



Energy Community Regulatory Board

**A Common Regulatory Approach for the Development
of the Energy Community Gas Ring**

Draft Consultation Paper

***Submitted to the attention of the Permanent High Level
Group***

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SUMMARY

The Energy Community Gas Forum, including Contracting Parties' Governments, the Energy Community and Donors, has recognised the economic, social and environmental benefits of an Energy Community Gas Ring and started work on its development. However, the Gas Ring so far is only a concept, requiring the choice of an institutional setting and a proper regulatory framework. The present ECRB Consultation Paper discusses these issues.

The Consultation Paper acknowledges the legal framework resulting from implementation of Directive 2003/55/EC and the expected implementation of Directive 2004/67/EC and Regulation No. 1775/2005 in the Energy Community.

The ECRB is also aware of the financial and energy market hardships that may hinder the development of the Ring and encourages Donors, National Governments and stakeholders to adopt a long term perspective on the development of the Ring.

ECRB believes that the Gas Ring should consist of the availability of capacity along a circular path, encompassing the CP territories, rather than of a separate infrastructure. Therefore, it should be a virtual rather than physical concept, using where appropriate infrastructure that was built for other purposes. Construction of an entirely separate infrastructure would greatly increase the Gas Ring costs and could hardly be borne by the Energy Community gas industry.

Two main approaches may be proposed:

- A. The Gas Ring could be regarded as a *whole piece of infrastructure that should be developed simultaneously*, so that it enters into service at the same time, although it is developed by several Transmission System Operators.
- B. The Gas Ring could be the result of the *gradual development of the national gas grids of the countries* from which the Ring will pass, including other current pipeline development projects.

While the former approach would naturally require the establishment of a Single Ring Operator and may in the long term ensure a better management of capacity, ECRB proposes that the latter approach should be adopted as a starting point. This would greatly facilitate the decision making process, which could be a major obstacle for the implementation of the Ring, and follow more closely the market needs of the different CPs.

In this way, national TSOs would be required to build or offer capacity for the Ring, at harmonized regulatory conditions, which could be identified by appropriate ECRB Guidelines¹ prepared in cooperation with TSOs.

The Guidelines could specify the extent to which services and network codes could be harmonized on the Gas Ring, facilitating trade and the establishment of a single gas market in the Energy Community. Backhaul services on the Ring should be explicitly foreseen. Offer of one stop shop services should also be encouraged.

¹ Pursuant Article 58 of the Energy Community Treaty, ECRB may adopt measures if so empowered by the Ministerial Council.

In general, regulatory responsibilities on each national section of the Gas Ring would remain with the relevant National Regulatory Authority. The ECRB would issue common Guidelines, as well as opinions in case of cross border disputes, as foreseen by the Energy Community Treaty.

The Gas Ring would not be an interconnector between national markets, but rather the backbone of a common Energy Community market. Therefore, it should be fully open to Third Party Access. No TPA exemption should be awarded for its function.

Although Gas Ring congestion is not expected for a long time, capacity reservation and congestion management criteria are proposed, as well as provisions for capacity enhancement.

Tariffs should be set by NRAs for each national section of the Ring and related to the harmonized services, provided that they are cost reflective. A special tariff should however be set for the Ring capacity, to be split from tariffs for use of other pipelines.

Once the Gas Ring is completed and working, the establishment of a Single Ring Operator could be considered, if necessary.

A roadmap is proposed for the implementation of the Gas Ring. It starts from high level agreement and decision by the Energy Community Institutions, in cooperation with Donors. A High Level Workshop is proposed to raise awareness on the regulatory and institutional aspects of the Gas Ring

The Energy Community in accordance with the Treaty would choose the general Gas Ring Path and the institutional model, and define the role of ECRB and TSOs. It is suggested that ECRB, if so empowered by the Ministerial Council, could issue Guidelines specifying the scope and main content of service harmonization on the Gas Ring, and that TSOs should agree on the harmonization of business practices and the detailed technical characteristics and location of the pipelines used to offer the Gas Ring capacity.

The draft Consultation Paper is submitted to the PHLG pursuant Article 58 (a) of the Energy Community Treaty..

1. Background and objectives

The first and second Energy Community Gas Forums, held on November 2007 and 16 April 2008, highlighted the need for new transmission infrastructure in South Eastern Europe. In particular the Forums supported the concept of a Gas Ring that should eventually connect the territories of all Energy Community Contracting Parties. These conclusions are also supported by the 2007 Gas Survey developed by the ECRB.

In its advisory role pursuant to the Energy Community Treaty, Article 58 (a), the ECRB has developed the present Consultation Paper, as planned in the ECRB 2008 Work programme. Its main objectives are:

- To discuss and define common regulatory principles to be applied, with a view to ensure the support of Contracting Parties, the European Commission, International Financial Institutions, the gas transmission and supply industry and other stakeholders, and foster a swift start of the Gas Ring project;
- To elaborate on the potential next steps for the achievement of this project;
- To propose to the PHLG to initiate a discussion at a regional level, on the implementation strategy. To this end, all propositions of the present paper, and in particular the regulatory principles of section 4, would be open to comments and proposals by the Gas Forum participants.

2. The Energy Community Gas Ring Concept

2.1 Origin and outline of the Gas Ring Concept

As the ECRB 2007 South East Europe Gas Survey² has reported in detail, the gas market of the Energy Community Contracting Parties (CPs) is only relatively developed in the Northern parts of Croatia and Serbia, while the rest of the CPs have either no gas or a very limited infrastructure endowment and supplies. Furthermore, most supplies come from a single external source, with only Croatia featuring a significant domestic production. There are no LNG terminals and storage facilities are not yet adequately developed. Under these conditions security of supply is severely limited; new suppliers incur into several difficulties in providing increased and alternative supplies to the region; and the opportunities of developing market competition are scant.

On the other hand, it is widely agreed that natural gas could significantly contribute to improve the economic, social and environmental conditions of the CPs. If introduced and used as a substitute for electricity, liquid and solid fuels for households, industry and commercial sector, it would lower their energy supply costs, helping to reduce energy poverty and business competitiveness. Moreover, natural gas would improve overall energy efficiency and cut emissions of sulphur and carbon dioxides, nitrogen oxides and particulates, entailing local, regional and global environmental benefits. Last but not least natural gas may help increasing power generation in the region, which is in short supply, in the shortest feasible time and at reasonable cost, if the environmental benefits are accounted for.

² http://www.ecrb.eu/portal/page/portal/ECRB_HOME/ECRB_DOCUMENTS/ECRB_MEETINGS/R08-GA-05-10_Gas%20survey%202007_080306_public.pdf

The Gas Survey has also noticed that a better use of existing infrastructure could already lead to some increase of natural gas consumption. However, it is widely agreed that CPs need more transmission capacity, also aimed at improving interconnection between them and with neighbouring EU Member States.

At the 1st Gas Forum held in November 2007, Economic Consulting Associates (ECA) presented the draft final results of the Regional Gasification Study³, sponsored by the World Bank and KfW. This study clearly indicates the opportunity and need for gas transmission investments in the SEE region.

The ECA study presented the *Energy Community Gas Ring* concept (henceforth: the Gas Ring), which was welcomed by the Forum. Its purpose is to connect all Contracting Parties via a ring, considering also the needs of the region with regard to the electricity sector as well as the (existing or planned) regional pipelines, LNG terminals and storage facilities that could be connected to the Gas Ring. It could contribute significantly to further gasification of SEE but could also provide significant benefits for upstream and downstream countries.

In particular, it was highlighted that the Ring would:

- connect the markets of the CPs, including supply to those that are not currently gasified, and link them with EU neighbours (Greece, Bulgaria, Romania, Hungary, Slovenia, Italy);
- gasify deep into currently ungasified areas;
- enhance both diversity and technical security of supply, by allowing supply of each market from multiple sources and permitting mutual assistance among CPs, and by linking up regional storage potential;
- allow for the development of balancing sources and arrangements on a regional basis;
- facilitate meaningful regional SEE gas trading in future and establish the conditions for the development of a market based gas bridge between Eastern production and Western consumers;
- foster regional economic co-operation in energy;
- enable the development of gas-fired power plants in the whole region.

The 1st Gas Forum concluded that the major pipeline projects addressed in the region, and in particular in the Energy Community Ring, would need to integrate, taking into account the results of the Gasification Study.

In particular, the World Bank stressed that the Ring would greatly facilitate private sector investment, including in gas-fired electricity generation and gas distribution. These catalytic impacts and the very substantial economic benefits of the Ring for the CPs and even for the European Union countries suggest that public sector development of the Ring, including possible grants, is justified and called for. Such financing can only be considered if (i) the CPs clearly demonstrate their national and regional commitment to the Ring and (ii) accordingly include and assign high priority to the Ring in their national investment programs and (iii) request financing for the Ring in their national programs of EU and donor/IFI assistance.

The Forum welcomed the support of the Donors to these projects. The Forum invited the CPs to include with priority the Energy Community Gas Ring Concept in their short term and long term investment plans.

³ <http://www.energy-community.org/pls/portal/docs/36273.PDF>

After endorsement of the Ring concept by the 1st Gas Forum, the representatives of the CPs presented their investment programs and their convergence towards the Energy Community Gas Ring Concept in the following 6th Meeting of the Joint Gas Working Group on Infrastructure and Investment, held in Belgrade on 3 April 2008, and at the 2nd Gas Forum held in Maribor on 16 April 2008. Underlining the substantial economic benefits of the Energy Community Ring for the Contracting Parties, the Forum welcomed the presentations and called the Contracting Parties to further co-operate with respect to the development of the Energy Community Gas Ring Concept.

2.2 Alternative views of the Gas Ring

While the Gas Ring concept has been endorsed by all Gas Forum participants, it should be recalled that this concept must be considered within the rich framework of projects under development in South Eastern Europe. In fact, several new pipeline, LNG and storage projects have been presented at successive Gas Forums. Some of these projects are aimed primarily at the markets of CPs; others are transit projects, which are aimed at feeding other markets (mostly in the European Union) and are based in part on the territories of the CPs or of neighboring countries, so that existing lines could be used or new spur lines could be built to connect them to the Ring. Projects are proposed by both state-owned and private gas companies, alone or in joint ventures, originating from CPs, EU Member States and other countries. A preliminary list is provided in Annex 1.

All of these projects, as well as already existing pipelines, could represent parts of the Ring, or feed it, or provide auxiliary services.

In this context, there are two main options for the development of the Gas Ring:

- c. **Option A:** The Gas Ring could be regarded as a *whole piece of infrastructure that should be developed simultaneously*, so that it enters into service at the same time, although it is developed by several TSOs.
- d. **Option B:** The Gas Ring could be the result of the *gradual development of the national gas grids of the countries* from which the Ring will pass, including other current pipeline development projects, in line with a commonly agreed Energy Community programme.

The former approach may be considered to provide a “vision”, but it needs a substantial effort in terms of resources and political coordination, which may be difficult considering the overall status of co-operation amongst CPs. The second approach seems to be a more natural development, starting from existing networks and projects. Thus, it would allow more flexibility, and may be more compatible with the expectations of the CPs. The relevant pipelines would be built in line with the potential development of their markets, requiring less financing in the beginning, permitting variations of the concept as time goes by and requiring less political co-ordination. Donors may also start focusing their interventions on the most urgent pipelines, rather than on the Ring as a whole.

In other words, the Gas Ring could be developed in several stages and by different market players, under various regulatory regimes, and following different decision processes, though under the common framework of the Energy Community Treaty.

A third approach may also be considered. The Gas Ring could be seen as an entirely separate development, implemented by a new, ad hoc TSO, and interconnected but not overlapping with any of the existing pipelines or with other projects. However such approach is hardly worth considering, as it would lead to duplication of pipelines, loss of economies of scale and overall waste of resources.

At the initial stages of development, Option B could be followed, as it provides the smoothest and more compatible way forward. However, in what follows, Option A is also addressed, since the actions it implies will be proven useful should a final decision making procedure take place.

Depending on the sections of the Gas Ring and of the existence or not of already available infrastructure, these two options could be combined.

A further issue is the Ring path, which has not been exactly defined yet. It is clear that it should eventually connect all CPs, as well as the neighboring countries; however in preliminary stages it could be laid in some of them only. Moreover, in order to ensure that the security of supply benefits of the Ring are achieved as soon as possible, the Ring could be initially "closed" only through pipelines of neighboring EU Member States. Two possible specifications of the Ring, proposed in the ECA Study, are shown in Annex 2 as Concepts 1 and 2.

A basic common legal framework for all such projects is provided by the Energy Community Treaty itself, in particular where it foresees adoption and implementation of directive 2003/55/EC. The Energy Community Ministerial Council has decided in its 3rd Meeting on 18 December 2007 to include in the Gas Acquis to implement also the Directive 2004/67/EC and Regulation No. 1775/2005, which are due by the end of 2008. In its 4th meeting on 27 June 2008, the Ministerial Council "stressed the importance of CPs' implementing Directive 2004/67/EC before 31 December 2009".

2.3 Factors affecting the development of the Ring

While the present paper focuses on regulatory aspects of the Gas ring, the ECRB is aware that its development depends on several political, economic and financial conditions, which are beyond the control of the Energy Community's regulators. However, it is worth commenting on some of them.

No major infrastructure can be developed unless it is clear who will undertake the risk of the market. On this respect there are several potential solutions. There could be a single owner of the infrastructure, or multiple (national) entities collaborating for the development of the infrastructure and willing to share the risk. As we remarked above, the later option is far more likely given the current institutional framework.

In all cases subsidies may be required (grants, low interest rate loans, guarantees). Taking into account the immaturity of the markets, the interest of the private sector may be limited, at least for some sections of the Ring. In some cases, benefits of the Ring could be limited even for National Governments, while they are still substantial for the Community as a whole. Therefore a multilateral approach is appropriate, which is best provided by International Financial Institutions after the appropriate political decisions.

The more donors (i.e. Donors, governments, TSOs, etc.) are willing to support, the more the "ideal" framework can be implemented, where the new infrastructure would be fully open for Third Party Access and ready to maximize competition and security of supply for all participants.

With less public support, Ring infrastructure may have to be financed mostly by private parties, who may require exemptions from TPA, and fail to provide harmonized services; hence it be harder to efficiently close the Ring, which would offer a more limited contribution to the development of the Energy Community gas market.

Theoretically, a further risk is that CPs and companies may avoid committing resources if they expect Donors or IFIs to step in. However this is not a likely case for the Gas Ring. The Ring would in fact include pipelines that have other purposes like transit and are strongly backed by Governments in their National interest. Support from Donors would be mostly needed for the most difficult areas, and particularly for interconnection between CP territories.

Support for the Ring should not be affected by swings in the relative price of natural gas with respect to its competitors, notably solid fuels. While such swings have been particularly large lately, it should be recalled that the Gas Ring is an important tool of a more general gasification project. Such project has a strategic nature, is based on the opportunity to gasify the region, and is supported by considering the long term relative price of gas, as well as its social and environmental benefits.

Likewise, the Gas Ring development decision should not be heavily affected by the current global credit crunch. The size of required investment is not large from an international financial perspective. Moreover, infrastructural developments can – and already do – play an important role in the framework of the countercyclical stimulus packages that are being taken by several governments to counter the real effects of the credit crunch.

3. The regulatory framework for new gas infrastructure in the Energy Community: past, related and current activities and challenges.

In its 5th meeting on 7 February 2008, the ECRB approved its Work Programme for 2008-2009. This included the preparation of a position paper on "Cross border cooperation of regulators in relation with investment projects of regional dimension". The need to undertake such paper started from the fact that suppliers and investors approaching the South East European gas market face interesting development perspectives but also an uncertain and fragmented regulatory framework, which may reduce their commitment, notably if the reduced size of the market is considered. Therefore, a transparent, stable and harmonized regulatory framework for new infrastructure should be ensured by National Regulatory Authorities (NRAs) of the region through their co-operation, in order to provide the most encouraging conditions for investment while protecting the interests of consumers through competition, and enhancing their security of supply.

The ECRB 2008 Work Programme also recalled that efforts to draft and issue binding Guidelines for the Energy Community have not been successful so far. In fact during the preparatory phase before the Energy Community Treaty came into force, some related work was undertaken:

- In 2004, the Working Group for South East Europe of the Council of European Energy Regulators (SEEER) set up a Gas Regulatory Group in charge of drafting the "Guidelines for New Gas Infrastructure Investment Regulation in the Energy Community of South East Europe (GGIIR)";
- After the GRG failed to achieve a Common Position until April 2006, the Interim Energy Community Secretariat took up the issue and drafted a new version, known as New Gas Infrastructure Investment Regulation (NGIIR), which was presented at the Mini Gas Forum on 13 October 2006 and to the Energy Community 3rd PHLG Meeting on 5 December 2006.

However sufficient consensus could not be achieved on either draft.

Meanwhile ERGEG addressed several issues that are closely related to those considered in GGIIR and NGIIR, notably by adopting the following Position Papers and Reports:

- "Report on the transmission pricing (for Transit) and how it interacts with Entry-Exit Systems" of 6 December 2006;
- "Guidelines for Good Practice on Open Season Procedures (GGPOS)" of 21 May 2007;
- Survey on "Treatment of New Infrastructure - European Regulators' Experience with Art. 22 exemptions of Directive 2003/55/EC" (Interim Report of 12 September 2007);
- Public Consultation Paper on "Draft Guidelines on Article 22, issued on 5 March 2008⁴.

Other relevant Documents include:

- European Commission's (non binding) "Note on exemptions from certain provisions of the third party access regime" of 30 January 2004, which is expected to be revised soon;
- The Energy Community Gas Market Design Report of 12 April 2007;
- The Proposal for a Directive of the European Parliament and of the Council amending Directive 2003/55/EC of the European Parliament and of the Council of 26 June 2003, known as "Third Package", has also been considered⁵.

The ECRB 2008 Work Programme requires that the proposed approach should be based "on regional harmonisation of legal, administrative and regulatory aspects, starting from national legislation and heading towards its harmonized implementation. Experiences in the EU and elsewhere will be considered to elaborate a position paper on the specific topic, focusing on the specificities of the countries of the Energy Community and neighboring participant countries". Close cooperation with ERGEG Regional Initiatives, and in particular convergence with the South-South East Europe Gas Regional Initiative (SSE-GRI)⁶, is also considered, as the territories of the CPs are actually surrounded by those of the SSE-GRI and their networks are interconnected .

ECRB is aware that the development of a common regulatory approach towards new infrastructure entails several "regulatory challenges". Whenever regulators are asked to support the development of new infrastructure they are faced with hard choice, as they have to strike the balance between curbing market power and ensuring customer protection and affordability of essential energy goods and – on the other hand - the need to ensure financing of investments, quality and security of service and efficient price signals. In particular the general provision that tariffs should be cost reflective and include fair rates of return on a longer term basis may be at odds with social and macroeconomic stabilization policy goals.

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http://www.energy-regulators.eu/portal/page/portal/EER_HOME/EER_PUBLICATIONS/CEER_ERGEG_PAPERS/2007/GGP/C06-GWG-29-05c_GGPOS.pdf

http://www.energy-regulators.eu/portal/page/portal/EER_HOME/EER_PUBLICATIONS/CEER_ERGEG_PAPERS/2007/Reports/E07-TNI-01-04_Art.%2022-AnalysisReport_finalLAST.pdf

http://www.energy-regulators.eu/portal/page/portal/EER_HOME/EER_CONSULT/CURRENT%20PUBLIC%20CONSULTATIONS/Article%2022/CD/E07-GFG-31-07%20Article%2022%20Guidelines%20DP2.pdf

⁵ http://ec.europa.eu/energy/electricity/legislation/doc/notes_for_implementation_2004/exemptions_tpa_en.pdf;

<http://www.energy-community.org/pls/portal/docs/82178.PDF>

Common rules for the internal market in natural gas, COM (2007) 0529,
http://ec.europa.eu/energy/gas/package_2007/index_en.htm

⁶ http://www.energy-regulators.eu/portal/page/portal/EER_HOME/EER_INITIATIVES/GRI/South_South_East

These challenges are harder in the case of a relatively junior industry, as it is often the case with natural gas in the Energy Community. It may be hard to face the typical startup difficulties, which are particularly strong for an industry featuring high fixed sunk costs. Other more powerful competitors may enjoy not only economies of scale, but also influence and subsidies which may lead to a far from level competitive field. Such difficulties may also result in reluctance by some existing gas industry players to try new challenges.

Nevertheless, infrastructure development in the region is not new, but it an “exercise” on which sufficient experience exists, even under emerging market conditions and including the need to implement a liberalization process. Experiences from the Energy Community CPs and their neighbors, as reported e.g. at the recent Gas Distribution Conference, show how infrastructure can be successfully developed by mobilizing both public and private capital around shared objectives.

4. Scope and principles of a harmonized regulatory framework.

After consideration of the factual and legal framework of the Energy Community and its CPs gas market needs, having regard of those of the neighboring European Union Member States (EUMS), the following principles are proposed. The rationale for the propositions and (where appropriate) a critical discussion are provided in the present section. Comments are invited on both.

- I. The development of gas infrastructure in the CPs, as well as in neighboring EUMS, will be based on Directive 2003/55/EC (henceforth: the Gas Directive), Directive 2004/67/EC and Regulation (EC) No. 1775/2005 of the European Parliament and of the Council (henceforth: the Gas Regulation). Any further Measures for infrastructure, which could be taken pursuant to the Energy Community Treaty, must be justified by the specific situation and characteristics of the infrastructure. Any preferential or discriminatory treatment must be avoided.*
- II. In particular, it should be recognized that Transmission System Operators have the right and task of operating, maintaining and developing under economic conditions their transmission systems, pursuant to Article 8 (1a) of the Gas Directive. Such transmission systems should be generally subject to a system of third party access (TPA), pursuant to Article 18 of the Gas Directive.*
- III. It is in the primary interest of the Energy Community Contracting Parties that an adequate transportation capacity should be available to connect them. However, the development of this capacity may involve neighboring TSOs and countries, investors and other stakeholders and, therefore, the legal basis and content of this development, in the context of the Energy Community Treaty, will also have to be agreed in advance among the countries involved⁷.*

The basis for the Energy Community's energy market is the adoption of the *Acquis Communautaire* on energy, as listed in Annex I of the Treaty. Any further provision should consider the specific situation and be strictly limited to what is necessary to pursue the objectives of the Energy Community, while at the same time avoiding any discrimination, which could prevent the integration of the CP's markets with those of the European Union.

The necessity to adopt special provisions for the Gas Ring could be examined based on the following:

⁷ Some relevant considerations are included in the present paper

- a. the limited size of the Energy Community market; it is appropriate to pursue economies of scale that may not be achieved in any single CP;
- b. the low degree of interconnection, which reduces security of supply and the potential for competition;
- c. the opportunity to feed the Ring from different sources and/or to supply gas to different markets or storage facilities in case of disruptions and demand swings, thereby providing the opportunity for mutual assistance among interconnected CPs and the neighboring countries;
- d. the availability of resources for the fast increase of power generation in areas featuring structural electricity deficits;
- e. the availability of cheaper energy resources, thereby helping to combat energy poverty and improving the conditions of vulnerable energy consumers, notably in a period of high fuel prices;
- f. the environmental and energy efficiency benefits entailed by further gasification of the Energy Community, including its contribution to climate protection.

This approach is also consistent with the World Bank comments to the Gas Ring proposal, as reported in the Conclusions of the 1st Gas Forum (see above).

On the other hand, the nature of the special provisions is highly dependant on the definition and model of development of the Ring. In fact, if the above mentioned Option A (“a whole piece of infrastructure that should be developed simultaneously, so that it enters into service at the same time, although it is developed by several TSOs”) was chosen instead of Option B (“the result of the gradual development of the national gas grids of the countries from which the Ring will pass, including other current pipeline development projects”), the scope of the measures that should be taken would be very different. For example, if the latter approach is chosen, one could reasonably argue that the relevant measures could only encompass harmonized network codes, with the adequate access rules and transparency requirements in place (in the first step), with the potential for making a one-stop-shop along the lines of the coordinated auctions process in the electricity sector. This issue is further addressed in the following sections.

IV. In order to achieve the above mentioned objectives, a Gas Ring concept should be defined as the provision of a minimum transportation capacity along one or more circular (closed) paths, so that all CPs are eventually involved. Such capacity may be made available in special dedicated pipelines or by reserving capacity in larger transmission systems, which may also be used for other purposes. In the latter case, the present regulatory approach is applied to such capacity, without prejudice to any other regulatory provisions adopted by CPs for the remaining capacity.

It is not always appropriate to build special infrastructure for the Gas Ring. In fact, TSOs may be interested in developing much larger capacity than the minimum Gas Ring requirement, along the same route as the Gas Ring, in order to supply selected CP market areas, or for transit purposes. The Gas Ring may in such cases benefit from lower unit capacity costs, entailed by economies of scale from larger pipelines. On the other hand, reservation for a certain capacity rights holder of some limited capacity in a multi-purpose pipeline is a common and well established practice of the gas industry.

In other words, the Gas Ring may also be defined as a virtual rather than physical pipeline. It could be built and managed by the concerned national TSOs (*Ring Operators, ROs*). As a

minimum, these ROs are expected to harmonize their national access rules in a way which ensures smooth operation of the Gas Ring. Such common regulatory framework by definition should not be (dis)advantageous for any of the CPs.

ROs may also decide to partly or entirely entrust the management of capacities related to the Gas Ring to a single company (*Single Ring Operator*), or to adopt some other form of common management, with the view to provide uniform services to third parties (*one stop shop*). These issues will be discussed in section 6 below, without prejudice to the main regulatory principles that are outlined in the next section 5.

5. Definition of the Gas Ring.

- V. *The overall path of the Gas Ring needs to be defined , by consensus among the Parties involved. This requires, in principle, agreement at a higher political level from the beginning. The actual path and transportation systems to be used will be decided by the Ring Operators. The Gas Ring may require more interconnection in order to appropriately involve all CPs. It may also require capacity in infrastructure located in neighboring EUMS, even on a temporary basis, with the view to formulate a closed path, for as long as CP-based infrastructure is not in place .*
- VI. *The capacity of the Gas Ring will be jointly defined by the ROs, for each section, taking into account the need to fully exploit already available capacity, as well as new supply routes promoted by various investors through the SEE region. For this purpose, they shall take all necessary measures to determine the anticipated market potential.in such a way that the required capacity may be financed. The design of this procedure would be subject to the approval of the involved. NRAs.*
- VII. *Decisions on the Gas Ring capacity that should be made available will be taken in accordance with national legislation, for each national section of the Gas Ring. However, the procedure should be such that allows any involved stakeholder who wishes to increase the planned capacity at its own cost to do so. Intervention of the national NRAs and (in case of cross-border disputes) the ECRB should be foreseen, with a view to safeguard the implementation of this principle.*

The Gas Ring would be the backbone of gasification in the CPs' territories, therefore it is reasonable to build it in line with long term development forecasts rather than short term needs.

Ensuring the financing of the Gas Ring may require some difficult decision. One possibility is to allow interested network users (shippers) to request an increase of the Ring in return for capacity reserved for longer periods. In such case, larger costs would be borne by shippers, which would be allowed to enter into long term capacity contracts allowing them to reserve capacity in return for long term commitments⁸..

However, awarding such long term capacity may raise legal difficulties, limiting TPA rights. In general a preferred approach would be to finance the Gas Ring development out of TPA tariffs. This would be decided by NRAs for each national section of the Ring. This would ensure full access to the Ring capacity- On the other hand the required tariff levels may be hard to bear in a region with very limited market development, notably in the new market areas. A way to avoid too high such tariffs would be the intervention of Donors, notably to finance.

⁸ Advanced Reservation Capacity Agreements as developed in the United Kingdom may be a suitable model for long term capacity reservation. This could be also the outcome of an open season process. Once the Ring concept is defined and its developments is decided, it may be useful to conduct open seasons on the national grids of the involved countries, having in mind the prospect of the Ring creation or its later enhancement.

In any case, any decision should carefully consider the issue of Ring financing. No Ring could be built unless companies' shareholders are ready to take the risks which are usually associated with equity capital, which is more than the timely limited one that could be addressed by IFIs.

In any case, it is likely that capacity of the Gas Ring would be decided initially on the basis of ROs' judgment, which may be based on demand forecasting studies, and are often approved by a competent political or regulatory authority in each CP, defined by the relevant national legislation in accordance with the Gas Directive. However, the NRAs involved and/or the ECRB would be responsible for solving any cross-border dispute that may arise between stakeholders from different CPs or neighboring EUMS. For example, if a TSO from a CP does not envisage adequate capacity as needed by a shipper from another CP, it could be expected from the Regulators to request the expansion of the capacity at the applicant's request, provided that the latter covers the necessary cost and the solution is technically feasible.

Since decisions by ROs and the relevant authorities will be the basis for the development of the Gas Ring, it is not expected that the procedure described above would have a major role. Indeed, TSOs and other investors may prefer waiting for capacity to be defined by the GRO and use it at regulated tariffs, possibly with the participation of IFIs, rather than providing a firm commitment towards new investment. On the other hand, investors (including TSOs from neighboring countries⁹) would have the possibility of reserving long term capacity through such a procedure, which could be useful for some of them and would also provide signals for the potential users of the Gas Ring.

VIII. Access conditions including tariffs will be related to the Gas Ring capacities, and offered as harmonized services. A single service covering several participating networks (one stop shop) may also be agreed by ROs and offered. Such service would involve the capacities defined as the Gas Ring as well as pipelines that feed gas into the Ring and branch lines that deliver gas from the Ring to consumption areas only for capacity up to or equal to the Ring capacity. Such pipelines as well as any related infrastructure including storage sites and LNG terminals would remain subject to regulation by the relevant NRAs.

It may be appropriate to extend ROs "one stop shop" services to feeding pipelines, at least for the related capacity. ROs may also decide to offer one stop shop services, including their branch lines, as an option for network users.

NRAs and TSOs should strive to ensure the best harmonization of access condition for all CPs, in the interest of network users and as an effective way to avoid cross border disputes.

6. Gas Ring access and operational rules

IX. The Gas Ring would be fully open for TPA pursuant to Article 18 of the Gas Directive and Article 4 of the Gas Regulation. Harmonized network codes would be drafted by the ROs for use of the Gas Ring, and approved in accordance with national legislations. In case of cross-border disputes on the provision and implementation of the network codes the ECRB would be requested to issue its opinion.. The main provisions and criteria for access to the Gas Ring are suggested in the present paper.

⁹ If a national TSO, with the agreement of the national Regulator, wishes to book capacity in the Ring for future use by its national gas market participants, then he may participate in the capacity reservation procedure. Relevant costs could be socialized in the network tariffs of his national market and be remunerated by national users.

- X. *No exemption from TPA would be awarded for the function of the Gas Ring. However the relevant national bodies may award such exemptions to transmission pipelines located in the CPs, pursuant to the relevant national legislation and the Gas Directive, without prejudice of the capacity made available to the Gas Ring, even if this uses the same pipelines.*

The nature of the Gas Ring is to sustain gas transmission within a fully integrated market. Entry and exit points from the Ring would be provided wherever it is economic to do so. As such, the Gas Ring does not provide only interconnection or transit services, but it is rather the backbone of gas transmission in the integrated market of the CPs. It is therefore not appropriate to request exemptions from TPA for the Gas Ring as foreseen by Article 22 of the Gas Directive.

It is worth underlining that this is a substantial rather than legal judgement. In principle, sections of the Gas Rings could be eligible for exemption if the conditions specified by Article 22 applied. For example transmission companies may apply for exemption of particular sections, but this would jeopardise any single identity of the Ring: there could be no harmonisation if sections are exempt and others are not. Therefore, it is ECRB opinion that the Ring capacity should be considered as a whole, open to TPA and not accepted for exemption.

This proposition does not however exclude that:

- spur line and feeders of the Gas Ring, which satisfy the requirements of Article 22 and provide interconnection between the Ring and external sources of gas, may apply for exemptions as envisaged by the Gas Directive. In fact, feeders of the Gas Ring may be used in (even larger) part for transit purposes, and as such they could be regarded as interconnectors and be eligible (if the relevant conditions apply) for exemptions under Article 22;
- if a virtual Gas Ring concept applies, where parts of the Gas Ring use pipelines that are built for other purposes (e.g. for transit), exemptions may still be awarded by the relevant Authorities to the remaining capacity of the pipeline, which is not reserved for the Gas Ring;
- branch line originating from the Gas Ring may apply for derogation from some provisions of the Gas Directive, pursuant to Article 28 (for example, if they serve emergent market pursuant to Article 28(2), or pending the development of downstream infrastructure pursuant to Article 28(4)).

On the other hand, feeders and spur lines may well be developed under a normal TPA regime, without exemptions. In fact many of the adjacent TSOs in the EU Member States have obligations for expansion of their national grid, even for transit, provided that adequate guarantees are in place - e.g. from Donors or from neighbouring countries - that links between the national networks would be fully remunerated, as foreseen by the tariffs principles (See Section 7). Given their limited size and costs several spurs from existing grids and interconnections between networks could be built even with very limited market players' support.

In case derogations were awarded under Article 28(4) of the Directive it should be considered whether the Gas Ring capacity should be excluded from such derogations. On this perspective the Gas Ring should be regarded as infrastructure of regional rather than national interest and assessed accordingly.

These provisions underline the need to strike the balance between the public and open nature of the Gas Ring, and the opportunity to allow investors to ask for exemptions if the Article 22 criteria are met and a transit opportunity exists. However the responsibility of awarding exemption would remain with NRAs and the European Commission under the current legal framework. NRAs

might also decide to satisfy any transit needs under the TPA regime, for example by conferring capacity in the long term at regulated rates, and by including the cost of capacity development in the transmission tariffs. In such cases the relevant authority may decide that system users (and eventually their customers) would bear the market risk of the new infrastructure.

On the other hand, if the authority finds that such costs cannot be borne by the TPA tariff, and if the other Article 22 conditions are met, then the criteria for the award of a (total or partial) temporary exemption would apply.

In general the ECRB would not have any role on such exemptions, except if any cross border dispute arises. Therefore only an information obligation is foreseen.

- XI. *Once capacity is available on the Gas Ring, it would be allocated by the ROs to applicants, normally on an annual basis. Only in case of congestion in parts or all of the Gas Ring, the concerned ROs would launch an auction to allocate the capacity. Any revenue from the auction should be used to enhance capacity or returned to the Gas Ring users. In the short term prorating may also be used as congestion management method, subject to anti-hoarding provisions.*
- XII. *Capacity would be normally reserved for entry points into the Ring and all cross-border and exit points.*
- XIII. *In particular, backhaul flows should be explicitly permitted. This could be achieved by requiring in the network codes and tariffs that each entry point is also an exit point and vice versa, including cross-border points.*
- XIV. *In case congestion is permanent an open season process should be launched for capacity expansion. The open season specification would require approval by the NRA. The ECRB would be involved in case of cross-border disputes.*
- XV. *Capacity reservation would be subject to financial guarantees. Such guarantees may be lifted or reduced if the applicant has an investment grade debt rating from a major rating agency.*
- XVI. *Any RO or network user may also require expansion of the Ring capacity or its extension towards other areas, for example through enhanced compression or the construction of loops. In such cases ROs would agree on the necessary actions, and possibly on launching an open season. In case of disputes the ECRB would issue its opinion.*

Considering the relatively slow consumption buildup and the opportunity to build enough capacity that can accommodate consumption in the long term, congestion is not expected to occur in the first few years after the establishment of the Gas Ring. Therefore it is appropriate to use the "first come first serve" approach, which is the simplest from the administrative perspective. Further, "first come first serve" entails incentives to network users to reserve capacity as soon as possible and therefore to develop their market soon.

In the unlikely case of congestion auctions may be used to solve them. This approach seems more practical than the "rucksack" principle, at least for entry into the Ring, notably if the cross-border nature of the Ring is considered. In the short term, before proper auctions are organized, prorating of capacity may be used, to be reserved to shipper which can demonstrate the availability of gas supplies.

- XVII. *In case capacity is not used by a network user but is requested by another shipper it should be released to the applicant. ROs would specify detailed and harmonized "use it or lose it" rules according to Gas Regulation 1775/2005. In particular, long term capacity agreements would be subject to milestones requiring the use of the Gas Ring. Incentives could also be*

provided to initial capacity holders, with the view to release the capacity they don't need to the market.

It is necessary to discourage hoarding of the Gas Ring capacity by any user that may try to reserve capacity in order to prevent entry by other suppliers. In particular, long term capacity holders would be required to offer unused capacity on an interruptible basis, as required by Article 5(3) of the Gas Regulation. Such provisions may also be included in the Network Codes, approved by NRAs. The ECRB may develop common guidelines on this respect and would intervene in case of cross-border disputes.

XVIII. ROs would co-operate on dispatching and balancing in order to ensure the availability of transmission capacities of the Gas Ring.

ROs would operate their networks for their needs, without prejudice to Gas Ring operation. This would probably require the completion of operational balancing agreement between all ROs. They may also decide to confer responsibilities over balancing and dispatching to a common operator.

7. Tariffs

XIX. The Gas Ring transmission activities would be financed by charges levied on its users. Such charges would include any related transmission cost including a reasonable rate of return on assets. Tariffs shall be fully cost reflective. In case of disputes the ECRB would try to solve them by summoning the concerned NRAs, which would be asked to submit the relevant information about assets and operational costs, required for the activities of the Gas Ring and lying on the territories of their competence. If NRAs cannot agree they may also ask the ECRB to advise on a solution.

In particular, capital expenditure will be fully reflected in costs, and approved by NRAs. ECRB may contribute by benchmarking tariffs with each other as well as with international standards in order to prevent disputes. Any cost reduction that may derive from the participation of donors in the financing of the project, as well as any cost that is covered through connection fees or other access charges, the revenue of auctions, balancing charges and other related TSO revenue, should be transferred to users of the Gas Ring through reduced tariffs.

Disputes in the interpretation and implementation of cost reflective tariffs may arise. In some cases these disputes have a cross-border nature: for example, customers of a downstream jurisdiction may find that the transit charges imposed on them by the regulation of an upstream country are too high, due to an unreasonably high assessment of some cost components. In such cases the ECRB should try to solve the controversy by encouraging agreement between the concerned NRAs. In case no common position could be reached the ECRB could be required to issue its opinion. It is worth recalling that the Energy Community Treaty defines a dispute settlement procedure.

In case the Gas Ring capacity is part of larger pipelines, any ECRB intervention would be limited to such capacity and would not address the remaining capacity of the concerned pipelines.

XX. Tariffs will be related to entry and exit points or zones, with a view to fairly reflect transportation distances and the possibility of reverse commercial flows on the Gas Ring. Exit zones may coincide with the territories of contracting parties. Backhaul transactions would be charged the common system costs only.

Entry-exit type tariffs are regarded by European Regulators as the most appropriate way of setting gas transmission tariffs. This is particularly the case for a Ring, where flows may be

reverted, or gas trades can be agreed for transactions using the Ring in the opposite direction with respect to the main flow (backhaul transactions).

In this way, network users and eligible customers would pay in relation to the cost of transmission in the direction needed to reach them. They would also benefit from an emergency service through the opposite direction, which would be implicitly included at a far lower cost.

In the case of the Ring, the calculation of tariffs is relatively simple. The tariff for a transaction would amount to the sum of the costs of the network zones involved in the transaction. For example, gas entering the Gas Ring (concept 3) on the Slovenian – Croatian border at Rogatec and aimed for consumption by an Albania customer would amount to the sum of Croatian and the (future) Montenegrin and Albanian networks charges. Cost of national branches should not be included but it would be applied separately by each connected TSO. Some tariff reform may be necessary on a national basis to implement a separate tariff for Gas Ring capacity.

A further benefit of this approach is the very limited potential for disputes between participating TSOs. Basically each TSO would be in a position to earn the revenue related to its share of the Ring, without any need for compensation between them. Compensations could be introduced only on a voluntary basis in case one stop shop services were offered, but these would not be necessary for the implementation of the system.

Tariffs would be normally different for each entry and exit points, as costs differ to reflect the network topology. However, exit zone tariffs may be postalized at CP level if NRAs wish to keep a single tariff for their national territory. This does not introduce major distortions considering the limited size of each CP.

In other words, cost-reflectivity of the tariffs does not imply a unique tariff over the whole Ring, but rather a set of cost reflective tariffs for portions of the Ring. Such tariffs would however be set for harmonised services, to be defined by NRAs within the framework of ECRB,

An important difference with respect to postage stamp tariffs currently used in the CPs would be the introduction of reduced tariffs for reverse flows. Each NRA may however decide to split its territory into several zones and apply differentiated tariffs.

Since backhaul transactions do not add to system costs but actually reduce the need for capital and compression costs, they should receive a significant discount and only charged for general system administrative costs.

XXI. Tariffs will be set in EUR for duration of five years and updated yearly to reflect the average inflation rate of the Eurozone or other way which adequately describe increase of transmission costs. A productivity factor will also be applied in order to reflect reasonable productivity improvements, aimed at achieving European standards, and to reflect increases in the utilization rate of the Gas Ring.

Financing of some parts of the Gas Ring by private parties may be difficult and could require intervention by State institutions and Donors. Tariffs should reflect such costs. It is worth noticing that a clear and strong commitment by NRAs towards stable and cost reflective tariffs, as well as ECRB responsibility in case of disputes, could greatly improve financing conditions of any pipeline that would form the Gas Ring. Without such commitment, Donors may not provide grants or reduced rate loans, and any private financing would possibly request not only much higher returns, but also a fast upfront depreciation of the assets. Both would lead to far higher transmission tariffs, which would in turn jeopardize the competitiveness of natural gas in the region. Therefore, it is very important for NRAs to commit to long term transmission tariff setting.

Therefore, a price cap mechanism is envisaged, in line with modern regulatory practices prevailing in the European Union, and should be gradually phased in. This would enhance regulatory certainty and provide the best basis for donors' involvement. Details of the mechanism would be defined by the ECRB, considering that gradual increase in the Gas Ring average load factor as the market is developed is expected to lead to unit tariff reduction during the regulatory period.

XXII. Tariffs will be proportional to reserved capacity. A separate charge will be also applied to reflect compression and leakages and updated every three months to reflect changes in international gas prices.

Transmission tariffs are capacity based in most cases in Europe, and this solution is the easiest for the sake of arranging an internationally accepted tariff system. However compression costs and losses, which are expected to be relatively small in the Gas Ring case, should be charged separately, possibly at pre-determined rates linked to the gas price, as reflected by a suitable published market indicator.

Tariffs should be defined in EUR in order to encourage the participation of international investors, also considering the lack of any other generally accepted currency in the region. As a consequence of which they would be indexed after Eurozone inflation. Otherwise, tariffs may also be indexed to average inflation rate in the CPs, but in this case prices in EUR would be affected by CP currencies' exchange rates. This would add some volatility and may involve difficulties in the servicing of loans received from Donors. In practice, tariffs may also be defined in EUR and cashed in CP national currencies at the current exchange rate.

8. Operation of the Gas Ring

The present section deals with the actual institutional and regulatory solutions that may be envisaged to ensure such outcome. Two main options are submitted to the reader:

- A. The establishment of a dedicated Single Ring Operator to hold and manage the transportation capacities that make the Ring available. Such Operator would not in general own the assets, but only the necessary access rights to them,
- B. The provision of the Gas Ring and the necessary capacity by the current and future TSOs that own the pipelines, after an agreement of the concerned parties.

XXIII. (1) A Single Ring Operator (SRO) would be established, as a company participated by all concerned TSOs. The proposed Measure would define the SRO as the sole Gas Ring capacity holder. The SRO would not normally own the network, which would remain in the ownership of participating TSOs. However, the SRO would be entitled to use the pipelines of participating operators in order to provide the requested capacity to network users, as requested for the implementation of the Gas Ring.

(2)The Gas Ring will be operated by the concerned TSOs, for each section (Ring Operators). They shall officially agree on the implementation of the main provisions required by the present Document,subject to NRA approval in line with Article 25 of the the Gas Directive:

- *the capacity and routes, including entry and exit points, to be offered for the implementation of the Gas Ring;*
- *the necessary harmonization of network codes, and transportation contracts;*

-
- *tariff criteria;*
 - *the establishment of operational balancing agreements for interconnected networks.*

The SRO could be regarded as an independent system operator. In the gas industry, its role could also be assimilated to those of rights holders, which pay TSOs for use, operation and maintenance of their networks, and in turn market them. It can also be compared with the Austrian Gas Grid Manager¹⁰, with the proposed NETS (TSO integration) proposed for South Eastern Europe, or with the international Nabucco company structure.

In all such cases ownership would be separated from capacity rights holding of the networks. National TSOs would retain ownership and possibly also operational management, but following the operational instructions of the SRO¹¹.

Definition of the actual corporate model and governance as well as of participation shares lies beyond the scope of this paper. The existing and proposed models are only mentioned here to underline that they would be compatible with the SRO option, which is no substitute for them.

Establishment of a SRO would ensure the harmonized and integrated development of the Gas Ring. The nature of the SRO would be also fully consistent with the proposals of the "Third Package".

The conferral of partial transit rights of pipeline capacity to a third party and its management on a certain route in agreement with TSOs is a common practice of several major European gas operators and is normally carried out without major difficulties. For example, capacity of major transit pipelines in Europe like TAG, TENP, MEGAL are partly allocated on a long term basis to right holders, which are different from the pipeline owners. Likewise, part of the capacity of pipelines owned (e.g.) by national TSOs may be allocated to the SRO:

A further benefit of establishing a SRO would be related with the transparency of financial flows, notably if Donors are heavily involved, as it would provide a single counterpart for them. In such

¹⁰ Austria recently implemented a transport model where five TSOs are technically operating their network and a common Grid Manager (AGGM-Austrian Gas Grid Manager) is handling and managing capacity, covering the following tasks:

- Calculation of transport capacities
- Management of grid access and capacity allocation;
- Control and optimization of gas flows, including use of linepack
- Provision of system services
- Planning procedure of new investment (long term planning and/or open seasons)

Experience shows that in this way the grid has been able to support a 10% higher peak load than before system wide management.

The Austrian transmission pipelines are operated by 5 TSOs. Main task of the TSO is to operate, maintain and extend the transmission lines pursuant to the instructions and standards of AGGM. TSOs control the transmission lines operated by them in line with the business terms of AGGM.

Responsibility to enter into contracts with shippers may be allocated to either the RGM or individual TSOs. In the former case responsibility would be strengthened as it would directly fall on companies actually providing the service. In the latter case responsibility would not be direct but shippers' role would be facilitated through the involvement of the RGM.

¹¹ The present paper should by no means be interpreted as the endorsement of current national TSOs as ROs, or of their current ownership status. In fact, regulators do not have in the Energy Community any responsibility concerning the ownership of any company, and they do not have opinions on company ownership including that of TSOs. Gas Ring development by National TSOs could be carried out by state owned or private companies, as well as by public-private partnerships.

case, the SRO may also include the appropriate financial institutions as temporary equity holders, and own at least some of the assets it uses.

On the other hand, the second option where the Gas Ring is developed under a formal co-operation agreement between participant TSOs (ROs) has the remarkable advantage of being much simpler and requiring fewer negotiations, which may stall the process due to the difficulties of defining its precise outreach, by-laws including governance, headquarters, and allocation criteria for common assets, costs and revenue. The recent experience with the South East Europe Coordinated Auctions Office for the electricity market shows how lengthy this process can be.

Finally, it should be underlined that these options are not mutually excluding.

It may be reasonable to start with the second option, where the Gas Ring would be developed based on the national plans and existing infrastructure of the CPs (and EUMS, where necessary) through which the Ring is going to be developed. Formal agreements between the relevant authorities (see next section) would clarify how national plans could be restructured to be compatible with those of neighboring countries so as to eventually formulate the Ring, or, likewise, how the Ring could be slightly altered to comply with national plans. Further formal agreements between TSOs would then define the exact path of the Gas Ring, its implementation schedule and outline the necessary interconnection provisions and the harmonization of market and access rules. The partial or optional offer of some one stop shop services may be also envisaged.

At a later stage, after the necessary negotiations and studies have been completed, and possibly after the Ring has been completed, the SRO could be established and be given the appropriate tasks and responsibilities. This decision could be conditional on results achieved by the harmonized national development (Option A).

The implementation proposals of the next Section adopt this approach.

9. A roadmap towards the Gas Ring

The present section will suggest the next steps that may lead to the implementation of the proposed approach, creating the most favorable regulatory framework for the development of the Energy Community Ring. These will require the co-operation of all CPs, and of all organs of the Community (Ministerial Council, Permanent High Level Group, ECRB, Secretariat) as well as of the gas industry, notably TSOs.

In general, the Gas Ring project and its main pillars should be decided at the highest level. On the other hand, the subsidiarity principle suggests that decision about detailed routing regulatory rules and procedures and technical aspects should be left to each CP and its TSO(s).

Likewise, issuance of regulatory Guidelines for the Gas Ring access, tariffs and expansion could be attributed to the ECRB by the Ministerial Council.

The following steps may be envisaged:

1. ECRB decides to submit this consultation paper to the **Permanent High Level Group** pursuant Article 58 (a) of the Treaty.
2. Considering the difficult regulatory issues raised by the Gas Ring, it may be useful to raise in depth awareness at the highest level on the required regulatory framework for its development. This could be achieved also through a **High Level Workshop** that may be

organized, where ECRB will illustrate and informally discuss the present Document with PHLG members, Donors, and TSOs.

3. After taking the views of the Contracting Parties in the Permanent High Level Group, it is recommended that the consultation paper is presented for discussion at the **2009 Gas Forum**.
4. NRAs and the ECRB could start working on the harmonization of rules as required for the establishment of common services. They may draft **Guidelines** on access criteria and tariffs, following the proposals of the present Document. Such Guidelines may be included in a ECRB Position Paper, a Recommendation, or a Memorandum of Understanding among concerned Regulators.
5. TSOs would also work on the **harmonization of their business practices**, with a view to ensure their compatibility and pave the way for the availability on common (one stop shop) services. This process should start from the Conclusions of the ECRB "Study on the Improvement of Interconnection, Interoperability, Transparency and Harmonisation of Operational Rules for Natural Gas Transportation in the Energy Community" and follow the agreed regulatory Guidelines. Periodical joint meetings of regulators and TSOs would be organized to report and discuss on progress achieved. The process may end up in a TSOs' MoU outlining the main services of the Gas Ring Capacity, and their commitment to build the necessary new infrastructure and make the proposed capacity available.

Annex 1. List of projects presented at the 1st and 2nd Gas Forum

Note: this list is based on presentation by concerned stakeholders. It is included for information of the readers, with a geographical ordering, is not exhaustive and does not represent any endorsement of projects by the ECRB.

(1) Projects based at least in part on CPs' Territories

- Extension of the main Croatian line through Lika and Dalmatia between Bosiljevo and Ploce
- LNG regassification terminal in Krk (Croatia)
- Ionian Adriatic Pipeline (IAP) between Ploce (Croatia) through Montenegro and Albania)
- Trans Adriatic pipeline between Greece, Albania and Italy
- LNG regassification terminal in Fier (Albania)
- Storage site in Fier (Albania)
- Transmission line Klecovce-Negotino (FYR of Macedonia)
- Transmission line Tetovo – Gostivar (FYR of Macedonia)
- Transmission line Skopje-Pristina (FYR of Macedonia-UNMI Kosovo)
- Completion of the Banatski Dvor storage site (Serbia)
- Interconnector Niš – Dimitrovgrad (Serbia)
- "South Stream" Northern branch (Russia-Bulgaria-Serbia-Hungary-Slovenia-Italy)
- Transmission line Zenica - Bosanski Brod and Kladanj - Tuzla - Bosanski Brod (Bosnia and Herzegovina)
- Transmission line Loznica - Bjeljina (Serbia - Bosnia and Herzegovina)
- Transmission line Bijeljina – Banja Luka – Novi Grad (Bosnia and Herzegovina)
- Storage facilities in Beničanci and Okoli II (Croatia)
- Transmission line Slobodnica-D.Miholjac-Dravaserdahely (Hungary-Croatia-Bosnia and Herzegovina)

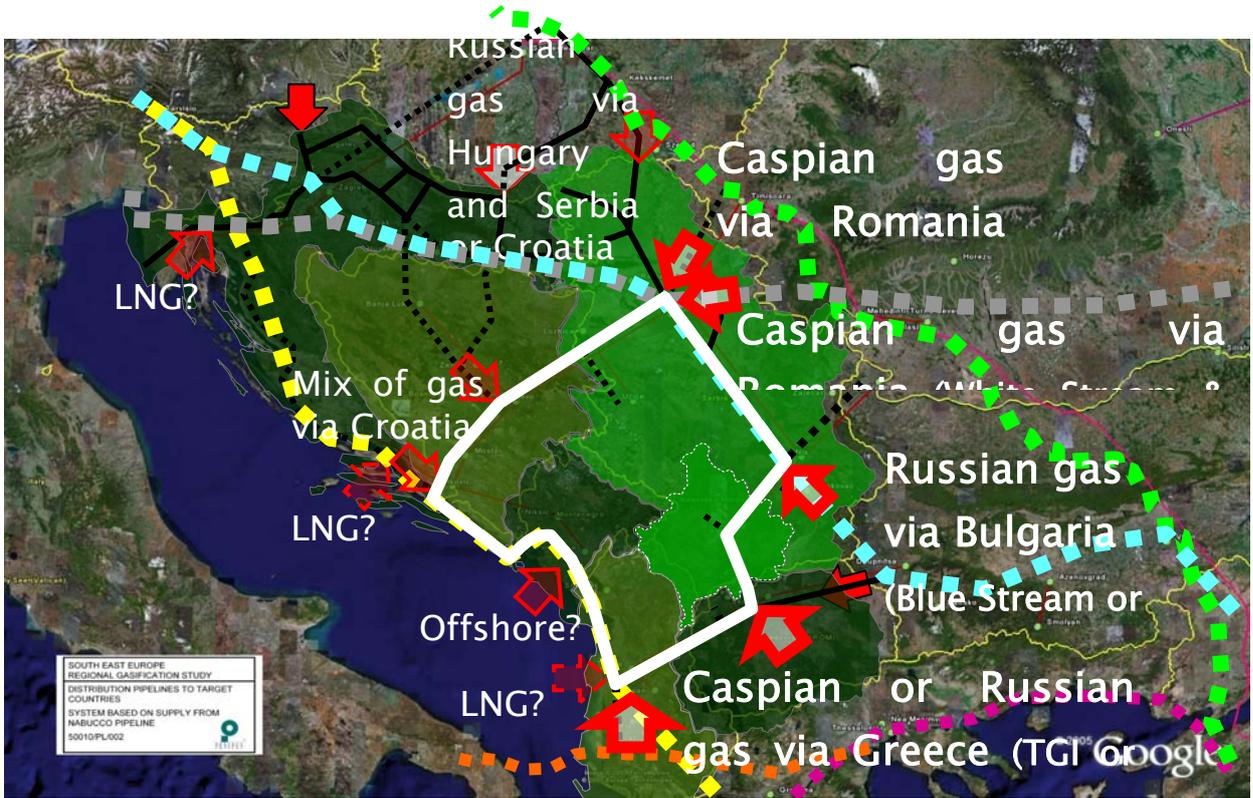
(2) Transit projects that may be connected to the CPs

- "Nabucco" (Turkey-Bulgaria-Romania-Hungary-Austria)
- "South Stream" Southern branch (Russia-Bulgaria-Greece-Italy)
- TGI Interconnector (Turkey-Greece-Italy)
- "White Stream" (Georgia-Ukraine-Slovakia)
- "Tauern Gas Leitung" (TGL, Germany-Austria-Slovenia)
- Greek gas network and LNG terminal in Revythoussa

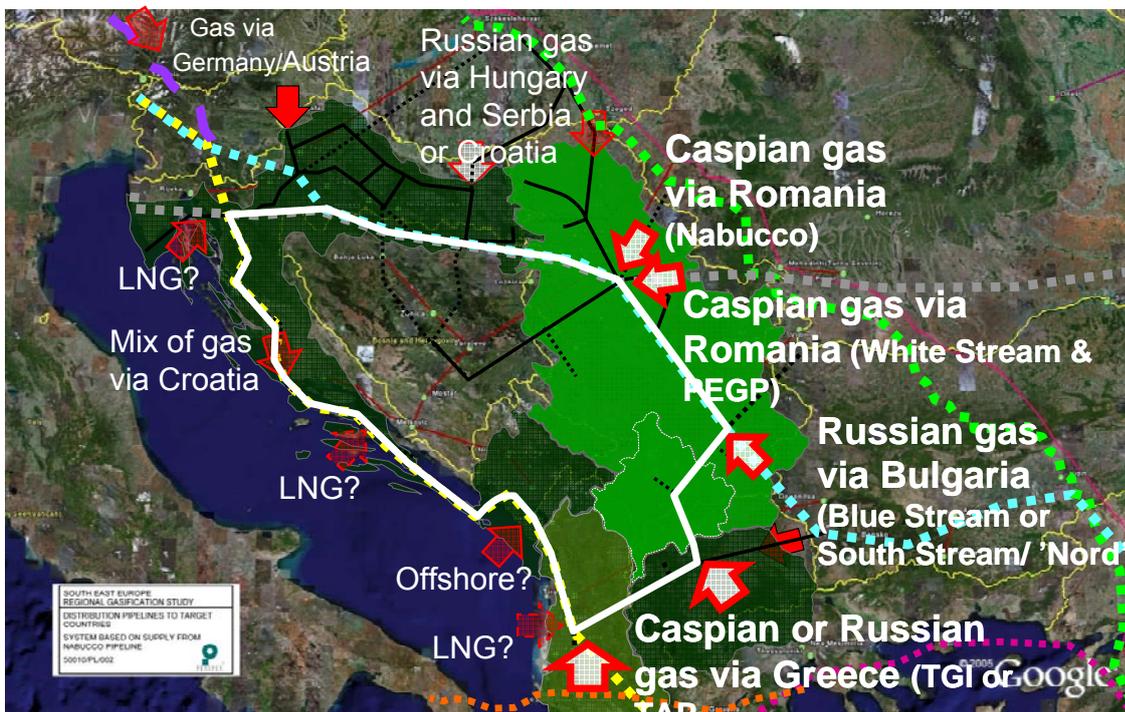
Annex 2. Gas Ring concept maps



Energy Community Ring concept 1



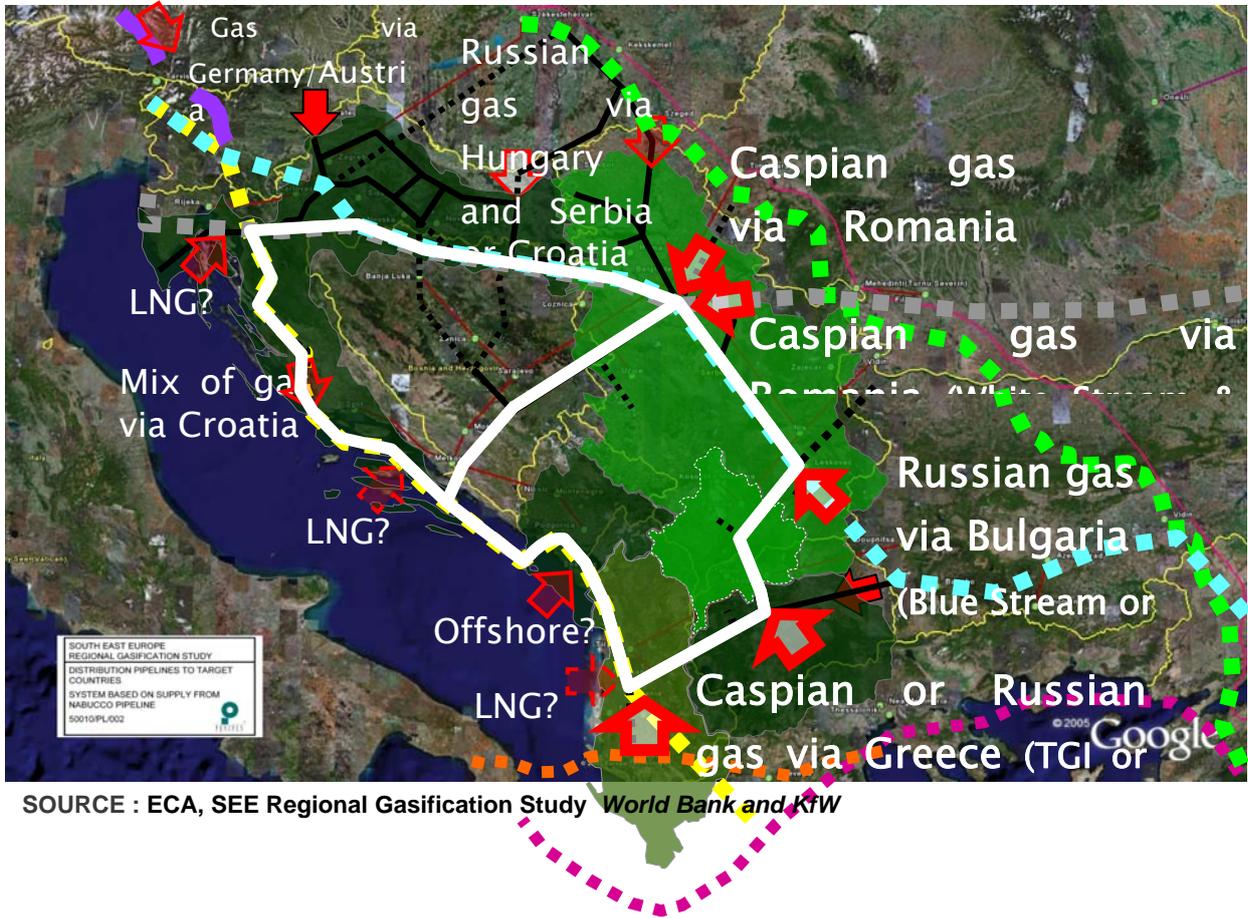
Energy Community Ring concept 2



SOURCE : ECA, SEE Regional Gasification Study World Bank and KfW



Energy Community Ring concept 3



SOURCE : ECA, SEE Regional Gasification Study World Bank and KfW