Energy Community Regulatory Board

Interoperability

Questionnaire

GWG – TF 1 Interoperability

February 2016

1. Scope of work

The ECRB Gas Working Group (GWG) Work Programme 2016 foresees the GWG Task Force I Gas Interoperability to prepare survey on Contracting Parties(CP) compliance with Regulation (EC) 2015/703 on interoperability and data exchange on interconnection points (IP) between CPs TSOs but also CP and EU country TSOs.

Regulation (EC) 2015/703 on interoperability and data exchange set rules for harmonization in technical, operational and communication areas with goal to facilitate commercial and operational cooperation between adjacent transmission system operators leading to effective market integration.

As a first step, survey will analyse the compatibility of the TSOs praxis applied on the IPs between gas transmission systems in Energy Community countries and also with neighbouring EU countries with the Regulation (EC) 2015/703 on interoperability and data exchange.

In a second step the GWG and ECRB will discuss about potential proposal to Ministerial Council to adopt Regulation (EC) 2015/703 on interoperability and data exchange as an obligatory document in Energy Community countries.

2. Questionnaire

As basis for analysis of the above outlined scope of work, the following questionnaire has been prepared for completion by the regulatory authorities of the

- **Contracting Parties**[1]

- **Observers**[2]

- **EU countries neighbouring the Energy Community Contracting Parties**[3]

Regulatory authorities of the above mentioned jurisdictions with natural gas market are requested to provide electronic answers for their IP by Thursday, **31 March 2016** the latest to the leader of the responsible GWG Task Force, Mr. Aleksandar Popadic (aleksandar.popadic@aers.rs), copied to ECRB Section at the Energy Community Secretariat, Mrs. Branislava Marsenic Maksimovic (Branislava.marsenic@energy-community.org).

---

[1] Albania, Bosnia and Herzegovina, FYR of Macedonia, Kosovo*, Moldava, Montenegro, Serbia and Ukraine.

[2] Armenia, Georgia, Norway and Turkey (Norway not included).

[3] Austria, Bulgaria, Croatia, Greece, Hungary, Italy, Romania and Slovenia.

Throughout this document [Kosovo*] refers to the following statement: This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo declaration of independence

I. INTERCONNECTION AGREEMENTS (IA)

1. Do IAs exist for all IPs between gas TSO in your country and adjacent TSOs?

☐ Yes

☐ No

☐ Exist on some and do not exist on other IPs [please write names of IPs with and without IA]:
……
……

2. What was the maximum number of network users on IPs on your side of the border in the last 5 years?

[Please write max number of network users for each IP]:

……

……

3. Did TSO invite network users to comment proposed text of IA (public consultation) before concluding or amending an IA?

☐ Yes

☐ No

☐ No, IAs haven't been concluded or amended since beginning of gas flow on IPs

[Please add any comments which can be useful]:
……

4. Are IAs prepared on the basis of ENTSOG template?

☐ Yes

☐ No

☐ Yes, partially   [please define which parts of IA are prepared on the basis of ENTSOG template]:
……

5. Do IAs contain rules of flow control?

☐ Yes

☐ No

6. Do rules of flow control designate a TSO responsible for steering the gas flow across the IP?

☐ Yes

☐ No

7. Do IAs contain details on measurement standards on IPs for gas quantity and quality?

☐ Yes

☐ No

8. Do IAs include following details on measurement principles:

- a description of the metering station including measurement and analysis primary and secondary equipment(may be used in case of failure of primary equipment) ☐ Yes ☐ No
- volume, quality and energy which are measured ☐ Yes ☐ No
- max. permissible error or uncertainty for elements of measurement equipment ☐ Yes ☐ No
- units, standards for measurement and any conversion factors ☐ Yes ☐ No
- procedure and methods to calculate parameters which are not measured ☐ Yes ☐ No
- calculation of the max permissible error or uncertainty in the determination of energy transported ☐ Yes ☐ No
- description of data validation process in use for the measured parameters ☐ Yes ☐ No
- the measurement validation and quality assurance arrangement ☐ Yes ☐ No
- frequency and content of measurement data exchange between TSOs ☐ Yes ☐ No
- the list of signals and alarms to be provided to other TSO ☐ Yes ☐ No
- the method of determining a correction to a measurement in case of failure ☐ Yes ☐ No
- rules between TSOs in case of measurement equipment failure ☐ Yes ☐ No
- rules between TSOs for access to the measurement facility ☐ Yes ☐ No
- rules between TSOs for additional verification of the measurement facility ☐ Yes ☐ No
- rules between TSOs for modification of the measurement facility ☐ Yes ☐ No
- attendance rules during calibration and maintenance at the measurement facility ☐ Yes ☐ No

9. Rules for the matching process on IP between two adjacent TSOs are:

☐ Lesser rule (lower value in case of different values at either side of an IP)

☐ No rules, because the same shippers are on both sides of an IP

☐ Some other rules [please describe rules]:

……

10. Do IAs specify the harmonised information contained within the data exchange for the matching process?

☐ Yes

☐ No

11. How do TSOs perform the matching process during the nomination or re-nomination cycle?

☐ In two hours in three steps (in the first 45 min adjacent TSO send process quantity to matching TSO which send confirmed quantities in the next 45 min to adjacent TSO and finally both TSOs send confirmed quantities of gas to network users and schedule the gas flow across the IP within two hours from the start of cycle).

☐ In other way [please describe the matching process during nomination or re---nomination cycle]:

……

……

12. Rules for allocation of gas quantities are:

☐ OBA (operation balancing account, shipper quantities are equal to confirmed nomination)

☐ Some other allocation rule [please describe rule]:

………

………

13. Communication language between TSOs in case of an exceptional event is:

☐ English

☐ Some other language [please describe language]:

………

14. Dispute settlement mechanisms are defined in the IAs:

☐ Yes, and they specify the applicable law, the court of jurisdiction or the terms and condition of the appointment of experts of an institutional forum or on an ad hoc basis

☐ Yes, but mechanism does not contain parts defined in the previous bullet [please describe mechanism]:

………

………

☐ No

II. UNITS

1. Define temperature and pressure reference conditions for gas volume applicable on your side of an IP.

☐ 0°C and 1.01325 bar

☐ 15°C and 1.01325 bar

☐ 20°C and 1.01325 bar

☐ Other reference conditions for temperature and pressure [please define reference conditions]

………

2. Define combustion reference temperature for calorific value, energy and Wobbe index applicable on your side of an IP

☐ 0°C

☐ 15°C

☐ 20°C

☐ 25°C

☐ Other reference conditions [please define reference conditions]

………

3. Which calorific value is used on your side of an IP?

☐ Lower

☐ Gross

4. Which energy unit is used on your side of an IP?

☐ kWh at t1/t2 (where t1/t2 are reference temperatures for combustion and metering, respectively) t1 =…………t2=………………[please define reference temperatures t1 and t2]

☐ MJ at t1/t2 (where t1/t2 are reference temperatures for combustion and metering, respectively) t1 =…………t2=………………[please define reference temperatures t1 and t2]

☐ Other unit [please define unit and reference temperatures for combustion and metering] …………………………………………………...

……

III. GAS QUALITY

1. How often does a TSO publish on its website calorific value and Wobbe index for each IP?

☐ Hourly

☐ Daily

☐ Monthly

☐ Does not publish at all

2. Have gas quality differences on two sides of an IP ever caused a restriction in cross-border trade?

☐ No

☐ Yes [please explain TSO's and NRA's activity to overcome restrictions]

……

……

3. Have differences in odourisation practices ever caused a restriction in cross-border trade?

☐ No

☐ Yes [please explain TSO's and NRA's activity to solve the problem]

……

……

IV. DATA EXCHANGE

1. Which type of data exchange is used on an IP?

☐ Document base data exchange (the data is wrapped into a file and automatically exchanged between the respective IT system)

☐ protocol: AS4

☐ data format: Edig@s-XML or an equivalent data format with same degree of interoperability

☐ Integrated data exchange (the data is exchanged between two applications directly on the respective IT systems)

☐ protocol: HTTP/S-SOAP

☐ data format: Edig@s-XML or an equivalent data format with same degree of interoperability

☐ Interactive data exchange (the data is exchanged interactively through a web application via a browser)

☐ protocol: HTTP/S

☐ Other type of data exchange [please explain which type of data exchanged is used]

....

....

2. Which security measures are undertaken?

☐ Protection of the confidentiality by encryption

☐ Integrity and authenticity by signature of the sender

☐ Security measure to prevent unauthorised access to IT infrastructure

☐ Other types of security measure [please define other types of security measures]

....

....