

CHAPTER VI – DATA EXCHANGE

The content of this document is subject to stakeholders' feedback before finalisation.

6. Introduction

- 6.1. General Requirements
- 6.1.1. General Provisions

This section of the Network Code aims to provide for the appropriate degree of harmonization of Data Exchange to support the completion and functioning of the European internal gas market, security of supply and appropriate access to the relevant information.

The Data Exchange Solution shall be restricted to the relevant business processes requiring the electronic exchange of data arising from the European network codes developed in accordance with regulation EC 715/2009.

6.1.2. Types of Data Exchange:

- Document based Data Exchange: Data will be exchanged wrapped into a file and automatically exchanged between the IT systems of the two communication parties.
- (ii) Integrated Data Exchange: Data are exchanged between two applications directly on the IT systems of both parties.
- (iii) Interactive Data Exchange: Data are exchanged interactively between a user and a web application of the counterparty via a browser.

The selection of the supported Data Exchange types for the different business processes will be defined in the ENTSOG Data Exchange Handbook (refer 6.2) of the corresponding Network Codes.

- 6.2. The ENTSOG Data Exchange Handbook
 - (i) The "ENTSOG Data Exchange Handbook" hereafter known as the Handbook shall be issued by ENTSOG, as timely revised in accordance with the change process described in this Code.
 - (ii) The TSOs and relevant communicating counterparties shall take reasonable endeavours to comply with a provision of the Handbook.
 - (iii) The latest two approved versions of the Handbook shall be publicly available on the ENTSOG website.
 - (iv) ENTSOG will revise the Handbook periodically after Public Consultation of Market Participants and according to new or changed requirements of Data exchange.



- (v) With exception of errors and new network code data exchange requirements, the number of changes to the Handbook will be limited to 2 revisions per calendar year.
- 6.3. Data Network

The Internet shall be used as network for all data exchange as specified in point 6.1.2. Technical details shall be as recorded in the Handbook.

- 6.3.1. Security requirements and responsibilities
 - (i) Each party is responsible for implementing appropriate security measures to prevent unauthorised access of their IT infrastructure.
 - (ii) Specific security recommendations will be defined in the Handbook for the corresponding data exchange types, if applicable.
- 6.3.2. Availability
 - (i) TSOs shall install the necessary systems to guarantee that no single point of failure will cause an unavailability of the Data Exchange. This requirement also applies up to the network connection(s) with the Internet Service Provider(s).
 - (ii) The TSO's system availability shall not be based on the underlying availability of Public Internet and interconnections between Internet Service Providers.
 - (iii) TSOs shall take all reasonable endeavours to obtain the appropriate services and support from their Internet Service Provider(s).
 - (iv) Recommendations for best practices for unavailability data exchange system for planned IT maintenance shall be described in the Handbook. However TSOs shall take all reasonable endeavours to keep the downtime to a minimum.
- 6.4. Data Exchange solutions
- 6.4.1. Document based Data Exchange:
 - (i) Protocol: AS4 shall be used as data exchange protocol. Technical details shall be as recorded in the Handbook.
 - (ii) Data Content Format: Edig@s-XML refer to the Handbook for the corresponding Business Processes/Network Codes for the data content definitions of the data files.
- 6.4.2. Integrated Data Exchange:
 - (i) Protocol: HTTP/S-SOAP. For technical details refer to chapter Integrated Data Exchange protocol of the Handbook.
 - (ii) Data Content Format: Edig@s-XML Refer to the corresponding Business Processes/Network Codes in the Handbook for the data content definitions.



6.4.3. Interactive Data Exchange:

- (i) Protocol: HTTP/S For technical details refer to chapter Interactive Data Exchange protocol of the Handbook.
- (ii) Data Content Format: Data exchange content is business process dependant. Refer to the corresponding Business Processes/Network Codes in the Handbook for the data content definitions.

6.5. IMPLEMENTATION SCHEDULE

- (i) TSOs shall make available the Data Exchange solutions according to the schedules imposed by the different Network Codes for which Data Exchanges are required.
- (ii) For communications between local counter parties and TSOs, a different implementation schedule can be agreed according to the local regulations or, with approval of the local NRA, as long as the existing communication solution is compatible with the business requirements of the new network codes.

6.6. PROCEDURE FOR MANAGING BUSINESS PROCESSES

Communication requirements for future network codes and changes to existing network codes, as well as for the follow up of technical evolutions, will be managed and controlled by ENTSOG. This process shall be transparent and participative and shall involve the establishment of a committee tasked with advising on how to adapt the Data Exchange Rules to such evolutions. ENTSOG will notify relevant communicating parties of any proposal, setting out in outline the nature and purpose of the modification and an indicative timetable for its implementation. ENTSOG may revise their proposal in the light of any comments made by the relevant parties. ENTSOG shall then prepare the implementation plan of its proposal or revised proposal, setting out in reasonable detail the nature of the proposal and the steps for its implementation. The following rules will be applied for the development of new communication requirements:

- (i) Based on the (new or changed) Network Code a Business Requirements Specification will be made that consist of the following elements:
 - i. Business Process Model (Use Case Diagram)
 - ii. Business Requirements (Text Document)
 - iii. Functional Specification (Sequence Diagram and Workflow)
 - iv. Implementation Guidelines (Information Model)
 - v. Technical Specification (Text Document)
- (ii) TSOs and concerned counterparties shall define during the development of the Network Code which Data Exchange solutions shall be used to support the business process.



- (iii) ENTSOG shall be responsible for the management and publication of all required documents according to the timelines defined in the Network Code of the concerned business process.
- (iv) Data Format release management shall be supported by ENTSOG.
 - i. New major releases shall be subjected to public consultation before becoming adopted. Changes will be announced and published on the ENTSOG website.
 - ii. On adoption, the new major release shall become the official version with the previous official version becoming the supported version. All TSOs shall support these two versions, if required.