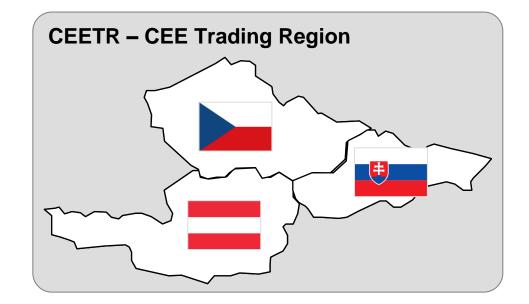
# Part I: Design Principles of the CEE Trading Region

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### **1** INTRODUCTION

This document is a key result of the CEE Trading Region ("CEETR") project which took place in spring / summer 2012.

CEETR would be a supranational gas market involving the Republic of Austria, the Czech Republic, and the Slovak Republic.

Project CEETR was conducted by CEGH Central European Gas Hub AG, Energie-Control Austria; Eustream, A.S. and NET4GAS, s.r.o. Consulting support was provided by Wagner, Elbling & Company.

This document is not a study, but presents the consensus achieved by the stakeholders in the course of the project.

In what follows, the principles guiding the structure and operations of CEETR are laid down and briefly explained.

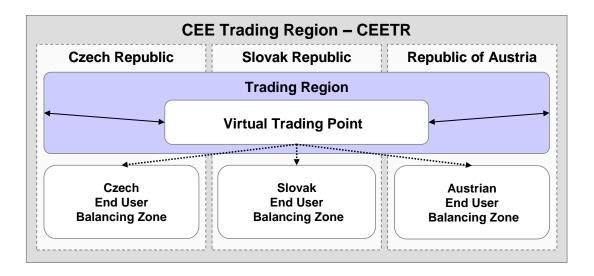
Note on terminology: The document uses present tense for describing principles where no alternatives are foreseen in the current state of model development. The document uses "shall" describing the preferred way of structuring in cases where alternatives exist.

## 2 BASIC STRUCTURE OF CEETR

The graph on the right shows the basic structure of CEETR.

Structurally, CEETR is made up of the following components:

- 1. One Trading Region
- 2. One Virtual Trading Point
- 3. Three End User Balancing Zones, one per participating country



Nominated transfer of gas into / out of the trading region (physical mainflow or counterflow transport)
Nominated transfer of gas from the balancing system of the trading region to an end user balancing zone

### 1. Trading Region

- The Trading Region includes gas transmission systems of all three participating countries.
- Network access to the Trading Region is organized as an integrated entry/exit network spanning all three participating countries.
- Within the Trading Region, national borders are irrelevant for shippers (and respective interconnection points need not be booked by shippers anymore).
- The Trading Region is a single, integrated balancing zone.
- The Trading Region enables a single wholesale market including three EU member states.

#### 2. Virtual Trading Point

- The Virtual Trading Point is located in the Trading Region.
- The Virtual Trading Point is the only point within CEETR, where a handover of gas between shippers can be accomplished.
- The Virtual Trading Point is the delivery point for any hub services and gas exchanges operating within CEETR.
- 3. End User Balancing Zones
  - Each End User Balancing Zone includes all gas distribution systems of one participating country.<sup>1</sup>
  - Each End User Balancing Zone includes all end users of a member state, i.e. even those, which are physically connected to a gas transmission system.
  - Each End User Balancing Zone is a separate balancing zone.
  - Shippers can move gas from the balancing system of the Trading Region to a specific End User Balancing Zone by nominating the desired transfer quantity.
  - Access to each End User Balancing Zone shall be commercially enabled at the Virtual Trading Point.<sup>2</sup>

Note on storage facilities:

Access to storage facilities shall be commercially enabled at the Virtual Trading Point.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> Note: This is with the exception of Austria, where only the distribution networks of market area east are included (since the two other market areas, namely Vorarlberg and Tirol, share no physical connection with any other gas network within CEETR).

<sup>&</sup>lt;sup>2</sup> This is achieved by a designated entity per End User Balancing Zone booking the required interconnection capacities between gas transmission and gas distribution systems (and allocating the respective cost on distribution system exits). Where the TSO is in charge of physically balancing the End User Balancing Zone, a separate booking process is not required; instead a downstream cost allocation is sufficient.

<sup>&</sup>lt;sup>3</sup> This is achieved by the respective storage system operator booking the required capacities between his facility's interconnection point with the gas network and the Virtual Trading Point (and allocating the respective cost to storage users).

### **3** CAPACITY MODEL PRINCIPLES

- 1. The Trading Region uses the following types of entry/exit capacities:
  - 1.1. freely allocable capacity;
  - 1.2. dynamically allocable capacity; and
  - 1.3. interruptible capacity.

<u>Freely allocable capacity</u> allows network usage on a firm basis from the booked entry point to the Virtual Trading Point of the Trading Region (and vice versa for exit points).

<u>Dynamically allocable capacity</u> allows network use on a firm basis from the booked entry point to one or more defined exit points of the Trading Region (and vice versa for exit points). Additionally, access to the Virtual Trading Point is granted on an interruptible basis (i.e. access is only granted if the total flow pattern in the network allows for it).

Interruptible capacity allows network usage on a purely interruptible basis only (i.e. depending on the use of the point in question by shippers using the two other types of capacity).

- 2. The capacity model of the Trading Region is derived in two steps:
  - 2.1. Entry/exit networks per participating country are designed such that physical bottlenecks are managed (i.e. considered in the network model) on exits and freely allocable capacity is maximized under this constraint.
  - 2.2. Any physical bottlenecks becoming unlocked upon joining the national network models to one integrated network model for the entire Trading Region are managed on the entries of the respective upstream network (while maximizing the entry capacity made available to the market under this constraint).

- 3. TSOs may, subject to European and national regulation and on their own account, use e.g. the following methods<sup>4</sup> to increase the amount of freely allocable capacity on their network:
  - operational flow commitments; and/or 3.1.
  - 3.2. oversubscription and buy-back schemes;<sup>5</sup> and/or
  - 3.3. investment (as a long-term measure).

#### **TARIFF PRINCIPLES** 4

### Preliminary remarks:

- 1. CEETR requires no harmonized changes to distribution system tariffs; hence the following principles only refer to the gas transmission systems.
- 2. CEETR does apart from the principles noted below not interfere with the national regulation model (revenue cap, tariff cap, etc., and how its individual components are determined and approved).
- 3. CEETR, however, has to deal with the fact that after realization of CEETR all international border points between CEETR countries cannot be booked by shippers anymore, potentially leading to a loss of tariff income by TSOs within CEETR.
  - Methodically, this loss can be split up into "lost entry-income", i.e. income from entry capacities that cannot be booked by shippers anymore, and "lost exit-income", i.e. income from exit capacities that cannot be booked by shippers anymore.
- 4. The following principles address mechanisms to deal with these potential losses since, as a general principle, a participating TSO's financial position must not be adversely affected by the implementation of CEETR.
- 5. A monetary simulation of how these principles operate in practice and what their outcome will be was not performed in the course of the CEETR project. Such simulation may lead to additional insights potentially requiring additional CEETR tariff principles.
- 6. Note on terminology: Border points that can still be booked by shippers after creation of CEETR, as well as interconnection points to End User Balancing Zones and storages (and potentially to large end users physically connected to a gas transmission system) are called "bookable points" in what follows.

<sup>&</sup>lt;sup>4</sup> Note: Additional cost incurred by TSOs applying these methods must be financed.

<sup>&</sup>lt;sup>5</sup> This method shall not be applicable to interconnection points with End User Balancing Zones (and the included distribution networks respectively).

#### Principles:

- 1. For avoiding any CEETR-induced loss of tariff income by any TSO operating within CEETR, the following mechanisms are used:
  - 1.1. Allocation of lost entry income to the following points on the same network
    - a) the remaining bookable points and

b) downstream interconnection points with other TSOs operating within CEETR (to be paid by means of Inter-TSO Compensation – see immediately below)

- 1.2. Compensation of <u>lost exit</u> income by:
  - 1.2.1. Inter-TSO Compensation;<sup>6</sup> and
  - 1.2.2. a reasonably moderate increase of tariffs at bookable entry points on the network of the TSO losing the exit income.
- 1.3. Any losses in tariff income from current long-term transport contracts not recovered through the above measures shall still be payable by the current long-term transport customers until the end of their respective contract's term.

In the context of CEETR Inter-TSO Compensation means that downstream TSOs at intra-CEETR border points book capacity with their respective upstream TSO to the extent required for accommodating peak flow from the upstream network. The booked capacity is paid for according to the tariff foreseen by the upstream TSO's national regulation. The respective cost incurred by the downstream TSO is recognized in its cost base and subsequently allocated to the bookable points on its network and border exits to other CEETR countries.

### **5** BALANCING PRINCIPLES

- 1. CEETR includes two principal balancing systems:
  - 1.1. the balancing system of the Trading Region and
  - 1.2. the balancing system of each of the End User Balancing Zones.

<sup>&</sup>lt;sup>6</sup> Note: An integrated tariff model including Inter-TSO Compensation has been established in Austria in the course of implementing the new gas market model (entering into force by 1 January 2013).

- 2. Balancing in the Trading Region operates on the following principles:
  - Every TSO operating within CEETR<sup>7</sup> offers balancing contracts (so called "General Balancing Contracts" establishing a "General Balancing 2.1. Account") covering the entire Trading Region and shippers may choose among them at will.
  - 2.2. All gas flows relevant for balancing in the Trading Region are based on nominations, which are allocated as nominated and include nominated exits to the End User Balancing Zones.
  - 2.3. Every General Balancing Account in the Trading Region is balanced ex-ante (i.e. based on nominated values) on an hourly<sup>8</sup> basis.
  - 2.4. The required system energy is bought/sold for each shipper on the gas exchange operating on CEETR's Virtual Trading Point.
  - All General Balancing Accounts no matter with which TSO the respective General Balancing Contract is concluded include the Virtual 2.5. Trading Point of the Trading Region, enabling the nominated exchange of gas between all shippers.
- 3. Additionally, for all bookable points on the gas transmission networks, a supplementary system of point-specific balancing accounts is implemented. Under this system shippers are obliged to balance in-kind<sup>9</sup> and ex-post any surplus or missing gas resulting from a discrepancy between (confirmed) nomination and allocation on a network point. Such discrepancies may arise for instance from the lack of an operator balancing account<sup>10</sup> or the (short-notice) interruption of interruptible capacity. Point balancing accounts are used only for balancing imbalances which are unavoidable by shippers.
- 4. Balancing in the End User Balancing Zones is performed according to the respective national rules for end user balancing.
- 5. Balancing accounts in the End User Balancing Zones shall also include the Virtual Trading Point.<sup>11</sup>
- 6. System energy for the End User Balancing Zones shall be managed (in addition to any sources of physical flexibility available to the entity in charge of physically balancing an End User Balancing Zone) by using the gas exchange on the Virtual Trading Point of the Trading Region.

<sup>&</sup>lt;sup>7</sup> In the case of Austria: the market operator of market area East.

<sup>&</sup>lt;sup>8</sup> This requires alignment with FWG Balancing.

<sup>&</sup>lt;sup>9</sup> This requires alignment with FWG Balancing.

<sup>&</sup>lt;sup>10</sup> Such accounts are prerequisites for implementing an allocation principle, where shipper's confirmed nominated values are principally allocated irrespective of the actual physical flow.

<sup>&</sup>lt;sup>11</sup> See footnote 2 for the respective precondition.