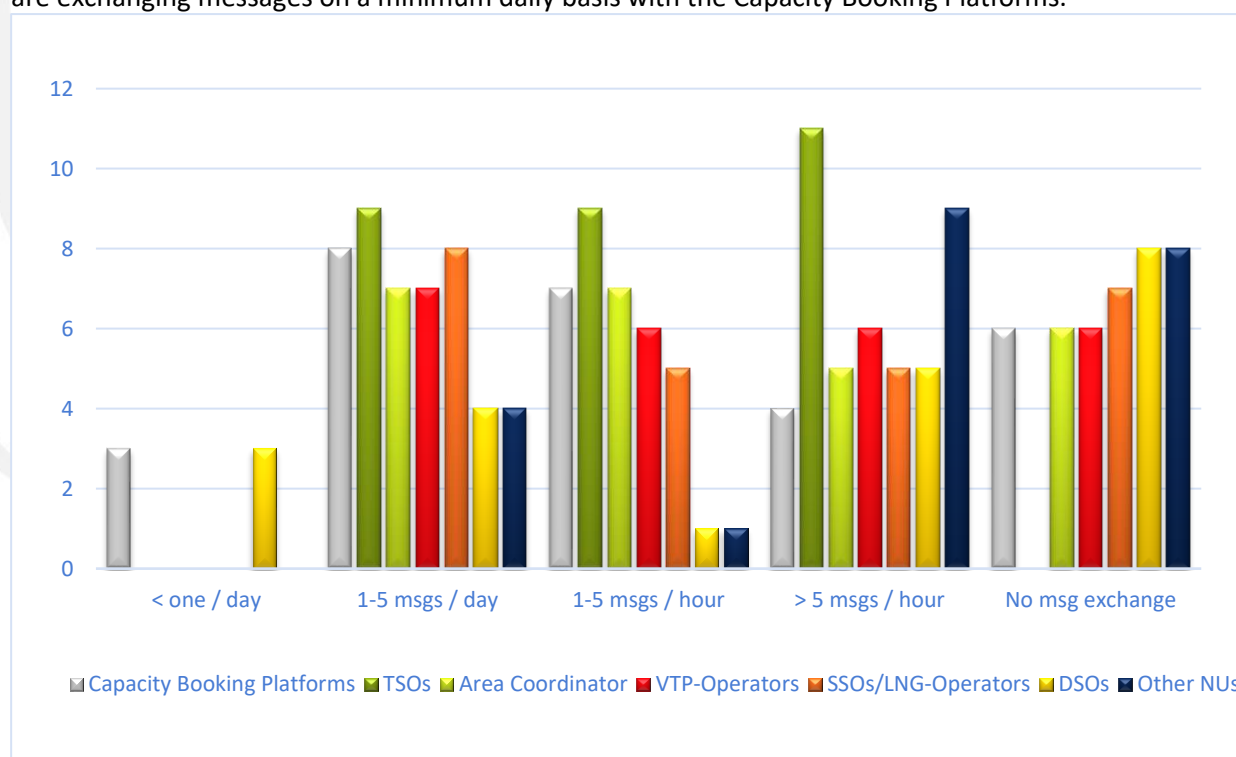
⁵ “One common standard” is meant as one solution which will be applicable across Europe. Harmonisation can be understood as a generic term towards a future pan-European solution.

4. Further Results from the Public Consultation

4.1. How many messages do you exchange to each counterparty? (Question 10)

The graph indicates that the most frequent message exchange (more than five messages per hour) is towards TSOs and, followed by communication with VTP Operators.

Concerning Capacity Booking Platforms, eight participants indicated to exchange on average 1-5 messages per day, while seven participants exchange on average 1-5 messages per hour and four participants exchange more than five messages per hour. Six participants are not exchanging any messages with Capacity Booking Platforms, while three participants exchange messages with them on average less than once per day. This means that 19 participants out of 28 that answered this question are exchanging messages on a minimum daily basis with the Capacity Booking Platforms.



4.2. For which communication do you see a potential for improvement in regard to data exchange and why is this improvement needed? (Question 12)

The participants see potential for improvement regarding data exchange for REMIT reporting processes. Here, generally speaking, uniform protocols and uniform formats are indicated.

RWE Supply & Trading provided the following comment which covers most topics addressed by other market participants as well: The quote gives reasons why there is a need to harmonise and why harmonisation is natural step in terms of progress: “Harmonisation of data exchange for, at least, capacity trading and nomination and matching processes, across all EU system operators, booking platforms and market area managers, would be our strongly preferred option and would enhance market efficiency.

[..] Whilst EU legislation mandating harmonisation applies only to TSO communications with network users active at interconnection points (IPs), and VTPs, and as long as certain TSOs continue to insist that ENTSG’s Common Data Exchange Solution Table is not binding, this will prove difficult to achieve.

RWEST currently operates in over 15 different EU gas markets and could make significant efficiency gains if it was able to standardise its trading operations around a single harmonised data exchange solution, protocol and format.

[..] As long as some operators, or platforms, continue using non-harmonised data exchange solutions, we have no choice but to continue communicating with them and time and resources are required to switch from one solution to another.

[...] We do now see merit in mandating an AS4/Edigas.XML document-based data exchange solution for the capacity trading processes (as described in the Edig@s version 5.1). [...] we have now implemented this solution for the nomination and matching process with our core TSOs, so to apply the same solution to capacity trading is a natural progression.

[..] it may encourage TSOs who are currently resisting this solution for nominations and matching to adhere to the ENSTOG Common Data Exchange Solution Table.

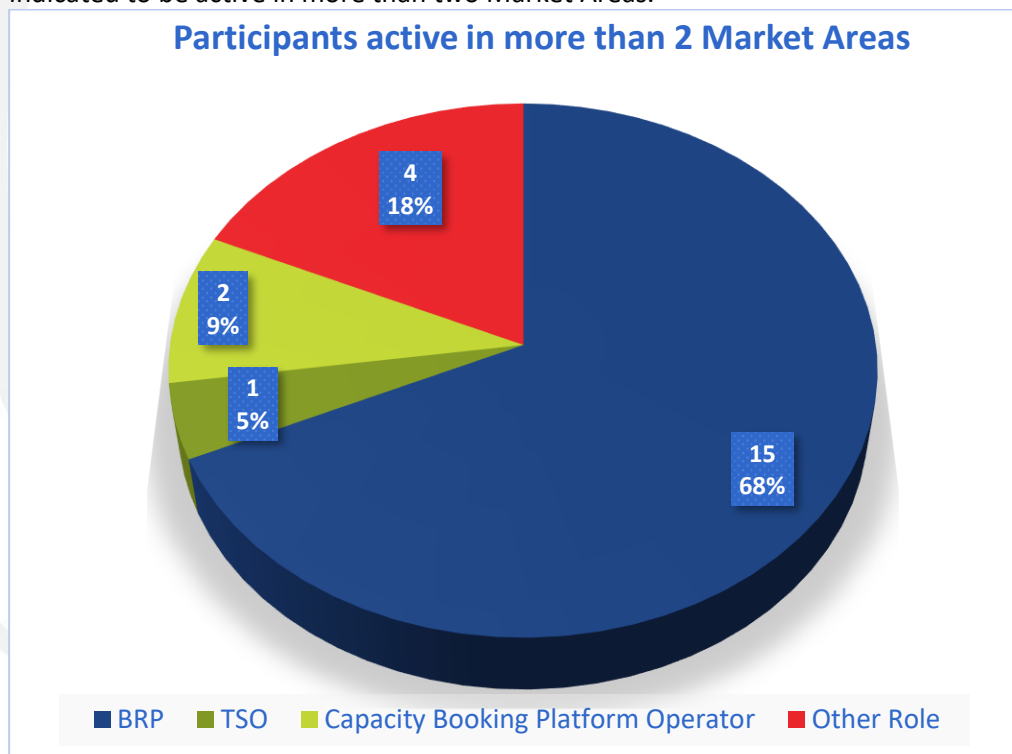
[...] TSOs would have an incentive to adopt it for non-IP capacity bookings as well

[..] We would insist on a (circa 18 month) transition period before the document-based capacity trading process becomes mandatory, during which time the existing data exchange solution could continue to be used..."

Other suggestions such as the usage of AS4 for communication to VTPs in Germany was already reported in a previous issue on the FUNC platform. ([link](#))

4.3. On how many Market Areas are you active? (Question 11)

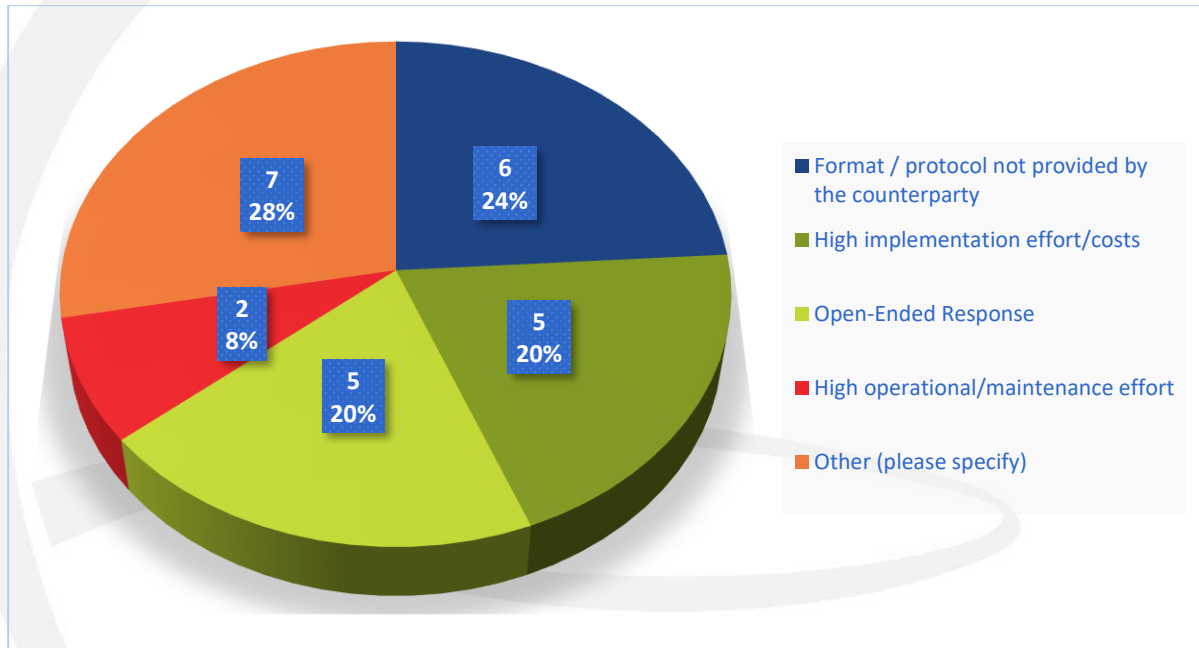
As an additional information to the question “3.1 Participants” following graph elaborates on the market participants being active in more than 2 Market Areas. All Balancing Responsible Parties indicated to be active in more than two Market Areas.



4.4. If Edig@s-XML / AS4 was considered but not implemented, please, indicate reasons why? (Question 14)

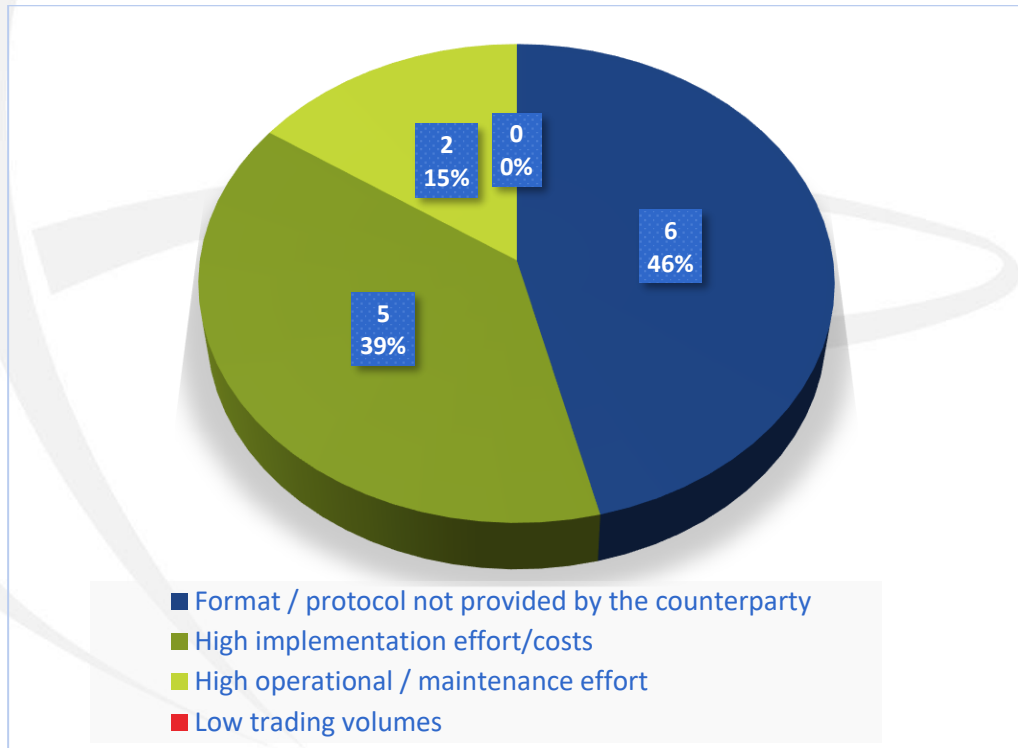
This question was raised as a follow-up question to the question “3.4 Usage of AS4 and Edig@s XML for business processes”.

24% of the participants indicated that Edig@s and AS4 are not supported by the counterparty (“Some processes partially implemented as required/supported by partners” (GMSL)) followed by 20% indicating high implementation effort and costs as elaborated in following comment: “Implementation of Edig@s for four message types (MAOCAP, AUCRES, AUCBID and ACKNOW) has been discussed and estimated. After the initial cost/benefit analysis, the idea has been rejected due to limited added value and high implementation and operational costs. PRISMA is including new services and new functionalities faster than changes to the Edig@s standard could be introduced.” (Prisma and Thyssengas GmbH)



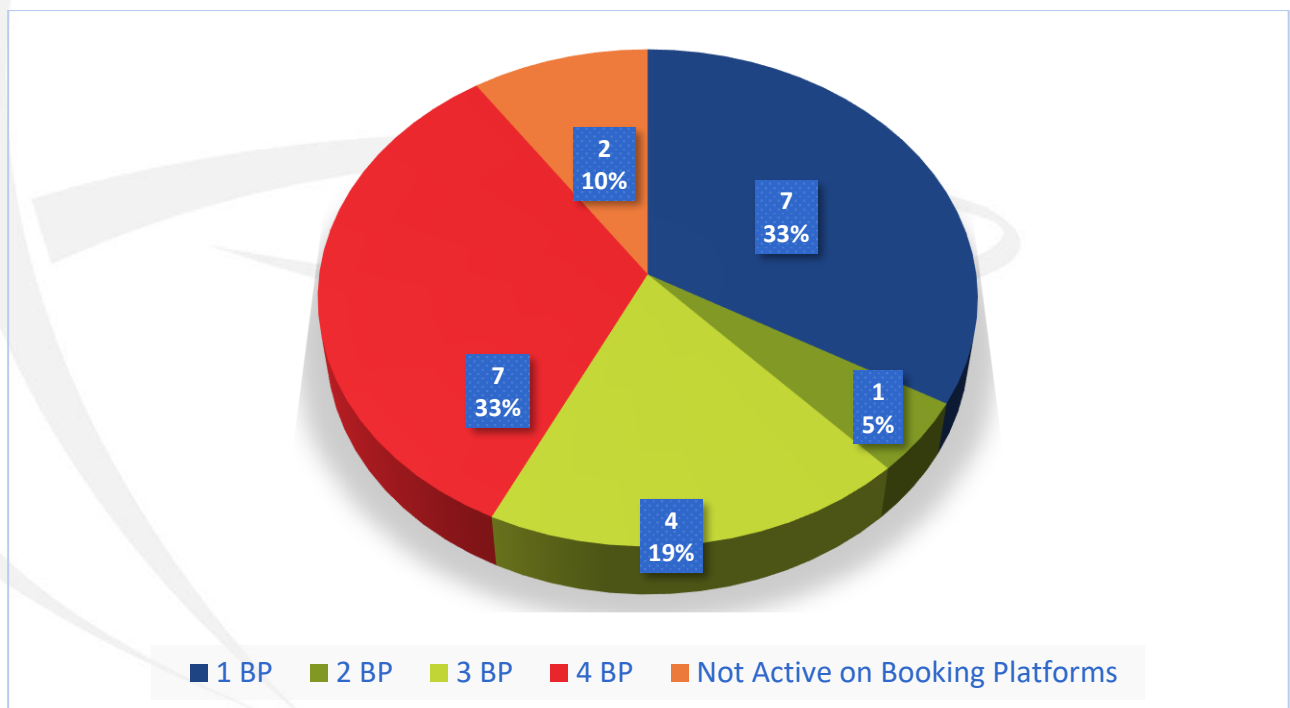
4.5. If Edig@s-XML / AS4 was NOT considered, please, indicate reasons why? (Question 15)

Most of the participants indicated that the main reason why Edig@s XML and AS4 were not considered is the missing implementation by the counterparties and the high implementation effort.



4.6. How many Capacity Booking Platforms do you use? (Question 16)

This evaluation does not consider TSOs and Platform Operators. 33% of the participants excluding TSOs and platform operators are active on 4 booking platforms. The same amount of the participants indicated being active on only 1 booking platform. 19% are active on 3 booking platforms and 5% are active on only 1 booking platform. 10% mentioned that they are not active on any booking platform.



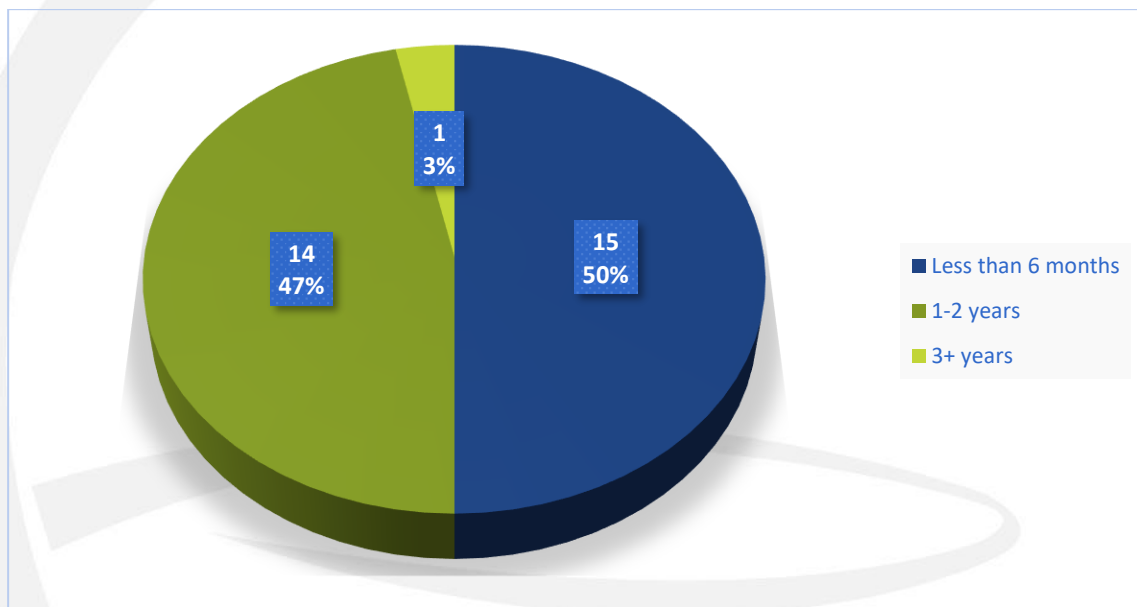
4.7. IF Edig@s XML is chosen as common format for capacity platform for processes mentioned in the Common Data Exchange Solution Table that can be used all over Europe would you then want to implement the solution? Please explain your answer in the "Comments" field. (Question 19)

All participants indicated that they will implement Edig@s XML if this would be the chosen format.

4.8. How much time will it take you to implement the new *format*⁶? (Question 20)

50% of the participants indicated a possible implementation of a new format within six months. The majority of the remaining participants is able to implement a new format within two years. Only one participant indicated an implementation process longer than three years.

⁶ This question is addressing the implementation of a new format in general.



4.8.1. Please elaborate on the reasons for the implementation timeline (see question 20)

The following comments were shared regarding this question. Please note that some participants did not agree to disclose their company names.

4.8.1.1. Less than six months implementation:

- “As we use a mapping technology, the process is relatively standardised and will therefore not require longer than 6 months.” (Equinor)
- “Much of the technology required already implemented” (Storengy UK)
- “We already have XML proprietary messages. The risk is on the capability of capacity booking platforms doing the necessities developments.” (REN Gasodutos)
- “Existing known protocol and format already in use” (anonymous participant)
- “Edig@s provides standard definitions of business objects used in the gas market (ex. Connection point, account, network users, quantities and their business types) and also rules to describe the time-series (including switch to/from daylight saving time), measure units etc. So basic implementation bricks can be easily reused.” (ENGIE SA)
- “The protocol needs to be set up - not sure what will be used, maybe AS4. Implementation with a new partner takes up to 3 months. Implementing the format takes less than 6 months.” (VNG Handel & Vertrieb GmbH)

4.8.1.2. 1-2 years implementation:

- “Implementation timeline highly depends on other projects and commitments, as well as the scope of implementation. Introducing Edig@s for communication with Network Users, would mean not only investments of time and material in analysis, design and development, but also in operations and support related processes. New messaging format using code lists instead of human-readable values, requires training of the development team, customer support team and product management team to be able to understand the contents of the message, support the customers and troubleshoot arising issues. Additional messaging formats require also

further efforts in terms of penetration tests and performance tests.” (Prisma and Thyssengas GmbH)

- “Developing EDI XML for not supported processes if necessary, takes time.” (GASCADE)
- “Adopting the relevant file formats from scratch, developing process to exchange and validate data flows with the relevant parties and adapting front end systems is complex and time consuming. It also requires structured testing, both internally and with multiple external parties.” (RWE Supply & Trading GmbH)
- “Due to the supplier selection process and implementation in the systems used.” (TAURON Polska Energia S.A.)

4.8.1.3. More than three years of implementation:

- “Replacing the customer exchanging processes also impact the electricity market in Sweden. The electricity market is moving towards a hub starting going live in 2022+ which makes switching formats in the gas markets less priority for the parties which are involved in both.” (Swedegas)

4.9. Would you want the existing method of data exchange to continue despite a common *format* being offered? (Question 22).

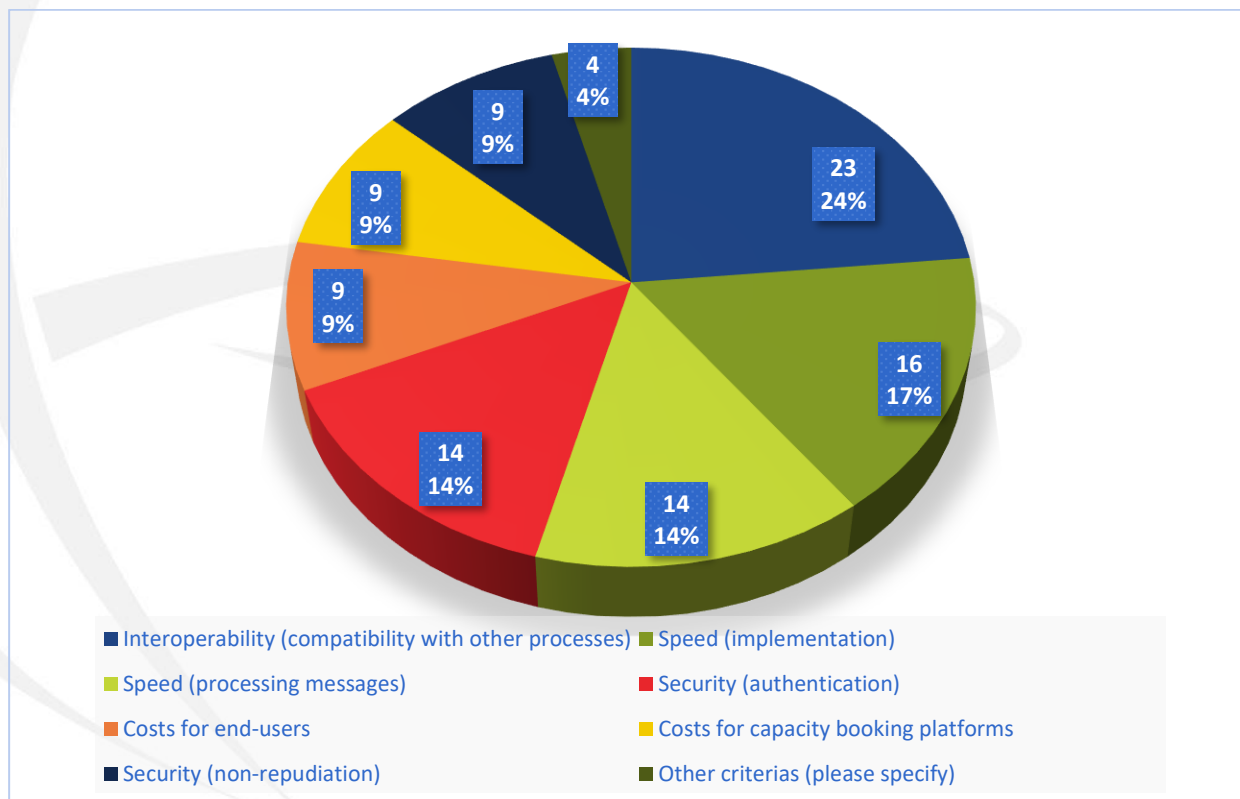
53% (16 out of 30) of the participants would like to keep the existing format despite a common format is already being offered.

The following comments were provided in support of this answer as reasons why the current format should continue to apply (Question 23)

- “For a transitory period, existing method should be continued.” (BRP)
- “Because the platform users may need some time to adapt.” (REN Gasodutos)
- “Platform specific data exchange methods need to be retained, as the EIDGAS standard does not cover several of the functionalities offered by the booking platforms. Coverage of all processes with the EDIGAS standard would slow down further market development and innovation in terms of service offering. Interactive data exchange remains the most frequently used way of communication.” (Prisma and Thyssengas GmbH)
- “If there is a not supported process, we have to use the old data exchange. This makes sense i.e. for a transition period.” (GASCADE)
- “The existing method should continue for at least a year afterwards. In doing so it would serve as a contingency and fallback option should implementation take longer than expected, or if the new data exchange processes prove temperamental.” (RWE Supply & Trading GmbH)
- “No additional costs necessary.” (GasTerra B.V.)
- “To secure a functioning market during transition a cut-over period should be applied.” (Swedegas)
- “no IT-Costs. There is an existing process that works, no need to change.” (Linz Strom Gas Wärme GmbH)
- “The global gas market requires different protocols.” (BRP)
- “Alternative method to submit / Indefinitely.” (Gas Networks Ireland)
- “Contingency in case of issues around implementation of new format.” (BRP)

4.10. Main criteria for having a common *protocol* (Question 26)

24% of the participants indicated “Interoperability” as their main criteria of having a common protocol, followed by “Speed of implementation” (17%), “Speed of processing messages” (14%) and the “Security in connection to authentication” (14%).



4.11. How much time it will take you to implement the new *protocol*⁷? (Question 30)

50% of the participants indicated “less than 6 months”, the other 50% indicated an implementation period of 1-2 years for the implementation of a new protocol.

4.11.1. Elaboration on the reasons (Question 31)

4.11.1.1. In favour of a short implementation, which was less than 6 months:

- “AS ..[4].. it is a product you can buy, around 6 months seems correct.” (Equinor)
- “Much of the infrastructure in place.” (Storengy UK)
- “If the platform already as the implementation done; it will be possible in 6 months, because we already have one interface developed/tested in the AS4 protocol.” (REN Gasodutos)
- “We already use AS4.” (RWE Supply & Trading GmbH)
- “Changing how messages are sent is a lot easier than changing the content of what is sent. Does not require a completely new data-model.” (Swedegas)
- “Only if REST is similar to AS4.” (BRP)

⁷ This question is addressing the implementation of a new protocol in general

- “AS4 is widely used already in Nomination & Matching and Gas Trading. Adding a new process is easier than adding a new protocol.” (VNG Handel & Vertrieb GmbH)
- “Already in use by GMSL and wider industry.” (GMSL)

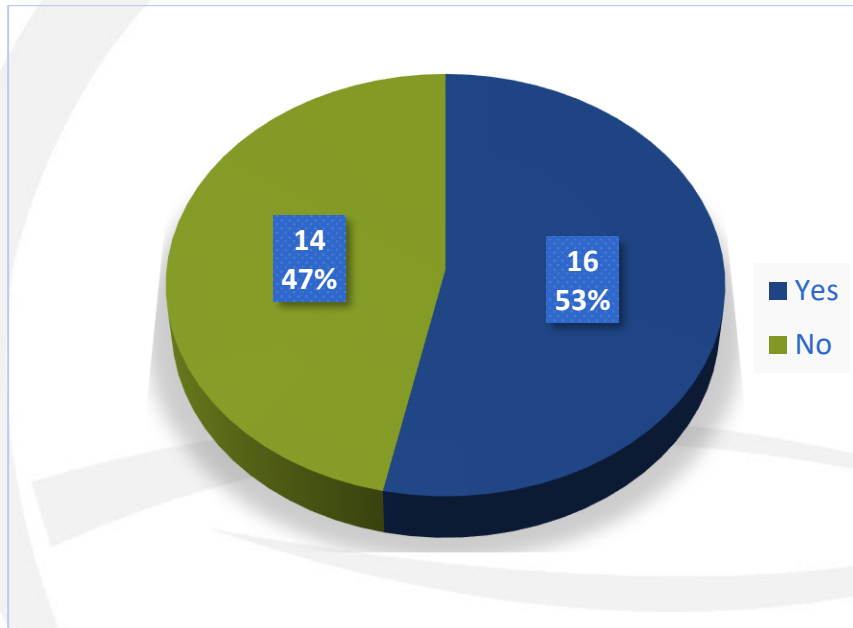
4.11.1.2. In favour of an implementation of 1-2 years

- “Small company with limited (human) resources, active on many markets.” (BRP)
- “Might take less time, subject to specification and implementation method” (system operator)
- “Changes to new protocol impact on many (business) processes.” (system operator)
- “The need to remodel some (business) processes; implementation timeline depends also on the time that GSA Platform TSOs members need to be ready for new protocol usage.” (GSA Platform)
- “Experience with IT-projects, less than one year is too fast.” (GASCADE)
- “Implementation of the new protocol that doesn't exist today will be time consuming.” (SIME Polska Sp. z o.o.)
- “This is our current estimate of the time needed amongst others to update all of our interfaces with the booking platform.” (GasTerra B.V.)
- “Internal security resources are limited, in addition – implementation on external users. (system operator)
- new protocol not based on experience so it takes longer time.” (other role - customer)
- “Changes to new protocol impact on many (business) processes.” (GAZ-SYSTEM)
- “Development Lead-time.” (Gas Networks Ireland)
- “Resource availability.” (BRP)
- “Due to the supplier selection process and implantation in the systems used.” (TAURON Polska Energia S.A.)

Based on the above provided reasons, both, small and large entities see it as an advantage to have a transition period between 1-2 years prior having only one solution in place.

4.12. Would you want the existing method of data exchange to continue despite a common *protocol* is offered? If YES please elaborate on the reasons see question 33? (Question 32)

53% (16 out of 30) of the participants would like to continue with the existing data exchange method in parallel to an already defined common protocol



4.13. Please elaborate on the reasons and desired timeframe (Question 33)

Following feedback supporting the possibility to keep the existing solution in place despite a chosen new protocol and format was provided:

- “For a transitory period, existing method should be continued.” (BRP)
- “To keep backward compatibility/interoperability” (system operator)
- “The AS4 protocol is a heavy protocol requiring a middleware server running 24/7. This solution is not suitable for smaller companies and individual traders, that still want to automate their processes or connect new frontend implementations. A parallel, simpler and cheaper implementation is still needed to allow for stateless communication and information pulling without investments in the infrastructure.” (Prisma and Thyssengas GmbH)
- “For a smooth transition, the cut-over period needs to be longer. (Swedegas)
- Contingency in case of issues around implementation of new protocol.” (BRP)
- “The current [existing] method does not generate new costs.” (TAURON Polska Energia S.A)

4.14. In case you are already using Edig@s for business processes like Nomination & Matching, what other processes would you like to cover with this format? (Question 35)

The following processes where the participants see an advantage to use the format Edig@s were mentioned:

- Capacity Booking processes (mentioned by 10 participants)
- REMIT (mentioned by 5 participants)
- Allocation (mentioned by 2 participants)
- Balancing (mentioned by 2 participants)

4.15. Please state any general comments (Question 36)

The following general comments were provided. They refer to the need to improve Edig@s description handbooks, and make Edig@s XML a free of charge standard:

- “Edig@s really lacks proper description/handbook in more easily readable format. Standard is good and paramount in any doubts, but without proper communication and explanation it is probably not sufficient as only source of reference.” (system operator)
- “[...] supports the Edig@s-XML/AS4 as a common format for capacity platforms. Due to the use of this solution as a communication standard, its further development is highly recommended.” (system operator)
- “GSA Platform supports the Edig@s-XML / AS4 as a common format for capacity platforms. Due to current usage of this solution as communication standard, its further development is highly recommended.” (GSA Platform)
- “The cost of additional interfaces in any format or protocol should be taken over by the party requesting it. Other market participants should not be contributing to the costs of services, which they are not using.” (Prisma, Thyssengas GmbH)
- “GAZ-SYSTEM supports the Edig@s-XML/AS4 as a common format for capacity platforms. Due to current usage of this solution as communication standard, its further development is highly recommended.” (GAZ-SYSTEM)
- “PRISMA right now earns money by offering an interface with XML files. That's why we exchange free emails. This new interface should be for free. Another way of funding needs to be found on the capacity platform side.” (VNG Handel & Vertrieb GmbH)
- “Any change must result in a system that is fully compliant with applicable competition law, and an assessment should be made prior to implementation to ensure that this is the case.” (BRP)



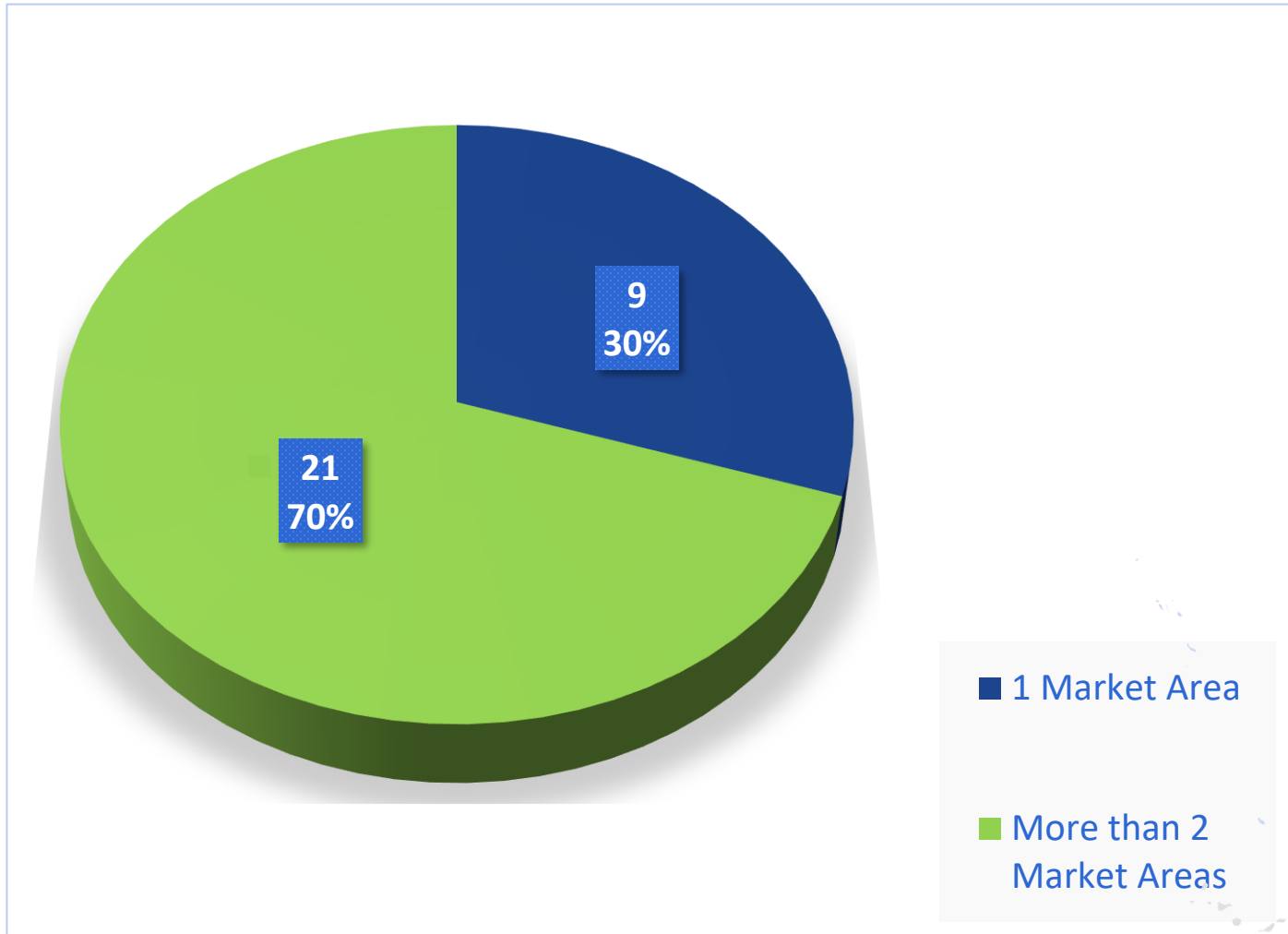
Picture courtesy of Gas Connect Austria

Public Consultation – Main Results

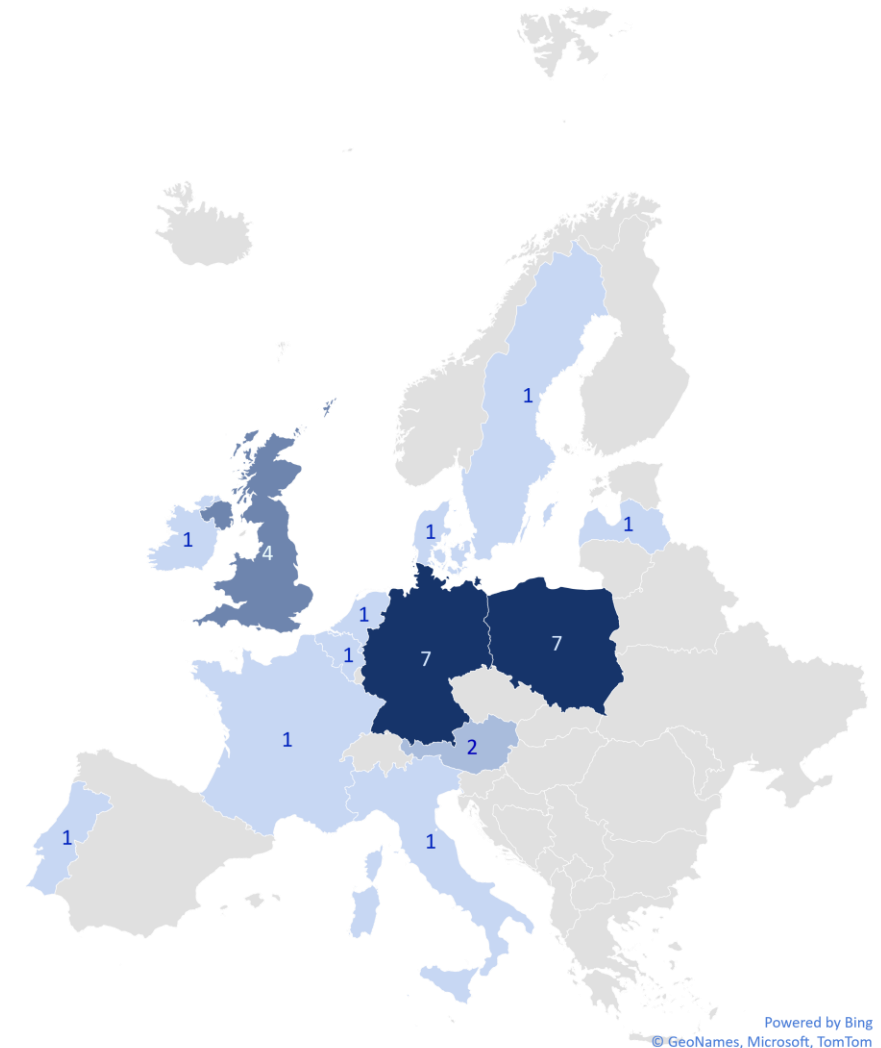
Public Consultation – FUNC issue “Missing harmonisation of interfaces on capacity platforms”

Marin Zwetkow, Subject Manager Interoperability & Data Exchange

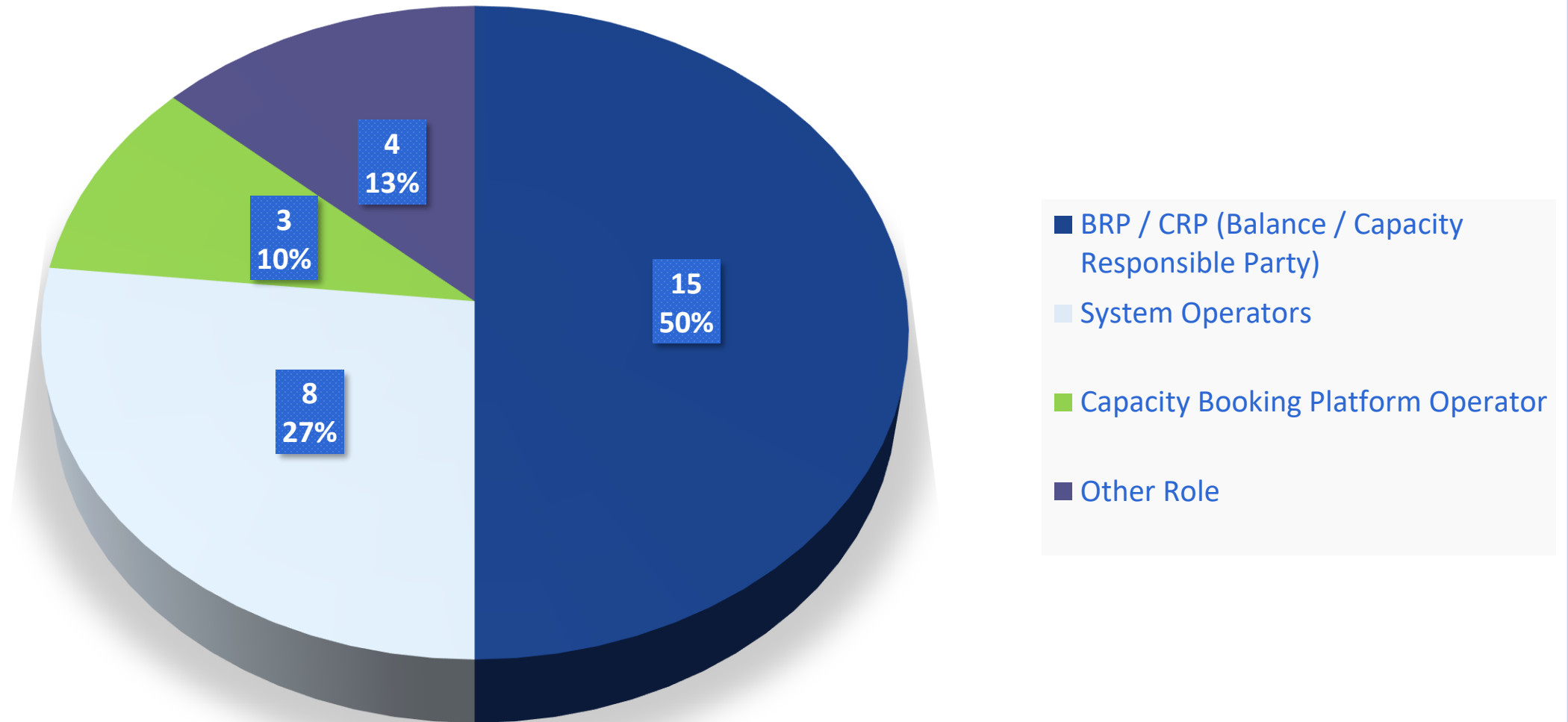
Participants



Countries



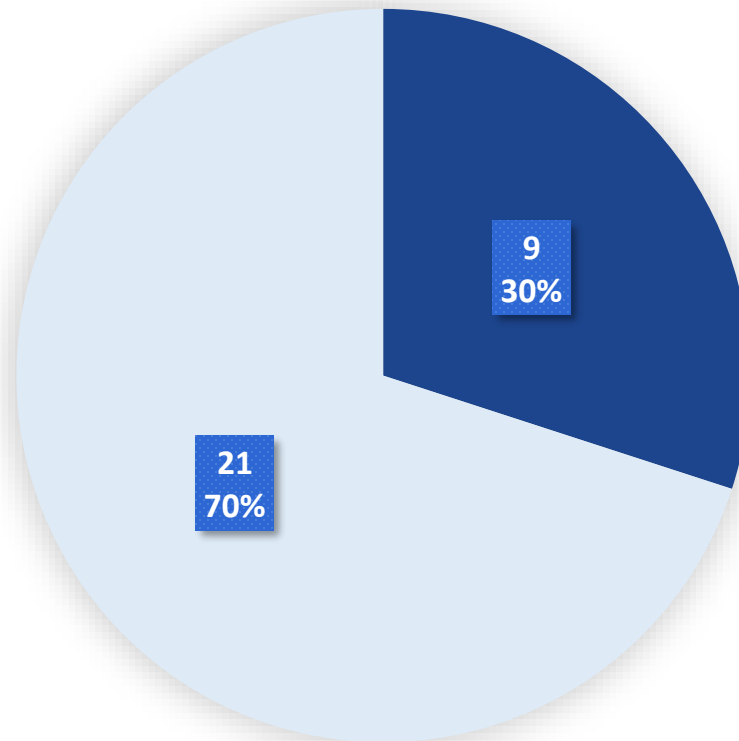
Participants



System Operators



Participants (Divided into 2 groups)



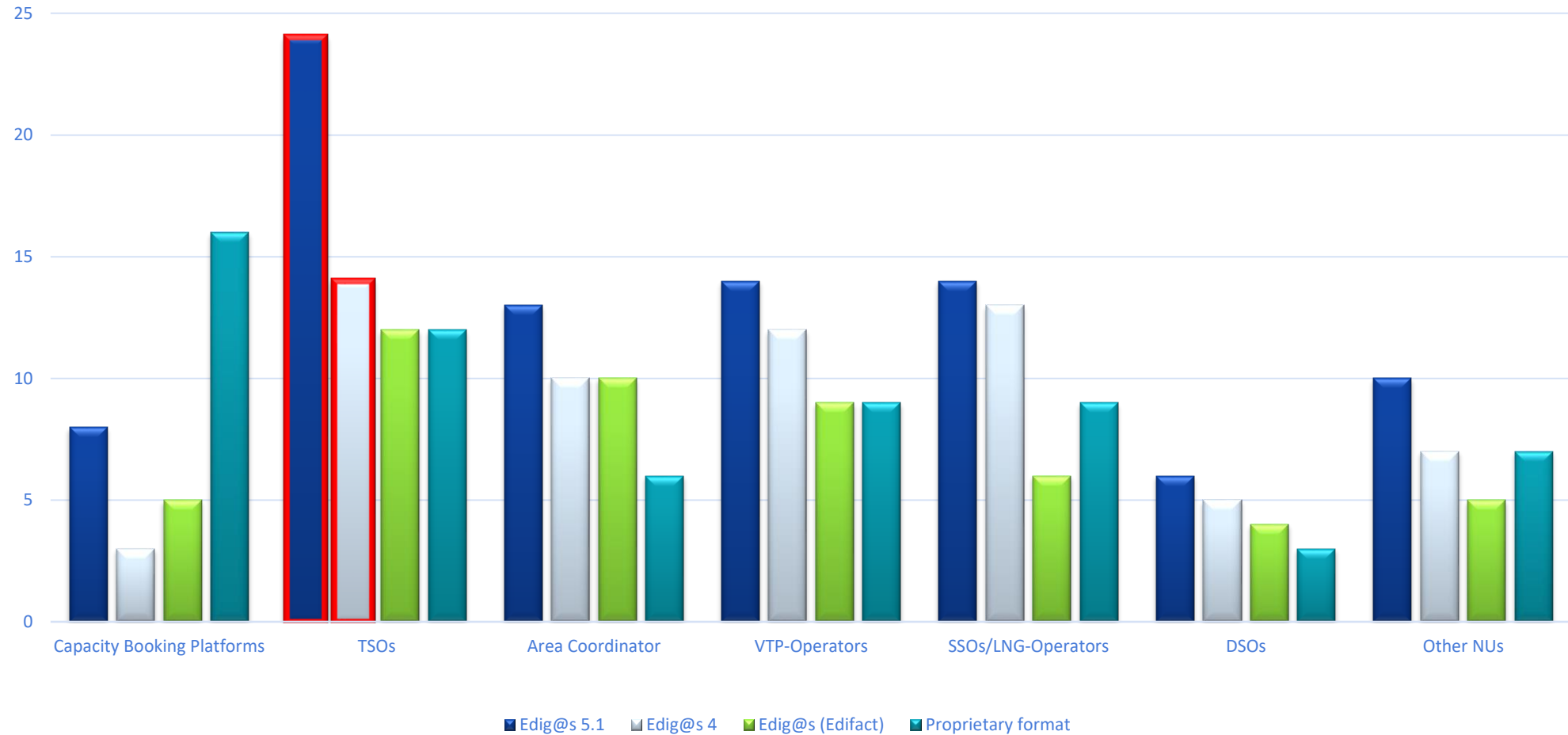
■ TSO / Capacity Booking Platform Operator

■ BRP/CRP/LNG/SSO/Other Roles

Other roles

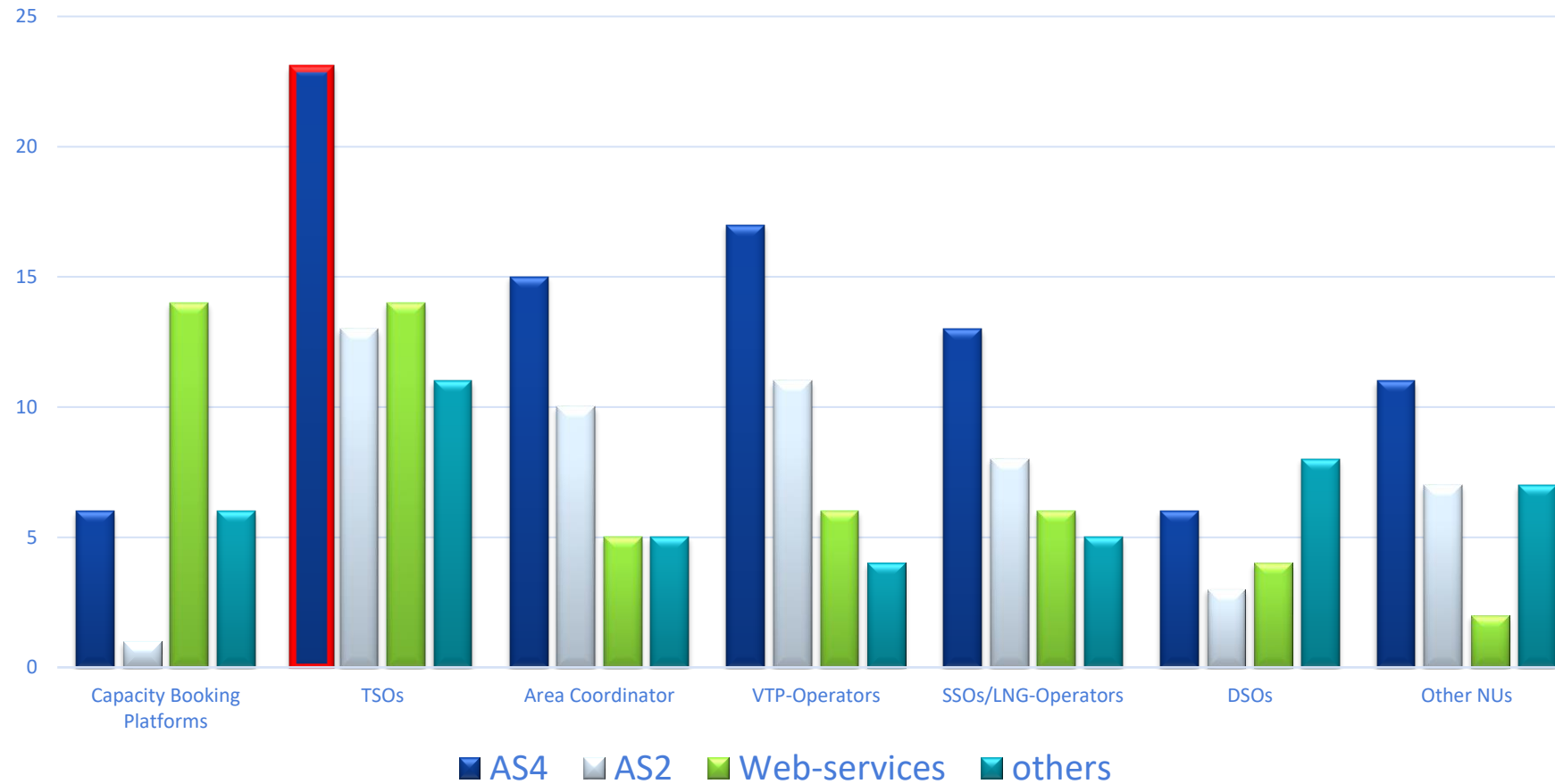
- Producer
- Seller
- Software provider
- Shareholder
- Customer

Used Formats



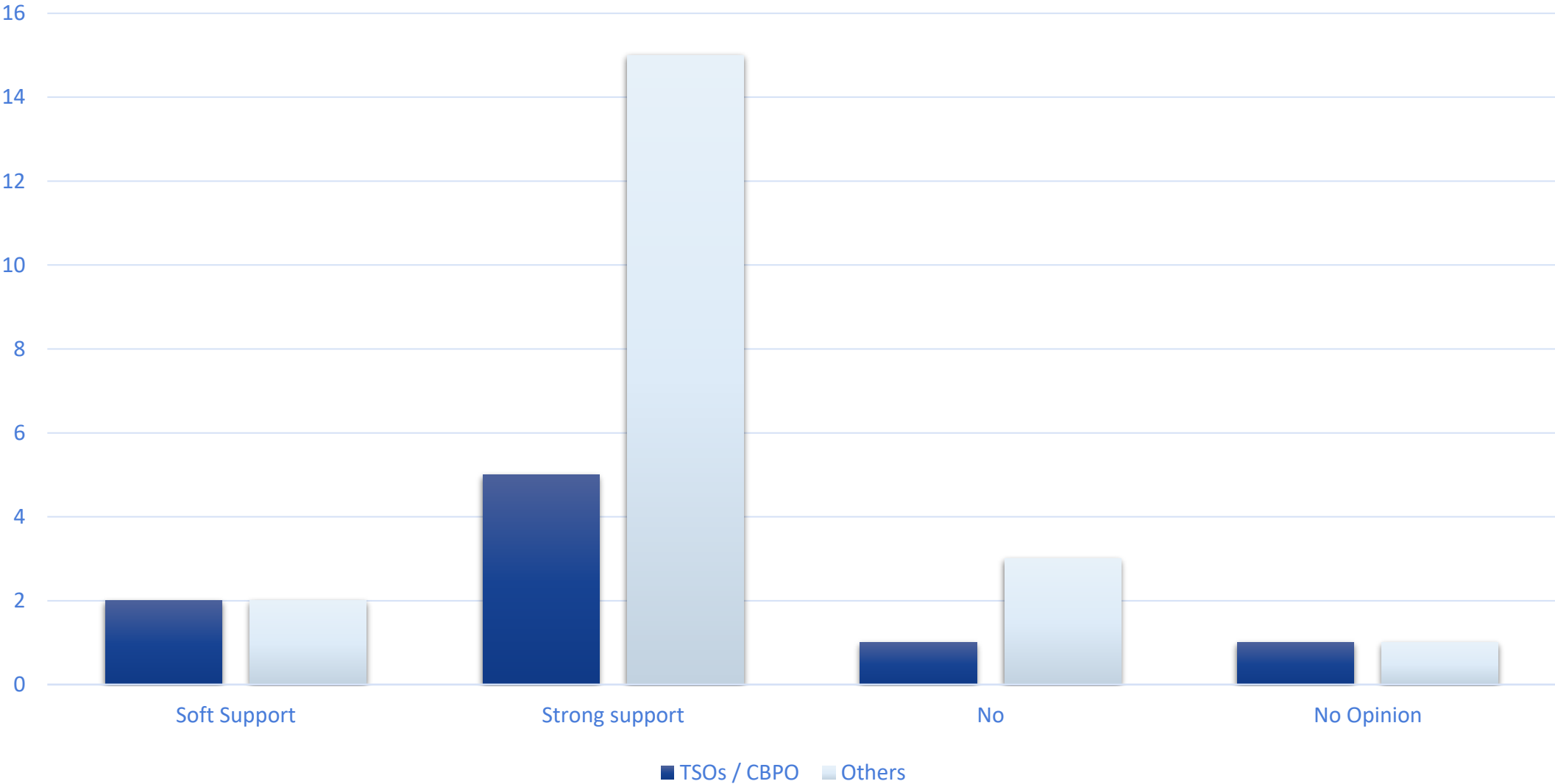
The bars with a red outline are mandatory (INT NC / National regulation)

Used Protocols

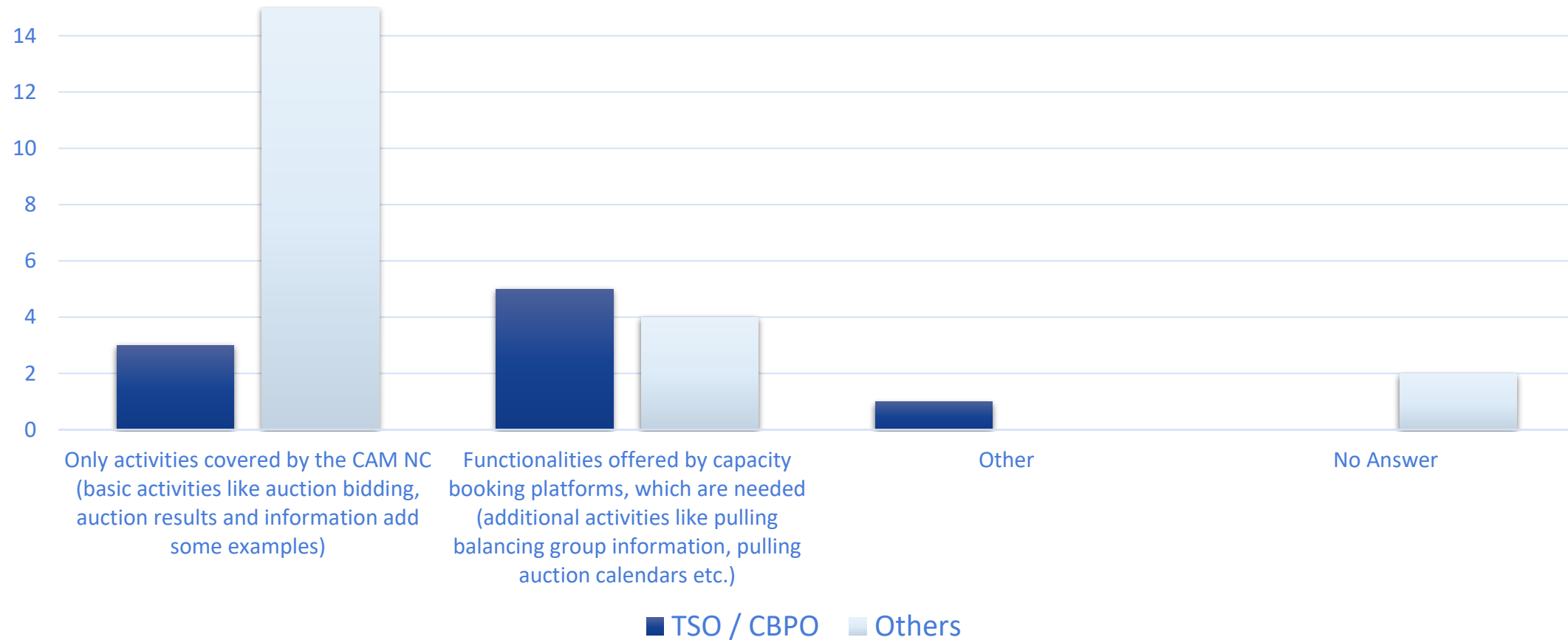


The bars with a red outline are mandatory (INT NC / National regulation)

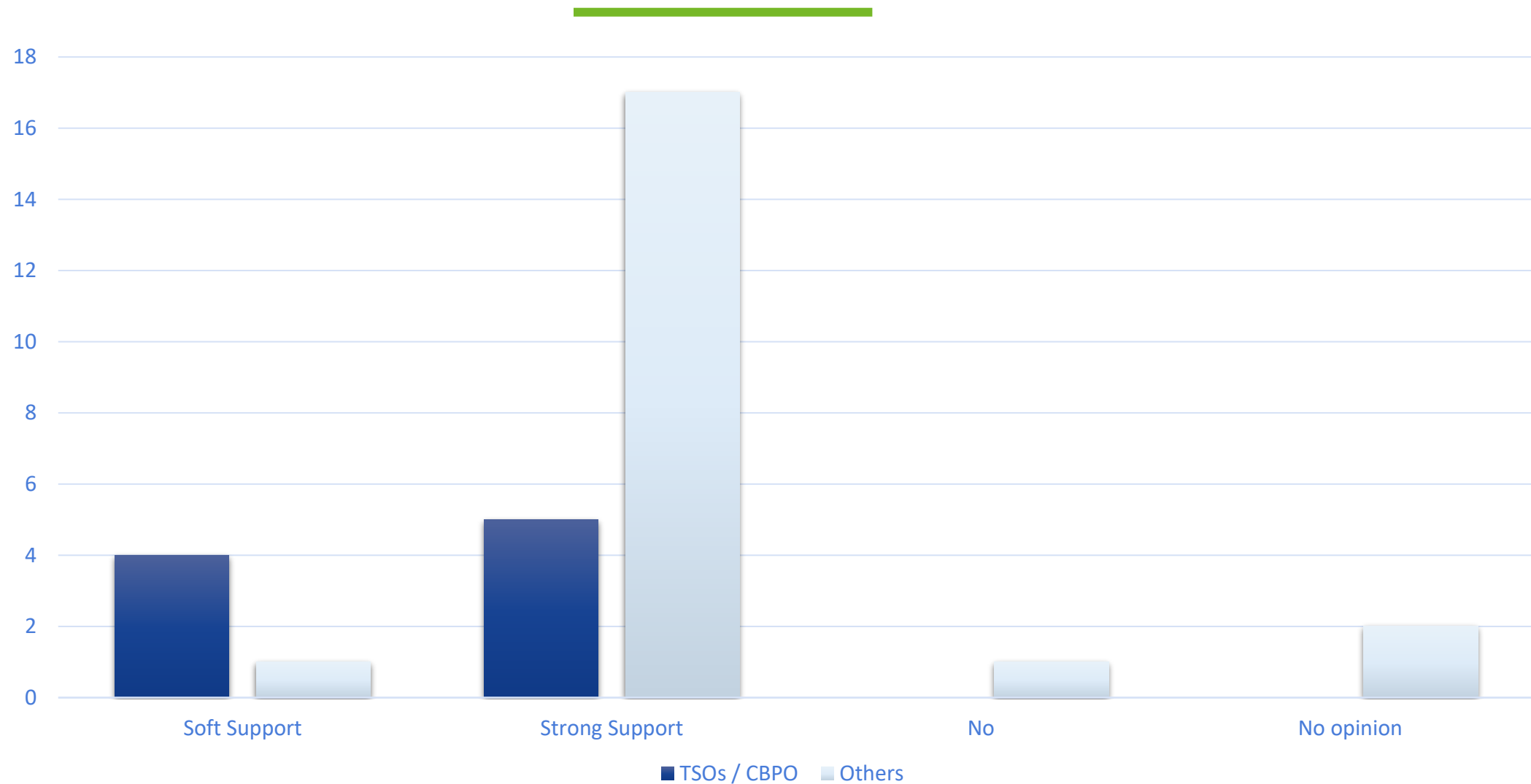
Support of Edig@s XML for Booking Platforms



Additional Edig@s functionalities



Support a common protocol for all capacity booking platforms



Preferred protocol for communication to capacity booking platforms



Feedback regarding the questioned Protocols

Protocol	Pros	Cons
AS4	• Interoperability (24) • Security (Authentication) (22) • Security (non-repudiation) (18)	• Speed of implementation (7) • Speed reg. processing messages (4)
REST	• Speed while proccession messages (10) • Speed of implementation (9)	• Interoperability (12) • Security (non-repudiation) (10) • Security (Authentication) (9)

- AS4 (following ENTSOG's definitions) was indicated as the protocol ensuring a high level of security aspects
- REST (as implemented by Prisma) was indicated as the protocol providing a faster initial implementation of the data exchange process

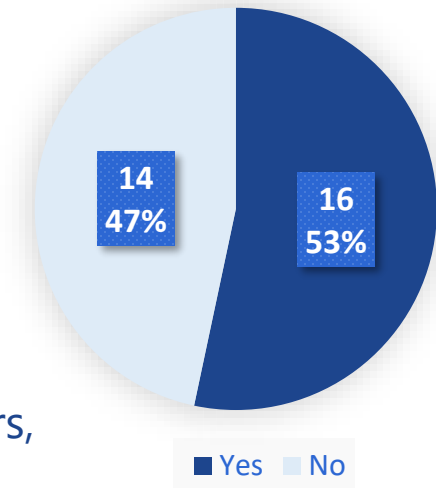
For which processes do you have Edig@s XML / AS4 in place?



The bars with a red outline are mandatory (INT NC / National regulation)

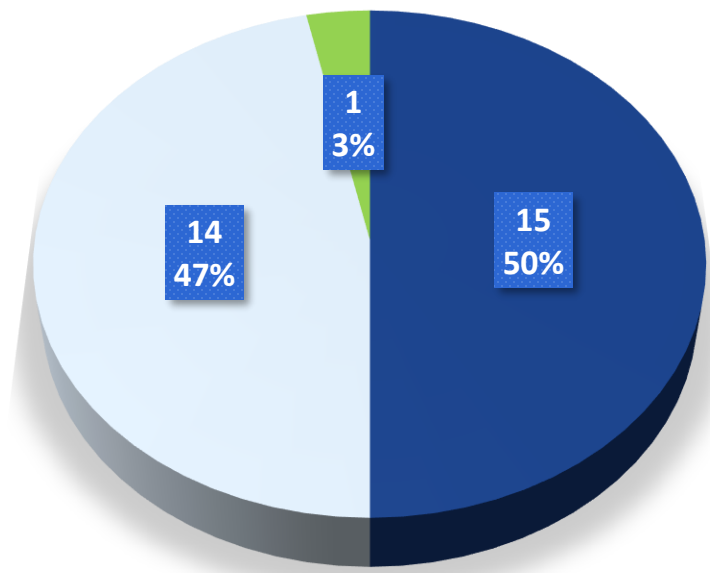
Would you want the existing method of data exchange to continue despite a common protocol is offered?

- 53% (16 out of 30) of the participants would like to continue with existing data exchange method
 - For a transitory period, existing method should be continued.
 - To keep backward compatibility/interoperability
 - The AS4 protocol is a heavy protocol requiring a middleware server running 24/7. This solution is not suitable for smaller companies and individual traders, that still want to automate their processes or connect new frontend implementations. A parallel, simpler and cheaper implementation is still needed to allow for stateless communication and information pulling without investments in the infrastructure. (Prisma, Thyssengas)
 - For a smooth transition, the cut-over period needs to be longer. (Swedegas)
 - Contingency in case of issues around implementation of new protocol.
 - The current [existing] method does not generate new costs (TAURON Polska Energia S.A.)



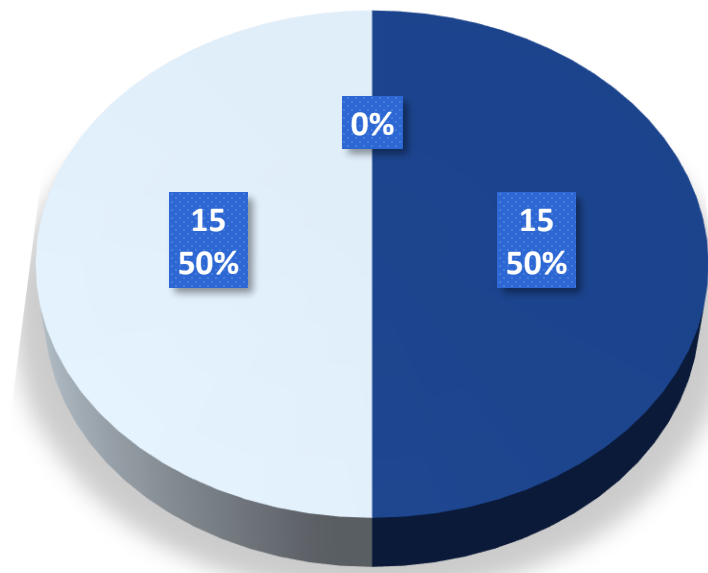
Implementation time for a new format and protocol

Format



■ Less than 6 months ■ 1-2 years ■ 3+ years

Protocol

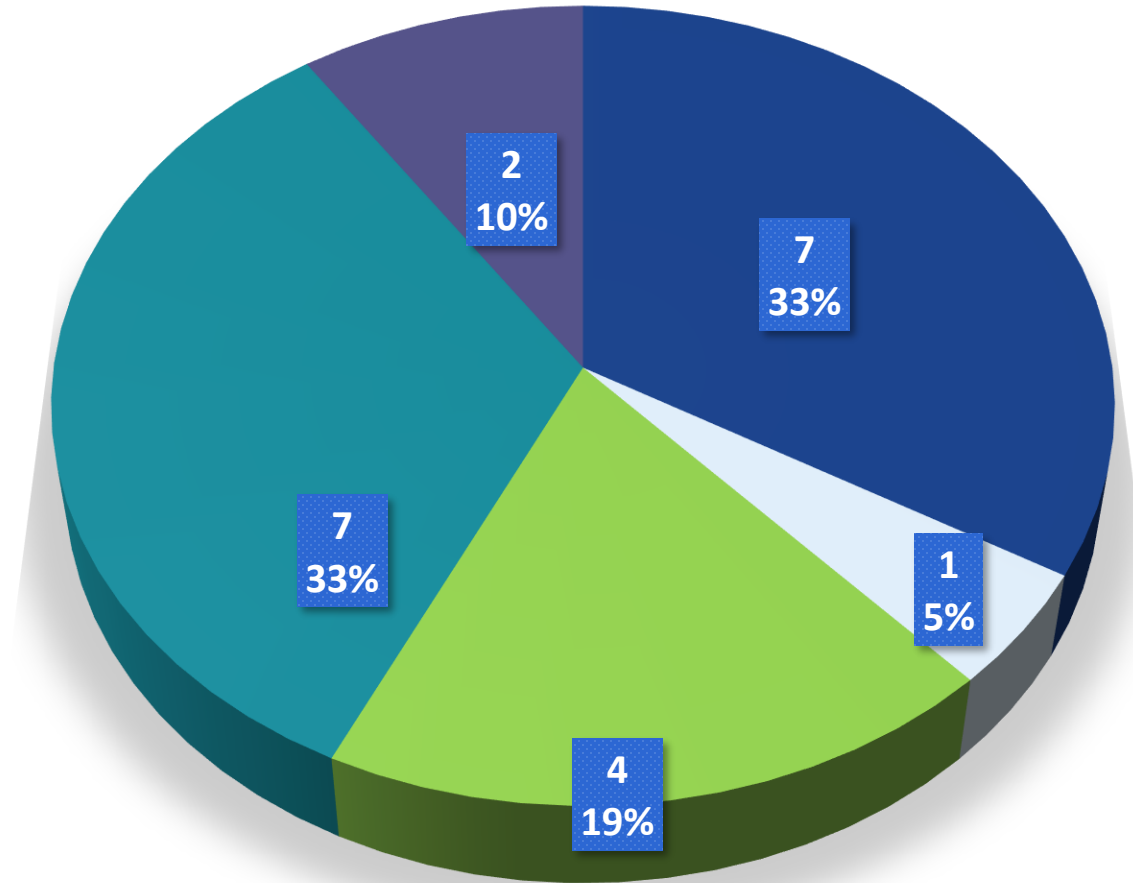


■ Less than 6 months ■ 1-2 years ■ 3+ years

- The implementation period for a new format and protocol was indicated by “less than 6 months” by 50% of the participants, the remaining participants could implement a new format and protocol within a period of 2 years

Remark: please note that this question is addressing the implementation of a new format/protocol in general

How many Capacity Booking Platforms do you use?



■ 1 BP ■ 2 BP ■ 3 BP ■ 4 BP ■ Not Active on Booking Platforms

This evaluation does not consider TSOs & Platform Operators

What are 3 the most important issues from your point of view regarding this reported issue?

- Costs (mentioned by 14 participant)
- One common standard (10)
- Harmonisation (7)
- Interoperability (6)
- Extract of the quotes supporting the above mentioned arguments:
 - Having unified messaging principle/approach would significantly reduce costs on implementation and complexity for operations / Different standards and methods currently used creates additional complexity
 - Likelihood of errors and therefore costs/ Lack of common protocol / Ease of switching between platforms (Storengy UK)
 - Variety of protocols and formats to manage for a CRP / Increased IT costs (maintenance) (ENGIE SA)
 - Harmonization is needed. Using Edigas is the best way to harmonize. / Interfaces should not cost extra money as a fee, implementation/maintenance costs are sufficient. (VNG Handel & Vertrieb GmbH)

What are 3 the most important issues from your point of view regarding this reported issue?

- Further arguments
 - It is important to maintain a level playing field for companies of different sizes. (Thyssengas, Prisma)
 - We should avoid slowing down development of new services and offerings. (Thyssengas, Prisma)
 - Cost and benefit in the context of the whole market should be considered. (Thyssengas, Prisma)
 - Mandating an AS4/Edigas.xml document based data exchange solution for capacity trading processes will improve our efficiency. It may also encourage TSOs who are currently resisting this solution for nominations and matching to finally adopt it. (RWE Supply & Trading GmbH)
 - Whilst an AS4/Edigas.xml document based data exchange solution for capacity trading processes now works for us, it may be overkill for some network users who book capacity infrequently, or in just one market. So the best solution could be to make it mandatory for those network users requesting it, but to keep the current interactive processes available for those network users who cannot justify document based data exchange. (RWE Supply & Trading GmbH)

General Comments

Topic	Quote	Remark
Edig@s	...lacks proper description/handbook in more easily readable format. Standard is good and paramount in any doubts, but without proper communication and explanation it is probably not sufficient as only source of reference.	The documentation is a compromise between high level information and technical description. Within v6 an improvement of the documentation has been undertaken
edig@s-XML/AS4	Due to the use of this solution as a communication standard, its further development is highly recommended.	
Costs	The cost of additional interfaces in any format or protocol should be taken over by the party requesting it. Other market participants should not be contributing to the costs of services, which they are not using.	
	PRISMA right now earns money by offering an interface with XML files. That's why we exchange free emails. This new interface should be for free. Another way of funding needs to be found on the capacity platform side	
Legal aspect	Any change must result in a system that is fully compliant with applicable competition law, and an assessment should be made prior to implementation to ensure that this is the case.	AS4 and Edig@s XML are part of the INT NC.

Next Steps

- Publication of the results of the public consultation
- Draft of a solution for the reported issue
- Publication of the solution after approval by ENTSOG and ACER
- In case the solution would be to include data exchange between Network Users & Capacity Booking Platforms into the INT NC
 - Involvement of the EC by ENTSOG and ACER
 - Drafting an Amendment proposal by ENTSOG and ACER for of the INT NC for the EC



Thank you for your attention

Marin Zwetkow, Subject Manager Interoperability & Data Exchange

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Gas Network Codes Functionality Process Issue Solution

Issue details	
Number:	01/2019 and 03/2019 ¹
Name:	Missing harmonisation of interfaces on capacity platforms
Reporting party:	Equinor ASA and ENGIE
Network Code / Guidelines concerned:	Network Code on Interoperability and Data Exchange Rules, Commission Regulation (EU) 2015/703
Article of the Network Code / Guidelines	Chapter V
Category:	European Issue
Abstract: In the common data exchange solutions table (CNOT) from ENTSOG it was decided that for capacity, interactive data exchange should be used. As an outcome, some of the processes are harmonised, but the data exchange and platforms are completely different. This makes it difficult for network users (Balancing Responsible Parties) to keep track of the capacity options available for transporting the gas in Europe, including costs involved. The absence of harmonisation among TSOs regarding capacity trading is in contradiction with the NC on Interoperability and Data Exchange ('INT&DE NC'). Capacity trading affects gas availability and gas prices, that is why [the issue poster] strongly believe that it should be harmonised via a document-based solution using Edig@s format.	

Issue solution(s)	
Publication date:	11 December 2020
ACER and ENTSOG had an intensive stakeholder process ENTSOG & ACER organised a workshop on 24 September 2019 with representatives of the Capacity Booking Platforms, TSOs and EFET in order to get a better understanding of the formats and protocols currently used for the communication between Network Users and Capacity Booking Platforms.	

¹ The issue was posted twice on the Functionality Platform by two separate users. On 1 July 2020 the Functionality Platform was updated, and all the issues previously posted on the old Platform were given new issue numbers. Issue 01/2019 was previously named 470-19-05-15-1056 and issue 03/2019 was previously named 496-19-06-03-0926

- Afterwards a Public Consultation was launched aiming at getting the market participants' input on their preferred format and protocol for the above-mentioned data exchange process.
- The structure of the public consultation was jointly agreed with the stakeholders participating in the workshop and was launched on 8 January 2020 and was open until 14 February 2020. 30 parties participated at the questionnaire, 15 of them indicated their role as Balance Responsible Party (Network User).
- The results of the Public Consultation and the possible impact of the proposed changes were discussed at a 2nd Workshop with key-stakeholders on 19 June 2020. Almost all participants were in favour of having a common format and protocol on European level. In particular the participants at the public consultation indicated Edig@s XML as their preferred format for the communication between Capacity Booking Platforms and Network Users. The AS4 protocol, as defined within the ENTSOG AS4 profile, was supported by the majority of the participants as the preferred common protocol.

Therefore, to achieve this harmonisation ACER and ENTSOG propose the following steps to be undertaken in order to provide a solution for the reported issue:

- ENTSOG will propose to change the Common data exchange solutions table (CNOT) and propose document-based exchange solution for capacity (interactions between Network Users and Capacity Booking Platforms) and leave the interactive data exchange as a voluntary option.
- An amendment of the INT&DE NC as detailed in Annex I. It is proposed to amend the following Articles: 1(2), 20 (1) & (2) and 23(1) & (2). The amendment reflects the proposals provided for the previous FUNC case on data exchange at VTP and storage.
- In the future further studies can be developed to assess the impact of higher-level harmonisation of this issue.
- The proposed amendments for the specific processes are described in the Common Data Exchange Solution Table as detailed in Annex II.
- Please note that ultimate outcome of the proposals may deviate from the proposed solutions described in Annex I & II because additional process steps outside the FUNC process are required. Annex I has to go through a comitology process lead by the European Commission. Annex II has to be publicly consulted as this is the part of the amendment process of the Common Network Operation tools as stated in INT & DE NC Art. 24 (2). The results of the consultation on the Common Data Exchange Solution Table may trigger further amendments of the INT & DE NC next to those proposed in Annex I.

Annex I

The following amendments of the INT&DE NC have been/will be proposed to the European Commission by ACER and ENTSG.

The amendment proposal has been structured as follows:

<i>Original text</i>	<i>Amendment</i>	<i>Comments</i>
The current wording of the Article.	The proposed new wording of the Article. Additions have been made in bold and deductions (if any) have been indicated with a striketrough .	Explanatory comment to why the amendment is needed to fulfil the solution to the FUNC issue.

<i>Original text</i>	<i>Amendment</i>	<i>Comments</i>
Article 1 Subject matter and scope	Article 1 Subject matter and scope	
This Regulation shall apply at interconnection points. With regard to data publication, Article 13 shall apply to relevant points defined in paragraph 3.2 of Annex I to Regulation (EC) No 715/2009. In addition to interconnection points, Article 17 shall apply to other points on transmission network where the gas quality is measured. Article 18 shall apply to transmission systems. This Regulation may also apply at entry points from and exit points to third countries, subject to the decision of the national authorities.	This Regulation shall apply at interconnection points. With regard to data publication, Article 13 shall apply to relevant points defined in paragraph 3.2 of Annex I to Regulation (EC) No 715/2009. In addition to interconnection points, Article 17 shall apply to other points on transmission network where the gas quality is measured. Article 18 shall apply to transmission systems. Chapter V shall apply also to Capacity Booking Platforms concerning their communication to registered Network Users. This Regulation may also	

	apply at entry points from and exit points to third countries, subject to the decision of the national authorities.	
Article 20 (1) General provisions	Article 20 (1) General provisions	
For the purposes of this Chapter, ‘counterparties’ means network users active at: (a) interconnection points; or (b) both interconnection points and virtual trading points.	<i>For the purposes of this Chapter, ‘counterparties’ means network users active at: (a) interconnection points; and/or (b) virtual trading points and/or (c) Capacity Booking Platforms</i>	<i>For the common data exchange solutions to be applicable for the communication between capacity booking platforms and network users, the definition of ‘counterparties’ has to be extended to network users active at capacity booking platforms.</i>
Article 20 (2) General provisions	Article 20 (2) General provisions	
The data exchange requirements foreseen by point 2.2 of Annex I to Regulation (EC) No 715/2009, Commission Regulation (EU) No 984/2013, Commission Regulation (EU) No 312/2014, Commission Regulation (EU) No 1227/2011 and this Regulation between transmission system operators and from transmission system operators to their counterparties shall be fulfilled by common data exchange solutions set out in Article 21.	<i>The data exchange requirements foreseen by point 2.2 of Annex I to Regulation (EC) No 715/2009, Commission Regulation (EU) No 984/2013, Commission Regulation (EU) No 312/2014, Commission Regulation (EU) No 1227/2011 and this Regulation between transmission system operators and from transmission system operators, VTP Operators or Capacity Booking Platforms to their counterparties shall be fulfilled by common data exchange solutions set out in Article 21.</i>	<i>The amendment to Article 20(2) aims at making the data exchange requirements applicable also for capacity booking platforms. In order for the common data exchange solutions to be applicable also for the communication between capacity booking platforms and their counterparties, capacity booking platforms have to be added as an entity in Article 20(2).</i> <i>VTP Operators have been added based on the solution for FUNC issues 01/2018, 02/2018 and 06/2018.</i>

Article 21 Common data exchange solutions	Article 21 Common data exchange solutions	<i>No amendments required on Article 21</i>
1. Depending on the data exchange requirements under Article 20(2), one or more of the following types of data exchange may be implemented and used: (a) document-based data exchange: the data is wrapped into a file and automatically exchanged between the respective IT systems; (b) integrated data exchange: the data is exchanged between two applications directly on the respective IT systems; (c) interactive data exchange: the data is exchanged interactively through a web application via a browser. 2. The common data exchange solutions shall comprise the protocol, the data format and the network. The following common data exchange solutions shall be used for each of the types of data exchange listed in paragraph 1:	<i>No amendment required</i>	<i>Article 21 is where the common data exchanges and their solutions are defined.</i> <i>For the document-based data exchange, the protocol solution is indicated as AS4 and the format solution is indicated as Edig@s-XML (or equivalent).</i> <i>The common network operational tools (CNOT) includes the common data exchange solutions table, which is where the common data exchange solutions for each type of information flow of the capacity trading process are listed.</i> <i>Once the common data exchange solutions table has been updated, 'document-based' will be the common data exchange solution between auction offices and Network Users</i> <i>The proposed amendments to the INT&DE NC will assure that the application of the common data exchange solutions is mandatory also for capacity booking platforms.</i>

(a) For the document-based data exchange: (i) protocol: AS4; (ii) data format: Edig@s-XML, or an equivalent data format ensuring identical degree of interoperability. Entsog shall publish such an equivalent data format. (b) For the integrated data exchange: (i) protocol: HTTP/S-SOAP; (ii) data format: Edig@s-XML, or an equivalent data format ensuring identical degree of interoperability. Entsog shall publish such an equivalent data format. (c) For the interactive data exchange, the protocol shall be HTTP/S. For all data exchange types set out in points (a) to (c), the network shall be internet. 3. Where a potential need to change the common data exchange solution is identified, Entsog, on its own initiative or on the request of ACER, should evaluate relevant technical solutions and produce a cost-benefit analysis of the potential change(s) that would be needed including the analysis of the reasons		
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that make a technological evolutionary step necessary. A public consultation involving all stakeholders shall be carried out by Entsog including the presentation of the result of the evaluation and proposal(s) based on the cost-benefit analysis realised. Where an amendment to the common data exchange solutions is considered necessary, Entsog shall submit a proposal to ACER in accordance with the procedure set out in Article 7 of Regulation (EC) No 715/2009.		
Article 23 (1) Implementation of the common data exchange solutions	Article 23 (1) Implementation of the common data exchange solutions	
Depending on the data exchange requirements under Article 20(2), transmission system operators shall make available and use the common data exchange solutions defined in Article 21.	<i>Depending on the data exchange requirements under Article 20(2), transmission system operators, VTP Operators and Capacity Booking Platforms shall make available and use the common data exchange solutions defined in Article 21.</i>	<i>In order for the common data exchange solutions to be applicable also for the communication between capacity booking platforms and their counterparties, capacity booking platforms have to be added as an entity in Article 23(1)</i> <i>VTP Operators have been added based on the solution for FUNC issues 01/2018, 02/2018 and 06/2018.</i>
Article 23 (2)	Article 23 (2)	

Implementation of the common data exchange solutions	Implementation of the common data exchange solutions	
Where data exchange solutions between a transmission system operator and concerned counterparties are in place on the date of entry into force of this Regulation and provided that the existing data exchange solutions are compatible with Article 22 and with data exchange requirements under Article 20(2), the existing data exchange solutions may continue to apply after consultation with network users and subject to the approval of the national regulatory authority of the transmission system operator.	<i>Where data exchange solutions between a transmission system operator, VTP Operator or Capacity Booking Platform and concerned counterparties are in place on the date of entry into force of this Regulation and provided that the existing data exchange solutions are compatible with Article 22 and with data exchange requirements under Article 20(2), the existing data exchange solutions may continue to apply after consultation with network users and subject to the approval of the national regulatory authority of the transmission system operator.</i>	<i>The Article gives the option of continuing using an existing data exchange solution after the entry into force of this Regulation, subject to approval by the NRA.</i> <i>To make this option available also for capacity booking platforms, they have to be added as an entity in Article 23(2).</i> <i>VTP Operators have been added based on the solution for FUNC issues 01/2018, 02/2018 and 06/2018.</i>
Article 26 Entry into force	Article 26 Entry into force	
<i>This Regulation shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union.</i> <i>It shall apply from 1 May 2016 without prejudice to Article 5.</i>	1. <i>This Regulation shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union.</i> 2. <i>It shall apply from 1 May 2016 without prejudice to Article 5.</i> 3. However, the amendments in Articles	<i>In the consolidated version of NC INT&DE this article should be revised, and the application dates reviewed for each amendment proposal.</i> <i>The exact time between entry into force and application would be up for discussion on comitology level, however 12 months is proposed and considered</i>

	<i>1(2), 20(1), 20(2), 23(1) and 23(2) shall apply as of 12 months from the entry into force of the amended legislation.</i>	<i>sufficient based on the implementation time originally imposed by the INT&DE NC.</i>

Gas Network Codes Functionality Process

Issue Solution Annex II

Amendment of the common Data Exchange Solution Table ([link](#))

Current version: the proposed changes are highlighted in yellow. The selected common data exchange solution for the communication between Auction Office¹ and Registered Network User is defined as 'interactive' while 'document based' is mentioned as the optional data exchange solution.

The process 'Aggregated Auction Results' (highlighted in orange) has to be separated between communication from Capacity Platform Responsible to Registered Network Users on one hand and all remaining parties on the other hand (highlighted in orange).

BRS	Document Chapter	Document Line Number	Information Flow	From Party Role Value	To Party Role Value	Confidentiality Level	Common Data Exchange Solution	Date of Publication	Optional Data Exchange Solution
CAP0554_160726_BRS_CAM+C	3.3.1.2	509	Network User Registration	Network User	Transmission System Operator	Private			Recommendation - Interactive
	3.3.1.3	515	Network User Registration to Auction Office	Network User	Auction Office	Private			Recommendation - Interactive
	3.3.1.4	522	Approved Network Users	Auction Office	Registered Network User	Private			Recommendation - Interactive
	3.3.1.5	531	Surrender Capacity Rights	Registered Network User	Auction Office	Private	Interactive	1/11/2016	Document Based
	3.3.1.6	551	Offered Capacity	Auction Office	Registered Network User	Public	Interactive	1/11/2016	Document Based
	3.3.1.8	572	Capacity Bid	Registered Network User	Auction Office	Private	Interactive	1/11/2016	Document Based
	3.3.1.9	578	Allocated Capacity	Auction Office	Registered Network User	Private	Interactive	1/11/2016	Document Based
	3.3.1.11	590	Aggregated Auction Results	Auction Office	All	Public	Interactive	1/11/2016	Document Based
	3.3.1.12	601	Surrendered Capacity Sold	Transmission System Operator	Registered Network User	Private	Document Based	1/11/2016	Interactive
	3.3.1.14	614	Reverse Auction Bid	Registered Network User	Auction Office	Private	Interactive	1/11/2016	Document Based
	3.3.1.15	626	Allocate Reverse Auction Results	Auction Office	Registered Network User	Private	Interactive	1/11/2016	Document Based
	3.3.2	643	Secondary Market Sales	Registered Network User	Transmission System Operator	Private	Interactive	1/11/2016	Document Based
	3.3.2	651	Secondary Market Sales	Transmission System Operator	Registered Network User	Private	Interactive	1/11/2016	Document Based

Proposed amendment:

¹ The term "Capacity Platform Responsible" is used in the Common Data Exchange Solution table mentioned below. It is referring to the Capacity Booking Platforms

The common data exchange solution for the communication between Capacity Platform Responsible and Registered Network User is proposed to be 'document based' while 'interactive' is mentioned as the optional solution which can be provided on top (highlighted in yellow).

The communication 'Aggregated Auction Results' is proposed to be separated into communication to registered Network Users where 'document-based' is the common data exchange solution while the communication to all other parties but Registered Network Users will remain as 'interactive' as the common data exchange solution. (both processes are highlighted in orange)

Furthermore, the term 'Auction Office' has been amended to 'Capacity Platform Responsible' since this term provides more clarity and is used in other documentations for the gas sector.

The "blue" marked processes were indicated by all Capacity Platform Responsibles as "light" processes with less than 10 active parties and less than 10 interactions per year. For this reason, the Common Data Exchange Solution for these 3 processes "Surrender Capacity Rights", "Reverse Auction Bid" and "Allocate Reverse Auction Results" will remain as "interactive".

BRS	Document Chapter	Document Line Number	Information Flow	From Party Role Value	To Party Role Value	Confidentiality Level	Common Data Exchange Solution	Date of Publication	Optional Data Exchange Solution
CAP0554_160726_BRS_CAM+C	3.3.1.2	509	Network User Registration	Network User	Transmission System Operator	Private			Recommendation - Interactive
	3.3.1.3	515	Network User Registration to Capacity Platform Responsible	Network User	Capacity Platform Responsible	Private			Recommendation - Interactive
	3.3.1.4	522	Approved Network Users	Capacity Platform Responsible	Registered Network User	Private			Recommendation - Interactive
	3.3.1.5	531	Surrender Capacity Rights	Registered Network User	Capacity Platform Responsible	Private	Interactive	1/11/2016	Document Based
	3.3.1.6	551	Offered Capacity	Capacity Platform Responsible	Registered Network User	Public	Document Based	1/11/2016	Interactive
	3.3.1.8	572	Capacity Bid	Registered Network User	Capacity Platform Responsible	Private	Document Based	1/11/2016	Interactive
	3.3.1.9	578	Allocated Capacity	Capacity Platform Responsible	Registered Network User	Private	Document Based	1/11/2016	Interactive
	3.3.1.11	590	Aggregated Auction Results	Capacity Platform Responsible	Registered Network User	Public	Document Based	1/11/2016	Interactive
	3.3.1.11	590	Aggregated Auction Results	Capacity Platform Responsible	All but Registered Network User	Public	Interactive	1/11/2016	Document Based
	3.3.1.12	601	Surrendered Capacity Sold	Transmission System Operator	Registered Network User	Private	Document Based	1/11/2016	Interactive
	3.3.1.14	614	Reverse Auction Bid	Registered Network User	Capacity Platform Responsible	Private	Interactive	1/11/2016	Document Based
	3.3.1.15	626	Allocate Reverse Auction Results	Capacity Platform Responsible	Registered Network User	Private	Interactive	1/11/2016	Document Based
	3.3.2	643	Secondary Market Sales	Registered Network User	Transmission System Operator	Private	Interactive	1/11/2016	Document Based
	3.3.2	651	Secondary Market Sales	Transmission System Operator	Registered Network User	Private	Interactive	1/11/2016	Document Based

Please see Annex I for the detailed amendment proposals of the INT & DE Network Code and their explanations.