

NRA's views' on the Gas Regional Investment Plan 2011-2020 – South Gas Regional Initiative

1. Introduction

The Third Package foresees the development of Ten-Year Network Development Plans (TYNDP) at three different levels: national, regional and European level. Article 12 of the Regulation (EC) n°715/2009 states that TSOs shall establish regional cooperation within ENTSOG: “In particular, they shall publish a regional investment plan every two years, and may take investment decisions based on that regional investment plan”.

Although the scope, contents and methodology for drafting the regional investment plans are not defined in the EU legislation, the Agency gave further insights on its expectations in the evaluation of the second TYNDP 2011-2020, published by ENTSOG. It was specified that “regional investment plans should contribute to higher consistency between national and Community-wide TYNDPs, identify infrastructure and investment gaps at regional level, better address the relation between infrastructure and market integration in order to have an accurate diagnosis of investment needs and provide a deeper description and understanding of cross-border congestions to ensure a consistent design of cross-border projects”.

Over the past few years, the South GRI has gathered valuable experience with regards to the coordination of infrastructure developments. The TSOs within the South GRI had engaged in a joint assessment of cross-border investment needs for 2015, which led in particular to the launch of Open Seasons in 2009 and 2010 for the development of the interconnection capacities between France and Spain. Building on this experience, the TSOs within the South Region (Enagas, GRTgaz, REN Gasodutos and TIGF) published their first Regional Investment Plan (GRIP) in November 2011. The NRAs welcome this first publication, which will enhance the coordination of infrastructure developments in the South Region.

The South GRIP was presented at the Stakeholders Group meeting of February 2012 and a one-month public consultation was launched afterwards. One response was received from Iberdrola. As a general comment, this stakeholder reminded that investments should be subject to cost-benefit analyses while the GRIP South tends to only present how the different projects would improve the current situation. For instance, this respondent considers that the existing infrastructures are sufficient to cover the Portuguese demand and takes the view that demand forecasts are overestimated. In the case of the new Iberian Peninsula-France corridor, it highlights that the results of the past Open Season procedures developed in the SGRI already provide enough interconnection capacity.

As part of the work programme for 2012 of the South GRI, the NRAs committed to provide feedback to the TSOs on the GRIP methodology and contents, as well as on its consistency with National and EU-wide TYNDPs. This feedback will be used as an input to ACER's forthcoming opinion on the six regional investment plans published between November 2011 and June 2012. This evaluation will be launched on the basis of article 6 (9) of the Regulation n° 713/2009, stating that the Agency shall monitor regional cooperation of TSOs and take due account of the outcome of that cooperation when formulating its opinions, recommendations and decisions.



In this perspective, the NRAs of the South Region intend to highlight positive results from the first GRIP exercise and also point to potential room for improvements. The outcome of this assessment will be openly discussed between regulators and TSOs, to ensure that the next GRIP for the South Region is even better fit for purpose.

2. Overview of supply patterns, current and forecasted demand and flexibility tools

The South GRIP provides a valuable description of the specificities of the region compared to the overall EU gas market in terms of supply portfolio, pointing to the specific role played by LNG for instance, but also in terms of current demand profiles and forecasts and finally on the availability of flexibility tools. This overview is very useful in the sense that it reflects the key issues for our region, highlighting for example the current trend towards greater flexibility in the LNG market, which is important for the South Region considering the significant share of LNG supplies. **The NRAs welcome this initiative and encourage further analyses for the next GRIP, in particular with regards to the changes affecting the LNG market and its consequences on flow patterns.**

In addition, the GRIP depicts the differences between the French, Spanish and Portuguese markets in the fields mentioned above. While relevant comparisons are presented, **the NRAs would suggest that it is complemented with a focus on the interdependence of the three markets.** The idea would be to underline the specific role played by gas transiting from France to Spain, Spain to France, as well as Spain to Portugal and Portugal to Spain, compared to the role of the other sources of supply and flexibility to these three countries. This focus would highlight the importance of the cross-border interconnections in the region and thus give an insight on the potential added value of the different infrastructure projects.

The response received from the public consultation points out that the demand forecasts (+1.8% of average annual growth) are overestimated, in particular with regards to the use of gas for power generation. These figures are actually derived from ENTSOG's demand scenarios used for the 2011-2020 TYNDP. While the NRAs acknowledge that it is important to ensure consistency between the different plans, they also consider that **the effects of the economic crisis will need to be better reflected in the demand forecasts of the next GRIP.** Consequently, demand forecast should be revised, as well as the role assigned to CCGTs in the network development requirements.

Forecast of how the gas offer would evolve in the following years would be also necessary, since it helps defining investments needs.

3. Description of the investment projects

The section dedicated to the interconnection projects provides a comprehensive description of the different FID and non-FID projects contributing to the implementation of the "Iberian-French corridor" and "3rd IP Portugal-Spain". The charts and maps included in this section help identifying the links between the specific infrastructures developments and core network reinforcements, and also provide valuable information on the technical characteristics of the infrastructures and on their current status.



On the general approach, **the NRAs welcome the attempt to “cluster” the different projects and sub-projects** and would recommend that their interactions are further described in the next GRIP. The NRAs think **it would be useful to have a more thorough justification for each investment**, with a description of their individual contribution to the free flow of gas between countries. This would help highlighting precisely under which circumstances each development becomes necessary. It would also give echo to the more specific comment made by the respondent to the consultation regarding the relation of infrastructure developments in Spain with the IPs between France and Spain.

In addition, the benefits expected from the non-FID projects of eastern axis development and 3rd IP between Portugal-Spain are described. Their overall contribution to market integration, development of renewable energy sources and security of supply is highlighted. Concerning the Iberian-French corridor, the focus is put on the improved coverage of peak demand and of daily average demand in both countries which would result from an increase of interconnection capacities. Concerning the 3rd IP Portugal-Spain, it is underlined that the energy exchanges between the two systems will be facilitated, in line with the expected growth of demand. In the two cases, **the NRAs consider that it would be interesting to link the benefits mentioned in terms of security of supply with the current needs of each gas system**, taking into account all flexibility tools available and in particular storage. In other words, the GRIP could give an insight on the assessments carried out on a national level with regards to security of supply, for example the risk analyses derived from the application of Regulation (994/2010). This would help evaluating the real added value of each project in this field.

The GRIP also highlights that the investment projects under study would contribute to the implementation of “North-South corridor in Western Europe”, which was identified as a priority corridor by the European Commission in the new “Infrastructure Package”¹. **The NRAs welcome the fact that TSOs used the criteria set out in the draft Regulation** and presented the GRIP as an input to the selection process for “Projects of Common Interest”. However, the NRAs consider that **the assessment of the different projects cannot be properly conducted if the potential benefits are not balanced against an estimation of the costs**. The respondent to the public consultation also suggested that the GRIP includes a description of the financing schemes in consideration. The NRAs consider that this last requirement may be difficult to achieve for projects under study, but share the view that the cost-recovery aspect should be better reflected in the GRIP. In this line, **technical and economical analysis of other possible alternatives to the mentioned projects are recommended** in order to complete the study.

With regards to the development of the western axis between France and Spain, the GRIP mentions that capacity will be increased up to 60GWh/d in both directions at the Biriadou IP. Although it is consistent with the figures provided in the previous EU TYNDP and national development plans, the NRAs would like to remind that no capacity has been allocated in the direction France to Spain after the Open Season 2015 and thus the concerned regulators have not given their approval to the creation of this additional firm capacity.

¹ COM (2010) 677: Energy Infrastructure Priorities for 2020 and beyond – A Blueprint for an integrated European energy network, 17.11.2010
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52010DC0677:EN:HTML:NOT>



On the other hand, NRAs understand that only defining projects aimed to connect the countries inside the Regions is not the correct approach of the GRIP. **The GRIP should analyse the integration and coordinated functioning of both, national infrastructures, as well as international connections, as well as infrastructures aimed to connect the Region with other neighbouring Regions** (in the case on the Gas South Region, the integration with the North one through France). Consequently, other investments, not only those directly link to international pipelines inside the Region, should be described and defined.

4. Modelling exercise

The South GRIP proposes an assessment of the resilience of the system according to three disruption scenarios that are the most relevant for the region, namely a disruption of LNG supplies, a disruption of supplies from North Africa by pipeline and a disruption of all Algerian supplies. To do so, the TSOs of the South region have built on the modelling exercise carried out by ENTSOG for the TYNDP and also the results from GLE study on LNG disruptions. For each disruption scenario, three assumptions have been tested; one with existing infrastructures and FID projects, another one including the development of the Eastern axis and the 3rd IP Portugal-Spain and finally one including the rest of non-FID projects. **The NRAs appreciate this modelling effort and consider the simulations at the regional scale are a valuable complement to the more general conclusions of the EU TYNDP.** However, more information on the hypothesis, their reasons, and basis of the model would be advisable, in order to better understand the modelling exercise and its result.

The conclusion drawn by TSOs is that, with existing infrastructures and FID projects, the remaining flexibility in the Spanish and Portuguese systems would be low in case of disruption of LNG from Nigeria or of supplies from Algeria. The GRIP mentions that the congestions identified would be removed in case of development of the Eastern axis and the 3rd IP between Portugal and Spain. Here, **the NRAs take the view that the GRIP should reflect the contribution of each project/sub-project to the removal of congestions.** Analysis of possible supply alternatives for each disruption scenario without the proposed investment would be also appreciated.

In addition, the GRIP proposes to assess the contribution of these two main projects to market integration. In line with the methodology developed by ENTSOG, the GRIP measures the potential spread through the network of gas from one specific source. Again, three assumptions are tested: one with existing infrastructures and FID projects, another one including the development of the Eastern axis and the 3rd IP Portugal-Spain and finally one including the rest of non-FID projects.

The market integration modelling carried out for the EU TYNDP identified a limitation to the influence of LNG from the Iberian Peninsula due to a lack of capacity to France, which called for further investigations within the GRIP process. In the “bubble model” proposed in the EU TYNDP, countries are considered as building blocks and the focus is put on cross-border limitations of flows, but the EU plan does not identify the exact location of bottlenecks nor does it provide a detailed description of its consequences. In this context, **the NRAs welcome the additional simulations on the LNG terminals send-out in each of the three countries,** taking into account different levels of interconnection capacities. The NRAs take note of the conclusion that the LNG send out in Spain and Portugal would be limited to between 70-80%, considering existing infrastructures and FID projects and increased to above 80% if the Eastern axis and third IP Portugal-Spain is developed. While the



NRAs agree with the general statement that the situation would be improved with these non-FID projects, it considers that **the GRIP needs to give more explanations on the specific location of the congestions and on the ways to remedy these congestions**. In other words, it may be useful to consider separately the contribution of each infrastructure development or reinforcement being part of the wider projects of eastern axis development and 3rd IP Portugal-Spain.

The GRIP also highlights the results obtained from ENTSOG with regards to the potential “spread” or area of influence of Algerian pipeline gas supplies and also of Russian gas supplies, using the same assumptions on the level of interconnection capacities. It shows how the different non-FID projects would contribute to increase the energy exchanges between the Southern and Northern parts of Europe and fits into the recent developments on the Infrastructure Package. Nonetheless, there is no additional information compared to the conclusions raised within the EU TYNDP. In this line, an economical assessment of the LNG send out capacity development in the Region, related to investments in interconnection capacities among Portugal, Spain and France, as well as related to the connection of the Gas South Region with the North one, would complete this exercise.

5. Involvement of stakeholders

The NRAs welcome also the fact that stakeholders were given the opportunity to react on this document through the public consultation.

For future exercises, **the NRAs suggest that an early dialogue is established between TSOs, NRAs and stakeholders**. The idea would be to exchange views on the preliminary results from the modeling exercise on cross-border bottlenecks and benefits from investment projects. Feedback from stakeholders could then be taken into account before the final version of the regional plan is published. The NRAs suggest that this dialogue with stakeholders takes place within the framework of the SG meetings or other specific workshops organized at the South GRI level.

6. Conclusion

The NRAs welcome the publication of the first GRIP for the South region. It provides for a comprehensive overview of the supply and demand balance in the French, Spanish and Portuguese systems, gives an in-depth description of the current and future level of interconnection between the three markets and highlights the contribution of the different non-FID projects to the removal of congestions identified in the modelling exercises.

The NRAs acknowledge that this is the first GRIP published for the South Region. Considering that the elaboration of GRIPs is a learning-by-doing process, the NRAs identified potential room for improvement in the following areas:

- The regional overviews should be updated with more recent data on demand and supply in the Region and further developed, with focus on the interdependence of the three markets and its integration into Europe. In particular, it would be interesting to analyse flow patterns in the region, in light of the global market trends.
- The GRIP should consider not only infrastructure linking the countries inside the Region, but also coordination and integration with national investments and with infrastructures aimed to connect the Region with neighbouring Regions.



- The simulations should go into more details when describing the congestions and potential remedies. This would imply focusing on the exact contribution of each infrastructure development or reinforcement being part of the wider projects of increasing the interconnection capacities. More detail of the model basics and used hypothesis should be provided in order to get a better understanding of the modelling exercises.
- In addition, the GRIP sets out valuable descriptions of the benefits expected from the different investment projects and these should be complemented with a consideration of the specific needs of each market and also of the estimated costs of the projects. Providing this additional information in the GRIP would allow for a more robust assessment of the different projects, in line with the cost-benefit approach put forward in the Infrastructure Package. Alternative investments to the proposed projects should be also considered and economical and technical assessed.
- Finally, stakeholders should be involved at an earlier stage of the process, so their views and concerns can be addressed in the final version of the GRIP.

The NRAs take the view that these developments could facilitate the identification of the precise needs of the region and the assessment of the different investment projects, thus contributing to an efficient development of infrastructures. In this perspective, the NRAs suggest that an open dialogue is launched within the Implementation Group, with the objective of investigating how these recommendations can be translated into concrete measures for the next GRIP.