Workshop on Data Communication Harmonisation for Gas Transmission

Entsog Data Exchange Usage Profiles

Jackie Manning

System Operation Adviser

Image Courtesy of Thyssengas

2. Welcome and objectives

Hendrik Pollex, System Operations Business Area Manager
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Emergency Evacuation

> Emergency Evacuation Plans - Plans located on two main corridors of ENTSOG office indicating the way of evacuation from offices located on the Second Floor of Cortenbergh 100 Building.

> The meeting point is in front of the Mosque-Parc du Cinquantenaire,

Plan d'évacuation | Evacuatie plan | Evacuation map
ENTSOG aisbl - GIE aisbl

CONSIGNES EN CAS D'INCENDIE	VEILIGHEIDSRICHTLIJNEN IN GEVAL VAN BRAND	WHAT TO DO IN CASE OF FIRE
Ne paniquez pas	Blijf kalm	Keep calm
N'emportez rien	Neem niets mee	Don't take anything
Ne revenez pas sur vos pas	Keer niet terug	Don't come back in your room
Dirigez-vous vers une issue de secours	Begeef u naar een nooduitgang	Leave building via emergency exit
N'utilisez pas les ascenseurs	Gebruik geen liften	Do not use the elevator
Rendez-vous au lieu de rassemblement	Afspraak op verzamelpunt	Go to the meeting point

VOUS ETES ICI U BENT HIER YOU ARE HERE	CHEMIN D'EVACUATION VLUCHTWEG EVACUATION WAY	POINT DE RASSEMBLEMENT VERZAMEL PUNT MEETING POINT	EXTINCTEUR BRANDBLUSAPPARAAT FIRE EXTINGUISHER	DEVIDOIR HASPEL FIRE HOSE REEL	BOUTON D'ALARME ALARM DRUKKNOP ALARM BUTTON	LOCAL ELECTRICITE ELEKTRICITEITSLOKAAL ELECTRICAL ROOM	SORTIE DE SECOURS NOODUITGANG EMERGENCY EXIT	SORTIE NORMALE ET DE SECOURS UITGANG EN NOODUITGANG USUAL AND EMERGENCY EXIT

+2

Introduction

> Material and notes / list of participants to be published

...hoping that this has been a fully transparent process

Agenda for today

2	Opening	10:30-10:40
3	Data Exchange from EU Regulation 2015/703	10:40-10:55
4	Document Based Data Exchange - ENTSOG AS4 Usage Profile V3.5	10:55-11:40
	Presentation – EC CEF eDelivery team	11:40-11:50
	Coffee Break	11:50-12:05
5	Interactive Data Exchange – Introduction to the Profile	12:05-12:45
	Member Presentation – SNAM & ENI	12:45-13:00
	Lunch Break	13:00-14:00
6	Integrated Data Exchange – Introduction to the Profile	14:00-14:45
	Member Presentation – GTS	14:45-15:00
	Coffee break	15:00-15:15
	Member Presentation - GAZ-SYSTEM	15:15-15:30
	Stakeholder Presentation – EGSSIS	15:30-15:45
7	Public Consultation & Questions and Answers	15:45-16:15
8	Closing Remarks	16:15-16:30

Structure of event

Location: ENTSOG Offices, 100 Avenue de Cortenbergh, Brussels, 1000

Subject: **Workshop on Data Communication Harmonisation for Gas Transmission**

Chair: ENTSOG

AGENDA

Please note all sections (other than the Welcome) will allow time for open discussion

No	Description	Time
1	**Morning Coffee and Registration**	10:00 - 10:30
2	**Opening (ENTSOG) (Hendrik Pollex)** ➤ Welcome/Introduction/History/Structure of Event ➤ Objectives	10:30 - 10:40
3	**Data Exchange from EU Regulation 2015/703 (Jef de Keyser)** ➤ Legal Background for Harmonised Data Exchange ➤ Common Data Exchange Solutions	10:40 - 10:55
4	**Document Based Data (AS4) Exchange – (Pim Van Der Eijk)** ➤ Update to the ENTSOG AS4 Usage Profile ➤ Next Steps & Q&A	10:55 - 11:40
	Presentation – EC CEF eDelivery team	11:40 - 11:50
	Coffee Break	**11:50 - 12:05**
5	**Introduction to Interactive Data Exchange (Jackie Manning)** ➤ Background ➤ Content & Validation, Member Use Cases ➤ Next Steps & Q&A	12:05 - 12:45
	Member Presentation – SNAM & ENI	12:45 - 13:00
	Lunch	**13:00 - 14:00**
6	**Introduction to Integrated Data Exchange – (Pim Van Der Eijk)** ➤ Background ➤ Content &Validation ➤ Next Steps & Q&A	14:00 – 14:45
	Member Presentation - GTS	14:45-15:00
	Coffee Break	**15:00 - 15:15**
	Member Presentation – GAZ-SYSTEM	15:15 - 15:30
	Stakeholder Presentation – EGSSIS	15:30 - 15:45
7	**Next Steps & Public Consultation** ➤ Next Steps & Invitation to reply to public consultation ➤ Questions and Answers (All)	15:45 - 16:15
8	**Closing**	16:15 - 16:30

> Objective: For ENTSOG to update our stakeholders on the latest AS4 Usage Profile, and to introduce the Interactive and Integrated Data Exchange Profiles for Public Consultation.

> How will this be achieved:

- Discuss the legal background for harmonised data exchange
- By presenting the updated ENTSOG AS4 Usage Profile V3.5
- By presenting the ENTSOG Interactive Data Exchange Profile with Use Case Examples
- By Presenting the Integrated Data Exchange Profile
- Presentations by stakeholders
- Question and Answer Sessions

Objectives of Today's Workshop

Discuss Legal Background for Harmonised Data Exchange

⬇

Share the update to the ENTSOG AS4 Usage Profile

⬇

Introduce the ENTSOG Interactive Data Exchange Profile & Use Cases

⬇

Introduce the ENTSOG Integrated Data Exchange Profile

⬇

Questions and Answers

⬇

Advise stakeholders how to respond to the public consultation for the Data Exchange Profiles

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8	**Closing Remarks**	**16:15-16:30**

3. Legal Background for Harmonised Data Exchange (Data Exchange from EU Regulation 2015/703)

Jef DeKeyser

Interoperability Subject Manager

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Introduction - Regulation

REGULATION (EC) No 715/2009 - Conditions for access to the natural gas transmission networks -

Article 8

Tasks of the ENTSO for Gas

1. The ENTSO for Gas shall elaborate network codes in the areas referred to in paragraph 6 of this Article upon a request addressed to it by the Commission in accordance with Article 6(6).

2. The ENTSO for Gas may elaborate network codes in the areas set out in paragraph 6 with a view to achieving the objectives set out in Article 4 where those network codes do not relate to areas covered by a request addressed to it by the Commission. Those network codes shall be submitted to the Agency for an opinion. That opinion shall be duly taken into account by the ENTSO for Gas.

3. The ENTSO for Gas shall adopt:

(a) common network operation tools to ensure coordination of network operation in normal and emergency conditions, including a common incidents classification scale, and research plans;

Introduction - Regulation

COMMISSION REGULATION (EU) 2015/703 - Network code on interoperability and data exchange rules - *Recitals*

(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.

(8) Chapter V of this Regulation should ensure the appropriate degree of harmonisation of data exchange for supporting the completion and functioning of the European internal gas market, security of supply and appropriate and secure access to information, facilitating cross-border transmission activities.

- Article 24

Development process for common network operation tools

1. For each data exchange requirement under Article 20(2), Entsog shall develop a common network operation tool in accordance with Article 8(3)(a) of Regulation (EC) No 715/2009 and shall publish it on its website. A common network operation tool shall specify the common data exchange solution relevant for the respective data exchange requirement. A common network operation tool may also include business requirement specifications, release management and implementation guidelines.

2. Entsog shall establish a transparent process for the development of all common network operation tools. Entsog shall conduct a consultation for each common network operation tool.

Introduction - Regulation

COMMISSION REGULATION (EU) 2015/703 - Network code on interoperability and data exchange rules - *Article 20-21 – Who , What and How*

Article 20

General provisions

1. For the purposes of this Chapter, 'counterparties' means network users active at:

(a) interconnection points; or

(b) both interconnection points and virtual trading points.

2. 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.

Article 21

Common data exchange solutions

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.

Introduction - Regulation

COMMISSION REGULATION (EU) 2015/703 - Network code on interoperability and data exchange rules - *Article 23 – Implementation and existing solutions*

Article 23

Implementation of the common data exchange solutions

1. 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.

2. 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.

Introduction - Regulation

COMMISSION REGULATION (EU) No 984/2013 – Network Code on Capacity Allocation Mechanisms in Gas Transmission Systems - *Article 5 – Standardisation of communication*

1. Transmission system operators shall coordinate the implementation of standard communication procedures, coordinated information systems and compatible electronic on-line communications such as shared data exchange formats and protocols, as well as agree principles as to how this data is treated.

2. Standard communication procedures shall include, in particular, those relating to network users' access to the transmission system operators' auction system or a relevant booking platform and the review of auction information provided. The timing and content of the data to be exchanged shall be compliant with the provisions set out in Chapter III.

3. The standard communication procedures adopted by transmission systems operators shall include an implementation plan and duration of applicability, which shall be in line with the development of booking platform(s) as set out in Article 27. Transmission systems operators shall ensure confidentiality of commercially sensitive information.

Introduction - Regulation

COMMISSION REGULATION (EU) No 312/2014 - Network Code on Gas Balancing of Transmission Networks

- CHAPTER IV **NOMINATIONS -** *Articles 12-18*

→ *Article 13* **Information regarding nominations and re-nominations at interconnection points**

Article 13

Information regarding nominations and re-nominations at interconnection points

Nominations and re-nominations provided by network users to the transmission system operators with regard to interconnection points shall contain at least the following information:

(1) interconnection point identification;

(2) direction of the gas flow;

(3) network user identification or, if applicable, its balancing portfolio identification;

(4) network user's counterparty identification or, if applicable, its balancing portfolio identification;

(5) start and end time of the gas flow for which the nomination or re-nomination is submitted;

(6) gas day D;

(7) the gas quantity requested to be transported.

Introduction - Regulation

GOAL

- Remove barrier for free flow of gas in EU through harmonisation
  - Harmonised operational procedures at IP's
  - Harmonised ICT communication standard between TSO's and TSO – NU (network user)

OUTCOME

- Faster implementation (configuration – avoid coding)
- Cost efficiency (use of –limited number- standard solutions; avoid tailor made implementations)
- Multiple vendor solutions (free available standards – ENTSOG profiles & Edig@s)
- Existing (local) solutions can still be used (with NRA approval)

3. NC Interoperability and Data Exchange

- Commission Regulation (EU) 2015/703 establishing a network code on interoperability and data exchange rules shall apply from **1 May 2016**

- TSOs have to be in a position to support the **standard data exchange solution(s)** as defined in the common network operation tools

- **Chapter 5**, Articles 20, 21, 22, 23 and 24 refer to the data exchange provisions of the network code

- **TSOs** are obliged **to offer the possibility to communicate using a standard data exchange solution** as described in the common network operation tools

Chapter V. Data Exchange
Article 20: General provisions

TSO 2

IP — VTP — IP

TSO 1
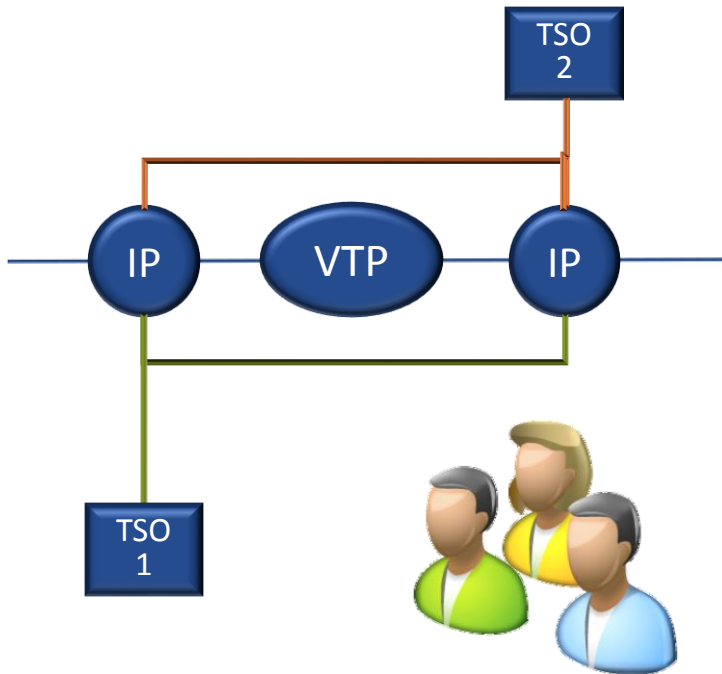
Network users active at IPs
or IPs and VTPs

SCOPE

- Congestion Management Procedures
- NC Capacity Allocation Mechanisms
- NC Gas Balancing
- NC Interoperability & DE
- REMIT

V. Data Exchange
Article 21: Common Data Exchange Solutions

Document based
- Data wrapped in a file and then exchanged
- Protocol: AS4
- Data format: Edig@s-XML

Integrated
- Data exchanged directly between applications
- Protocol: HTTP/S-SOAP
- Data format: EDIG@s-XML

Interactive
- Data exchanged through a web application via a browser
- Protocol: HTTP/S

Selection dependent on the type of business described in the CNOT

Data Exchange types

➤ **Components for Data Exchange**

- Data content (**WHAT**) → Business related
- Data Network → Internet
- Data protocol (**HOW**) → IT technology

➤ **Types of Data Exchanges –** INT NC Art 21 (1)

- Document based (AS4 – Edig@s XML)

The data is wrapped into a file and automatically exchanged

- Integrated (HTTPS – SOAP - Edig@s XML)

The data is exchanged directly between two applications

- Interactive (web browser)

The data is exchanged interactively via a browser

Data Exchange types

> **Document based Data Exchange is most appropriate for:**

- Near real-time communication
- Time critical transmissions
- Non-repudiation
- Authentication
- Confidentiality (commercially sensitive information)
- Traceability
- High volume and high frequency preformatted data
- Reliable messaging
- 24/7 availability

Data Exchange types

> **Interactive Data Exchange is most appropriate for:**

- Human Involvement
- Informational, public data
- Non-Time critical communications
- Client-Server (user initiated) communication
- Low volume and low frequency <u>queryable</u> data
- Very good accessibility (laptop, smart phone,…)
- Use of standard browser, no specific software required
- Fast user set-up/configuration
- 24/7 availability (server side)

Data Exchange types

> **Integrated Data Exchange is most appropriate for:**

- Real-time communication
- Time critical transmissions
- Authentication
- Confidentiality (commercially sensitive information)
- SOAP communication
- High volume and high frequency <u>queryable</u> data
- Reliable messaging
- 24/7 availability (server side)

V. Data Exchange
Article 23: Implementation of Common Data Exchange Solutions

TSOs shall implement the common DE solution within 12 months of when NC comes into force

Parties who cannot communicate with TSOs with their existing DE protocol shall also use the common DE solution

Existing solutions can stay in place as long as they are compliant with the data exchange requirements for the corresponding business processes subject to NRA approval

Common Data Exchange Solutions for Nomination & Matching procedures

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution	Optional Data Exchange Solution – second most preferred by stakeholders**
Nomination authorisation *	Registered NU	TSO	Private	Recommendation-Document Based	Recommendation-Document Based
Nomination	Registered NU	(Initiating) TSO	Private	Document Based	Interactive
Nomination	Registered NU	(Matching) TSO	Private	Document Based	Interactive
Forward Single Sided Nomination	(Active) TSO	(Passive) TSO	Private	Document Based	Interactive
Processed Quantities	(Initiating) TSO	(Matching) TSO	Private	Document Based	Interactive
Matching Results	(Matching) TSO	(Initiating) TSO	Private	Document Based	Interactive
Confirmation Notice	(Initiating) TSO	Registered NU	Private	Document Based	Interactive
Confirmation Notice	(Matching) TSO	Registered NU	Private	Document Based	Interactive
Interruption Information	(Initiating) TSO	Registered NU	Private	Document Based	Interactive
Interruption Information	(Matching) TSO	Registered NU	Private	Document Based	Interactive

* Data exchange solution is not mandatory but recommended and has to be negotiated between the TSO and NU
** Neither the offering nor the format of an Optional Data Exchange Solution is mandatory

Common Data Exchange Solutions for CAM &CMP

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution	Optional Data Exchange Solution – second most preferred by stakeholders**
Network User Registration*	Network User	Transmission System Operator	Private	Recommendation – Interactive	Recommendation - Interactive
Network User Registration to Auction Office*	Network User	Auction Office	Private	Recommendation – Interactive	Recommendation - Interactive
Approved Network Users*	Auction Office	Registered Network User	Private	Recommendation – Interactive	Recommendation - Interactive
Surrender Capacity Rights	Registered Network User	Auction Office	Private	Interactive	Document Based
Offered Capacity	Auction Office	Registered Network User	Private	Interactive	Document Based
Capacity Bid	Registered Network User	Auction Office	Private	Interactive	Document Based
Allocated Capacity	Auction Office	Registered Network User	Private	Interactive	Document Based
Aggregated Auction Results	Auction Office	All	Private	Interactive	Document Based
Surrendered Capacity Sold	Transmission System Operator	Registered Network User	Private	Document Based	Interactive
Reverse Auction Bid	Registered Network User	Auction Office	Private	Interactive	Document Based
Allocate Reverse Auction Results	Auction Office	Registered Network User	Private	Interactive	Document Based
Secondary Market Sales	Registered Network User	Transmission System Operator	Private	Interactive	Document Based
Secondary Market Sales	Transmission System Operator	Registered Network User	Private	Interactive	Document Based

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Any Questions/comments?

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4. Document-Based Data Exchange

Pim Van Der Eijk

Consultant

Introduction – Update to AS4 Usage Profile

Document-Based Exchange:

➤ AS4 Usage Profile Main Features

➤ Changes from Rev_2 to Rev_3.5

➤ Supporting Documents

➤ Implementation Experience

➤ Next Steps

➤ Use Cases

Introduction – Document Based (AS4) Data Exchange

Document Based (AS4) Data Exchange: Link to Profile

Data Exchange types

> **Components for Data Exchange**

- Data content (**WHAT**) → Business related
- Data Network → Internet
- Data protocol (**HOW**) → IT technology

> **Types of Data Exchanges –** INT NC Art 21 (1)

- **Document based (AS4 – Edig@s XML)**

  The data is wrapped into a file and automatically exchanged

- Integrated (HTTPS – SOAP - Edig@s XML)

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- Traceability
- High volume and high frequency preformatted data
- Reliable messaging
- 24/7 availability

Document Based Data Exchange

Process:

- From April through to November 2016 we facilitated conversations on testing experiences, the feedback from this into the Rev_3 of the profile

- Later updates to consolidate and harmonise the three DE profiles

Outcome:

- AS4 Usage Profile, Revision 3, 2016-11

- Regular Updates following during 2017 ITC KG meetings

- Version 3.5 sent to Prime Movers 29 March 2017

- Version 3.5 published 30 April 2017

AS4 Usage Profile Main Features

AS4 ebHandler
- One Way Push MEP
- AS4 Compression Feature
- AS4 Reliable Messaging

Domain profiling
- Service, Action, Role, Payload handling

TLS
- Version 1.2
- ENISA Guidelines for keys and algorithms

WS-Security
- Signing based on XML Signature
- Encryption using XML Encryption
- ENISA Guidelines for keys and algorithms

Changes from Rev_2 to Rev_3.5

- Introduction of the mechanism to manage certificate exchanges and updates for AS4 using ebCore Agreement Update

- Clarification on the use of UTF-8

- Certificate and other parameters to take AgreementRef header into account

- Security – Algorithm requirements

- Clarification of Mandatory Nature of Party Identification type attribute

- Clarification of additional Service and Action, Role and AgreementRef values

- Certificate Body - CommonName

- Processing Modes Table

Supporting Documents

http://www.entsog.eu/publications/common-data-exchange-solutions

AS4 How to Set Up a System Release Rev_2, 2016-11-30

- Describes deployment and configuration for ENTSOG AS4

AS4 Usage Profile Questions and Answers Release Rev_5, 2017-04-13

- FAQ compiled as implementations continue

ENTSOG AS4 Mapping Table Release Rev_3 on 2017-04-30

- Service, Action, From Role, To Role, EDIGASDocumenttype from all BRSs

ENTSOG AS4 Agreements & Agreement Updates Released Rev_1, 2017-01-12

- Introduces the concept of agreements & agreement updates

ENTSOG AS4 Usage Profile Comparison Rev_2 to Rev_3.5 Released Rev_0, 2017-04-13

- Shows the comparison between Rev_2 and Rev_3 of the AS4 Usage Profile

Implementation Experience Since 2016-05

At least three Member States are promoting AS4 for national use

Initiatives in Member States to also use AS4 for electricity data exchange

ENTSOG AS4 inspired other use of AS4 at European level in e-SENS and in the Connect Europe Facility (CEF) e-Delivery

A dozen different AS4 solutions in use by gas companies

Early issues with conformance and interoperability encountered

Choice of suppliers has allowed at least two gas companies to switch products

Need indentified for a structured configuration information exchange format to lower cost of implementation

Complementary Specifications (1)

OASIS ebCore Agreement Update (optional)

- Solution for Certificate Updates between parties

- XML format and exchange messages allow (partial) automation

- Vendor support required since ENTSOG Usage Profile Rev3

OASIS ebCore CPPA3 (work in progress)

- Framework for automatically configuring messaging systems

- "Profiles": XML document for party-specific configuration parameter sets

- "Profiles" can be unified into "Agreements": configurations for pairs of partners

Complementary Specifications (2)

OASIS ebCore CPPA3 Concept for Implementation (work in progress)

Configuration Repository

Counterparties upload their configuration data

Counterparties download partner configurations
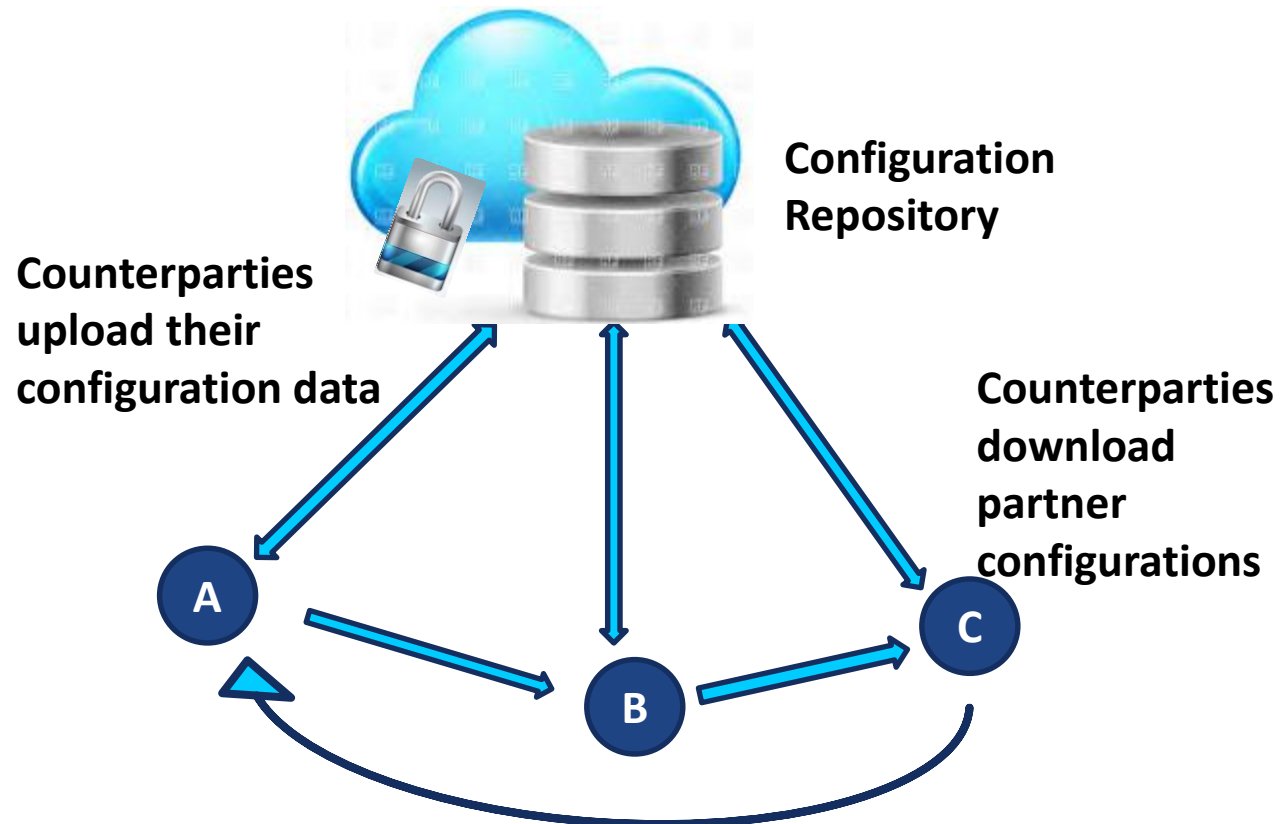
Complementary Specifications (2)

OASIS ebCore CPPA3 Concept for Implementation (Under Discussion)

- Secure Portal for Self Service Configuration Management

- Parties identified using EIC code

- Collaboration model defines party roles for gas business process exchanges

- Parties provide contact data, technical parameters, roles, counterparties

- Technical parameters include certificates, URL, schema versions ..

- Role information model relates parties to collaboration model

- Party/Counterparty relations control profile visibility and exchange compatibility

- Functionality for Export/Download in machine-readable format

Next Steps Document-Based Data Exchange

AS4 Usage Profile:

- **Published Rev_3.5 published 13 April 2017** reflect minors updates

- Future major revision to incorporate Automated Configuration (optional)

Other Documents:

- More "getting started" documentation

- Document profiling/specifying use of Automated Configuration

Collaboration with CEF:

- AS4 "Core" profile module, common to multiple AS4 user community profiles

- Conformance and Interoperability testing of AS4 profiles and profile modules

4. Document-Based Data Exchange – Use Case

Jackie Manning

Adviser System Operation
Jackie.Manning@entsog.eu

Use Cases - Common Data Exchange Solutions for Nomination & Matching procedures

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution	Optional Data Exchange Solution – second most preferred by stakeholders**
Nomination Authorisation *	Registered NU	TSO	Private	**Recommendation*** Document Based	Recommendation- Document Based
Nomination	Registered NU	(Initiating) TSO	Private	Document Based	Interactive
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*Data exchange solution is not mandatory but recommended and has to be negotiated between the TSO and NU
**Neither the offering nor the format of an Optional Data Exchange Solution is mandatory

Nomination & Matching Processes
Information Flows for DSN

| NU 1 | TSO 1 (initiating TSO) | TSO 2 (matching TSO) | NU 2 |

1 Nomination → (NU 1 to TSO 1)

1 Nomination ← (NU 2 to TSO 2)

5 Interruption Notice*** (TSO 1 to NU 1)

5 Interruption Notice*** (TSO 2 to NU 2)

2 Processed Quantities (TSO 1 to TSO 2)

Matching

3 Matching Results (TSO 2 to TSO 1)

4 Confirmation (TSO 1 to NU 1)

4 Confirmation (TSO 2 to NU 2)
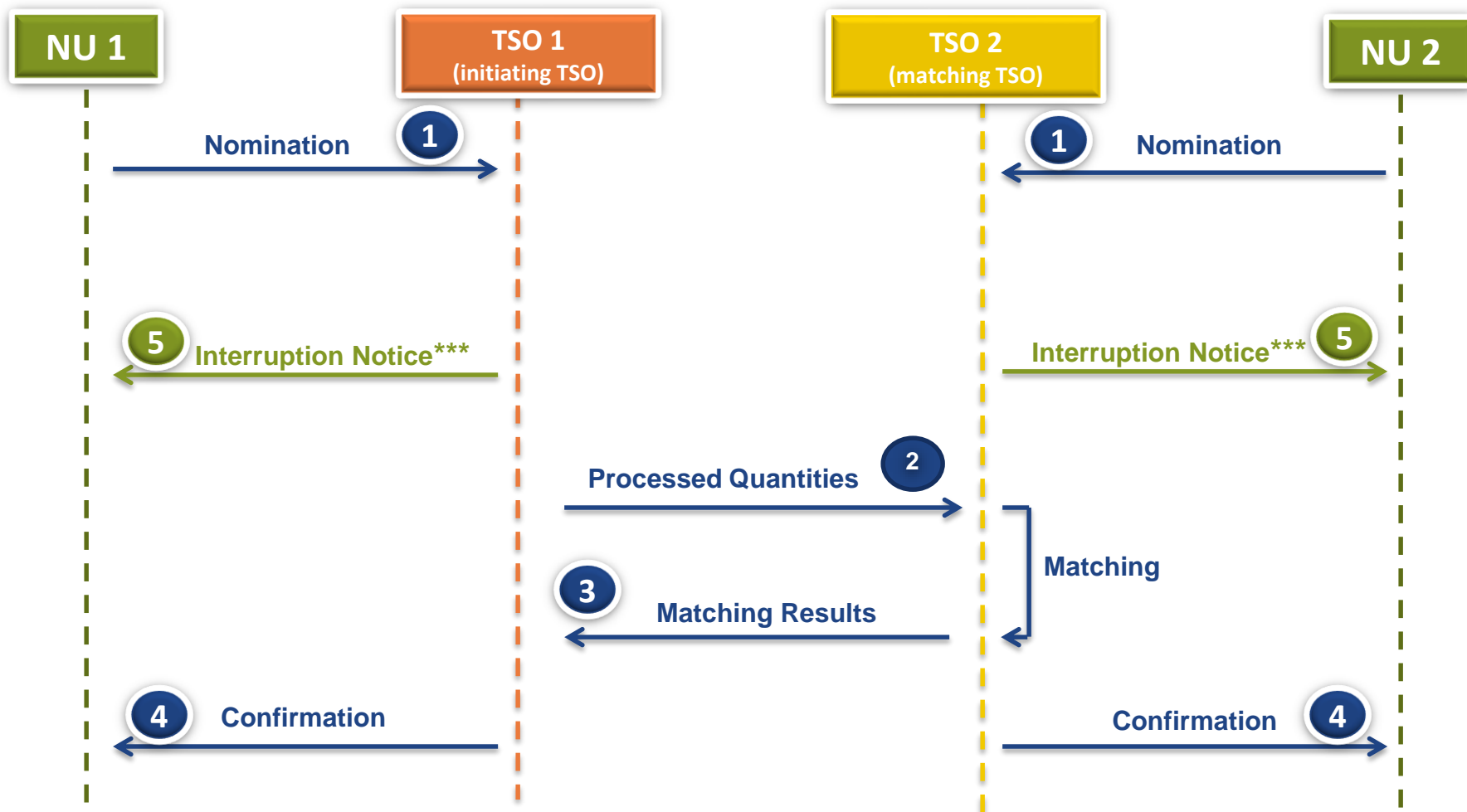
*** the process only occurs in case a TSO has introduced an interruption to the NU nomination.

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Nomination & Matching process Data Exchanges

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution	Optional Data Exchange Solution – second most preferred by stakeholders**
(1) Nomination (DSN)	Registered NU	(Matching) TSO	Private	**Document Based**	**Interactive**
(2) Processed Quantities (DSN)	(Initiating) TSO	(Matching) TSO	Private	**Document Based**	**Interactive**
(3) Matching Results	(Matching) TSO	(Initiating) TSO	Private	**Document Based**	**Interactive**
(4) Confirmation Notice	(Initiating) TSO	Registered NU	Private	**Document Based**	**Interactive**
(4) Confirmation Notice	(Matching) TSO	Registered NU	Private	**Document Based**	**Interactive**
(5) Interruption Information	(Initiating) TSO	Registered NU	Private	**Document Based**	**Interactive**
(5) Interruption Information	(Matching) TSO	Registered NU	Private	**Document Based**	**Interactive**

**Neither the offering nor the format of an Optional Data Exchange Solution is mandatory

**For all the Nomination and Matching processes,
Document-Based is the mandatory Common Data Exchange Solution**

Nomination & Matching process

Nomination & Matching Process BRS Document

Link to the BRS: http://www.entsog.eu/publications/nomination-and-matching#BRS-NOMINATION-AND-MATCHING

1 The transmission of nomination information between the Registered Network User and the Transmission System Operator. In case of double sided nominations, the information shall be submitted to the Initiating Transmission System Operator and to the Matching Transmission System Operator by the respective Registered Network User(s). In case of single sided nominations, the information shall be submitted to the active Transmission System Operator (in this example being the Initiating Transmission System Operator).

The common data exchange solution for the data exchange for double sided nominations is shown below:

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Nomination	Registered Network User	(Initiating) Transmission System Operator	Private	Document Based
Nomination	Registered Network User	(Matching) Transmission System Operator	Private	Document Based

2 The transmission of matching information between the Initiating Transmission System Operator and the Matching Transmission System Operator. This transmission occurs within 45 minutes after the nomination deadline and contains all the nominations processed by the Initiating Transmission System Operator and optionally the nomination.

The common data exchange solution for this data exchange is shown below:

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Processed Quantities	(Initiating) Transmission System Operator	(Matching) Transmission System Operator	Private	Document Based

3 The transmission of the matching results between the Matching Transmission System Operator and the Initiating Transmission System Operator. This transmission occurs within 90 minutes after the nomination deadline and contains at least all the nominations where the processed information has been matched and that are confirmed. It also contains the processed results on the Matching Transmission System Operator side and optionally the nomination.

The common data exchange solution for this data exchange is shown below:

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Matching Results	(Matching) Transmission System Operator	(Initiating) Transmission System Operator	Private	Document Based

Nomination & Matching process

Nomination & Matching Process BRS Document

Link to the BRS: http://www.entsog.eu/publications/nomination-and-matching#BRS-NOMINATION-AND-MATCHING

4 The transmission of the confirmation between the Transmission System Operator and the Registered Network Users. This transmission occurs within two hours after the nomination deadline and contains the results of their nominations.

The common data exchange solution for this data exchange is shown below:

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Confirmation Notice	(Initiating) Transmission System Operators	Registered Network Users	Private	Document Based
Confirmation Notice	(Matching) Transmission System Operators	Registered Network Users	Private	Document Based

5 A sixth information flow, interruption information, only occurs in the case where a Transmission System Operator has introduced an interruption to the Registered Network User nomination. In this case the Transmission System Operator informs the Registered Network User of the interruptions that have affected the nomination. This information is basically provided for information since processing of the nomination may not yet be completed. It must occur within the 45 minutes after the nomination deadline.

The common data exchange solution for this data exchange is shown below:

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Interruption Information	(Initiating) Transmission System Operator	Registered Network User	Private	Document Based
Interruption Information	(Matching) Transmission System Operator	Registered Network User	Private	Document Based

Questions and Answers

Agenda for today

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8	Closing Remarks	16:15-16:30

Presentation - CEF eDelivery team
EC

Agenda for today

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5. Interactive Data Exchange

Jackie Manning

Adviser System Operation

Jackie.Manning@entsog.eu

Introduction – Interactive Data Exchange

Interactive Data Exchange:

- ➤ Overview

- ➤ Goals

- ➤ Use Cases

- ➤ Next Steps

Introduction – Integrated Data Exchange

Interactive Data Exchange:

Link to Profile:

Data Exchange types

➤ **Components for Data Exchange**

- ■ Data content (**WHAT**) → Business related
- ■ Data Network → Internet
- ■ Data protocol (**HOW**) → IT technology

➤ **Types of Data Exchanges –** INT NC Art 21 (1)

- ■ Document based (AS4 – Edig@s XML)

  The data is wrapped into a file and automatically exchanged

- ■ Integrated (HTTPS – SOAP - Edig@s XML)

  The data is exchanged directly between two applications

- ■ **Interactive (web browser)**

  The data is exchanged interactively via a browser

Data Exchange types

> **Interactive Data Exchange is most appropriate for:**

- Human Involvement
- Informational, public data
- Non-Time critical communications
- Client-Server (user initiated) communication
- Low volume and low frequency <u>queryable</u> data
- Very good accessibility (laptop, smart phone,…)
- Use of standard browser, no specific software required
- Fast user set-up/configuration
- 24/7 availability (server side)

Website = Interactive Data Exchange

Website = web service?

- ➢ Interactive websites can be difficult to automate

- ➢ If there are standard web services definitions it is very easy to use them in a standard, automated way

- ➢ Web services can be queried easily, even through Excel, the favourite tool for decision makers

- ➢ It is easy to build a web frontend on a web service for interactive use

Interactive Data Exchange

Process:

➢ ICT KG initial assessment in 2016-03: differences to other two data exchange types (e.g. no interoperability concerns)

➢ Decision to only produce a high-level document with general guidance and best practice

Outcome:

➢ Interactive Data Exchange Usage Profile, version 0.1, 2016-05

➢ Regular Updates following 2016/17 ITC KG meetings

➢ Version 0.8 shared with Prime Movers 29 March 2017

➢ Version 0 published 30 April 2017

Interactive Data Exchange Use Case Classification

Four types of Interactive Data Exchange:

1. Anonymous access to public information

2. Authenticated access to public information

3. Authenticated access to private information

4. Authenticated transactions involving private information

Interactive Data Exchange Use Case Classification

Four types of Interactive Data Exchange:

1. Anonymous access to public information

Interactive Data Exchange Use Case Classification

Four types of Interactive Data Exchange:

2. **Authenticated access to public information**

Interactive Data Exchange Use Case Classification
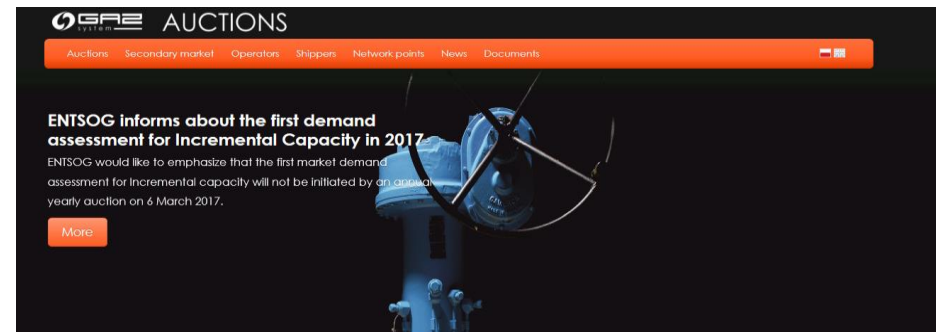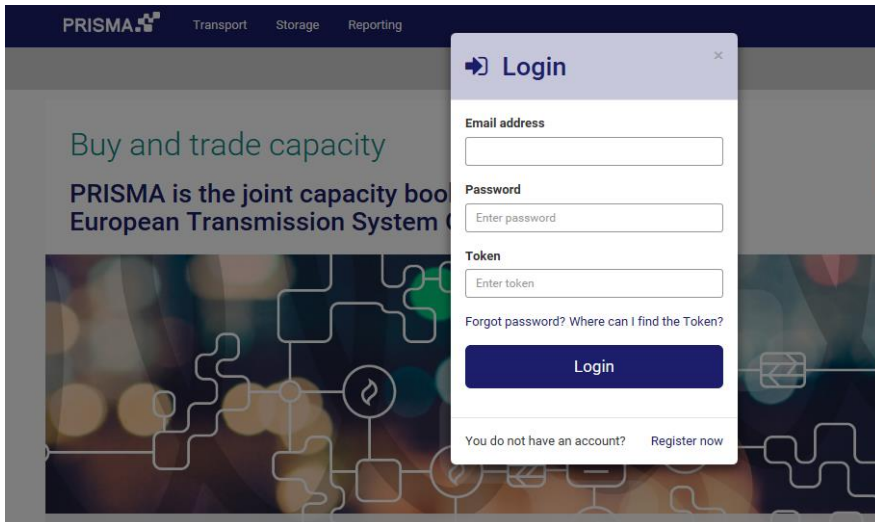
Four types of Interactive Data Exchange:

3. Authenticated access to private information

Interactive Data Exchange Use Case Classification

Four types of Interactive Data Exchange:

4. Authenticated transactions involving private information

Interactive Data Exchange Usage Profile

Goals:

➤ Support public, private, anonymous and authenticated access to services

➤ Support both information access and transactions

➤ Increase consistency and usability and facilitate (harmonise) implementations

➤ Provide security guidance based on state-of-the-art best practices, following recommendations for "near term" (defined as "at least ten years") future system use

Modular structure:

➤ Common Part plus use-case specific extensions

Common Profiling

➢ HTTP 1.1 or higher and TLS 1.2 or higher for new applications

➢ HTML 5 for content

➢ Information presented to align with information models of BRS (naming, definition etc.)

➢ Client Device independent

➢ Accessible for people with disabilities (WCAG10)

➢ Multilingual

➢ Upload/Download to support structured formats

Security Levels

No User Authentication

> For "anonymous access to public information"

Username / Password Authentication

> For "registered access to public information"

Two Factor Authentication

> For "authenticated access to private and commercial information"

Two Factor Authorisation

> For "authenticated transactions involving private and commercial information"

5. Interactive Data Exchange – Use Case

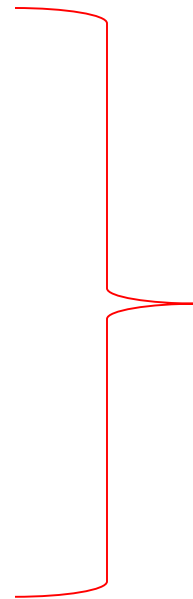Jackie Manning

Adviser System Operation
Jackie.Manning@entsog.eu

Use Cases - BRS CAM & CMP Processes

- ➤ Network User registration
- ➤ Credit limit management
- ➤ Bookable Point registration
- ➤ Capacity right surrender
- ➤ Offered capacity determination
- ➤ Capacity auction
- ➤ Auction result publication
- ➤ Buyback auction
- ➤ Secondary market sales

Common data exchange solutions for interactions between involved parties

One process will be taken as an example in the following slides.

CAM & CMP processes & data exchange
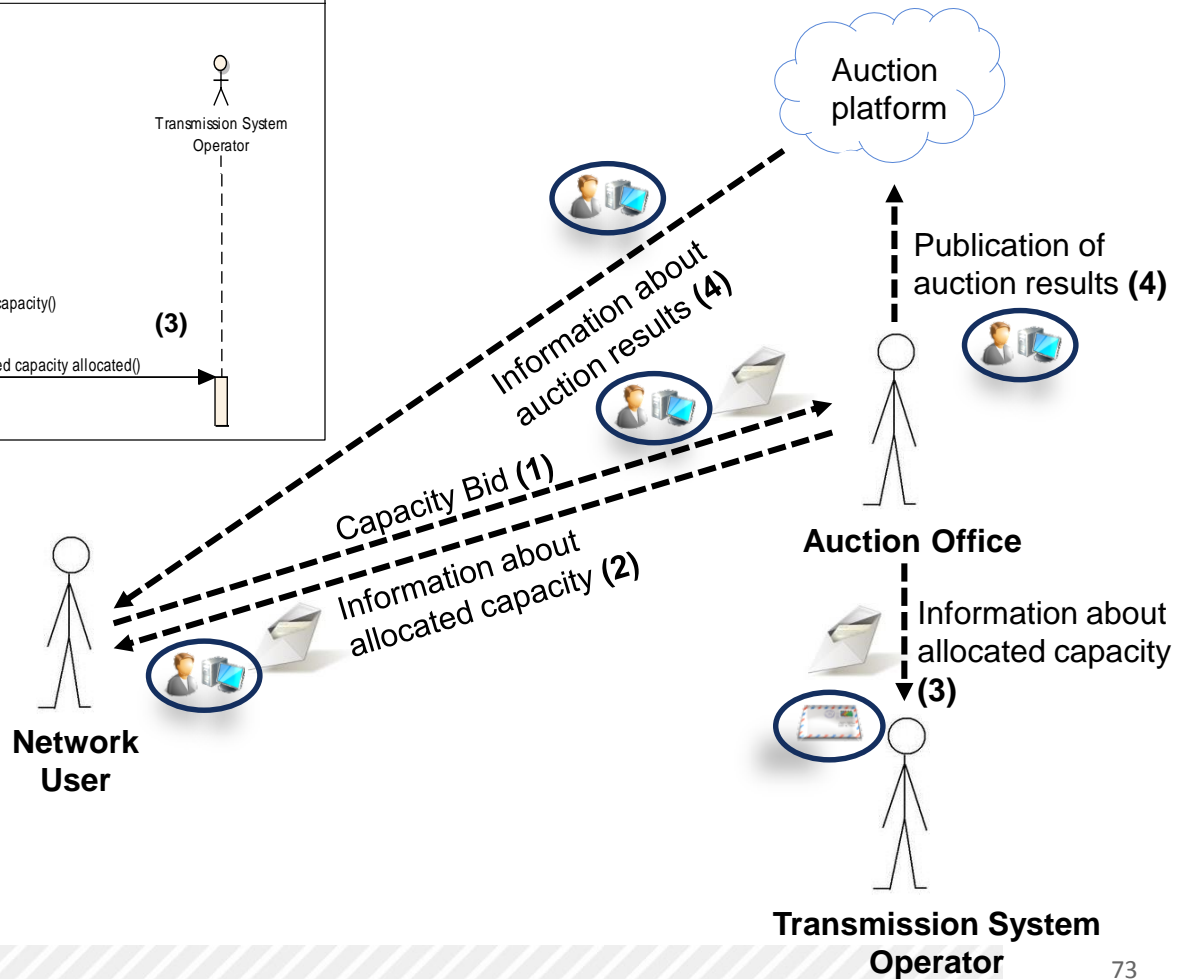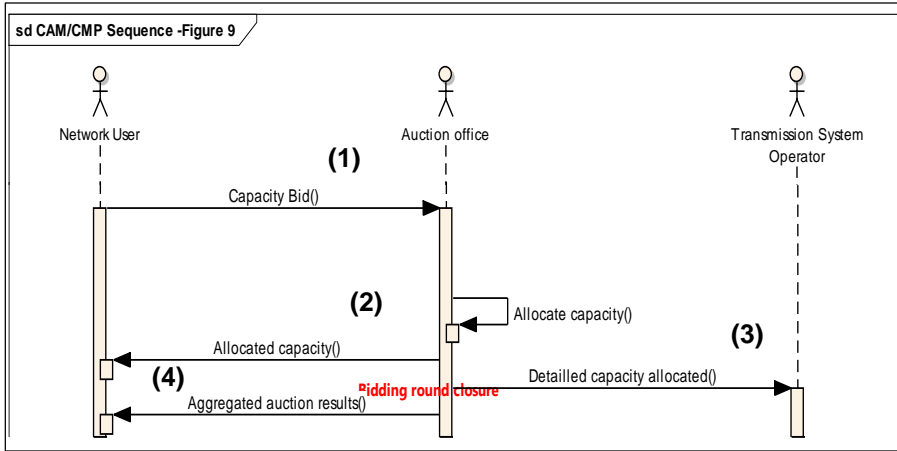
List of actors:

- ➢ Auction Office

- ➢ Network User

- ➢ Transmission System Operator

> **"***Different from the connections ('TSO-TSO', 'TSO-Shipper'), the connection 'TSO to Auction Office' data exchange is outside the scope of the INT Code since the backend connection of the TSOs to their auction offices is a purely internal TSO matter (rf. to Art. 20 (2) NC INT).*

CAM & CMP processes & data exchange

Auction Process

CAM & CMP processes & data exchange

Auction Process BRS Document

Link to BRS: http://www.entsog.eu/publications/cam-and-cmp#BRS-CAPACITY-ALLOCATION-CAM-AND-CONGESTION-MANAGEMENT-CMP

3.3.1.8 Capacity bid

Network Users submit bids in accordance with the type of auction being run. Before a uniform price auction or an ascending clock bidding round closes they may submit modifications to their bids or cancel the bid completely if the auction process allows it. (refer to section 3.2.3.2)

The common data exchange solution for this data exchange is shown below:

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Capacity Bid	Registered Network User	Auction Office	Private	Document Based

3.3.1.9 Allocated capacity

The Auction Office allocates offered capacity to a Network User's bid and informs the Network User of the quantity and price allocated according to the given auction process. (refer to section 3.2.3.3)

The common data exchange solution for this data exchange is shown below:

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Allocated Capacity	Auction Office	Registered Network User	Private	Interactive

3.3.1.10 Detailed capacity allocated

Once the capacity allocation has terminated the Auction Office transmits all the Network User allocations to the Transmission System Operator. (refer to section 3.2.3.4)

The data exchange solutions between the Auction Office and the Transmission System Operator are not part of the Network Code for Interoperability and Data Exchange Rules the data exchange solution is to be negotiated between the parties:

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Detailed Capacity Allocated	Auction Office	Transmission System Operator	Private	Recommendation - Document Based

3.3.1.11 Aggregated auction results

This represents the total aggregated values for the auction (at least the clearing price and total capacity sold) and is intended for use by any market participant. (refer to section 3.2.3.4)

The common data exchange solution for this data exchange is shown below:

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution
Aggregated Auction Results	Auction Office	All	Public	Interactive

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CAM & CMP processes & data exchange

Auction Process BRS Document

Link to BRS: http://www.entsog.eu/publications/cam-and-cmp#BRS-CAPACITY-ALLOCATION-CAM-AND-CONGESTION-MANAGEMENT-CMP

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution	Optional Data Exchange Solution
Capacity Bid	Registered Network User	Auction Office	Private	Interactive	Document Based
Allocated Capacity	Auction Office	Registered Network User	Private	Interactive	Document Based
Detailed Capacity Allocated	Auction Office	Transmission System Operator	Private	*Recommendation - Document Based	Recommendation - Document Based
Aggregated Auction Results	Auction Office	All	Public	Interactive	Document Based

*Data exchange solution is not mandatory but recommended and should be negotiated

Common Data Exchange Solutions for CAM &CMP

Information Flow	From Role	To Role	Confidentiality Level	Common Data Exchange Solution	Optional Data Exchange Solution – second most preferred by stakeholders**
Network User Registration*	Network User	Transmission System Operator	Private	Recommendation – Interactive	Recommendation - Interactive
Network User Registration to Auction Office*	Network User	Auction Office	Private	Recommendation – Interactive	Recommendation - Interactive
Approved Network Users*	Auction Office	Registered Network User	Private	Recommendation – Interactive	Recommendation - Interactive
Surrender Capacity Rights	Registered Network User	Auction Office	Private	Interactive	Document Based
Offered Capacity	Auction Office	Registered Network User	Private	Interactive	Document Based
Capacity Bid	Registered Network User	Auction Office	Private	Interactive	Document Based
Allocated Capacity	Auction Office	Registered Network User	Private	Interactive	Document Based
Aggregated Auction Results	Auction Office	All	Private	Interactive	Document Based
Surrendered Capacity Sold	Transmission System Operator	Registered Network User	Private	Document Based	Interactive
Reverse Auction Bid	Registered Network User	Auction Office	Private	Interactive	Document Based
Allocate Reverse Auction Results	Auction Office	Registered Network User	Private	Interactive	Document Based
Secondary Market Sales	Registered Network User	Transmission System Operator	Private	Interactive	Document Based
Secondary Market Sales	Transmission System Operator	Registered Network User	Private	Interactive	Document Based

*Data exchange solution is not mandatory but recommended and has to be negotiated between the TSO and NU
**Neither the offering nor the format of an Optional Data Exchange Solution is mandatory

Questions and Answers

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Data Exchange Profiles
SNAM & ENI

Questions and Answers

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6. Integrated Data Exchange

Pim Van Der Eijk

Consultant

Introduction – Integrated Data Exchange

Integrated Data Exchange:

➢ Overview

➢ Use Cases

➢ Goals

➢ Next Steps

Introduction – Integrated Data Exchange

Integrated Data Exchange:

Link to Profile:

Data Exchange types

> **Components for Data Exchange**

- Data content (**WHAT**) → Business related
- Data Network → Internet
- Data protocol (**HOW**) → IT technology

> **Types of Data Exchanges –** INT NC Art 21 (1)

- Document based (AS4 – Edig@s XML)

The data is wrapped into a file and automatically exchanged

- **Integrated (HTTPS – SOAP - Edig@s XML)**

The data is exchanged directly between two applications

- Interactive (web browser)

The data is exchanged interactively via a browser

Data Exchange types

> **Integrated Data Exchange is most appropriate for:**

- Real-time communication
- Time critical transmissions
- Authentication
- Confidentiality (commercially sensitive information)
- SOAP communication
- High volume and high frequency <u>queryable</u> data
- Reliable messaging
- 24/7 availability (server side)

Integrated Data Exchange

Process

- ITC KG Workshop, Case Studies presented by ENAGAS, GTS and SNAM

- Analysis of Data Exchanges defined in ENTSOG Business Requirements Specifications (BRS)

- Use Cases categorised; requirements and technical options summarised

Outcome

- Integrated Data Exchange Usage Profile, version 0.1, 2016-03

- Regular Updates following 2016/17 ITC KG meetings

- Version 0.9 presented to Prime Movers 29 March 2017

- Version 0 published 30 April 2017

Integrated Data Exchange Use Case Classification

Integrated Data Exchange Classification:

1. Common Profiling

2. Public information, anonymous users (Profile A)

3. Public information, registered users (Profile B)

4. Private information, authenticated users (Profile C)

Main Goals for Integrated Data Exchange Usage Profile

Support all three Use Cases:

Focus:
- For public information: ease of use
- For private information: secure access (ENISA recommendations)
- Support EDIG@S-XML

Interoperability, ease and consistency of implementations

Support non-addressable, anonymous clients

Modular structure:
- Common Part plus use-case specific extensions

Integrated Data Exchange Common Profiling

Base Choices:

Support for IPv4 and IPv6

HTTP 1.1 and TLS 1.2 for new applications

Synchronous Request-Response MEP

SOAP 1.2

Simple SOAP envelopes only
- SOAP-with-attachments, MTOM (under consideration)

SOAP+WSDL
- No WS-Addressing or other SOAP headers
- No WS-RM
- No UDDI

For Consideration (e.g. in future updates)
- Attachments (e.g. retrieve PDF version of a contract)

Integrated Data Exchange Use-Case Specific Profiling

Profile A: Public Anonymous
- Common Profiling only (no extensions)

Profile B: Public, Registered
- Common Profiling + WS-Security UsernameToken extension

Profile C: Private, Authenticated
- Common Profiling + WS-Security X.509 Token, Signing and Encryption extension
- Details (keys, algorithms etc.) re-used from AS4 Usage Profile

For Consideration (e.g. in future updates)
- Option to use WS-Security SAML-token Profile

Questions and Answers

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Integrated Data Exchange
GTS

Transparency

- *COMMISSION DECISION of 10 November 2010 amending Chapter 3 of Annex I to Regulation (EC) No 715/2009 of the European Parliament (2010/685/EU)*

- *3.1.1. F o r m   o f   p u b l i c a t i o n*

- *Transmission system operators (TSOs) shall provide all information referred to under paragraph 3.1.2 and paragraph 3.3(1) to 3.3(5) in the following manner:*

> on a website accessible to the public, free of charge and without any need to register or otherwise sign on with the transmission system operator;

> on a regular/rolling basis; the frequency shall be according to the changes that take place and the duration of the service;

> in a user-friendly manner;

> in a clear, quantifiable, easily accessible way and on a non-discriminatory basis;

> in downloadable format that allows for quantitative analyses;

> in consistent units, in particular kWh (with a combustion reference temperature of 298,15 K) shall be the unit for energy content and m3 (at 273,15 K and 1,01325 bar) shall be the unit for volume. The constant conversion factor to energy content shall be provided. In addition to the format above, publication in other units is also possible;

> in the official language(s) of the Member State and in English.

- *This Decision shall enter into force on the 20th day following its publication in the Official Journal of the European Union. It shall apply from 3 March 2011. Done at Brussels, 10 November 2010.*

Transparency

- *Characteristics for the service*

> on a website accessible to the public, free of charge; (Note: it would be recommended if the source website is identifiable)

> on a regular/rolling basis;

> in a user-friendly manner;

> in a clear, quantifiable, easily accessible way and on a non-discriminatory basis;

> in downloadable format that allows for quantitative analyses.

- *Information to disclose:*

Information													
Transparency information group	Information	F	I	BH	TN	TX	NWP Segm	Segm. Aggr	Three Minus Rule	Publ. Level	Update Freq.	History	Future	Remark
Capacity	Available capacity	X	X	X	X	X	-	-	-	day	Weekly	3 y	5 y	Border points
	Booked capacity	X	X	X	X	X	-	-	X	day	Weekly	3 y	5 y	Border points
	Total capacity	X	X	X	X	X	-	-	X	day	Weekly	3 y	5 y	Border points
	Longterm available capacity	X	X	X	X	X	-	-	-	year	Monthly	-	10 y	Border points
Nominations	Nominations and Re-nominations	X	X	X	X	X	-	-	X	hour	2x day	-	5 d	Border points
	Confirmations	X	X	X	X	X	-	-	X	hour	2x day	-	5 d	Border points
Metering	Real time flow + Hs	-	-	-	-	-	-	-	X	hour	Hourly	1 m	-	Industry, Storage, Import Export
Interruptions	Booked capacity	X	X	-	X	X	-	-	X	hour	Daily	3 y	-	Border points
	Total capacity	X	X	-	X	X	-	-	X	hour	Daily	3 y	-	Border points
	Nominated quantity	X	X	-	X	X	-	-	X	hour	Daily	3 y	-	Border points
	Confirmed quantity	X	X	-	X	X	-	-	X	hour	Daily	3 y	-	Border points
	Allocated quantity	X	X	-	X	X	-	-	X	hour	Daily	3 y	-	Border points
	Initial interrupted quantity	-	-	-	X	X	-	-	X	hour	Daily	3 y	-	Border points
	Initial interruptible quantity	-	-	-	X	X	-	-	X	hour	Daily	3 y	-	Border points
	Initial nominated quantity	-	-	-	X	X	-	-	X	hour	Daily	3 y	-	Border points
	Interrupted quantity of last nomination	-	-	-	X	X	-	-	X	hour	Daily	3 y	-	Border points
	Interruptible quantity of last nomination	-	-	-	X	X	-	-	X	hour	Daily	3 y	-	Border points
Allocations	Allocations	X	X	X	X	X	-	-	X	hour	Daily	3 y	-	Border points
	Provisional allocations	X	X	X	X	X	-	-	X	hour	Daily	3 y	-	Border points

Definitions

- ***When a web service is published, the information model behind it is important***

> Definitions of the terms used, e.g.

- **Point**: A by regulation defined relevant point. The physical representation is used:
- **ConnectionPoint:** By regulation marked as relevant point, part of a network and administrative required (non-physical), for entering and exiting a balancing zone.

> Public published information model

- ***The WSDL and/or XSD's must be published***

- ***Caution: Don't make the service too big!***

> Keep the service restricted for a specific information purpose, e.g. transparency

Transparency: Example Information model
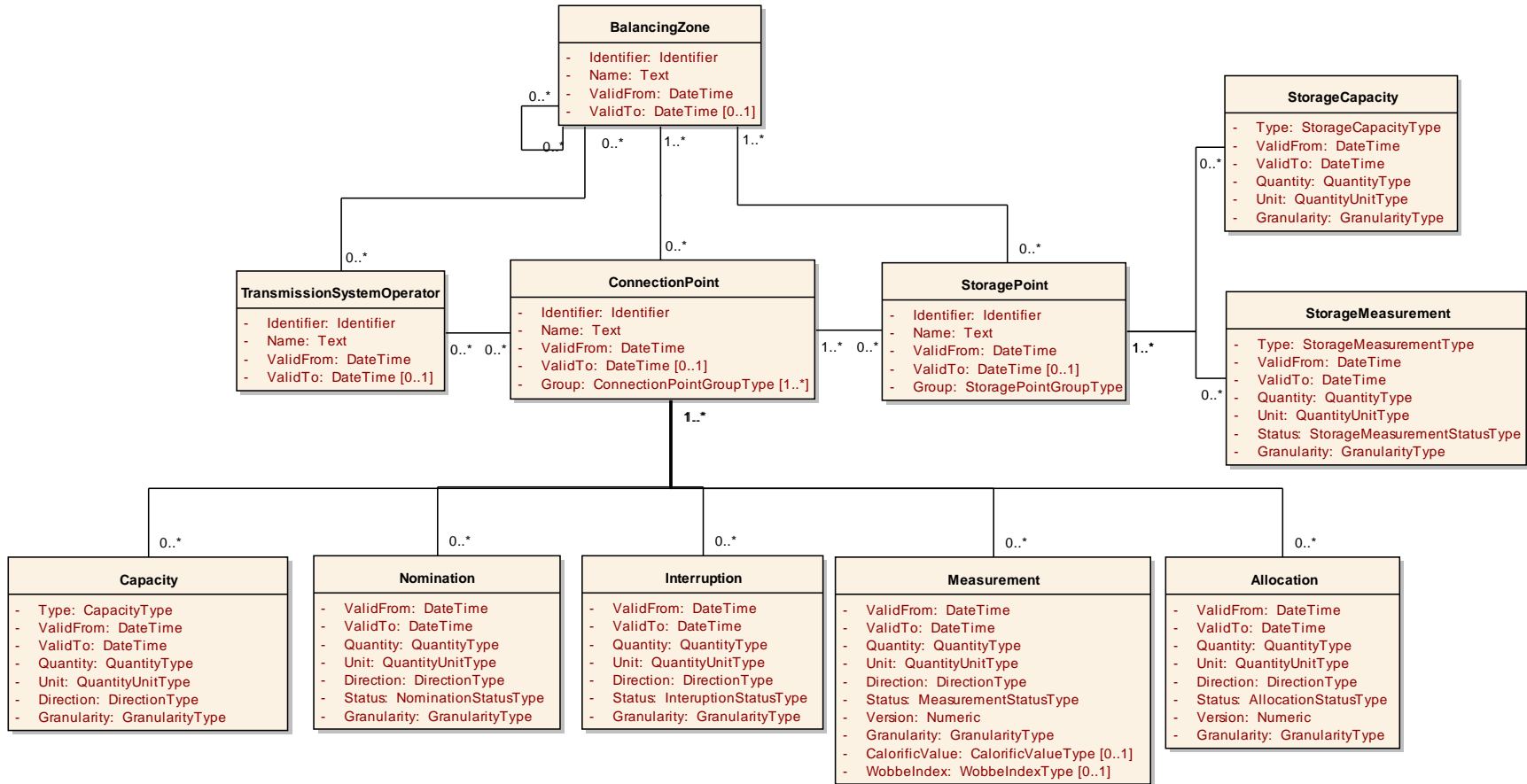
Transparency: Example Publish ConnectionPoint
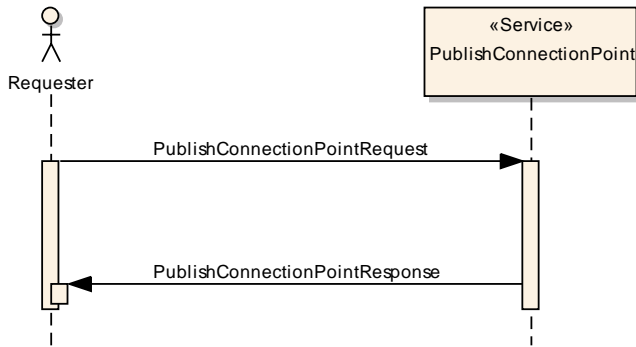
Service Definition	
Description	Publishes a list of available ConnectionPoints
Parameters	ValidFrom, ValidTo, BalancingZone (Optional)
Normalized Name	PublishConnectionPoint

Constraints
• Valid Period is 18 month ahead and 60 months back (starting from 1-1-2011)
• When no ValidFrom and/or ValidTo is specified the minimum ValidFrom and/or maximum ValidTo will be used by the service provider.
• For aggregated Balancingzones only the ConnectionPoints on the border of the aggregated BalancingZone will be related to the aggregated BalancingZone.
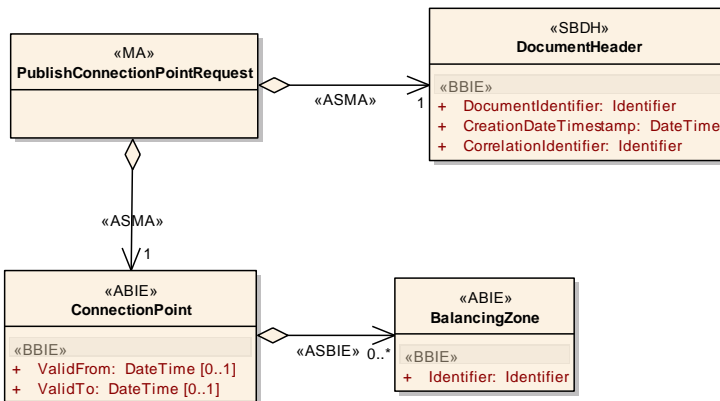
inbound
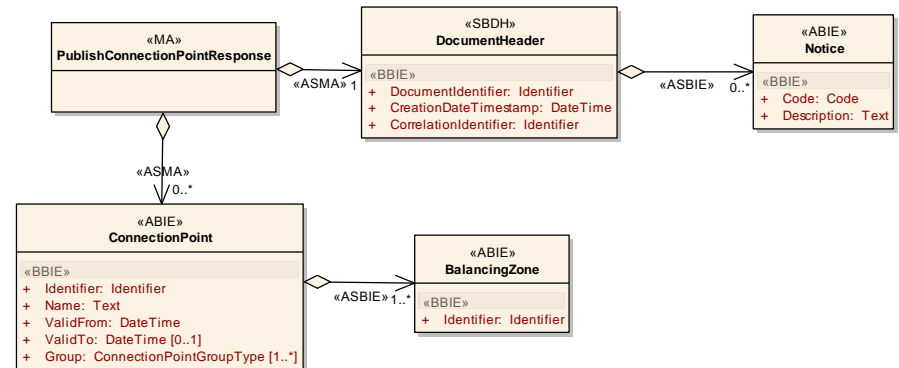
outbound

What are "Web Services"?

- ### *Implementation technology for SOA application development*

> The term "Web Services" can be confusing. It is, unfortunately, often used in many different ways. Often the cause of this confusion is the term "services" that has a different meaning than the term "Web Services." **The term Web Services refers to the technologies that allow for making connections. Services are what you connect together using Web Services.** The combination of services—internal and external to an organization—make up a service-oriented architecture.

- ### *Collection of specifications from W3C and OASIS*

> W3C: SOAP, WSDL etc.

> OASIS: UDDI, WS-Security, WS-Federation, WS-Trust, WS-Reliability etc.

> XML is used in the wrapper, e.g. WSDL, headers, meta-data, etc.; but can also be the payload

- ### *Implementation*

> Mix and match specifications to suit one's need

> WSDL (WS definition), UDDI (WS directory) not mandatory

> Security and availability, measures must be taken to implement authentication, defence against misuse, etc.

Web services

- **SOAP**

> SOAP was originally part of the specification that included the Web Services Description Language (WSDL) and Universal Description, Discovery, and Integration (UDDI). It can also be used without WSDL and UDDI. The interaction is illustrated in the figure below.
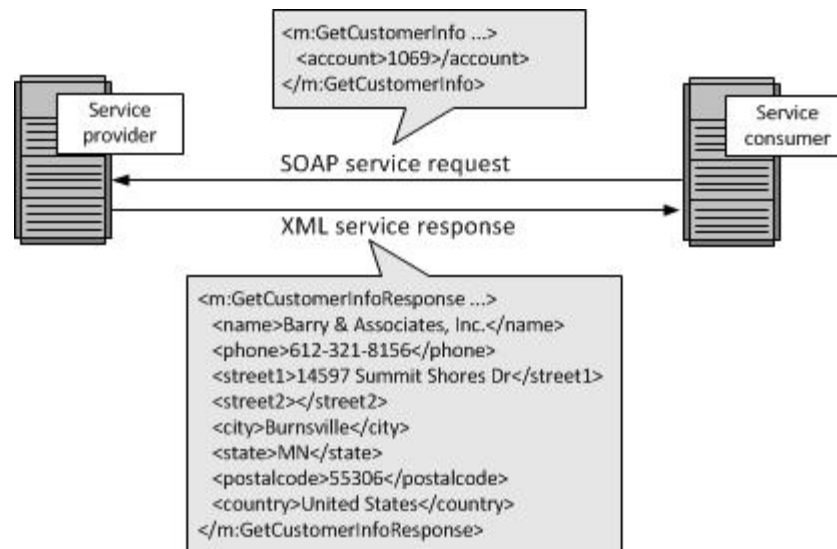
Web services

- ***Representation State Transfer (REST)***

> REST appeals to developers because it has a simpler style that makes it easier to use than SOAP. It also less verbose so that less volume is sent when communicating. The interaction is illustrated in the figure below.

> The Open Data Protocol (OData) is build on REST.

Web services

- ***JavaScript Object Notation (JSON)***

> While both SOAP and REST use XML for interchange, JavaScript Object Notation (JSON) uses a subset of JavaScript. This is illustrated in the figure below.

> The payload of an OData web service can also be JSON.
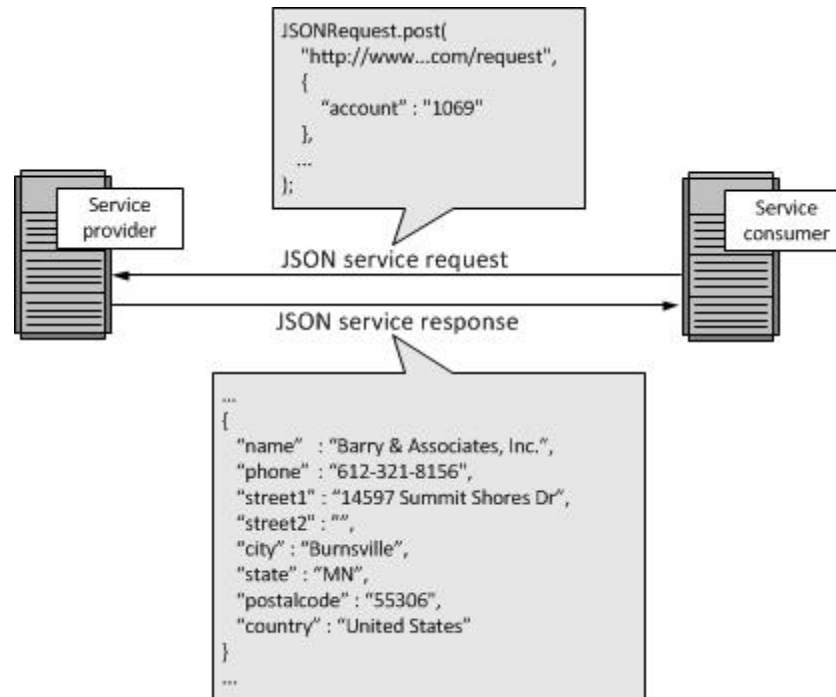
Interoperability

- *Defining HTTP/S-SOAP is not enough to make a web service interoperable*

- *Since there is not one definition of a "web service", additional specifications must be made between parties or communities*

- *The interface to a SOAP web service is captured in a WSDL (this could be seen as a web service API)*

> Payload is always XML, wrapped in a SOAP envelope, also XML

> Code can be generated (XSD elements/types to Java/C#... Classes)

> When the response on a request is a "well formed" XML, it can easily be further processed

> It is even possible to query a web service within Microsoft Excel

> Authentication must be implemented in a separate way: username/password, certificates

Conclusion

- *SOAP web services can be used for public available information, minimal security*

- *SOAP web services can be used in conjunction with authentication to provide specific content for a party*

  > Most parties use their own certificates to authorise users, username/password is not advisable to use

- *The information model and the web service descriptions & standardised EASEE-gas WSDL's must be made available*

- *SOAP web services should be standardised which makes it more efficient to use it within the gas market (to consume web services)*

- *BRS-es must clearly state which data exchange solution(s) is or are applicable*

- *ENTSOG profiles must be in line with the business requirements*

Questions and Answers

Agenda for today

2	**Opening**	**10:30-10:45**
3	**Data Exchange from EU Regulation 2015/703**	**10:45-11:00**
4	**Document Based Data Exchange - ENTSOG AS4 Usage Profile V3.5**	**11:00-11:45**
	Coffee Break	**11:45-12:00**
5	**Interactive Data Exchange – Introduction to the Profile**	**12:00-12:45**
	Member Presentation – SNAM & ENI	**12:45-13:00**
	Lunch Break	**13:00-14:00**
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	Coffee break	**15:00-15:15**
	Member Presentation - GAZ-SYSTEM	**15:15-15:30**
	Stakeholder Presentation – EGSSIS	**15:30-15:45**
7	**Public Consultation & Questions and Answers**	**15:45-16:15**
8	**Closing Remarks**	**16:15-16:30**

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Members Presentation
GAZ-SYSTEM

Questions and Answers

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Stakeholder Presentation
EGSSIS

Questions and Answers

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7. Next Steps & Public Consultation

Jackie Manning

Adviser System Operation
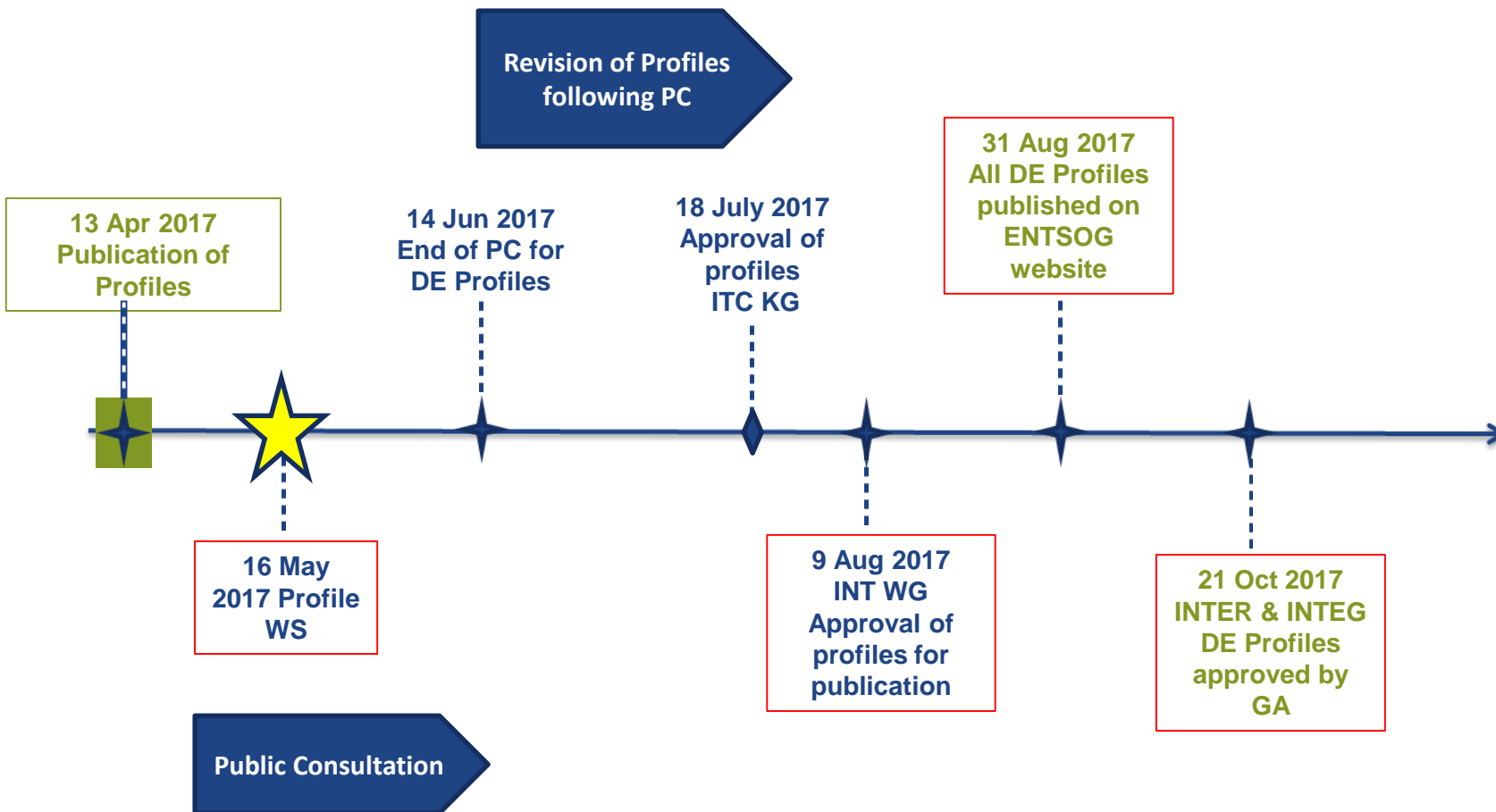
Jackie.manning@entsog.eu

Next Steps ENTSOG Usage Profiles

AS4 Usage Profile Rev_3.5, Interactive and Integrated Data Exchange Profiles Rev_0

- **Published 13 April 2017**

- **Profiles Workshop 16 May 2017**

- **Public Consultation(PC) to 14 June 2017**

- **PC Outcome and Feedback Integrated June/July 2017**

- **Publication end of August 2017**

Key Dates - Timeline for publication of DE Profiles

Revision of Profiles following PC

13 Apr 2017 Publication of Profiles

14 Jun 2017 End of PC for DE Profiles

18 July 2017 Approval of profiles ITC KG

31 Aug 2017 All DE Profiles published on ENTSOG website

16 May 2017 Profile WS

9 Aug 2017 INT WG Approval of profiles for publication

21 Oct 2017 INTER & INTEG DE Profiles approved by GA

Public Consultation

Data Harmonisation - Public Consultation

Introduction

ENTSOG welcomes all stakeholders' feedback on the existing AS4 Usage Profile, the Interactive and the Integrated Data Exchange Profiles that have been created as part of the Common Network Operation Tools (CNOTs). These documents are technical specifications that provide additional guidelines for Document Based, Interactive and Integrated Data Exchange Solutions. For interoperability and consistency, these additional guidelines are required to specify how the identified data exchange protocols are to be used in a harmonised way.

ENTSOG develops Common Network Operation Tools (CNOTs) based on the mandate provided by the following European Regulations:

Article 8 Paragraph 3(a) of Regulation 715/2009 states that ENTSO for Gas shall adopt common network operation tools to ensure coordination of network operation in normal and emergency conditions, including a common incidents classification scale and research plans.

Article 24 Paragraph 1 of the Regulation 2015/703 NC on Interoperability and Data Exchange Rules states that for each data exchange requirement under Article 20(2), ENTSOG shall develop a common network operation tool in accordance with Article 8(3)(a) of Regulation (EC) No 715/2009 and shall publish it on its website. A common network operation tool shall specify the common data exchange solution relevant for the respective data exchange requirement. A common network operation tool may also include business requirement specifications, release management and implementation guidelines.

Deadline for responses:
ENTSOG welcomes all stakeholders' feedback on the ENTSOG existing AS4 Usage Profile, the Interactive and the Integrated Data Exchange Profiles, created as part of the Common Network Operation Tools (CNOTs).

Stakeholders are asked to please respond to the following questions via an online response form **by 5.00pm (CET) on Wednesday 14th June 2017**.

Link to public consultation

Data Harmonisation - Public Consultation

Link to public consultation

Data Harmonisation - Public Consultation

Link to Data Exchange Usage Profile documents (under public consultation)

- INT0488-170213 AS4 Usage Profile_Rev_3.5

- INT1072-170221_Interactive Data Exchange Usage Profile_Rev_0

- INT1073-170221_Integrated Data Exchange Usage Profile_Rev_0

Link to consultation page on ENTSOG webpage

Data Harmonisation - Public Consultation

Questionnaire:

Consultation Questions

Interactive Data Exchange Usage Profile:

1. Will the Usage Profile support the harmonised implementation of Interactive Data Exchanges?

   Please provide any benefits, draw backs or other suggestions regarding the Usage Profile below:

Integrated Data Exchange Usage Profile:

2. Will the Usage Profile support the harmonised implementation of Integrated Data Exchanges?

   Please provide any benefits, draw backs or other suggestions regarding the Usage Profile below:

AS4 Usage Profile:

3. Do you have any questions or suggestions to the proposed version update to the AS4 Usage Profile?

   Please describe below:

Link to consultation page on ENTSOG webpage

How to respond to the public consultation?

Instructions:

➢ To assess the overall response <u>we need at least the name of responding organisation</u>, therefore anonymous responses cannot be taken into account (does not preclude anonymous publication)

➢ <u>Contact details are necessary</u> in case clarifications are needed and should be included in the questionnaire.

➢ Confidentiality: **ENTSOG reserves the right to publish all of the individual responses to the public consultation** (with exception of personal information) **unless you indicate otherwise** in the questionnaire.

Deadlines for Public Consultation

Public Consultation:

17 May 2017 to 14 June 2017

Deadline for taking part in the Public Consultation:
14 June 2017

Link to Public Consultation

Link to Usage Profiles

Please submit your response by 14 June 2017!

Any Questions/comments?

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8. Closing

Jef De Keyser

Interoperability Subject Manager

Jef.Dekysers@entsog.eu

Thank You for Your Attention

Hendrik Pollex
System Operation
Business Area Manager

Jef de Keyser
Subject Manager
System Operation

Jackie Manning
Adviser
System Operation

Pim Van Der Eijk
Consultant

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