



ENTSOG IT and Communications Roadmap
**(A Plan for the Coordination and Harmonization of Solutions for the
Electronic Exchange of Data in EU Markets for Gas)**

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1.0 Background:

Considering a number of factors such as the growing need for TSOs to cooperate, the increasing number of products available to the market, an increase in transparency requirements and the opening up of gas markets with the associated growth in parties wishing to participate and one can see the rapid growth in the volume in electronic traffic required between parties as more and more data has to be exchanged. To ensure the interoperability between each party's IT systems there is a need to coordinate the development and implementation of shared data exchange formats and protocols as well as agreed principles as to how this data is treated.

In addition, the EU 3rd energy package places a requirement on TSOs to cooperate and to develop technical codes, including in the area of interoperability. The exchange of data is a fundamental aspect in all areas of cooperation. The development of agreed common standards and protocols for exchanging data is a key enabler in facilitating a European market for gas and enhancing interoperability amongst interconnected networks.

The TSOs have a key role to play in this area. For data formats and exchange protocols to become "common" requires TSOs to agree to adopt them. Adoption can be facilitated if processes and structures are put in place that seeks to identify, adopt and implement agreed solutions.

ENTSOG's role in the above can be to have a coordinated approach by creating a handbook that collates these agreed solutions. The purpose of this handbook would be to act as a reference guide to aid interoperability in this area. Such an approach has been employed by electricity TSOs via UCTE¹ (now part of the ENTSO-E) and is used to support the technical operation of the European interconnected electricity grid.

Finally, no stakeholder body is currently concerned with developing a common approach as to

- what data and when should be exchanged,
- who should see it and,
- what restrictions there are to its use.

Such areas are currently dealt with in a piecemeal fashion through the individual network codes of Member States, bilateral contracts between parties and in EU Regulations listing some minimum transparency requirements to encourage market liberalisation. To ensure the creation of such a common approach requires the Industry to develop a series of agreed principles with respect to the publication and exchange of data.

¹ UCTE = Union for the Co-ordination of Transmission of Electricity

2.0 ENTSOG IT and Communications Roadmap

2.1. Aim

The aim of the ENTSOG IT and Communications Roadmap (Roadmap) is to develop a coordinated and agreed approach amongst stakeholders to move towards the goal of achieving greater coordination and harmonization of IT and communication matters which will lead to implement agreed solutions regarding the electronic exchange of data.

2.2 Deliverables:

To achieve its aims, the Roadmap proposes a number of key deliverables to facilitate the goal of streamlining the number of technical solutions used in European gas markets for the electronic exchange of data:

- Statement of Principles for the Exchange and Publication of Data (Statement)
- *Creation of a Technical Solutions Adoption and Implementation Group(Group)*
- *Process and scope for developing a Data & Solutions handbook(Handbook)*
- *Processes for Developing Technical Solutions*
- *Processes for the Adoption and implementation of technical Solutions*
- Resource requirement

2.2.1 The ENTSOG Statement of Principles for the Exchange and Publication of data

Objective

The aim is for ENTSOG to articulate its own set of principles for the exchange and publication of data that are aligned to the 3rd legislative package requirements.

The Statement shall contain a series of agreed principles regarding the provision and use of data between relevant parties to enhance interoperability between operators and to facilitate the development of a European market for gas.

These principles shall be used as a guide in the development of the Interoperability Network Code and in the adoption of approved technical solutions for the exchange of data.

The Statement shall provide a basis for identifying what data should be published in the public domain, and what data should be shared amongst relevant parties.

Scope & Structure

The Statement shall cover areas such as criteria for data to be shared, duties to inform, and restrictions on TSOs on their use of data from their network users and from adjacent TSOs. It shall also deal with the need for processes that ensure confidentiality and commercial sensitivity in data transfers.

The Statement shall contain the following sections:

- General Principles - This shall deal with principles that universally apply to the provision of all data items.

In this section it shall be stated that, in order to both aid transparency and facilitate interoperability between the IT systems of operators and market participants, ENTSOG shall put in place structures and processes that progress the streamlining of solutions for the electronic exchange of data.

Any solution adopted by ENTSOG shall have an implementation plan and duration of applicability.

The data transfers should be affected in the manner specified by the Network Codes prepared by ENTSOG ensuring confidentiality and commercial sensitivity.

The general duties and obligations of TSOs and network regarding the use of the adopted solutions for electronic data exchange shall be mentioned.

- Public Data - This section shall be about the publication of data to the public domain. This will be aligned to the 3rd package requirements.
- Interoperability Data - This shall be concerned with the exchange of data restricted to the relevant parties for the purpose of facilitating interoperability between the different parties within a network and to ensure the efficient operation of connected TSOs.

Relevant parties will range from confidential bilateral exchanges up to information shared to all registered Users of a System. It shall be concerned with the criteria of data that should be exchanged as well as how this data should be treated and how it should be exchanged.

Management & maintenance

The Statement shall be approved by ENTSOG's Board.

The latest approved Statement shall be owned by the appropriate ENTSOG Advisor as identified by the ENTSOG General Manager. The Advisor shall be responsible for the change management of the document and the coordination of the processes for updating and the inclusion of new content.

2.2.2 Technical Solutions Adoption and Implementation Group

Objective

ENTSOG shall create the Group responsible for the formal adoption of any proposed solution for inclusion in the Handbook. The Group shall be chaired by the ENTSOG Advisor responsible for the Handbook.

Scope

The Group shall be concerned with whether a proposed solution facilitates the aims of the ENTSOG's Statement. The Group shall also consider practical aspects of its adoption and implementation including the date from which the solution is formally included in the Handbook.

2.2.3 Data & Solutions Handbook

Scope

Technical solutions adopted by ENTSOG shall be contained in a single document known as the ENTSOG Data & Solutions Handbook (Handbook). The Handbook shall contain the sole solutions officially recognized by ENTSOG.

Process

ENTSOG Group shall develop the scope of the Handbook and the processes for detailing how to add to, or change its contents.

The Handbook shall contain additional items such as a list of agreed data types to be exchanged and published, as well as a mapping of data types and principles with related technology standards.

Management and Maintenance

The Handbook shall be approved by ENTSOG's Board. The latest version of the Handbook shall be electronically available on the public website of the ENTSOG.

The Handbook shall be owned by the appropriate ENTSOG Advisor as identified by the ENTSOG General Manager. The Advisor shall be responsible for maintaining the document and managing the processes for updating and the inclusion of new content.

2.3 Processes for Developing Technical Solutions

There will be a requirement for new IT solutions to be developed and existing ones updated.

Solution Development within ENTSOG

These will typically be for solutions involving the exchange of data impacting TSOs only. If such an internal development requirement is identified then the solution can be developed by technical experts within ENTSOG, supported as required by the Group.

Solution Development External to ENTSOG

IT solutions for data exchange usually have a significant impact on all stakeholders. It is therefore important that all stakeholders have an equal opportunity to be involved in the development of any solutions.

ENTSOG Group shall work in close cooperation with other European stakeholder bodies to identify suitable common solutions for the exchange of data, when there is such a need.

Existing solutions or standards, which are implemented with good experience, shall be regarded with high priority.

All proposals from outside ENTSOG shall be subject to ENTSOG adoption process.

2.4 Processes for Adoption and Implementation of Technical Solutions

The Group shall consider the practical requirements concerning the implementation of proposed solutions, such as structures required and operational aspects.

Additional consultation shall be held with stakeholders to seek their views and perspectives of any proposed solution prior to adoption. Conditions for Adoption shall include:

- Does the proposed solution facilitate the aims of the ENTSOG Statement?
- Have stakeholders been properly consulted and their views considered?
- Has the operational requirements been considered prior to adoption, including associated costs, resources and structures. Has this been factored into any proposed implementation timescale?
- Is the solution already operational in the gas market with a European wide implementation?

Implementation of Adopted Solutions

The adopted solutions recorded in the Handbook are the officially recognised solutions of ENTSOG and as such there will be an expectation that TSOs should seek to adopt these solutions at the earliest practicable opportunity.

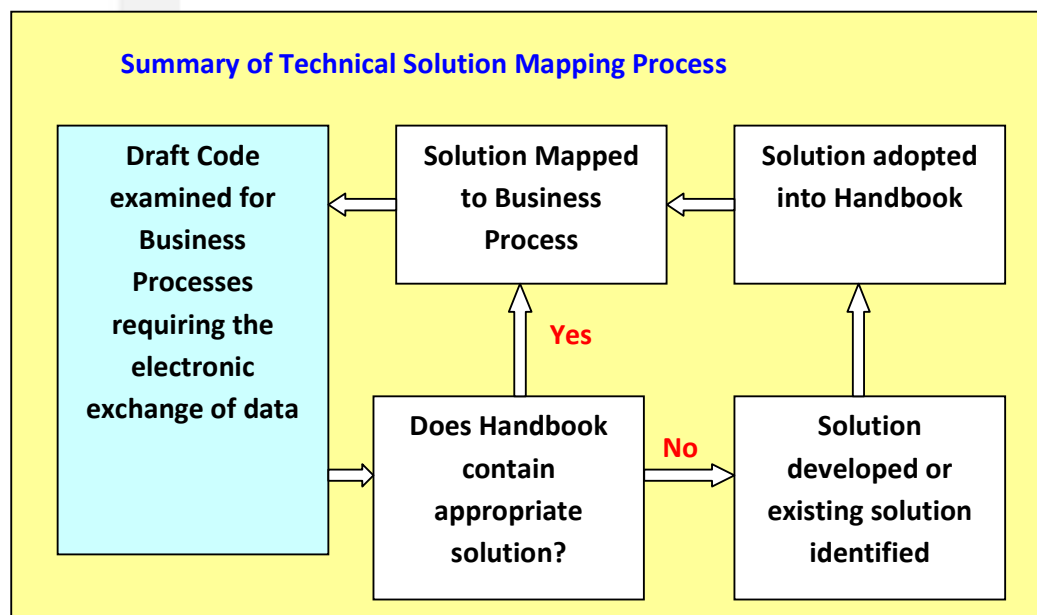
The Handbook shall also contain any relevant technical solutions (such as the data format or exchange protocol) contained in developed Network Codes that become binding.

Mapping Approved Solutions to Interoperability Network Code

The Group shall liaise with the relevant ENTSOG WG and review the Interoperability Network Code during its development. It shall identify any business processes within the Network Code that requires the electronic exchange of data and then map the relevant adopted technical solution to this process.

The Group shall have a subordinate and supporting role to the WG developing the Network Code.

The process for identifying the relevant solution is shown below.



It is noted that mapping of an adopted solution to the Network Code will be through a reference in the Handbook, which can also make reference to existing standards where applicable, thus ensuring the further development of the solution without the need to change the Code.

Where no relevant solution has been adopted

Where no relevant solution has been identified and adopted then the Group will externally communicate the need for a solution. This will be discussed as part of the consultation process during the Network Code development.

Time based exceptions

The Group shall propose time based exceptions by some ENTSOG members, due to existing infrastructure and regimes of member states that delay the implementation for some TSOs.

Monitoring and Support

The Group shall also monitor the adoption of the approved solutions and provide support for implementation when asked.

3.0 Resource Requirement

ENTSOG members shall provide appropriate resources to support the associated task forces, groups and processes within the ENTSOG as well as contribute to the associated development of solutions and implementation processes performed by any multi-stakeholder organisation.