

AS4 Q&A - Session

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Agenda



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- ***Introduction***
- ***Questions from IPSYSTEMS (HU)***
- ***Answers by ENTSOG***
- ***Experience during the implementation of AS4***
 - Fluxys
- ***Automated configuration platform***
- ***Discussion on open topics***



Questions from AS4 stakeholders



Feedback from IPSYSTEMS (Hungary)

- *Individual Server Security Policy makes deployment slow.*
- *More transparency or dedicated contact persons are recommended, who can act, respond quickly and could allocate the necessary resources to proceed with approvals or required in-house developments.*
- *Process of message security decoding despite suggested steps are in many cases not compliant.*
- *Not clear, why many members do not choose the recommended steps.*
- *ENTSOG conformance profile are not fully followed by the TSOs. It is not transparent to what degree members are following the recommendations.*
 - *Suggestions to track down "mismatches"*
 - *Time and financial resources could be saved*

Answers from ENTSOG

ENTSOG AS4 profile conformance

- The ENTSOG AS4 Profile aims to help implementations of AS4 by TSOs and their counterparties. It uses the words **MUST**, **SHOULD** etc. to indicate conformance requirements on implementations.
- ENTSOG fully agrees that conformance to the ENTSOG AS4 Profile *reduces cost and time of implementation*, not just for a party but also for its counterparties. This is the very reason why the profile was created.
- Following the profile also makes sure appropriate *security* is used.
- ENTSOG strongly encourages users to deploy a well-tested, conformant ENTSOG AS4 solution.
- ENTSOG does not certify or recommend particular solutions. However, there is a choice of conformant AS4 implementations that are known to fully and successfully implement the profile.
- ENTSOG continues to maintain and explain/clarify the profile, and to address any issues and change requests from TSOs

Answers from ENTSOG

ENTSOG AS4 profile conformance

- There is no independent test service for the ENTSOG AS4 profile yet. However, the ENTSOG AS4 profile is very similar to the current version of the European Commission's eDelivery AS4 Profile
 - <https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/eDelivery+AS4>
 - Security parameters and other core features of the eDelivery profile are identical to the AS4 profile from ENTSOG
- The European Commission has a conformance testing service for eDelivery:
 - <https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/eDelivery+Conformance+testing>
- A list of eDelivery AS4 conformant implementations is available from:
 - <https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/e-SENS+AS4+conformant+solutions>
- The Drummond Group does general AS4 interoperability certification
 - <https://drummondgroup.com/as-certified-products-list/>

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Answers from ENTSOG

ENTSOG AS4 profile conformance

- The eDelivery AS4 profile and conformance testing are an initiative of the Connection Europe Facility (CEF) initiated by the European Commission
 - CEF supports the development of high performing, sustainable and efficiently interconnected trans-European networks in the fields of transport, energy and digital services
 - ENTSOG and CEF agreed to start collaborating with CEF on AS4 in 2017
- The next version of the eDelivery AS4 profile will be modularised
 - A “Common Profile” module will cover a pure subset of ENTSOG AS4
- The conformance testing platform will adapted accordingly and have:
 - A test suite covering the Common Profile
 - A separate test suite covering additional ENTSOG enhancements (under discussion with CEF)
- This will make it easier for TSOs and solution providers to test conformance



Questions from IPSYSTEM (Hungary)

Communication regarding AS4 profile changes

- *Would it be possible to brief stakeholders how ENTSOG is communicating AS4 recommendation changes towards the TSOs?*
 - *The communication would not be restricted towards the TSOs only, but there would be a communication in stakeholder level.*
 - *Enabling IT suppliers of AS4 to be better aware of TSO approaches, who are not direct clients, as IT providers have to test their solution with NNOs that might have a different approach towards AS4.*

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Answers from ENTSOG

Communication regarding AS4 profile changes

- The communication of the AS4 profile changes was not limited to TSOs only
- The releases are available on the ENTSOG [website](#)
- Plan to announce the changes via newsletter
- The ITC KG will revise the distribution list of AS4 stakeholders
- ENTSOG is considering the possibility to add a subscription link on ENTSOG's website for addition to the AS4 stakeholder distribution list
- ENTSOG contact information for AS4 is available at <https://www.entsog.eu/publications/data-exchange>

Questions from IPSYSTEM (Hungary)

Release plan of the AS4 profile

- *Is there an AS4 recommendation release plan at ENTSOG? If there is one, could it be extended to the stakeholders, as well?*
 - *It would indicate the date of the upcoming release well ahead*
 - *It would be a convenient way to coordinate work and information exchange between TSOs and IT Service providers*
 - *It would also give time for the development phase.*
 - *IT providers could adapt new changes faster than waiting for TSOs request*

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Answers from ENTSOG

Release plan of the AS4 profile

- There is an overall work plan for the ITC KG, but a separate formal release plan for the AS4 profile is not available
- Changes to the profile were driven by change requests and clarifications which led to minor changes within the AS4 profile.
- Overall, the profile is stable and in “maintenance mode” with no major changes planned
- The last updates for AS4, still in early implementation by TSOs, were addons not affecting core features of AS4:
 - Certificate Update messages (ebCore AU)
 - Automated Configuration Management
- A release plan will be considered if any major releases are planned

Questions from IPSYSTEM (Hungary)

“Tightening up” the AS4 profile

- *The encryption method algorithm is only recommended by ENTSOG*
- *We met an inconsistency because of marking a function only with RECOMMENDED*
- *A list about the recommended types would be useful or at least one option should be marked with MUST to have consistency in every section.*
 - *Some member states implemented ENTSOG AS4 recommendation as mandatory, some deviated from the recommendations. These various approaches cause risks.*
 - *The lack of unified approach could cause implementation inconsistencies which could risk the operation of TSO’s reliable communication. We believe in some cases it would be reasonable if ENTSOG recommendations would be stricter and not recommended only but required.*



Answers from ENTSOG

“Tightening up” the AS4 profile

- The ITC KG agreed to investigate on the possibility to tighten up the options for the AS4 profile
- Some important parameters (e.g. encryption) should not give too much room for interpretation and huge choice of solutions
- The ITC KG agreed to start working on a list of parameters which will be considered for this “tightening up” approach
- Likely early candidates are the three key transport algorithms used in XML encryption

Questions from IPSYSTEM (Hungary)

Standardised configuration data

- *The exchange of Configuration data regarding AS4 is always a time-consuming and not easy part of building communication.*
 - *During setting up many testing communications we noticed that every partner has their own sample of a Connectivity Sheet for sharing their configs. It would be great to have a standard sheet which is based on ENTSOG AS4 profile.*

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Answers from ENTSOG

Standardised configuration data

- The ITC KG in cooperation with EASEE-Gas is considering the approach of implementing a configuration repository
- In theory the parameters from this platform could be exported as a configuration sheet, this option is under consideration
- Even better, the parameters could be exported in a structured (XML) format, that users can import and deploy in their AS4 systems
- The configuration repository will be explained in the following chapter



Experiences while implementing AS4

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Feedback from Fluxys (Belgium)

Fluxys has faced following issues during the implementation of AS4

- Deviation regarding the values of AS4 “service” information (and other information, like “role”)
- Generally spoken message settings are “complex”
- Deviation regarding the values for AS4 Service Name (A06/A07/A11 Edigas 5 – A02/A03 Edigas 4)
 - OGE, Gascade & GTS only support 1 service name per agreement reference
- Deviation regarding the values for AS4 Document Type (01G, 26G, ANC,...)
 - OGE, Gascade & GTS only support 1 service name per agreement reference



Configuration Repository

Complementary Specifications (1)



OASIS ebCore Agreement Update (optional)

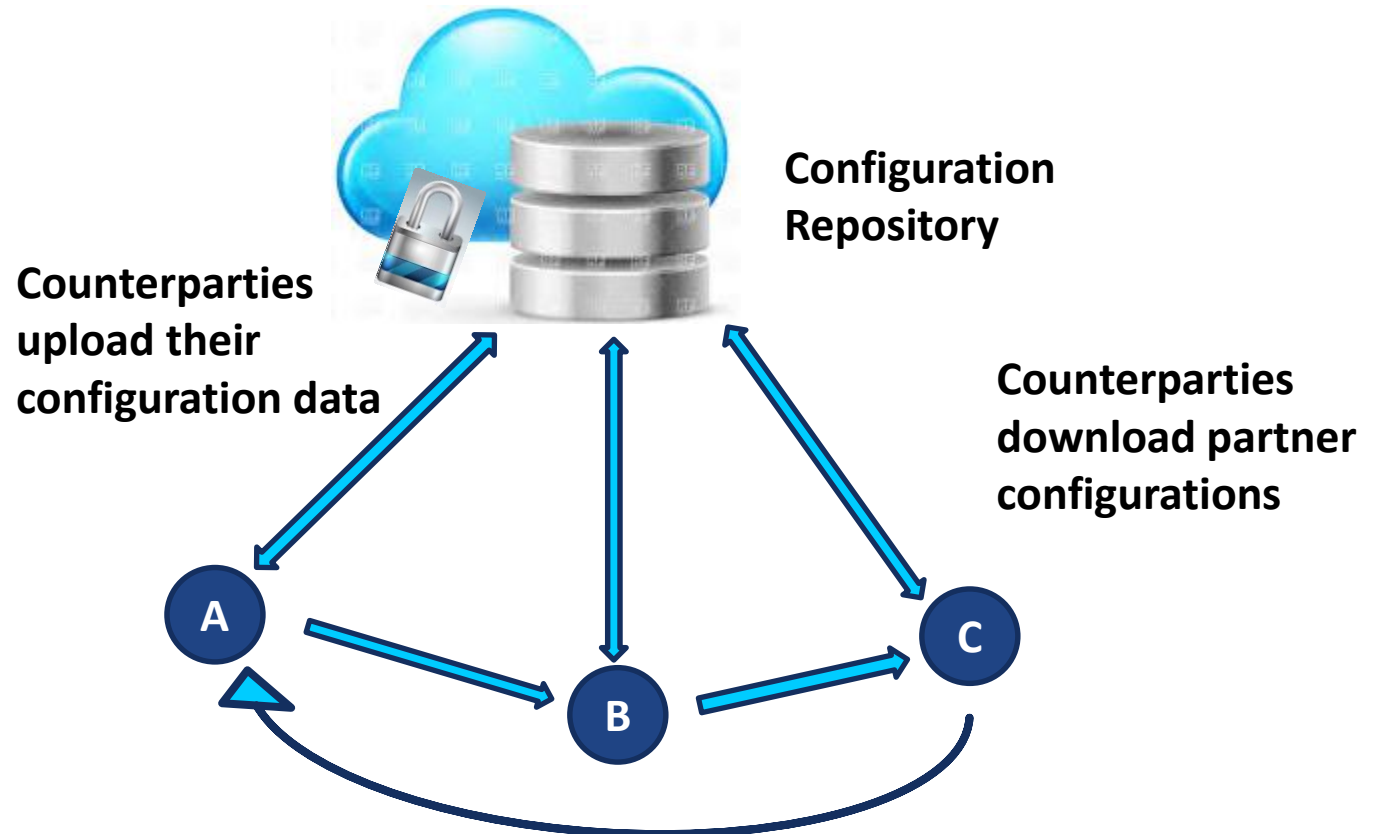
- Solution for Certificate Updates between parties
- XML format and exchange messages allow (partial) automation
- Vendor support required since ENTSOG Usage Profile Rev3

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)



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

EASEE-Gas

- Purpose: The association's main purpose is to develop and promote common business practices (CBPs) to simplify and streamline the business processes between all the gas industry players, leading to a more efficient and effective European gas market.
- i.a. development and maintenance of the edig@s message format
- <https://easee-gas.eu/>
- Cooperation agreement between EASEE-Gas and ENTSOG in place since 2014
- EASEE-Gas is currently considering and investigating the hosting of the AS4 configuration repository



Discussion





Thank You for Your Attention

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