

## CHAPTER II – INTERCONNECTION AGREEMENTS

### 2.1. General Requirements

#### 2.1.1. General Provisions

- (i) This section of the Network Code aims to provide for the appropriate degree of harmonisation of Interconnection Agreements (“IAs”) to support the completion and functioning of the European internal gas market, security of supply and appropriate access to the relevant information.
- (ii) IAs developed or amended according to the provisions of the Network Code shall contain provisions which facilitate commercial and operational cooperation among adjacent TSOs.
- (iii) NUs shall be informed in due time about the following rules in an IA affecting them:
  - Standards used for measuring equipment
  - Matching rule
  - Allocation rule
  - Exceptional Event

2.1.2. Within a period of 12 months from the date upon which this Network Code enters into force, (the “Compliance Period”) TSOs shall ensure that an IA is in place in respect of every Interconnection Point (“IP”).

2.1.3. IAs shall, as a minimum, include rules in respect of the following topics:

- (i) Modification of IAs
- (ii) Rules for flow Control
- (iii) Measurement principles for quantity and quality
- (iv) Matching
- (v) Rules for the allocation of gas quantities
- (vi) Exceptional events
- (vii) Dispute resolution

2.1.4. For each mandatory topic listed, default rules as defined in the Network Code shall apply in the event that a mutually acceptable IA is not achieved within the Compliance Period.

## 2.2 Development Process for new IAs

### 2.2.1. General Provisions

- (i) All IAs to be developed shall be compliant with the provisions of the Network Code.

### 2.2.2. Development of new IAs

- (i) For all IPs which are commercially operational when the Network Code enters into force with no IA in force:

- The relevant TSOs shall be required to have concluded their negotiations and signed an IA in respect of the IP by no later than the final date of the Compliance Period.

- (ii) For all IPs which become commercially operational within the Compliance Period:

- The relevant TSOs shall use their reasonable endeavours to agree upon and sign an IA. If the relevant TSOs do not achieve this objective, they may agree with each other and with the relevant NUs to commence commercial operation in respect of the IP without such IA but shall ensure that such IA has been agreed upon and signed by no later than the final date of the Compliance Period.

- (iii) For all IPs which become commercially operational after the Compliance Period, the relevant TSOs shall be required to:

- Agree a plan for the development and timely conclusion of the IA and
- Ensure that such IP does not become commercially operational until and unless an IA has been agreed upon and signed by the relevant TSOs.

2.2.3. In the circumstances described in paragraph 2.2(i) and 2.2(ii), if the relevant TSOs are unable to agree on an IA by the final date of the Compliance Period, the relevant TSOs shall be required to instigate the Dispute Resolution procedure specified in section [ ] of this Network Code. For the mandatory terms included in the Network Code, the default rules will be applicable during the dispute resolution period starting from the final date of the compliance period on

2.2.4. Signed IAs shall be sent for information by TSOs to the relevant NRAs.

## 2.3 Adaption of existing IAs

### 2.3.1. General Provisions

- (i) The IAs existing prior to the entry into force of the Network Code shall be adapted only insofar as the general provisions and mandatory topics of the Network Code are not adequately addressed therein.

### 2.3.2. Adaption process

- (i) Within the Compliance Period all TSOs shall analyse and, if necessary, take appropriate actions to amend their existing IAs in order to bring them into compliance with the requirements of the Network Code.
- (ii) All such IAs (whether amended or not) shall be sent for information by TSOs to the relevant NRAs.
- (iii) If the relevant TSOs are unable to agree on the adaption of an IA for a specific IP, the involved TSOs shall, where there is an existing dispute resolution procedure specified in the relevant IA, commence such procedure.
- (iv) Where no such resolution procedure exists in the relevant IA, the involved TSOs shall commence the dispute resolution procedure in accordance with generic dispute resolution in the Network Code.

2.3.3. During the period of par 2.3.2. existing terms of IAs shall continue to be in force until the amended terms come in to force.

## 2.4 Modification of IAs

### 2.4.1. Reason for Modification

- (i) TSOs may request any modification of an IA to which it is party by notifying the counterparty(s) to the IA in writing.
- (ii) TSOs shall be obliged to modify an IA when:
  - European legislation which has impact on the IA comes into force, or
  - Provisions become ineffective, invalid or unlawful.
- (iii) TSOs shall consider modification of an IA when:
  - National legislation which has impact on the IA comes into force
- (iv) TSOs may agree to modify an IA:
  - To reflect any agreed changes in the operational or commercial arrangements in respect of an IP.

#### 2.4.2. Modification Process

- (i) The parties shall meet and discuss in good faith, acting as Reasonable and Prudent Operators, in order to adapt or amend provisions of the IA, and to implement the required work or action, if need be.
- (ii) All modifications to IAs shall be completed within 12 month from the date on which one TSO requested the modification in writing to the other TSO. Where a proposed modification to an IA is subject to a dispute resolution procedure in accordance with para (iii) then the twelve month period may be extended.
- (iii) Any TSO may commence a dispute resolution procedure [ ] in respect of a proposed modification to the IA at any time. Any amendment to an IA shall:
  - a. be valid only if executed in writing and signed by a duly authorized representative of each party; and
  - b. be implemented from a defined effective date simultaneously at both sides of the IP

### 2.5 Flow Control

#### 2.5.1 General Provisions

- (i) All TSOs active at an IP shall agree upon rules for flow control to facilitate a controllable, accurate, predictable and efficient flow across the IP for the benefit of both TSOs and NUs.
- (ii) TSOs shall agree how to steer the flow and use their reasonable endeavours to minimize the deviations from the agreed flow.
- (iii) All actions taken for flow control at an IP are done only on an operational basis without any commercial aspects.

#### 2.5.2. Rules for Flow Control

- (i) For each IP and for each hour of the Gas Day the TSOs involved shall agree upon the amount and direction of gas flow and triggered by the events listed under point (ii) and (iii) hereafter.
- (ii) The agreed upon amount and direction of gas flow shall take account of:
  - The results of the Matching Process including operational account corrections
  - Any Exceptional Events
  - Any flow control arrangements agreed between the TSOs' for the purpose of ramp-up, ramp-down, minimum flow, switch of flow direction, etc.

- (iii) TSOs may alter the agreed upon amount and direction of gas flow at any time in order to comply with:
- Safety requirements,
  - Security of Supply requirements
  - Emergency Situations
  - Any other reasons specified in national rules
- (iv) TSOs controlling the flow control equipment shall, with the cooperation of adjacent TSOs, be responsible for steering the flow:
- To a level of accuracy sufficient to minimise the steering difference
  - At a sufficient level of stability in line with the efficient use of the gas transportation network.

2.5.3. Default rule: The above statements can be seen as the default rules.

## **2.6 Measurement principles**

### **2.6.1. General principles**

- (i) The IA shall include provisions to ensure that all the measurement responsibilities are clear and well defined for the involved parties.
- (ii) The IA shall include provisions to ensure that TSOs responsible for the installation, operation and maintenance of the measurement equipment shall make available all relevant information and data in respect of the measurement of gas flows at the IP to adjacent TSOs on their request.
- (iii) The provisions in the IA shall comply with relevant regulatory and European standards and/or non-discriminatory publicly available requirements of adjacent TSOs.

### **2.6.2. The measurement provisions within an IA shall define:**

- (i) TSOs who are responsible for the installation, operation and maintenance of the measurement equipment for volume, energy and gas quality;
- (ii) Description of the metering station: measurement and analysis equipment to be used and details of any secondary equipment that may be used in case of failure;
- (iii) Description and calculation of the measuring uncertainty of the determination of energy.
- (iv) Description of the documented provisions and/or data handling system for final validation and approval of the energy amounts.
- (v) Gas quality parameters to be measured, as well as the range and uncertainty over which the measurement equipment will operate, the frequency of measurement, in what units and according to what standards the measurement shall be made;

- (vi) Procedures and methods utilised to calculate those parameters which are not directly measured (Wobbe Index, density, etc...);
- (vii) Measurement validation and quality assurance arrangements, including verification and adjustment procedures to be agreed between TSOs;
- (viii) Manner of data exchange, including frequency and content, among the parties in respect of measurement data;
- (ix) List of signals and alarms to be provided by TSOs who own and operate the measurement equipment to other TSOs;
- (x) Rules to manage a situation where the volume and energy measurement equipment is found to be in error (either under-reading or over-reading outside of its defined uncertainty range); and
- (xi) Rules that shall apply between TSOs in the event of failure of the measurement equipment.

2.6.3. Default rule: The application of national, European and international Standards' measurement principles relevant to the type of equipment will be the default rule.

## 2.7 Matching

### 2.7.1. General Provisions

- (i) All TSOs whose systems are connected at an IP shall implement a joined Matching Process.
- (ii) The Matching Process shall describe the communication and processing of the relevant data among the TSOs to calculate the Processed Quantities and Confirmed Quantities of NUs and the quantity of gas that needs to be scheduled to flow at an IP.
- (iii) The specific provisions of the Matching Process shall be described in the IA and be in line with the rules described in this section 2.3.4.

### 2.7.2. Unbundled Capacity Products / Matching Process and Handling of Mismatches

- (i) Matching Rule
  - Adjacent TSOs or their agents shall mutually agree to apply a matching rule when Processed Quantities either side of an IP are not aligned. The matching rule shall lead to identical Confirmed Quantities for each pair of NUs (Portfolio identification) at both sides of the IP. Lesser Rule shall be the default matching rule.
  - Adjacent TSOs shall mutually agree on their role in the Matching Process (i.e. Initiating or Matching TSOs).
  - As default, Matching TSOs shall be TSOs which are responsible for the steering the flow at the IP and Initiating TSOs shall be TSOs which are not responsible for steering the flow.

(ii) Time Schedule

Adjacent TSOs shall mutually agree on a time schedule for the Matching Process within the Nomination and Renomination cycle taking into account the following points:

- The TSOs shall agree on what data needs to be exchanged between them in order to inform the NUs about their Confirmed Quantities before the end of the Nomination/Renomination cycle.
- The process to exchange the necessary data shall enable them to perform all calculation and communication steps in an accurate and timely manner

(iii) As default, the Matching Process shall be performed in the following sequential steps:

- Calculating and sending of Processed Quantities by Initiating TSOs within 45 minutes of the start of the Nomination or Renomination cycle.
- Calculating and sending of Confirmed Quantities by Matching TSOs within 45 minutes from the time at which the processed quantities are received by matching TSOs.
- Confirmation to NUs and scheduling the network by all TSOs within 30 minutes from the time confirmed quantities are received by initiating TSOs.

### 2.7.3. Matching Process for Bundled Capacity Products

- (i) The purpose of the Matching Process for Bundled Capacity Products shall be limited to alignment of the quantities in case of an Exceptional Event and to avoid differences due to mistakes during data communication.
- (ii) In case of bundled and unbundled capacity products at one IP, the Matching Process for bundled capacity products shall be integrated in the Matching Process for unbundled products in order to ensure that the flow at both sides of an IP is calculated on a consistent basis.

### 2.7.4. Data exchange and content

- (i) The Matching Process implies the use of data communication between adjacent TSOs.
- (ii) The information contained within the data exchange for the Matching Process shall be harmonised and shall at least contain:
- The sender and recipient Identification
  - IP Identification
  - Party(s) / Counterparty(s) NUs Portfolio Identification
  - Start (and end) Time for which the matching is made
  - Delivery Period (Gas Day)

- In case of daily balancing regimes on both sides Processed/Confirmed Quantities are expressed in kWh/d
  - In case of daily regime with within-day obligations implemented, Processed/Confirmed Quantities are expressed in kWh/h for each hour of the Gas Day
- (iii) The Confirmed Quantities as result of the Matching Process will be sent by the TSOs to relevant NUs.
- (iv) Default Rules: For the data content see text above.

## 2.8 Rules for the allocation of gas quantities

### 2.8.1. General principles

- (i) TSOs shall endeavour to ensure that the allocation rules either side of an IP do not present a barrier to cross border trade and that the NUs are always informed about the allocation methodology in place and updated well in advance about possible changes..
- (ii) These rules shall apply in respect of all allocations on an hourly basis or on a daily basis according to prevailing member states arrangements.

### 2.8.2.Options

The allocation rule shall be one of the following:

- (i) Option A:
- If the steering difference is allocated to an operational balancing account of TSOs (OBA), the allocations shall be provided by TSOs to the NUs and shall be equal to the Confirmed Quantities.
  - OBA is the standard preferred option for the allocation rule.
  - TSOs always aim to maintain the OBA balance to be as close to zero as possible
  - The OBA limits shall be set taking into account specific IP and/or interconnected system characteristics such as:
    - a. physical characteristics of the IP
    - b. linepack capability of each system
    - c. the total technical capacities at the IP
    - d. flow dynamics in the interconnected systems
  - The TSOs shall agree to cooperate with each other in making required adjustments in the operation of their systems in order to keep the OBA within the defined limits.
  - The TSOs shall agree a fall-back solution to be applied when the steering difference exceeds the limits and they are not manageable through the OBA.
  - In case the limits are reached TSOs may agree to extend the limits

(ii) Option B:

- If there are balancing NUs, the allocations shall be provided by TSOs to the NUs and shall be equal to the Confirmed Quantities for the non-balancing NUs, and equal to the Confirmed Quantity plus steering difference for the balancing NUs provided that the physical flow > sum of the confirmations of the non-balancing NUs.
- If the physical flow < the sum of the confirmations of the non-balancing NUs then the balancing NUs are allocated zero and the confirmed quantities of the non-balancing NUs are reduced and allocated on a pro-rata basis.

(iii) Option C: the metered quantities are fully allocated by TSOs to NUs in proportion to Confirmed Quantities thus:

- For any quantities delivered or off taken in the direction opposite to the physical flow, the allocation of the quantities to NUs will be equal to the Confirmed Quantities in the opposite direction to the physical flow and those quantities are definite; and
- For quantities delivered or off taken in the direction of the physical flow, the allocation of quantities to NUs will be equal to the metered quantity plus the sum of the Confirmed Quantities of all NUs in the opposite direction of the physical flow, multiplied by the ratio of the Confirmed Quantity of NUs to the sum of all Confirmed Quantities for all NUs in the direction of the physical flow.
- This allocation rule may be used as a fall-back solution.

(iv) Option D: Allocations are provided by a third party agent (acting on behalf of NUs) to NUs and to TSOs in accordance with rules agreed between the agent and the relevant NUs, under which the agent shall be obliged to ensure that the sum of the allocations in the direction of physical flow minus the sum of the allocations in the opposite direction to the physical flow is equal to the measured quantity.

### 2.8.3. Handling of differences between provisional and validated allocation data

- (i) Option A: Differences are allocated to the OBA.
- (ii) Option B: Differences are allocated to the balancing NUs.
- (iii) Option C and D: Differences are allocated in accordance with the allocation rules.

### 2.8.4. Default rule: In the event that TSOs are unable to agree on an allocation method, Option A(OBA) shall serve as the default rule to be applied. In case TSOs can't agree on the size of an OBA the dispute resolution of the NC has to be applied in due time.

## 2.9 Exceptional events

### 2.9.1. General Provision

- (i) All parties involved in an Exceptional Event are obliged to inform each other with all necessary information as further defined in these business rules.
- (ii) These business rules shall be applied at IPs and may be applied at other entry points to TSOs' network if agreed between TSOs and the relevant adjacent operator.

### 2.9.2. Communication and Coordination of Operation

- (i) The communication means shall facilitate a fast and simultaneous communication to all concerned parties.
- (ii) Where an Exceptional Event occurs on a TSOs network in respect of an IP, TSOs have to inform and to keep informed without delay adjacent TSOs about the nature, the expected duration of the event, and the possible impact on the quantities of gas that can be transported over the IP.
- (iii) The default communication means between TSOs should be phone call for information and reliable telecommunication in writing for confirmation.
- (iv) As soon as is reasonably practicable after an Exceptional Event occurs, both TSOs shall inform their affected NUs with respect to the relevant IP about the nature and expected duration of the event and any consequences for the Confirmed Quantities.
- (v) Upon resolution of an Exceptional Event relevant TSOs shall inform adjacent TSOs and TSOs shall inform their NUs accordingly.

## 2.10. Dispute resolution

### 2.10.1. General Provision

- (i) This section 2.3.7 concerns the resolution of disputes that may arise from the terms of an IA that is in force between TSOs.
- (ii) The involved TSOs shall use their reasonable endeavours to settle by negotiation any dispute, controversy or claim in relation to an IA.
- (iii) If that fails, all disputes in relation to an IA should be finally settled under resolution of dispute rules agreed by the TSOs which are specified in the IA.
- (iv) The dispute resolution rules within the IA shall as a minimum define the circumstances under which a matter may be referred to an independent party for expert determination, the process by which the TSOs shall appoint such a party, the timescales that shall be applicable and how any costs incurred by such party in order to resolve the dispute should be apportioned between the TSOs.

- (v) Where a matter is referred for expert determination, the IA shall specify that the expert's determination shall be final and binding on the TSOs who are party to the IA.

#### 2.10.2. Default Rules to be applied during Dispute Resolution

- (i) The rules applied before the start of the dispute shall remain applicable until the dispute has been resolved.

