

Picture courtesy of Gas Connect Austria

14th Transparency Workshop – Data Exchange Break Out room

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Available topics

- European signature algorithm dialogue
- Functionality Process
- Edig@s v6 / REMIT messages



European signature algorithm dialogue

- Regulation (EC) No 715/2009:
 - 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
- Maintaining a European interoperable standard of secure information exchange within each context
 - Including standards for algorithms, key-sizes and parameters
- Agreement on a Roadmap for updates
- Agreement on European level by the relevant European stakeholders
- National standards should not create barriers for market participants

AS4 Usage Profiles in Europe



- ENTSOG AS4 Usage Profile
 - Guidance for TSOs for Gas to implement the Network Code for Interoperability and Data Exchange for document-based exchange
 - Part of the Common Network Operation Tools (CNOTs) of ENTSOG as stated in the INT NC.
- EASEE-Gas Common Business Practice
 - Recommends ENTSOG AS4 Usage Profile for general gas data exchange
 - EASEE-gas provides certificates for use with AS4 for its members (more than 80 parties)
- Connecting Europe Facility (CEF) eDelivery Building Block
 - European Commission specification based on AS4 for cross-border data exchange
- AS4 specifications developed in EU Member States
 - Netherlands (based on the ENTSOG AS4 profile), Germany (work in progress)

Welcome & Introduction



- Participants

- BSI

- BDEW

- CEF

- EASEE-gas

- ENTSG



Security Comparison ENTSG-BNetzA

Algorithm	ENTSG AS4	BNetzA	Compatible	Comments
Certificate Signing Algorithm	RSASSA-PKCS1-v1_5	RSASSA-PSS	No	<p>This parameter concerns the selection of the algorithm that the Certification Authority uses to sign a certificate it issues.</p> <p>The scope of German regulation is formally limited to AS2 and email only but the cryptographic guidelines apply generically so likely also to AS4;</p> <p>At least some AS4 products support use of RSASSA-PSS signed certificates.</p>
Message Signing Algorithm	RSASSA-PKCS1-v1_5	RSASSA-PSS	No	<p>This parameter concerns the selection of the algorithm that an AS4 gateway uses to sign AS4 messages.</p> <p>As of May 2019, RSASSA-PKCS1-v1_5 seems to still be used widely for message signing with both AS2 and AS4 in Germany;</p> <p>Most commonly available AS4 products <u>do not</u> support RSASSA-PSS as message signing algorithm;</p> <p>This incompatibility is likely to be much more problematic than use of RSASSA-PSS for certificate signing.</p>
Key Transport Algorithm	RSAES-OAEP	RSAES-OAEP	Yes	<p>This algorithm is used to secure the exchange of the keys that are used to encrypt AS4 messages.</p> <p>RSAES-OAEP is successfully used with ENTSG AS4.</p>

Next Steps – discussion on the Common Roadmap Milestones

Security Expertise
(ENISA...)



Proof of
Concept
(CEF - tbc)

Public
Consultation with
the Market
Participants

Agreed
Implementation

Draft of
European
roadmap

Investigation
on vendor
support

Input from market
participants (EASEE-gas,
ENTSOG, CEF...)

Functionality Process

Functionality Process goals

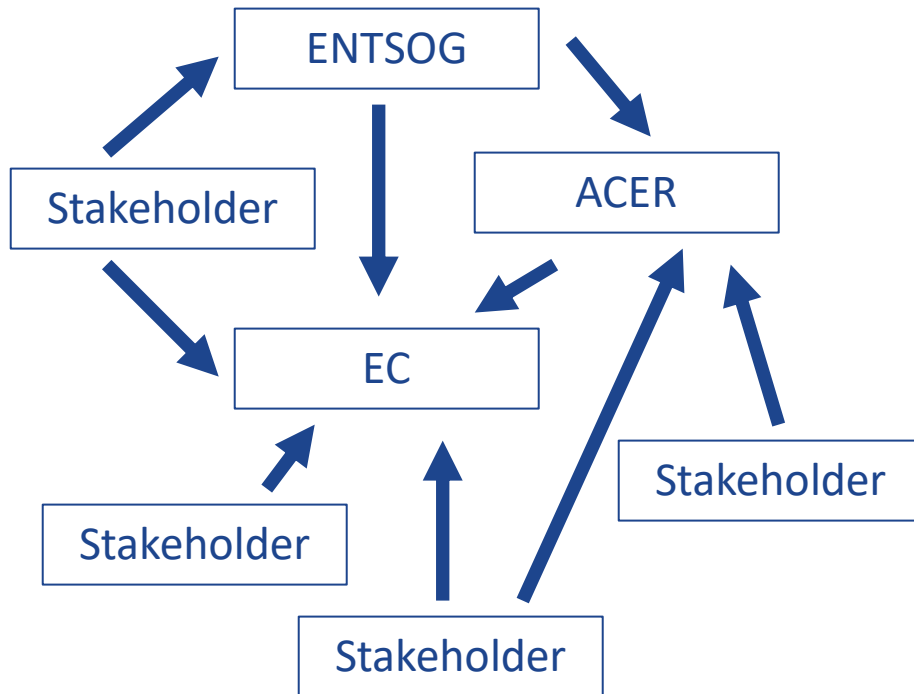
The purpose of the Functionality process

- Option for stakeholders to provide input on their concerns with the existing gas-related legislation*
- Any issues associated with the NCs and GLs can be raised
- Ensure ENTSOG and ACER are working side by side with equal mandate in such discussions about gas-related legislation
- Issue solution(s)
- Run jointly by ACER and ENTSOG, supported by EC

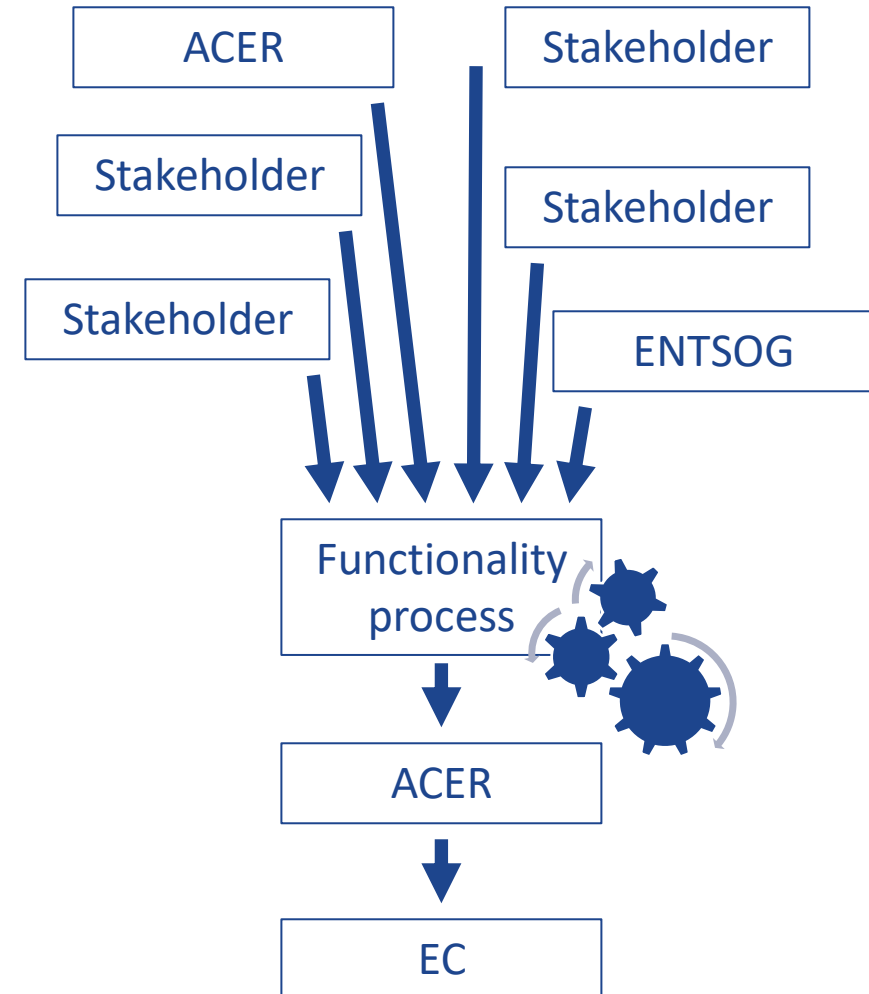
**The application of Reg. 713/2009 and Reg. 715/2009 is not affected.
This process is without prejudice to the existing obligations and powers of TSOs and NRAs.*



Robust Transparent Conceptual Process



VS



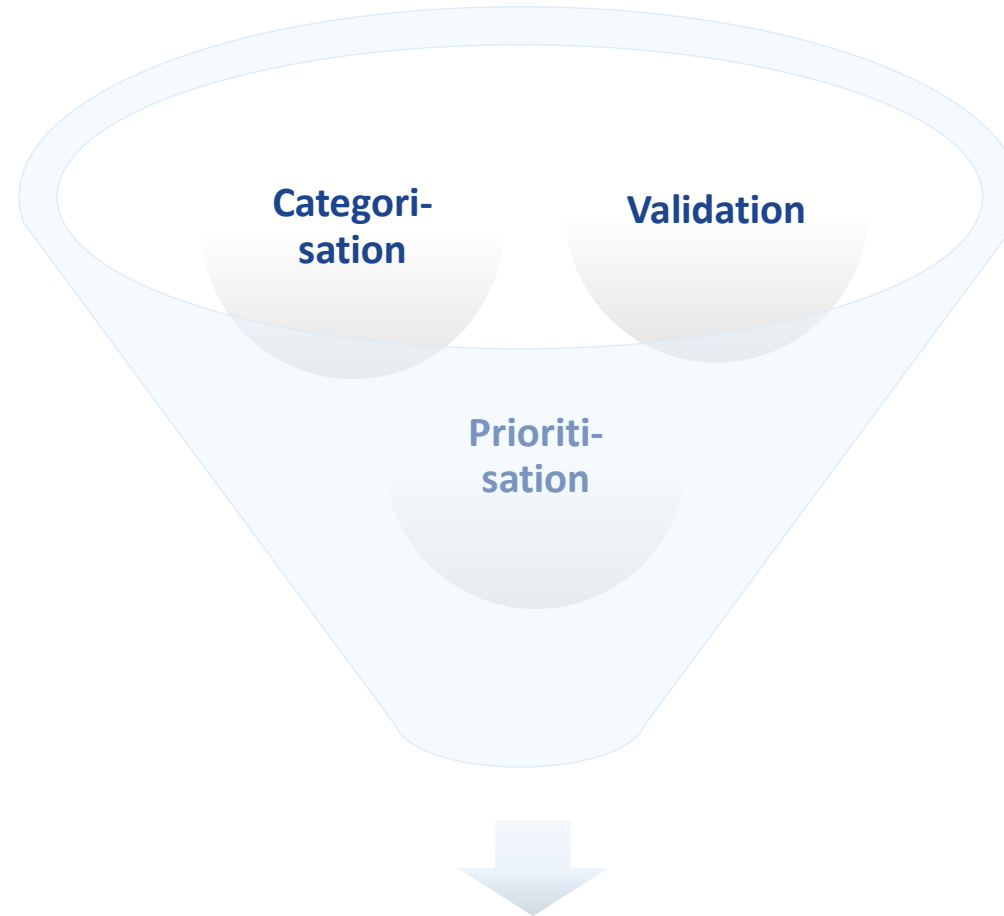
www.gasncfunc.eu

- GSA, PRISMA and RBP as well as some TSO use different interfaces and data exchange solutions for capacity trading (and other processes)
- NUs active in different markets have to develop and maintain different interfaces which creates avoidable costs
- Equinor and Engie would prefer a document-based data exchange solution for capacity trading (data format: Edig@s) while according to the ENTSOG CNOT an interactive data exchange solution should be used



FUNC issue – common interface for booking platforms

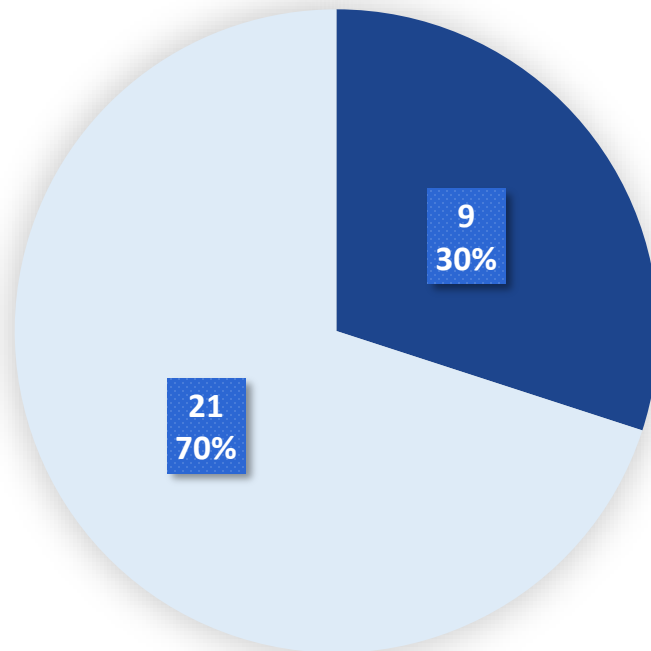
- Assessment of the case



Valid, European issue of medium priority

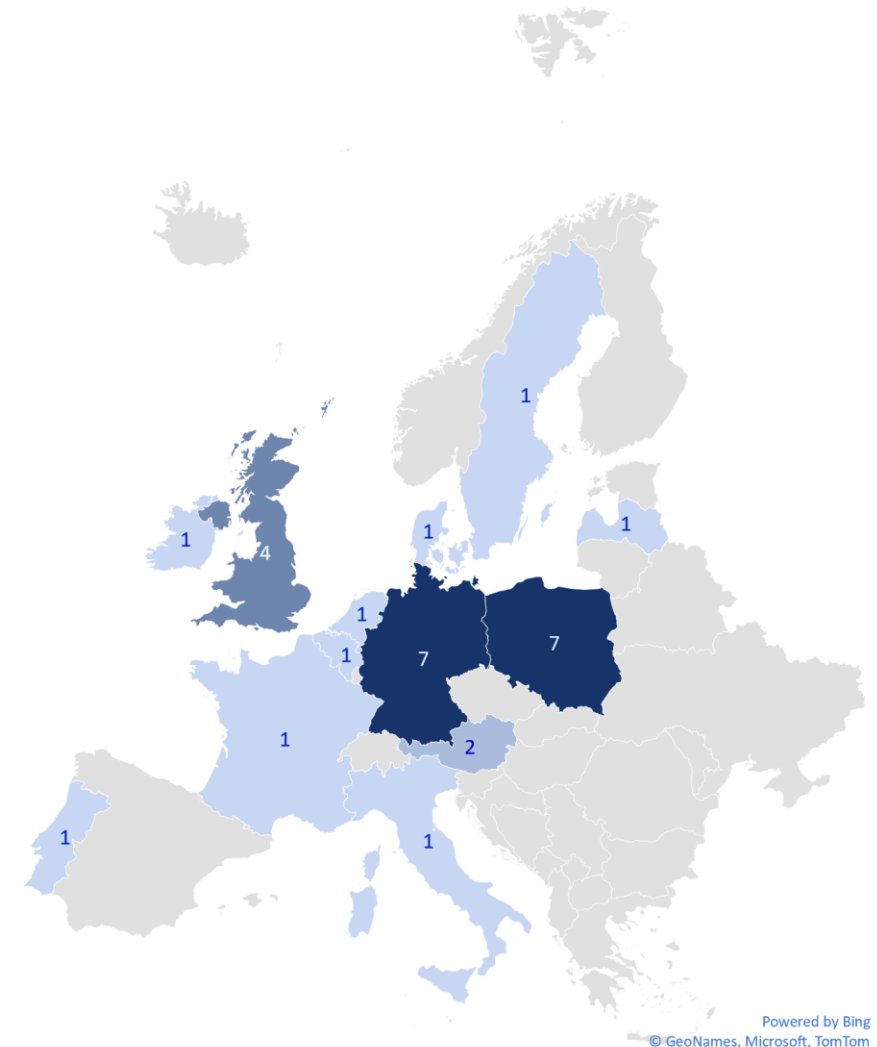
Public Consultation Results

Participants



■ TSO / Capacity Booking Platform Operator ■ BRP/CRP/LNG/SSO/Other Roles

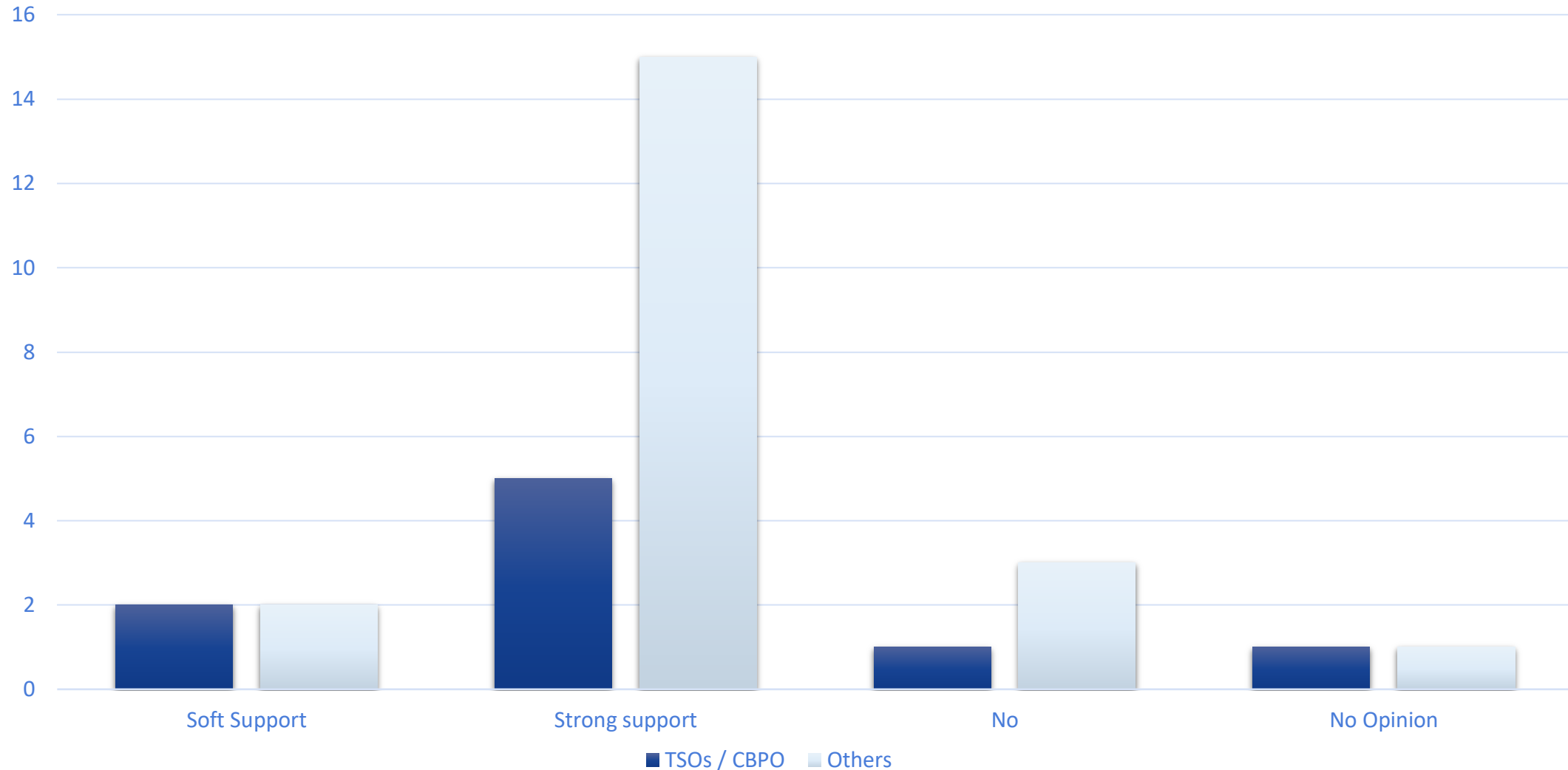
Countries



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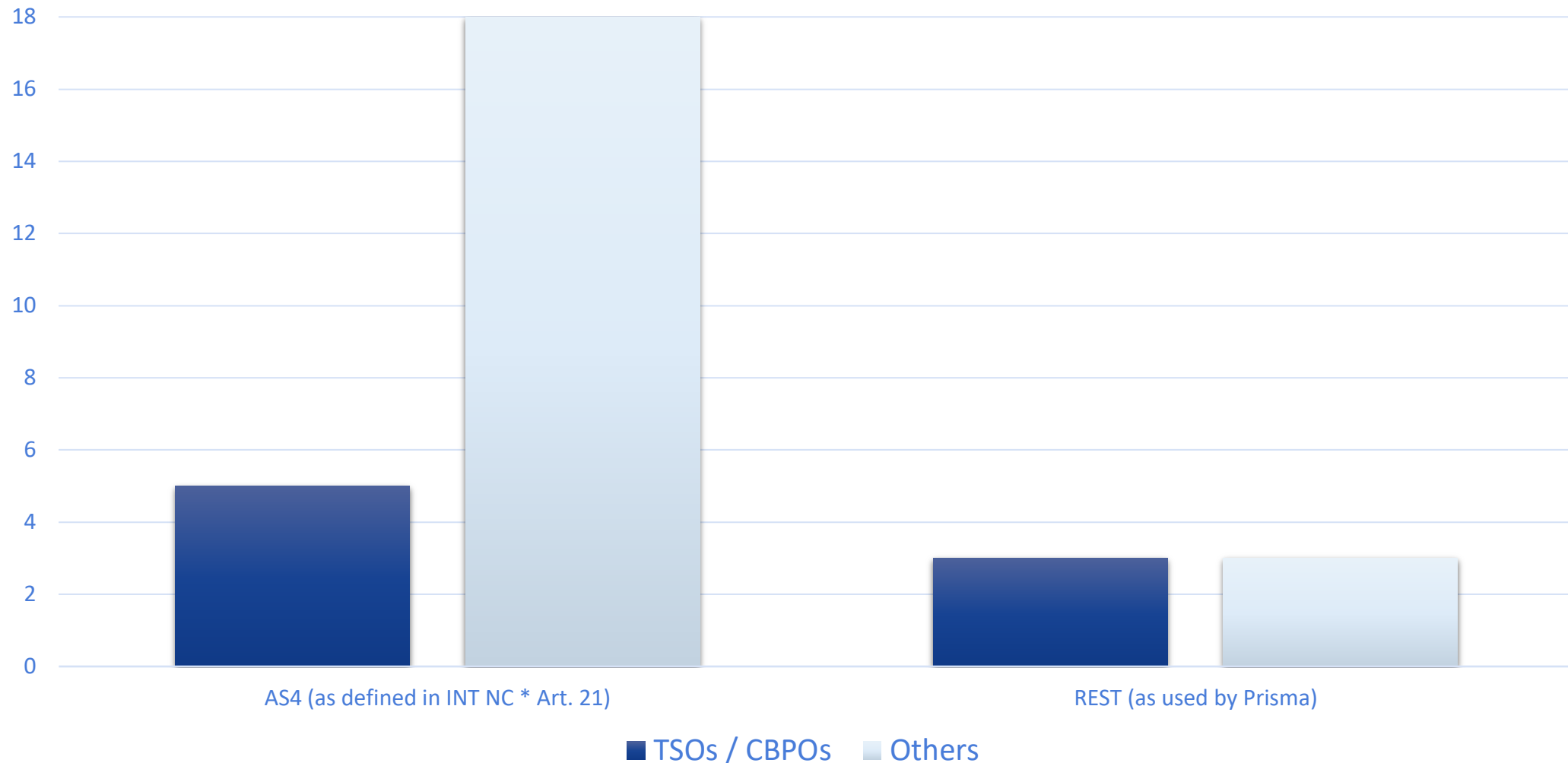
Participants could select only EU countries by name

Support of Edig@s XML for Booking Platforms



Strong support for Edig@s XML as a format for the communication to Booking Platforms

Preferred protocol for communication to capacity booking platforms



The majority of the participants prefers AS4 as a protocol for the communication to Booking Platforms

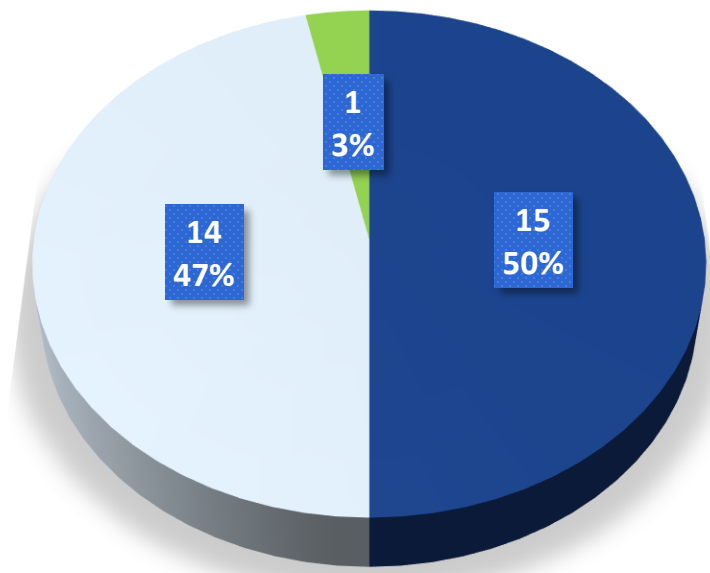
Feedback regarding the questioned Protocols

Protocol	Pros	Cons
AS4	<ul style="list-style-type: none">• Interoperability (24)• Security (Authentication) (22)• Security (non-repudiation) (18)	<ul style="list-style-type: none">• Speed of implementation (7)• Speed reg. processing messages (4)
REST	<ul style="list-style-type: none">• Speed while proccession messages (10)• Speed of implementation (9)	<ul style="list-style-type: none">• 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

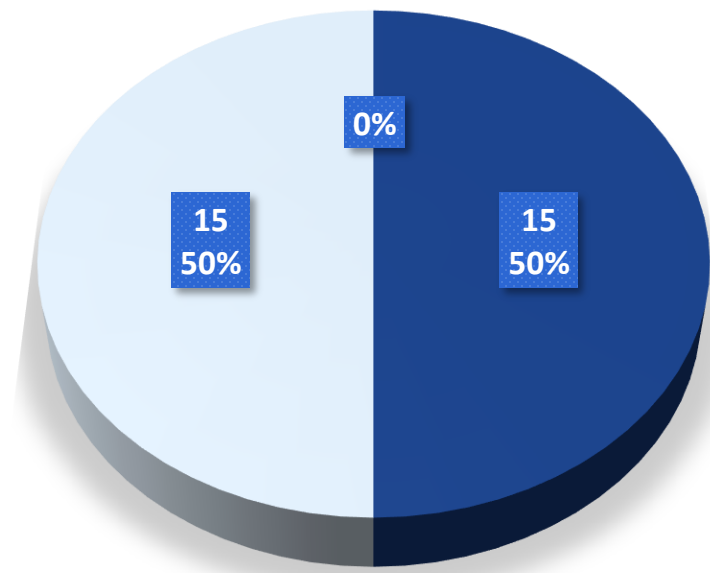
Implementation time for a new format and protocol

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

Next Steps

- Approval of the FUNC solution including:
 - Proposed amendments of the INT & DE NC



- To be approved by the EC

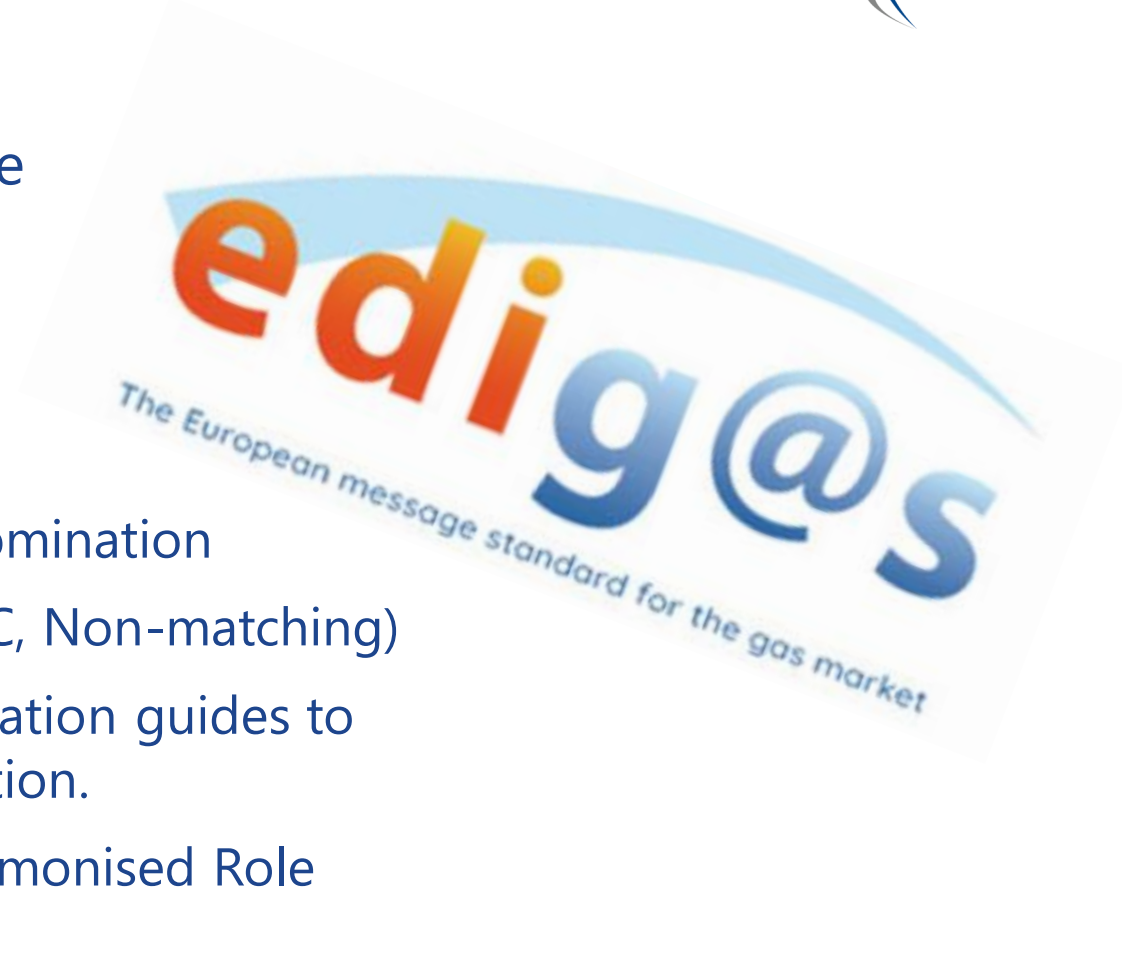
- Proposed amendment of the Common Data Exchange Solution Table (CDEST) ([link](#))
- Need to be consulted

Public Consultation

Edig@s v6 / REMIT messages

Edig@s v6

- Official version published and available here
www.edigas.org
www.easee-gas.eu/edig-s
- Changes
 - One location and one internal account per nomination
 - Different Nomination type (TSO, VTP, VTP OTC, Non-matching)
 - Decision tables added in Message implementation guides to avoid misunderstandings during implementation.
 - Attribute naming convention changed → Harmonised Role Model for gas
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Remit: Publication documentation content

- The electronic document contents are:
 1. Gas capacity Allocations Document
 2. Nomination Monitoring Document
 3. Contract Market Monitoring Document
- The information is aggregated at the connection point level based on the requested characteristics
- Download available at
www.edigas.org/remit-implementation-guide/
- Last update: March 2015
- Based on Edig@s v 5.1

Remit: Publication process

- The REMIT Process will not be migrated to Edig@s version 6
- Until the planned changes to the REMIT electronic documents are approved for implementation
- At that time the evolution to the REMIT document set will be simultaneously migrated to Edig@s version 6
- Consequently the REMIT document set shall always be in Edig@s version 5.1.



Thank you for your attention

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