CESEC Gas Action Plan 2.1 – Progress Review and Next Steps

I. Introduction

One year from the agreement on the CESEC Action Plan 2.0 which includes a series of country-specific regulatory actions and further regional work to improve the functioning of gas markets, important progress has been made by the Member States and the Energy Community Contracting Parties. However, complete implementation of the Action Plan 2.0 still requires serious efforts (see highlights below). Particular attention has been given over the past year to the complex task of creating the foundations of modern EU entry-exit gas systems and to implementing harmonized EU gas market rules (Network Codes). To that end stakeholder workshops were organized in Sofia and Bucharest in April and June respectively resulting in agreed conclusions listing the most urgent next steps towards achieving that objective.

Work has also started/continued in particular to improve the gas trading environment in the region. Based on the recommendations of the European Federation of Energy Traders (EFET), each Member State or Contracting Party has started to formulate specific steps to, in general terms, ensure that domestic and international market players alike may conduct gas trading activity – for their own benefit and that of their customers –without unnecessary red tape and in an as transparent and stable a regulatory setting as possible.

As regards transmission tariffs – where Action Plan 2.0 sought to develop regional cooperation to ensure that transmission tariffs are not an impediment to diversification of sources and routes – substantial progress has been achieved on the respective national levels in some Member States via tariff reviews¹ but thus far no form of or initiative on regional cooperation/coordination has emerged on the matter. In the CESEC region with multiple small markets, cross-border tariffs (in general and outliers in particular) are a key limiting factor to bringing new gas sources to markets (particularly those further from primary entry point due to pancaking of tariffs). Consequently, while the Commission still considers such regional cooperation on tariffs to be valuable and forward-looking, decisions on whether to engage in such regional work on tariffs are best placed with national regulatory authorities and will therefore not be further specifically pursued in the CESEC Action Plan.

II. Action Plan 2.0 Progress Review²

a) Completed actions

Member State	Action	Status
Austria	Capacity Allocation Mechanism Network Code implementation	Completed

¹ Progress has already been achieved by way of transmission tariff reforms in Hungary, Greece, and the envisaged tariff reform in Croatia.

² This Progress Review covers only relevant Member States. Please see the website of the Energy Community Secretariat for a progress review of the Action Plan 2.0 implementation by Contracting Parties: https://www.energy-community.org/portal/page/portal/ENC_HOME/AREAS_OF_WORK/CESEC

Croatia	Gas export-import and market restrictions	Completed
	Gas trading platform	Completed
	Compliance with the Security of Supply Regulation	Completed, signature of reverse flow MoU and progress with construction of CS1 deemed to mean compliant with action point
Greece	Interoperability Network Code implementation (IA Kulata/Sidirokastro)	Completed as of 01.06.2017
Hungary	Capacity Allocation Mechanism Network Code implementation	Completed
	Improving liquidity and volumes	Completed (improvements ongoing)
	3 rd Package compliance	Completed
Romania	Publication of storage data	Completed
Slovenia	Virtual trading point with trading platform	Completed

b) incomplete actions (Action Plan 2.1)

Member State	Action	Status	New Deadline
Bulgaria	3 rd Package compliance	Partly completed. Intensive dialogue with the World Bank on the issues of full market liberalization.	End of 2017 draft amendments to the Energy Act for full market liberalization.
	Interoperability Network Code implementation	Partly completed 3 IA-s - for IP Negru Voda 1/ Kardam, IP Ruse/Giurgiu and IP Kulata/Sidirokastro signed	No new date set
		IA for IP Negru Voda 2,3/ Kardam – in preparation phase	
	Congestion Management Procedures Guideline implementation	Not completed – in final stage of NRA approval, public consultation meeting organized by NRA on August 17 2017	1 October 2017, NRA approval - second part of September
	Balancing Network Code implementation	Implemented only in test regime for daily financial settlement since May 2017.	1 October 2017
		NC BAL Trading platform public procurement is expected to be launched in 2018	
	Capacity Allocation Mechanism Network Code implementation	Within-day auctions not yet implemented	1 October 2017
	Improvements on trading: Virtual Trading Point, trading hub	VTP implemented, Central dispatching platform with VTP trade notifications and nominations in test regime	1 October 2017

Croatia	3 rd Package compliance	partially completed, discussion with DG ENER ongoing	February 2018
Greece	Capacity Allocation Mechanism Network Code and Balancing Network Code implementation	1) CAM NC: All provisions implemented as of 01.06.2017, except offering of within- day capacity products. DESFA proposal for the necessary arrangements in order to offer within-day capacity products, is already under approval process by RAE.	Q1 2018
		2) BAL NC: Interim measures apply; Most of the approved interim measures implemented as of 01.06.2017. DESFA proposal for implementation of the remaining interim measures (mainly: Balancing Platform),is already under approval process by RAE	
	Implementation of a Virtual Trading Point and trading hub	Not completed DESFA proposal for the establishment of a VTP, introduction of trade notifications and access of pure traders to the VTP, is already under approval process by RAE.	Q1 2018
	Ensure effective and flexible access for all market players to Revithoussa LNG terminal	Not completed The access regime at Revithoussa LNG terminal is considered flexible enough in order to enable its use by all market players (capacity booking on FCFS basis, regasification capacity transfers,	Action to be completed in the light of the conclusion of LNG terminal upgrade, estimated in the 1st Q 2018

Romania	Interoperability Network Code implementation	LNG swaps, uploading slots swaps, provision of additional storage space on a monthly and daily basis, re- scheduling of scheduled uploads etc.). More flexibility will be provided upon the completion of the 3rd tank and the terminal's upgrade. Considering this the regulatory framework will be reviewed and revised. Not completed	No new date set
	Balancing Network Code implementation	Not completed	1 July 2018 1 October 2017
	Capacity Allocation Mechanism Network Code implementation	Not completed	1 October 2017
	Congestion Management Procedures Guideline implementation	Not completed	No new date set
	Improving trading liquidity and volumes	Not completed	No new date set
	Lifting gas export restrictions	Pending	Emergency Ordinance 46/2016 adopted by Romanian Government lifts export ban, but Parliamentary adoption still pending
Slovakia	Interconnection Agreement with Ukrtransgaz at Veľké Kapušany	Not completed	No new date set
	Voluntary implementation of remaining Interoperability NC elements at Budince	partially completed	
Slovenia	TSO as responsible forecasting party	New deliverable	1 October 2018

III. Next Steps

<u>Incomplete or non-implemented actions set out as part of CESEC Action Plan 2.0</u> should be implemented as a matter of priority. Some deadlines have been missed for reasons linked also to third parties' involvement (such as the Trans-Balkan transport contracts and Gazprom) while others experienced normal delays. In most cases new deadlines have been formulated with a view to completing the actions as soon as possible unless prior experience has shown defining specific deadlines is not effective given the particular contractual circumstances.

On the matter of <u>trading arrangements</u>, analysis by EFET showed that gas markets in the CESEC countries were to the largest extent underdeveloped and lacking basic features

conducive to the development of – at least – short term physical marketplaces.³ Discussions at CESEC workshops and exchanges of letters over the past months focused on actions towards developing such beneficial trading environments in the markets of the region. While the EFET hub scorecard (and reaching a "good" score therein) could generally be seen as a good proxy it has also become clear over the past months that focusing too much attention on a particular score and whether that score was calculated absolutely correctly was not the most appropriate approach. Consequently, this updated Action Plan takes the EFET list of hub criteria – which is generally accepted as a broad list of features that the best functioning hubs have implemented – as its point of departure and, in addition, contains actions to complete the development of trading arrangements. Therefore, the updated Action Plan includes includes national <u>Gas Trading Roadmaps</u> that Member States and Contracting Parties have developed over the past months and are that annexed to this Action Plan 2.1.

In addition to completing actions foreseen as part of Action Plan 2.0 of September 2016 and preparing the country-specific trading roadmaps, certain <u>country-specific actions</u> have been agreed upon over the past months in the framework of specific workshops in Sofia and Bucharest with a view to furthering the development of national and CESEC regional gas markets and are also annexed to this Action Plan 2.1.

Furthermore, in March 2017, the Energy Community Secretariat developed the Energy Community Gas Action 2020. In this context, the Secretariat detailed a list of actions for Energy Community Contracting Parties in particular as regards the improvement of market and possibly also tariff arrangements. Latest versions of these are also in annex of this Action Plan 2.1.

IV. Way forward

The European Commission, Member States and Contracting Parties, the Agency for the Cooperation of Energy Regulators (ACER) and the Energy Community Secretariat all agree that work on further developing the CESEC gas markets must continue. As previous experience has shown, the involvement of stakeholders in this process is of great value. In taking forward the implementation work with this Action Plan 2.1 all sides are committed to continue an open and transparent approach. Decisions on whether specific issues are best dealt with on the national or regional level (and in corresponding workshops) are to be taken in the course of the implementation process, duly informing all interested parties.

In addition to possible national or project-specific workshops/meetings the European Commission engages itself to organize at least two CESEC plenary meetings in 2018 coming up to the forthcoming CESEC High Level Group meeting to take stock of the progress of implementing individual actions of both regulatory and infrastructure nature.

³ See EFET "Trading EFET Hub study" presentation in workshop documentation at https://ec.europa.eu/energy/en/topics/infrastructure/central-and-south-eastern-europe-gas-connectivity

Most actions set out in this document foresee specific deadlines. CESEC members agree to do their utmost to meet the deadlines and report on those once the deadline has been achieved or if the deadline has been eclipsed without completing the action.

Annex

 $Annex\ 1:\ Gas\ Trading\ Roadmaps\ received\ from\ Member\ States$

$Greece^4$

Action	Comment	State of play
Establish a	Action implemented already	RAE intends to upload
consultation	by RAE	gradually all documents
mechanism		translated in English.
		Mentioned that
		consultations concerning
		European issues (as TAP)
		have been launched already
		in English
Establishment of entry/exit	Established	Action completed
system		
Title transfer (gas can be	Established	Action completed
traded without physical		-
delivery, usually by transfer		
between balancing groups)		
Cash out rules (long/short	Established	Action completed
positions set to zero at the	1 NI . 1 II	NT 4 A 1' 4 41
end of the balancing period	1. Network Users position is settled financially at the end	Note: According to the BAL NC Interim Measures
against payment of penalty	of each day while carryover	
in €/MWh)	of imbalances is not	report and the 3rd revision of the Greek Network Code
	allowed; The relevant	
	imbalance settlement price	approved by RAE in March
	reflects the balancing cost of	2017, the tolerance limits
	the TSO.	will be gradually eliminated
		by 2019.
	2. Tolerance limits currently	A 64 - 0 4 - 1-1: -1 - 0 - 0 - 6 - 41 - 0
	in place are only used to	After establishment of the
	differentiate the pricing of	Balancing Platform,
	imbalances (i.e. different price if imbalance is within	estimated to be operational
	or out of the tolerance	by the end of 2017, the
	limits).	imbalance settlement price
	mints).	will be based at SMP
	3. Tolerance limits are not	buy/sell in it.
	used for carryover of	
	imbalances between days.	
VTP accessible to non-	Currently only Network	Ministry anticipates to
physical traders	Users who have booked	conclude legal amendments
1 7	capacity are allowed to trade	if required so that combined
	gas on the VTP;	with a new (4th) revision of
		National transmission code
	Design of a new VTP access	to permit the establishment
	regime, allowing non-	of a new VTP regime

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 $^{^{4}}$ Table based on letter sent by the Greek authorities dated 26 April 2017

	physical traders activity by	accessible to non-physical
	DESFA, is currently	traders by the end of 2017
	underway.	
Firmness of HUB (cash out rules instead of pro rata curtailment of flows in case not enough gas is traded at the hub)	Pro-rata curtailment in the VTP (VNP) in case physical deliveries / offtakes are affected, is not foreseen in the Greek regulatory	Action in progress
Con 1'4 a man a constant a man	framework	A
Credit arrangements non punitive	Currently no specific provisions related to the use of VTP are in place. So far credit arrangements are integrated in the transport contract. Credit arrangement will be considered in the course of reforming access arrangements to VTP.	Action in progress
Resolve market structural issues (defined role for historical player: gas release programs, transport capacity release programs, market maker obligations, etc.)	A solid gas release program is already implemented by DEPA, compliant with Directive 73/2009 provisions and in accordance with the european best practices	Action completed

Hungary⁵

Action	Comment	State of play
Redefine NRA role as proactive		completed
Support IT developments and create knowledge center	RBP, RegIP database	ongoing
Abolish financial guarantees for natural gas trading licenses		completed
Ease regulations on licensing in general by initiating a "mutually recognizable license/registration"		ongoing
Consultation and continuous negotiation with neighbouring NRAs and		ongoing

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 $^{^{\}rm 5}$ Table based on written comments from Hungarian NRA in letters dated. 31 March and 31 May 2017

TSOs		
Introduction of a regular	Asset and cost revision with	ongoing
yearly capacity evaluation	new fees in place from 1 st	
process for tariff review	January 2017	
Reduce relative price of	HEA foresees opportunity	ongoing
within year products	to continue price reduction	
	in due time	

Slovakia

The Slovak republic applied for the interim measures as per article 45 of the Commission regulation No 312/2014 of 26 March 2014 establishing a Network Code on Gas Balancing of Transmission Networks.

The TSO in Slovakia established the Balancing platform for the purpose of transmission network balancing.

To improve liquidity and competition the TSO shall:

- on annual basis prepare and publish the market the assessment of balancing market development
- the document shall contain proposal of concrete steps aimed towards building more developed market
- consult the assessment with the market and prepare it in close cooperation with national regulatory authority
- the document shall include identification of the steps to remove the interim measures and envisaged timing"

Network Code Implementation Workshop

Bucharest, 8-9 June 2017

Conclusions and Action Plan

Following the debates that took place in this action on the implementation of a primary legal framework appropriate to Romania's efforts to continue and complete the process of liberalization of the natural gas market, a series of conclusions were drawn that synthetically are summarized by the following:

- GEO no. 64/2016 has been promoted in order to provide the premises necessary to fulfill the
 obligation assumed by Romania, as a Member State of the European Union the achievement of
 a free market, based on transparency, competitiveness and non-discrimination.
- The process of liberalization of the purchase price of natural gas implies the application of a legal framework necessary to ensure:
 - trading in natural gas under conditions of **economic efficiency**.
 - objective criteria for exercising **cost control**.
 - <u>maintaining the natural gas delivery solution to household customers</u> based on regulated final prices.
 - consistency in maintaining the necessary conditions for fulfilling the obligation assumed by Romania as a Member State of the European Union.
- GEO no. 64/2016 is an important step in a wider approach to the amendment and completion of the Law on Electricity and Natural Gas no. 123/2012, as amended and supplemented.

GEO no. 64/2016 should be approved by the Romanian Parliament in its current form. The amendments proposed by the Parliament, in order to impose the obligation for the producers to sell their entire gas production using just one centralised platform (specifically nominated by the law amendments as OPCOM), cannot be accepted. Such amendments could generate infringement situations on competition and, also, could maintain the infringement procedure on export ban issue.

As regards the actions required for the proper implementation of European legislation on the NC, it was considered necessary to undertake the following actions:

- 1.1. Transgaz to provide a proposal for NC amendment in order to facilitate for the network users the possibility to submit trade notifications without quantity limits with TS contracts on the VTP by 23 June, as an interim step.
- 1.2. ANRE will consult the proposal and approve it by the end of August 2017.

- 1.3. Estimated period of time necessary for Transgaz to implement the IT changes within 1 month after entering into force of the proposed modification required according to point 1.1.
- 1.4. With the full implementation of the entry exit model, the access to the VTP will be without any restrictions on any users. This will be achieved by 1 July 2018.
- 2.1. Transgaz to submit a proposal to amend the Network Code by mid June 2017 for introducing the entry exit system .
- 2.2. Transgaz will design the rest of the two thirds of the projects to get a complete version of the NC for the implementation of the entry-exit system equipped with VTP, this second lot named Module B (Rules for accessing the services at VTP, Gas Allocations, Gas Nominations, Balancing Rules). Estimated term for Transgaz to elaborate and submit for approval to ANRE: 30 september 2017 . ANRE will approve the Network Code changes by 15 December 2017.

NB: The entry exit system containing fully decoupled entry exit contracts with corresponding tariffs including the DSO level requires a more complex approach which is depending of the implementing of the above mentioned measures. As a preliminary estimation, the implementation of such measures could be considered starting with 1 October 2019.

- 2.4. Transgaz will implement the necessary IT changes within 6 months after entering into force of the proposed modifications.
- 3.1. ANRE to clarify in the Network Code who is responsible to provide the forecasts data to enable the Balancing and introduce the ENTSOG CNOT principles on Nomination and matching for all network points.
- 3.2. ANRE to approve the necessary documents to ensure that agreed forecasts are in place, and also agree on the Balancing information model to be used and consulted on this.
- 3.3. The forecasting party is the TSO, as written by the Romanian Gas Law and ANRE will specify with amendments how the communication process up to reconciliation between the TSO and DSO is designed. The code alignment shall be in place by 15 December 2017, in correlation with point 2.2. The information model shall be in place by 1 July 2018.
- 4.1.Transgaz to propose to ANRE to change the gas day to 7 to 7 Romanian time in line with the CAM Network Code by 30 September 2017, in correlation with point 2.2.
- 4.2. The Gas day shall apply to all entry-exit points. Transgaz will ensure the IT implementation by 1 July 2018, in line with all other changes foreseen by this date.
- 5.1. ANRE shall set or approve and publish the methodology for the calculation of the neutrality charges, based on Article 30 (2) of the Balancing NC. The code amendment is by 30 September 2017, while the regime will be operational by 1 October 2017.

Bulgarian Gas market rules implementation Workshop 4-5 April 2017, Sofia Conclusions

- Recommendation to Ministry of Finance to consider the amendment of the excise law and sub-ordinance to change provisions relating to the responsibilities of traders for installing "industrial computers with communication devices" at customers for sending real time information about delivered quantities to the customs agency. The recommended solution, for the purpose of facilitating supplier switching, would be that the customs agency either removes double reporting (relying on data already being submitted to network users by Bulgartransgaz) or that the reporting obligation is shifted to the customer (from the trader). The NRA or the Energy Ministry should forward the request for the recommended change to the Ministry of Finance.
- Bulgartransgaz will propose a framework transportation contract and sets rules on financial guarantees and credit limits that are needed for Network Users to take part in auctions for transport capacity. The framework provisions will be applied prior to the quarterly auction in August 2017. The credit limit will be effective as of the approval of the capacity tariff (cf. below).
- Bulgartransgaz will ensure that the capacity auction result (and subsequent electronic confirmation from RBP) will become a binding annex to the framework transport contract that will be signed by the shipper [and the TSO] before the shipper takes part in the auction immediately after the closure of the auction without the need for further contract signature.
- Binding Entry-Exit Tariffs will be published by Bulgartransgaz by 15 July 2017 ahead of the August 2017 quarterly capacity auctions. Bulgartransgaz will file the tariff proposal for approval to the NRA at the latest by 15 May; NRA undertakes to process the application expediently and in time for Bulgartransgaz to be able to publish the tariffs for the forthcoming capacity auctions (quarterly and potentially repeated annual) in accordance with the deadlines set out in the NC CAM. These binding tariffs will be used to determine the payable price (payable price = binding tariff + auction premium (if any).
- Bulgartransgaz to send transport contract relating to the yearly capacity bookings made at the 6 March 2017 annual yearly auction for signature to successful bidders by 12 April 2017. If the contract is not signed by the bidders by 5 May 2017, Bulgartransgaz will cancel the bookings made and repeat the yearly auction for the gas year 2017/2018 sufficiently (i.e. one week) ahead of the quarterly auction in August 2017. At this time, the binding Entry-Exit tariffs will be published already.
- Bulgartransgaz will ensure that units will be switched from m3 to energy units by 1 October 2017 on all transmission points. The storage contract will be switched to energy units at of the start of the next storage gas year (1 April 2018). The NRA and all market participants will ensure that the general shift to energy units (also for supply contracts) should be aimed to take place by 1 October 2017.
- Bulgartransgaz will apply the NC BAL by 1 May 2017 in full (including new IT solutions and information provision also by 1 May 2017). There will be a transitory parallel period where the imbalance charge will be communicated to shippers but effectively only applied as from 1 October 2017.
- On the basis of discussion with market players and in order to facilitate the implementation of the NC BAL on a gas market with low liquidity and extremely high concentration, DG ENERGY recommends to consider reducing the 'small adjustment' of +-10% (but preserving the flexibility to increase the adjustment up to +-10% in case

- the lower value leads to abuses) and also recommends considering larger tolerances to be applied for smaller portfolios. Bulgartransgaz is ready to reassess the matter.
- Congestion management procedures will be effectively applied at the latest by 1 October 2017. The NRA undertakes to prepare the draft decision expediently and consults on it during one month which, followed by final decision which it envisages to take in the course of the summer
- The virtual trading point (VTP), providing for the possibility to transfers title, is operational but currently not being used by market players. Bulgartransgaz will organise a workshop at by the end of April for shippers and draw conclusions on the operation of the software used for running the VTP. In order to stimulate usage during the test period running until 1 October 2017 shippers will be required to register for using the VTP (via the conclusion of the balancing contract) and are only able to exchange title between each other within the balancing zone by using the VTP for such trade notifications. From 1 October 2017 title transfer will have to take place via the VTP.
- Bulgartransgaz will publish a calendar for a recurring yearly process to amend as necessary the relevant contracts and general terms and conditions.

ENERGY COMMUNITY GAS ACTION 2020

Increasing liquidity in Ukraine

Background

In March 2017 the Energy Community Secretariat ('Secretariat', ECS) presented its concept for actions needed for establishing truly functioning gas markets in the Energy Community (EnC) and enabling a pan-European gas market integration- the "Energy Community Gas Action 2020". The Secretariat identified three groups of instruments for reaching the goals set: legal, market and infrastructure related actions, both national and regional, interlinked one with another.

While other market related measures, related to improving interoperability, capacity allocation and reforming transmission tariffs are envisaged for parallel implementation in all EnC Contracting Parties (and neighboring EU Member States, where relevant), increase of liquidity in emerging Ukrainian gas market requires special attention and offers a solid base for further facilitation. The box below presents the goals and actions of the Enc Gas Action 2020 envisaged for improving balancing and liquidity in the EnC Contracting Parties.

Balancing and increase of liquidity		
Goal	Establishment of functioning virtual trading points (VTP) and trading platforms as precondition for harmonization of balancing rules and increase of liquidity Harmonization of balancing systems starting with balancing system, nominations and re- nominations, information provision Introduction of CAM NC on domestic entry/exit points.	
ECS action	Develop with the WG a roadmap for identifying the measures needed to establish functional VTPs and trading platforms as well as the measures needed for harmonized regional balancing rules and introduction capacity allocation mechanism.	
Timeline	Roadmap finalisation: Q4 2017 functional VTPs and organization of or joining the existing trading platform(s): Q2 2018 BAL NC implementation: Q3 2018 – Q2 2019 CAM NC introduction: Q1 2017 – Q1 2018	

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⁶ https://www.energy-community.org/portal/page/portal/ENC_HOME/DOCS/4614496/4BEFFF5692C95696E053C92FA8C05505.pdf

For the purpose of identifying the concrete actions needed for increase of liquidity and improving balancing in Ukraine, two documents are used: EFET Guide on Features of a Successful Virtual Trading Point⁷ (accompanied by 2016 Review of Gas Hub Development⁸) and, partially, the evaluation tool developed by ACER for the 2016 Report on Implementation of Balancing Network Code⁹. Having in mind that the Network Code on Balancing is still not an obligation for the EnC CPs, only limited number of elements covered by ACER's tool i.e. those that represent the basis for implementation of Art. 21 of Regulation 715, are explored.

Requirements for increase of liquidity and status quo of their fulfillment in Ukraine

Virtual Trading Point/Trading platform		
EFET Indicators	Status quo in Ukraine	
Established consultation mechanism (for consultations on local hub development) by NRA	No	
Entry- exit system established	Yes, with network access/tariffs to VTP	
Title transfer allowed	Yes	
Cash out rules (long/short positions set to zero at the end of the balancing period against payment of penalty in EUR/MWh)	Yes, but the balancing period is still one month; units questionable	
Accessible to non- physical traders (to trade gas it is not required to flow physically from entry to exit i.e. trade without signup to physical rules)	Yes, but on VTP only. There are two trading platforms where gas can be traded: CE UEEX and UGX, however they are still not liquid enough. They do not provide clearing services and do not cover counterparty risk.	
Firmness of hub (via access to flexibility, through contracted services or, preferably, market based)	Yes. The allocation on VTP is equal to confirmed quantity. TSO provides balancing actions to selling party.	
Credit arrangements not punitive	To be checked	
Identified and resolved market structural issues including rules around participation of companies meeting dominance criteria (e.g. full market opening, gas release programs, transport capacity release program)	No. The gas price applied within performance of the public service obligations (PSO) is lower that market price rate.	
Defined role of hub operator (in comparison with TSO)	TSO is the hub operator; access to VTP is regulated by transmission network code, however there is no clear enough description of responsibilities related to hub operation. Procedure of access to VTP is described in the network code and is done under the following procedure: Network users submit the nomination to exit/enter virtual trading point in accordance with Form of application for nomination (http://utg.ua/FORMS-Nomination-12.05.2016%20eng.xlsx) and Form of covering letter for the planned gas allocation (http://utg.ua/covering-letter.docx). Network users also submit Natural gas acceptance	

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http://www.acer.europa.eu/en/Gas/Framework%20guidelines and network%20codes/Documents/Annex%20II-IV 2016 11 07 for publication.pdf .

	delivery protocol on VTP (http://utg.ua/acceptance%20delivery%20protocol.doc). All other documents and forms are by the link: http://utg.ua/en/utg/business-info/documents.html
Establishment of the reference price at the hub for contract settlement	In progress.
Standardized contract (s)	To be checked, probably not
Price reporting agencies active at the hub	No
Brokers	No
Establishment of exchange	CE UEEX and UGX, however they are still not liquid enough
Index becomes reliable and used as benchmarked	No

Balancing			
Basic elements of BAL NC	Status quo in Ukraine		
Information on balancing status available	Yes, monthly, not daily; not online		
Trading platform available and used by the TSO	It is available (2 exchanges), though not liquid enough; it is not used by the TSO. There are no short- term products that can be used by the TSO		
TSO uses balancing platform (as alternative to trading platform)	No, there is no balancing platform		
TSO makes limited use of balancing services	No; TSO uses linepack and its own storage for balancing, not even balancing services		
TSO transparency about balancing action costs/ calculation methodology for imbalance charges as well as the final tariffs made public	Applicable transmission network code includes provisions on balancing, including calculation of imbalance charges, however it is to be checked how it is implemented in practice.		
Daily cash- out implemented	No; Daily balancing is currently considered within the TSO (there is a study launched by the TSO)		
Cash- out prices set using trading platform trades	No		

Actions and timelines

Based on the findings above, the Secretariat identifies the **following actions to be taken by the Ukrainian gas market stakeholders**:

Nr.	Actions	Who?	Timeline
1.	Online availability of information on balancing status	TSO	End 2017
2.	Methodology for calculation of imbalance charges as well as the charges published on the web page	TSO/NRA	End 2017
3.	Definition of market/balancing rules (via amendments to the network code or preferably, by separate document). The rules should include precise definition of roles of market players, especially roles of VTP in comparison to existing exchanges.	TSO/NRA	End 2017
4.	Introduction of daily balancing, with daily cashout	TSO/NRA	Q1 2018
5.	Introduction of balancing service contract	TSO	Q4 2017
6.	TSO uses trading platform or balancing services for buying short- term products	TSO	Q2 2018
7.	Rules for accessing and functioning of exchanges available (also in English)	Exchanges	Q1 2018

8.	Credit arrangements/guarantees for accessing both VTP and exchanges fair	TSO/exchanges	Q2 2018
9.	Standardised contracts for VTP	TSO/NRA	End 2017
10.	Full market opening and abandoning of price regulation	Government/NRA	April 2018
11.	Full implementation of BAL NC	TSO/NRA	Depending on the implementation deadline for the EnC CPs- tentatively Q3 2018 – Q2 2019
12.	Introduction of CAM NC at domestic entry/exit points	TSO/NRA	Q4 2017
13.	Introduction of entry/exit tariffs on all entry/exit points (domestic and cross-border, including short-haul transportation tariffs)	NRA	Q4 2017

Next steps

- Organization of meetings with TSO, NRA and exchanges with a purpose of establishing Working Group to implement identified actions needed for increase of liquidity (November 2017).
- Regular meetings of the Working Group, reviewing status of implementation, definition of next steps.