

Analysis of cross border transmission gas tariffs between Portugal and Spain

Enagás contribution to the public hearing

17th February 2012



1. Introduction

- 1. Enagás welcomes the initiative by CNE and ERSE to analyse cross border transmission gas tariffs between Spain and Portugal, and their invitation to provide comments to the related public hearing.
- 2. Enagás would appreciate that public consultations in the South Gas Regional Initiative, when processes are not constrained by stringent deadlines related to the affective implementation of harmonisation processes, were conducted according to the Guidelines on CEER's Public Consultation Practices,¹ being all regulators in this Regional Initiative members of CEER. These guidelines establish a minimum consultation period of 8 weeks for public consultations.

2. General comments

- 3. Enagás supports regulators' conclusion that further steps should be taken to strengthen the Iberian gas market.
- 4. The integration of the Spanish and Portuguese gas market should be carried out mainly through the regulatory harmonisation process and, where appropriate, through the construction of new infrastructure project which to ensure the absence of physical congestions.

Third Package requirements on tariff methodologies and the Spanish system

5. Enagás fully supports the remarks included in the study regarding previous steps to the tariff harmonisation and, in particular, the statement that

"previously to the harmonization of cross border tariffs, a general access tariff methodology must be established, in order to guarantee the recovery of all the regulatory costs"

- 6. The analysis by regulators finely describes in page 49 the principles set out in the Third Package for tariff design.
- 7. In Spain an appropriate, transparent general access tariff methodology which fulfils the requirements set by the Third Energy Package has not been established by the competent regulatory authority.
- 8. The tariff system in Spain has some shortcomings that must be addressed in the medium term. Although originally in 2002, during the first stages of the liberalisation process, the tariff system was acceptably cost-reflective, the arbitrary updating process and the absence of published methodology has

¹ CEER: "Guidelines on CEER's Public Consultation Practices", Ref: C07-EP-16-03, 17 March 2011 http://www.energy-regulators.eu/portal/page/portal/EER_HOME/EER_CONSULT/C07-EP-16-03_PC-Guidelines_CEER.pdf



resulted in a system which offers no visibility and is with cross subsidies between users of different infrastructures, users with different load factors, and offers no visibility.

- 9. Moreover, tariff sufficiency is becoming in 2012 also an issue, and crosssubsidies between generations could also be introduced. The perception of regulatory risks related to retroactive decisions on allowed revenues is also increasing, and would result on increased financing costs for operators.
- 10. It is necessary to redesign the whole system by setting a new general tariff design methodology for gas infrastructures. In order to respect the principles already listed by regulators, the design should take into account:
 - In order to be cost-reflective, the allocation of the costs of the extra capacity built for Security of Supply purposes to all the users who benefit it. The CNE has already argued in favour of this measure.²
 - In order to facilitate efficient gas trade, to review the proportion of transmission costs allocated to entry points and to exit points, which is currently strongly biased towards the latter.
 - In order to ensure that tariff conditions reflect underlying costs, to eliminate the implicit subsidies to producers of nitrogen fertilizers which, according to the CNE,³ will amount in 2012 to 17.4 million Euros.
 - In order to minimise economic flows due to inter-operators compensation mechanisms, a better alignment of allowed revenues and the amounts billed by each operator (which would also be the logical consequence of more costreflective tariffs).
 - In order to be cost-reflective provide efficient signals, tariffs should more accurately reflect, through the capacity/commodity splits, the effective load

The CNE argued the following:

³ CNE: "informe 40/2011 de la CNE sobre la propuesta de orden por la que se establecen los peajes y cánones asociados al acceso de terceros a las instalaciones gasistas y la retribución de las actividades reguladas del sector gasista para el año 2012", 28 December 2011.

http://www.cne.es/cne/doc/publicaciones/cne197_11.pdf

² CNE: "Propuesta de revisión de peajes y cánones de acceso a las instalaciones gasistas para 2009 y de la tarifa de último recurso para el primer trimestre de 2009", 27 November 2008.

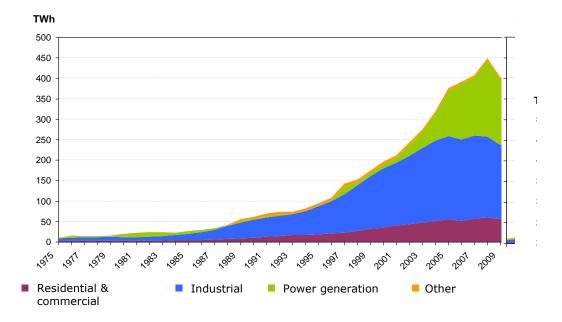
http://www.cne.es/cne/doc/publicaciones/cne157_08.pdf

[&]quot;A efecto de que los peajes envíen una señal económica de eficiencia, se propone que los peajes de regasificación de 2009 reflejen de manera más ajustada los costes de esta actividad. A este fin cabe, ante todo, reconocer que las plantas de regasificación realmente prestan dos servicios diferenciados: (1) proporcionar capacidad de entrada a los agentes que la contratan y (2) aportar seguridad de suministro al sistema, relacionada con la capacidad excedentaria de regasificación que se viene estableciendo en la planificación obligatoria. El coste asociado al primer servicio es el que se propone incorporar en el peaje de regasificación, mientras el segundo, ligado a la seguridad de suministro, se repartiría entre todos los usuarios del sistema a través de los peajes de transporte y distribución."



factor of CCGTs, and allocate to these users the costs that have caused to the system in terms of infrastructure development (see figure below on gas demand growth)

Figure 1: Evolucion of natural gas demand in Spain by sector



Source: Enagás

Economic rationale dictates tha tariffs applicable to CCGTs should consist essentially on a capacity terms that ensures cost recovery independently from the load factor of the facility. This is, moreover, consistent with capacity payments demanded by generators and approved by the Ministry, which amount, in the case of CCGTs, for more than 600 million Euros. Last, the probability to match bids in the power market for CCGTs would be increased if the variable term in the tariff is reduced, given that in the power generation market bids are submitted according to the marginal cost.

Tariff suficiency

- 11. Regulatory harmonisation initiatives between Portugal and Spain should not introduce further (operational or economic) uncertainties for infrastructure operators in the region. In particular, revenue recovery (or tariff sufficiency) should be an overriding principle of any process aimed at redefining tariff structures and/or levels.
- 12. Enagás is pleased to see that regulators have reflected and highlighted this principlein different parts of the document, notably on page 50:

"Covering costs corresponds to ensuring that TSOs get the revenues they are allowed to according to the regulated asset base and the efficient operating



costs."

13. Enagás, as an efficient and prudent operator, believes that emphasis should also be placed on auditing efficient investment costs before setting the regulated asset base, in particular for those infrastructures for which standard unit costs are not applied.

Merging of balancing zones and elimination of tariff at IPs

- 14. Enagás acknowledges regulators view that "in the future scenario cross border tariffs between Portugal and Spain shall not exist neither capacity bookings" at Tuy and Badajoz IPs. However, many interim steps should be taken before Spain and Portugal are merged into one balancing zone (or, possibly, a trading region).
- 15. There would be several options to merge the two balancing zones, but it is difficult to envisage the creation of a single, unrestricted entry-exit balancing zone if not through investments, by reducing the technical capacity at entry points, or a combination of both, and also with a number of market mechanisms. The latter, reduction of entry capacity, has obvious drawbacks, while the former should be evaluated based on the expected economic benefits and costs (Cost-Benefit Analysis proving that integration and increased competition benefits offset infrastructure costs).
- 16. However, as long as balancing zones are not merged, the cross-border tariff should be maintained, and be a result of the general tariff methodology, not of a political decision.
- 17. Enagás would like to remind that the same argument was already stated in the public consultation by the CRE regarding "*the tariffs and access conditions on the natural gas transmission networks*" in 2010, in relation to the possible elimination of the tariff between the TIGF and GRTgaz South balancing areas:⁴

Enagás fully agrees with merging of balancing zones as competition will be fostered and, thus natural gas prices will decrease. Balancing zones should be merged as long as competition benefits offset infrastructure costs. However, CRE is not proposing a merge of two balancing zones.

The removal of the interconnection tariff between TIGF and GRTgaz South maintaining two balancing zones is not equivalent to the unification of both balancing zones. It should be implemented only if required as an interim step for the full unification of both balancing areas, and the roadmap for the full unification should be clearly established in advance. Otherwise, the proposal would not be justified. In Enagás experience, the full benefit of a reduction of balancing areas is achieved through the development of infrastructures to eliminate internal congestions, which is the only solution to provide a stable market structure in the long-term.

⁴ CRE, "Consultation publique de la Commission de régulation de l'énergie sur les tarifs et conditions d'accès aux réseaux de transport de gaz naturel", septembre 2010, Enagás response http://fichiers.cre.fr/100920ReponsesConsultationPublique.zip

Enagás contribution to the public hearing by CNE and ERSE

The proposed market structure eliminating the tariff between GRTgaz South and TIGF will require compensating TSOs for their loss of revenue at the interface between the networks. These losses of revenue could be recovered by increasing tariffs at other interconnection interfaces. Thus, the proposed market structure is not a merge of balancing zones but essentially a reallocation of costs.

Tariff pancaking and double tariff

- 18. The fact that two tariffs are applied at an IP does not imply the ocurrence of tariff pacaking. Neither does it impede cost-reflectiveness.
- 19. It must be clarified that the concepts of "tariff pancaking and "double tariff" are different, and not differentiating between them might lead to wrong conclusions. Tariff pancaking would be the application of several tariffs to gas flows crossing one or more IPs, in systems where tariffs do not reflect costs. As long as tariff systems were cost-reflective, tariff pancaking would not be taking place. On the other hand, the existence of a "double tariff" (two tariffs applied to the same IP) is not per se a problem, as long as tariffs are cost-reflective.

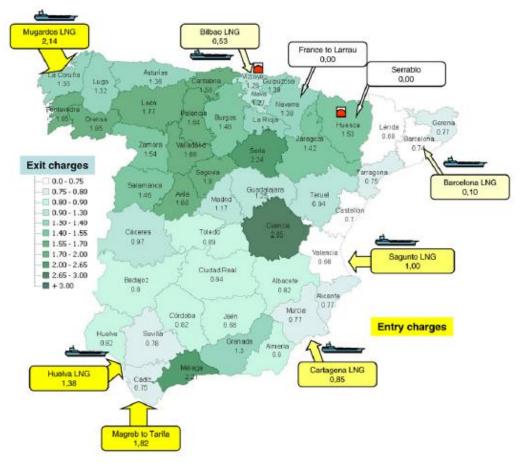
Tariff pancaking? Potential effect of the application of an entry-exit system in Spain

- 20. The only publicly available simulation of entry-exit tariffs in the Spanish system, based on a simulation of network flows, was published in 2010⁵ in a paper produced by three authors. Notably, two of them were and still are CNE personnel.
- 21. The article proposed an entry-exit tariff model and applied it to compute charges for the Spanish gas transport system in 2009. Results produced by the model were presented as coefficients which should multiply the transmission (and distribution) tariffs in force by then. The paper did not propose new tariff structures (e.g. the separation of transmission and distribution tariffs, the reconsideration of the capacity/commodity split, or a different proportion for the allocation of costs between entries and exits), and also took another assumptions which could be debatable. However, it was a notable contribution for the debate on tariffs in Spain which allows to identify potential problems for the implementation of entry-exit tariffs and allows to anticipate potential results from a more detailed and robust entry-exit tariffs simulations.
- 22. The map below shows the main results obtained. I was noted in the paper noted that, in those cases where demand exceeded available capacity, entry-exit tariffs could be supplemented by capacity charges at entry points resulting from auctions.

⁵ ALONSO SUÁREZ, A., OLMOS, L., SERRANO, M.: "Application of an entry-exit tariff model to the gas transport system in Spain", Energy Policy, Volume 38, Issue 9, September 2010, Pages 5133–5140.



Figure 2: Map with the entry and exit relative coefficients for the Spanish gas system (winter 2008-2009)



Source: Energy Policy

- 23. Gas flowing to Portugal through Badajoz generally comes from Tarifa or Huelva, and that the entry coefficients for both points are significantly higher than the average (1.82 in Tarifa, 1.38 in Huelva), and the exit coefficient in Badajoz (which, according to the non-discrimination principle, would be applied to all exits, including exports) is only slightly lower than the average (0.9).
- 24. Therefore an implication for the results would be that, as long as there were no costs allocated to transmission tariffs from infrastructures other than transmission and those derived from security of supply, that physical transits through the Spanish system to Portugal would be right now subsidised, not penalised even if the "reduction coefficient" of 0.7 currently applied to international transits in Spain was not applied to capacity terms.⁶

⁶ The consistency of this reduction coefficient with Article 13 of Regulation 715/2009, which states that "Tariffs for network users shall be non-discriminatory and set separately for every entry point into or



- 25. This subsidisation would be even clearer in the case of Tuy, being Mugardos (which would be the entry point for physical flows arriving at Tuy) the most expensive entry point (a coefficient of 2.14 would be applied, more than double than the average) and Pontevedra one of the most expensive exit points (1.65).
- 26. These simulations also shows that the application of this methodology would be flawed if the integral needs of the gas system, where LNG plays a major role, are not taken into account. The most prominent example is the price resulting at Mugardos, which provides a very clear disincentive to book capacity at the connection point between the transmission network and the LNG terminal, precisely in a terminal which needs specific regulatory measures to attract cargoes to meet it minimum vaporisation requirements. This shows the relevance of one of the principles highlighted in the analysis, the "adaptability to the specificities of the network".

3. Questions for stakeholders

Question 1: Would you agree with the analysis made on current market situation and on the major issues affecting cross border trade between Portugal y Spain?

- 27. Enagás appreciates the characterisation of the Portuguese and Spanish system, since a detailed description and analysis of both systems is required before adopting any decision.
- 28. Enagás has a minor concern as regards the characterisation of the Spanish gas system, and a major concern as regards the representativity and the adequacy of the hypothesis of the case studies included in the analysis. The latter invalidate the conclusion that "as shown in the case studies, this cost barrier can be significant and seriously limit the market integration between Spanish and Portuguese gas systems". The existence of a cost barrier (understanding by "cost barrier" and unduly high allocation of costs at IPs) can be either true or false, but cannot be inferred from a limited number of cases based on questionable and partial hypothesis.
- 29. As for the rest of the analysis, Enagás believes that regulators have correctly identified the main features that a general ariff methodology should have, and that the the concept of a step-wise approach evolving and improving over time proposed by regulators is adequate and reasonably prudent.

Characterisation of gas systems: comments on average costs

30. Enagás has identified some inconsistencies in the information about costs

exit point out of the transmission system. Cost-allocation mechanisms and rate setting methodology regarding entry points and exit points shall be approved by the national regulatory authorities. By 3 September2011, the Member States shall ensure that, after a transitional period, network charges shall not be calculated on the basis of contract paths", would need to be more carefully verified.



provided by the regulators and the source cited.

31. Costs included in table 2-2 "Average foreseen cost of system in 2011 in Spain" do not correspond to those in Ministerial Order ITC/3354/2010.

Table 1: Average foreseen costs of system in 2011 in Spain provided by the Study

	Cost 2011 (Order ITC/3354/2010)	%	Energy associated with the activity (GWh)	Average cost (€/MWh supplied)
Regasification	447 199	15%	285 200 (1)	1,57
Underground Storage	109 803	4%	20 647 (2)	5,32
Transmission	790 853	26%	422 099 (3)	1,87
Distribution	1 489 544	49%	180 013 (4)	8,27
Other costs	213 647	7%	416 015 (5)	0,51
System operation and other costs	73 047	2%	416 015 (5)	0,18
Cost recovery to previous year	140 600	5%	416 015 (5)	0,34

(1) Energy received at the Terminal

(2) Injecting and extracting energy

(3) Energy transmitted through the transmission network

(4) Energy transmitted through the distribution network.

(5) National end - user consumption

Source: Table 2-2 "Average foreseen cost of system in 2011 in Spain" of the Study.

 Enagás has reproduced the calculations considering the costs included in Ministerial Order ITC/3354/2010. The results show lower unit costs (remarkably for underground storages).

Table 2: Average foreseen costs of system in 2011 in Spain calculated by Enagás

	Costs 2011 (Order ITC/3354/2010)	Energy associated with the activity (GWh) (1)	Average cost (€/MWh)
Regasification	381,652,545	265,332	1.44
Underground Storage	47,670,173	23,907	1.99
Transmission	736,607,709	413,803	1.78

(1) According to Enagás "Avance del Informe 2011 - El Sistema Gasista Español"

Source: *Ministerial Order ITC/3354/2010 and self-made.*

- 33. Enagás acknowledges that the differences in the costs of transmission and regasification infrastructures could be due to inclusion of variable costs and own consumption.
- 34. On the other hand, the discrepancy in underground storage costs might be due to the fact that the analysis has, erroneously, taken into account Castor UGS's costs. This UGS facility is foreseen to start up by mid 2012 and the Study is comparing 2011 costs. The inclusion of this relatively much more expensive UGS infrastructure would justify the increase from 1.99 to 5.32 EUR/MWh.



- 35. Given the differences, Enagás would like to ask for clarification about the figures.
- 36. Leaving aside the discrepancies about the cost calculation, it is worth noting that transmission average costs in the Spanish and Portuguese systems are similar 1.87 and 1.8 respectively according to the analysis, or in any case around 1.8 €/MWh.
- 37. This cost around 1.8 €/MWh might be judged as relatively high in the European context. It must be borne in mind that:
 - the Spanish transmission system constitutes the larger single balancing zone in Europe in terms of geographical extension,
 - Spain has a relatively low population density,
 - Spain is also a more mountainous country than the average European country,
 - the system has been extended to the Balearic Islands through a submarine pipeline,
 - average consumption from domestic customers is lower than the European average due to benign weather conditions, and the degree of penetration is also more limited,
 - CCGTs, which in 2011 had a load factor below 30%, account for a large proportion of the consumption,
 - due to historical "energy isolation" reasons, security of supply standards (extra entry capacity) were introduced in the planning procedure, and
 - available information on unit investment costs (e.g. information provided in the 2015 OS between France and Spain) show that Enagás is an efficient operator (in the cited example standard unit costs in Spain were around a half of the costs declared in France).

Case studies hypothesis: balancing costs

- 38. Enagás advised regulators at previous South Gas Regional Initiative meetings that the results of the study would be flawed if balancing costs were not taken into account in the case studies.
- 39. Balancing costs have not been considered. However, different load factors at different points of the Portuguese and Spanish systems have been apparently applied, which is already an implicit (though partial) balancing assumption that affects the results.



- 40. In particular, it seems that in the application of gas tariffs in the "transit system" applies some type of "entry load factor" that would correspond to a shipper, and an "exit load factor" at the IP equal to that of the final gas consumer. This assumes that the balancing is performed in the transit country and not in the destination country. No analysis has been performed to determine whether this is the most efficient way for shippers to balance their position, or if tolerances are sufficient for shippers to be balanced without any additional flexibility product.
- 41. Given that:
 - these partial assumptions are inadequate and distort the results , and that
 - the number of case studies is rather limited,

Enagás considers that the results obtained are not a good basis for decisions, or even to identify the main potential tariff-related obstacles for efficient crossborder trading.

Question 2: How do you think that transmission network costs should be allocated at cross border IP (both Spain and Portugal), taking into account the defined principles (coherence, transparency, cost recovery and cost reflectiveness, etc) and the starting situation of the regulatory tariff framework in both countries?

- 42. Tariffs at IPs should result from the application of a general tariff methodology which is transparent and complies with the principles of the Third Package. No specific criteria should be applied to IPs, unless it can be technically justified (i.e. different criteria might be applied to different situations, but discrimination based on the use of gas is forbidden).
- 43. For example, the original justification for the application of reduction coefficients to gas transits in Spain was the elimination of tolerances from that specific service. This certainly justifies a lower tariff, but it would be discriminatory if a similar service was not offered to other users.
- 44. As already stated, in order to facilitate efficient gas trade, the proportion of transmission costs allocated to entry points and to exit points in Spain should be reviewed, since it is currently strongly biased towards the latter.
- 45. In the design of a new general tariff methodology, there should be a close cooperation between regulators and TSOs in both countries, in order to avoid defining significantly different regimes. Although the Third Package sets out a number of useful criteria, there is ample room to adopt decisions which might result in a very different allocation of costs at IPs: capacity/commodity split, the use of LRMC, average costs, marginal costs or other, the value put on backhaul flows when designing entry-exit tariffs, the proportion of costs allocated to entry points and to exit points, the criteria to group together entry and/or exit points,



the way to estimate the probability of interruption for interruptible tariffs, etc

- 46. It is unknown to what extent will the potential future Network Code on Tariffs be prescriptive as regards these methodological details.
- 47. Enagás believes that no provisional measures as regards tariffs at IPs should be adopted unless strong evidence was found of incorrect cost allocation. There would be a risk of introducing a new cross-subsidy in the system, detrimental to national users of one of the countries.

Question 3: Which do you feel are the most important aspects where harmonization (apart from the cross border tariffs harmonization) can contribute significantly to short term market integration?

Harmonisation of Capacity Allocation Mechanism

- 48. The harmonisation of CAM between Spain and Portugal is proceeding satisfactorily and should remain the priority.
- 49. After the implementation in 2012 of annual auctions for monthly products for a period of one year starting on 1st October, and depending on the results, the harmonisation of further products could be envisaged.
- 50. It must be borne in mind that the harmonisation of CAM for longer-term products is hampered by the lack of long-term contracts in Portugal and of long-term contracts binding upon infrastructure users in Spain (see answer to Q5 for more detail on the situation in Spain).
- 51. Also, that the further harmonisation of CAM will require harmonisation in areas which are not being immediately tackled, like the gas day (already requiredfrom 5 a.m. to 5 a.m. UTC by the FG on CAM), nomination procedures (a single nomination is required at IPs), and other.

Harmonisation of Congestion Management Procedures

- 52. Enagás agrees to analyse the steps towards the harmonization of CMPs at the Spanish-Portuguese border, namely freeing long term booked capacity not used by shippers.
- 53. However, taking into account that in Portugal no long-term contracts are in place, long-term UIOLI could only be applied on the Spanish side. Thus, there would be no harmonisation, but application on a single side of the border, with intervention of a single TSO and a single regulator but, paradoxically, with automatic consequences in both systems; though it can be done and discussed at the South Gas Regional Initiative, this would be out of the scope of MibGas initiative.
- 54. As regards the harmonisation of short-term measures, it should not be a priority



at this stage, given that it implies the harmonisation of a large number of regulatory pieces and involves significant IT costs.

Harmonisation of contractual practices: long-term contracts

55. Heterogeneity in regulatory/contractual capacity booking practices, which are inextricably linked to tariff methodologies, can severely hamper adequate investments, efficient competition and full harmonisation of capacity allocation mechanisms. The implementation of long-term contracts binding upon infrastructure users should be a priority. Otherwise, it will be just impossible to implement a large number of measures foreseen in the European Network Codes under development (e.g. CAM and CMP), to implement an entry-exit tariff system with differentiated entry and exit prices, and to apply, where relevant, Open Seasons as a market based mechanism to test demand for new interconnections (see answer to Q5).

Question 4: How would you implement the proposed step-wise approach, aiming for a more integrated market in the long term?

- 56. Enagás considers that the harmonization of the Spanish and Portuguese gas markets should be done step by step in line with the priorities set by the European Commission, the Framework Guidelines and Network Codes developed by ACER and ENTSOG respectively.
- 57. The necessary steps for the harmonization are currently being done in the context of the South Gas Regional Initiative (SGRI), where a number of pilot projects and initiatives are planned until 2014. For a complete success, particularly as regards pilot projects, a strong regulatory support is essential, which should be translated into consistent national regulatory adjustments with what is agreed in the S-GRI in order to provide certainty to TSOs, both economic and operational.
- 58. Amongst the referred initiatives in the SGRI, Enagás and REN have started working to harmonise the capacity allocation mechanisms between both countries, which is the first priority established by the EC after the approval of the Third Energy Package. It is foreseen that the first auction of capacity would take place in June 2012 to allocate capacity for a year in monthly product starting on 1st October 2012.

Question 5: Would you identify new issues you think are important to create a favourable cross border trade environment? How would you set the timing and priorization for the discussion on these issues?

Long-term contracts binding upon infrastructure users

59. Enagás would like to highlight one issue of utmost importance for the application of Framework Guidelines and Network Codes, as well as for the implementation



of tariff methodologies based on differentiated entry and exit tariffs, should that be the preferred option: the existence of long-term contracts binding upon infrastructure users (and not only upon infrastructure operators, as is the case now).

- 60. In the short-term, in Spain is necessary to establish long-term contracts binding upon infrastructure users, which can only be terminated through the payment of the corresponding Ship-or-Pay over the life of the contract, and involving the establishment of the relevant financial guarantees (of different nature from those currently in force). This will not prevent the simultaneous offering of short-term capacity products.
- 61. In Spain there is an exceptional provision in the regulatory framework, when compared to the rest of Europe, which is the possibility for network users to reduce the capacity booked or even to terminate their long-term contracts at very low price during the first year of the contract, or one year after the starting date, while long-term contracts are binding for the counterparty, the TSOs (or any other infrastructure operator).
- 62. This contractual flexibility, the lack of long-term contracts binding upon users, which has its origin in a very different context of scarcity of capacity at basic infrastructures, in which the entry of new players was encouraged, has today very negative consequences for different reasons:
 - It hampers an efficient planning, by eliminating network user's longterm signal on demand for capacity. Due to reductions, cancelations and changes of locations long-term contracts are not a reliable and stable signal. Spain is the only country where an infrastructure may lose its contracts from one year to another (e.g. because of the start up of a new infrastructure).
 - It prevents holding market-based procedures to allocate (existing o incremental) long-term capacity, the allocation is not guaranteed after a year given that it can be cancelled (in the case of France, Open Seasons and Open Subscription Periods were hold thanks to existence of these commitments on the French side; this would be impossible in the case of Portugal, where there are no long-term contracts).
 - For the same reason, the capacity auctions, particularly long-term, referred to in the Framework Guidelines and Network Code on Capacity Allocation Mechanisms could not be implemented in the Spanish system, preventing a regulatory harmonisation with the rest of Europe – besides, this also poses a legal problem.
 - It endangers the revenue recovery (or tariff sufficiency) principle, by not providing an efficient forecast of revenues that will have the system



for next year, and in the long run, by preventing a precise calculation of the tariffs.

- It slows downs the liquidity of the secondary market of capacity since the user is able to get rid of the capacity and given the extra capacity neither new entrants flock this market.
- It precludes the enforcement of an entry-exit tariff system with differential pricing, particularly as there is extra capacity in the Spanish system. If an entry exit system with differentiated entry prices was established, and points had substantial (or even minor) pricing differences, users would change their contracts location to optimise their payments, which could invalidate the forecast made to ensure tariff sufficiency; from the operational point of view could lead to enormous changes in flow patterns. In European systems where these tariff systems are in place, flow changes are marginal, as only affect new bookings or the capacity available in the short-term, being long-term contracts tied.
- It threatens the sustainability of the gas system in case of drops of demand, or in case new infrastructures in competition with the existing ones are connected in adjacent systems (or if exempted infrastructures are connected to the system). Since the cost of regulated infrastructures, which have been approved through a mandatory planning procedure, must be recovered, the reduction of reserved capacity causes an increase in regulated tariff levels, which is suffered by those users that remain linked to the regulated infrastructures. This makes TPA exemptions in the Spanish system meaningless, as they do systematically fail to fulfil at least the condition that the exemption must not be detrimental to the efficient functioning of the regulated system to which the infrastructure is connected.
- It hampers efficient cross-border trade, since the logical behaviour of shippers with long-term capacity booking in entry points in two adjacent systems in case of demand drops is to reduce capacity where it is free to do so, and honour the long-term contract up to the Ship-or-Pay level in the other system, flowing gas from that system to the one where capacity booking have been reduced. This is particularly true when referred to capacity in LNG terminals, since cargoes can be more easily deviated to the system where the tariff is a "sunk cost" (i.e., where the shipper is below the SoP level and the marginal cost of delivering gas is near zero), and capacity can be reduced in the system where it is free to do so (i.e. where the tariff can be avoided by reducing or cancelling the contract, which effectively means that the whole tariff is variable).
- 63. It is a must to solve this anachronism to, first, ensure the viability of the system in the long run and, second, make possible the implementation of the different



measures foreseen in the European Network Codes under development (e.g. CAM and CMP).

- 64. The implementation of entry-exit tariffs in major European gas system has never been tried without long-term contracts binding upon infrastructure users with a high Ship-or-Pay level, let alone if the system also had a significant proportion of extra capacity. Doing so would be inappropriate, unnecessarily risky, and would certainly introduce a major problem rather than solve any of the existing ones.
- 65. Given that, though not strictly necessary, it seems convenient and consistent with the Third Package to establish entry-exit tariffs with differentiated entry and exit prices, the regulator should establish as soon as possible long-term contracts binding upon infrastructure users with a relatively high Ship-or-Pay level (around 85%).

Creation of organized, liquid hubs

The creation of hubs in Spain and Portugal should be a priority for both countries, and should be as much coordinated as possible. It is a requirement for the implementation of the Balancing network Code, and then for the future harmonisation of balancing regimes.