

European Regulators Group for Electricity & Gas

Monitoring the implementation of the ERGEG Guidelines of Good TPA Practice for Liquefied Natural Gas System Operators (GGPLNG)

Ref: E09-LNG-07-03 3 June 2009



Table of contents

AB	ABBREVIATIONS				
DE	DEFINITIONS7				
1.	PAF	RT I		8	
	1.1.	Preface		8	
	1.2.	Executiv	e Summary	9	
	1.3.	Introduc	tion	10	
		1.3.1.	Scope and Method	10	
		1.3.2.	Coverage	11	
		1.3.3.	Contextualisation of ERGEG's 2009 monitoring work	17	
	1.4.	ERGEG	2009 monitoring results: Synopsis of findings from LSOs, users and NRAs	17	
		1.4.1.	General information regarding current access practice and GGPLNG	18	
		1.4.2.	Tariffs and tariff methodologies	19	
		1.4.3.	Roles and responsibilities	20	
		1.4.4.	TPA services	21	
		1.4.5. manage	Capacity calculation, capacity allocation mechanisms and congestion ment procedures	26	
		1.4.6.	Transparency	28	
		1.4.7.	Trading of capacity rights	29	
	1.5.	Outlook	and recommendations	29	
2.	PAF	RT II		31	
	2.1.	NRA's re	esponse summary	31	
		2.1.1.	General Information	31	
		2.1.2.	Tariffs and tariff methodologies	33	
		2.1.3.	Roles and responsibilities	35	
		2.1.4.	TPA Services	37	
		2.1.5.	Capacity calculation (CAC), capacity allocation mechanism (CAMs) and	~~	
		congest	ion management procedures (CMPs)	39	
		2.1.6.	Iransparency	44	
	2.2.	LSO's re	esponse summary	44	
		2.2.1.	General Information	44	
		2.2.2.	Palos and responsibilities	40	
		2.2.3. 221		47 ⊿∆	
		2.2.4.	Capacity calculation capacity allocation mechanism (CAMs) and	40	
		congesti	ion management procedures (CMPs)	57	
		2.2.6.	Trading of capacity rights	61	



2.3.	Users	response summary:	62
	2.3.1.	General Information	62
	2.3.2.	Tariffs and tariff methodologies	63
	2.3.3.	Roles and responsibilities	67
	2.3.4.	TPA services	69
	2.3.5.	Capacity calculation methodology	73
	2.3.6.	Transparency	78
3. OTH		OMMENTS RECEIVED AND NOT INCLUDED IN THE RESPONSES	01
SUMMA	AR I		01
3.1.	Comm	ents of NRAs	81

0.1.	Comments of		
3.2.	Comments of	of LSOs	82

List of Figures

Figure 1: Participating NRAs (by country) 12
Figure 2: Participating LSOs (by country)
Figure 3: Participating users (by country)
Figure 4: Level of responses to the questionnaires
Figure 5: Terminals falling into different access regimes
Figure 6: TPA access to LNG facilities implementation
Figure 7: Conflicts between GGPLNG and national legislation 33
Figure 8: Roles and responsibilities
Figure 9: Incorporation of GGPLNG recommendations
Figure 10: Penalties established
Figure 11: NRAs' role regarding penalties
Figure 12: NRA's role in designing services
Figure 13: Arrangements for integrated LSOs
Figure 14: Role of NRAs for CAC, CAMs and CMPs 39
Figure 15: Definition of methodology 40
Figure 16: CAMs definition 40
Figure 17: CMPs definition 41
Figure 18: Unused capacity clarification
Figure 19: Rules for rejecting TPA to LNG terminals
Figure 20: Authorities' role for rejecting TPA to LNG terminals
Figure 21: Transparency regulatory provisions 44
Figure 22: Conflicts between GGPLNG provisions and national legislative framework



Figure 23: Role of LSOs in tariffs and methodology design	. 46
Figure 24: Publication of tariffs	. 47
Figure 25: Communication with users	. 47
Figure 26: Services offered in the terminals	. 48
Figure 27: Bundled services offered	. 50
Figure 28: Non bundled products offered	. 51
Figure 29: Standard contract definition	. 52
Figure 30: Contracting process	. 52
Figure 31: Cooperation with interconnected TSOs	. 55
Figure 32: Terminal code	. 56
Figure 33: Definition of terminal code	. 56
Figure 34: Scheduling procedures for cargoes unloading	. 57
Figure 35: Design of CAMs and CMPs	. 57
Figure 36: CAMs applied for new capacities	. 58
Figure 37: CAMs for current capacities	. 58
Figure 38: Type of CMPs applied	. 59
Figure 39: Trading of capacity rights	. 61
Figure 40: Description of offered services	. 62
Figure 41: Relation of users with LSO's.	. 63
Figure 42: Publication of tariffs and methodology	. 63
Figure 43: Tariff regime structure	. 64
Figure 44: LSO's tasks compliance	. 67
Figure 45: Services offered by the LSO	. 69
Figure 46: Type of Services offered by LSOs	. 70
Figure 47: Terminal code	. 71
Figure 48: Notice period for unloading cargo at terminals	. 72
Figure 49: Cooperation between LSOs and adjacent TSOs	. 72
Figure 50: Capacity calculation methodology	. 73
Figure 51: CAMS and CMPS applied	. 73
Figure 52: CAM preferences for new capacities	. 75
Figure 53: CAM preferences for current capacities	. 76
Figure 54: CMPs preferences	. 77
Figure 55: Transparency Criteria 1-4	. 79
Figure 56: Transparency Criteria 5-8	. 80
Figure 57: Transparency Criteria 9-13	. 80



List of Tables

Table 1: Participating NRAs	11
Table 2: Participating LSOs	12
Table 3: Participating users [CONFIDENTIAL]	14
Table 4: Coverage frequency of LSOs' terminals	16
Table 5: LSO's and users profiles	18
Table 6: Current and Future Terminals that are referenced in the monitoring responses	31
Table 7: Other national authorities involved in tariffs setting	34
Table 8: Arrangements put in place with vertically integrated LSOs	38
Table 9: Role and involvement of LSOs:	44
Table 10: Main terminals characteristics	45
Table 11: User's type	62
Table 12: Role and involvement of users:	62
Table 13: Penalties applied to users	67
Table 14: From your experience, applied penalties were:	68



Abbreviations

AEEG	Autorità per l'Energia Elettrica e il Gas		
CAM	Capacity allocation mechanism		
ССМ	Capacity calculation mechanism		
CGWC	Capacity goes with costumer		
CMP	Congestion management procedure		
CNE	Comisión Nacional de Energía		
CRE	Commission de Regulation de l'Energie		
CREG	Commission pour la Régulation de l'Electricité et du Gaz		
DSO	Distribution system operator		
ERSE	Energy Services Regulatory Authority		
FCFS	First come first served		
GGPLNG	Guidelines for Good Third Party Access Practice for LNG System Operators		
GMM TF	Gas Market Monitoring Task Force		
LNG TF	LNG Task Force		
LSO	LNG terminal system operator		
NRA	National regulatory authority		
OFGEM	Office of Gas and Electricity Markets		
RAE	Regulatory Authority for Energy		
TSO	Transmission system operator		
UIOLI	Use it or lose it		



Definitions

LNG	liquefied natural gas;		
standard bundled LNG service	a bundled service offered by a LSO consisting at least of a right to berth an LNG carrier during a certain window of time, the right to unload the LNG, a temporal LNG storage capacity, and a regasification service with the corresponding send-out capacity;		
terminal user a customer or a potential customer of the LSO;			
unloading window	the period of time during which the terminal user has access to the infrastructure needed to unload the LNG from the cargo to the LNG facility;		
regasification	the process of vaporizing LNG in order to send out natural gas in the downstream system;		
ship vetting	Consists of an in-depth assessment process of an LNG ship in order to determine if it is suitable for gas transportation and unloading LNG.		
LNG facility	definition in article 2.11 of Directive 2003/55/EC.		



1. PARTI

This section of the document summarises and analyses the main results drawn from the responses received during the survey. This is followed by the conclusions and recommendations of ERGEG's monitoring exercise.

1.1. Preface

At the XV Madrid Forum, the European Commission approached ERGEG with a request to monitor the degree of implementation and compliance with the requirements defined in the ERGEG Guidelines of Good Third Party Access Practice for LNG System Operators (GGPLNG).

These ERGEG Guidelines were published in 2008, following a public consultation process, as a compilation of principles and rules to be adopted in the system regarding TPA services at LNG terminals.

The main purpose of the GGPLNG was to establish a fair operational framework for the transparent and non-discriminatory management and access to LNG facilities, in accordance with the Gas Directive¹. GGPLNG do not go beyond the Gas Directive, or applied regulation, in creating or restricting TPA rights. GGPLNG were also intended to provide input from ERGEG to the 3rd Package

Data obtained by monitoring the implementation of the GGPLNG will bring better understanding of the present LNG system performance on issues such as: tariffs, services, capacity allocation and congestion management. The exercise will also provide accurate data to promote further discussion and consensus-building on the identification of an approach to deliver future system regulation.

Therefore, the intent of the monitoring exercise presented in this document is:

- To assess the degree of implementation, and hence, compliance with the requirements outlined in the ERGEG Good Third Party Access Practice Guidelines for LNG System Operators, to identify reasons for non-compliance and to provide information to design actions to further progress in the construction of an internal market.
- To identify areas where further refinement and clarification of the ERGEG Guidelines of Good Third Party Access Practice for LNG System Operators are potentially needed; providing input, if needed, that allows TPA services, tariffs, transparency criteria, capacity and congestion mechanisms and rules to be better detailed in order to ensure non-discriminatory, transparent and effective access conditions to the LNG facilities for all system users;
- Based on the findings of the monitoring exercise, users, LSO's and NRA's preferences will be gathered, with the overall aim of creating a consolidated framework for LNG in Europe.

¹ Directive 2003/55/EC of the European Parliament and of the Council concerning common rules for the internal market in natural gas and repealing Directive 98/30/EC



1.2. Executive Summary

In 2009, ERGEG will carry out a comprehensive monitoring exercise of its Guidelines of Good Third Party Access Practice for LNG System Operators (GGPLNG).

ERGEG's monitoring exercise will therefore cover LSOs, System users and NRAs. The aim of this is to assess the degree of implementation and hence compliance with the requirements outlined in the GGPLNG, to identify benefits and failures, as well as users' requests and main trends in the market, to obtain clear conclusions and recommendations for how the potential difficulties in LNG regimes could be reduced and access improved.

The level of response was very good for NRAs and LSOs, sufficient for users, but not enough from certain markets. For example, since only two LSOs and one user operating in exempted terminals provided answers, it is very difficult to form a conclusion in this area. Also, Belgian terminal users have not provided responses, so the general conclusions reached in this report must be carefully addressed when referring to this country.

In summary, ERGEG's findings are as follows:

- GGPLNG' compatibility with current regulatory frameworks: some potential incompatibilities have been identified between the GGPLNG suggestions and the national regulations, regarding some aspect and, specifically, anti-hoarding mechanisms. Local markets and terminal conditions must always be taken into consideration.
- GGPLNG provisions on tariffs: NRA and users' responses suggest different perceptions regarding implementation of GGPLNG provisions on access tariffs, particularly with regard to tariff cost reflectivity, clear allocation of congestion revenues and promotion of efficient commercialization and terminal use. When NRAs are generally satisfied with the degree of compliance with GGPLNG on tariffs, users believe that there is room for improvement in the aspect mentioned above.
- GGPLNG provisions on roles and responsibilities: results provided by respondents show a good degree of GGPLNG implementation on these issues. Nevertheless, there is still room for improvement with regard to IT system performance and penalties. An effort is needed to fully implement, or improve, IT systems and to develop a balanced framework regarding responsibilities and penalties of LSOs and users.
- GGPLNG provisions on TPA services: services offered vary considerably from one terminal to another, although there seems to be an important degree of harmonisation and transparency when defining bundled services which almost always include: ship reception and unloading, LNG storage and regasification capacity. However, in approximately half of all cases, services are defined without market consultation and users state that they do not fit with their needs or could act as a barrier to market entry. Therefore offered services should be developed at the market's request and with market collaboration.

When analysing measures introduced by NRAs to avoid anti-competitive behaviours between affiliated companies, the need for regulation has been detected.

Standard contracts and terminal codes are currently being used or being developed in all terminals. Users' responses with regard to the terminal codes demonstrate that, on average, there is a 75% compliance with the GGPLNG. Aspects which could be improved, according to users, are: rules for secondary capacity markets, better definition of CMPs, tolerance levels of imbalance and liabilities.

Current cooperation among LSOs and TSOs works well regarding compatible operational procedures, consistent balancing regimes and coordinated maintenance programs.



According to users, more coordination, transparency and better definition would be welcome concerning access requests, services provision and timing.

• GGPLNG provisions on Capacity calculation, CAMs and CMPs:

Monitoring of Capacity calculation provisions reflect a good level of compliance, only with some complaints from users in case of services being calculated separately.

Regarding CAMs and CMPs this is probably the most controversial issue of the monitoring. Opinions differ among stakeholders, not only regarding the current type of mechanism, but also on the opportunity for developing new ones. Only half of the existent mechanisms are market based.

Some users' answers reveal little understanding of the mechanisms in place. Therefore, more information should be released on how these mechanisms work and the reason for having chosen them.

The opinion of users is that improvements can be made almost in all the issues covered, including the development of more transparent and non-discrimination mechanisms. Consistent, effective, simple and transparent arrangements in all terminals, closely supervised by Regulators, are required. Especially important is the design of this mechanism allowing compatibility with liquid trading, spot markets and efficient capacity use.

CMPs should be implemented and designed taking into consideration market preferences, once these have been established.

- **GGPLNG provisions on anti-hoarding mechanism:** underused and/or underutilised capacity is only defined in three countries. The clear definition of underused and systematically underutilised capacity would be welcome. Appropriate anti-hoarding capacity mechanism will optimise the operation of the terminals creating a fair level field for new entrants.
- GGPLNG provisions on transparency: Users' responses concerning effective publication of transparency criteria, services offered, used and available capacities, tariffs, etc, indicate a global recognition of an adequate transparency level, with potential improvements in some particular areas, especially for availability of slots or penalties. One area where improvements could be made is in the accessibility of some of this information in English.
- GGPLNG provisions on trading of capacity rights: only three of the monitored countries have established operative secondary markets, while 76% of users indicated secondary capacity market as the best CMP. ERGEG considers that secondary markets need to be fostered to help the dynamic and competitive growth of the market, in response to the most common user complaint.

1.3. Introduction

1.3.1. Scope and Method

At the XV Madrid Forum, the European commission approached ERGEG with a request to monitor the degree of implementation and compliance with the requirements for LNG terminals, as outlined in the ERGEG Guidelines of Good Third Party Access Practice for LNG System Operators (GGPLNG).



Within the Liquid Natural Gas (LNG) task force (TF), in close collaboration with the Gas Market Monitoring (GMM) task force (TF), ERGEG subsequently started its monitoring on the GGPLNG.

ERGEG developed three online questionnaires, seeking views from National Regulatory Authorities (NRAs), LNG System Operators (LSOs) and LNG facility users (users) on how the GGPLNG have been implemented. Since all of them are actively participating in the LNG market, they can provide the best insight as to whether and how the GGPLNG have been implemented or whether there are aspects of the GGPLNG which have been avoided. To separate the vision of the different stakeholders concerned is fundamental in order to independently detect their different needs and requests. Regulation to be implemented is intended to reflect the necessities of all system actors, guaranteeing a cooperative and well balanced market framework.

The online questionnaires were available on the ERGEG website. Users of the European LNG regasification plants, LSO's and NRA's representatives received an invitation by e-mail to participate in the survey that also contained: a guide describing the process to fulfil the online application, personal logins and passwords and a link to the web site where they could find the survey. It is important to point out that this monitoring exercise is the first to be developed by ERGEG with online external participation.

During the process several reminders were sent to LSOs and users by the GMM and NRAs.

1.3.2. Coverage

Following ERGEG's invitation to participate in the monitoring of the degree of implementation of the ERGEG GGPLNG, all NRAs invited took part in the Monitoring Exercise:

NRA	Country	
BELGIUM	Commission pour la Régulation de l'Electricité et du Gaz (CREG)	
FRANCE	Commission de Regulation de l'Energie (CRE)	
GREECE	Ρυθμιστική Αρχή Ενέργειας / Regulatory Authority for Energy (PAE / RAE)	
ITALY	Autorità per l'Energia Elettrica e il Gas (AEEG)	
PORTUGAL	Entidade Reguladora dos Serviços Energéticos (ERSE)	
SPAIN	Comisión Nacional de Energía (CNE)	
UNITED KINGDOM	Office of Gas and Electricity Markets (Ofgem)	
TOTAL: 7 NRAs		

Table 1: Participating NRAs



The following figure shows a map with those countries, highlighted in blue, where NRAs have participated in the 2009 ERGEG GGPLNG Monitoring Exercise.



Figure 1: Participating NRAs (by country)

With regard to LSOs, the following participated in ERGEG monitoring exercises:

Table 2: Participating LSOs

LSO Name	Number of terminals	Country
Bahía de Bizkaia Gas (BBG)	1	Spain
ENAGAS S.A.	3	Spain
Regasificadora del Noroeste, S.A (Reganosa)	1	Spain
Planta de regasificación de Sagunto S.A. (SAGGAS)	1	Spain
ELENGY	2	France
Societé du Terminal Méthanier de Fos Cavou	1	France
GNL Italia S.p.a.	1	Italy
Terminale GNL Adriatico S.r.l.	1	Italy
Fluxys LNG	1	Belgium
Hellenic Gas Transmission	1	Greece



LSO Name	Number of terminals	Country	
System Operator S.A.			
National Grid Grain LNG	1	United Kingdom	
REN Atlantico, S.A.	1	Portugal	
TOTAL: 12 LSOs, 15 terminals			

The following figure shows a map with those countries, highlighted in blue, where LSOs have participated in the 2009 ERGEG Monitoring Exercise of the GGPLNG.





Other invited LSO's that finally did not complete the questionnaires for the monitoring exercise where:

• United Kingdom: South Hook and Dragon.

Finally, the following users participated in the 2009 ERGEG Monitoring Exercise (Past users, current users and future users were invited to submit answers relating to different LSO systems, in different countries in some cases):



User	Country	
User 1	Italy, Spain	
User 2	Spain	
User 3	Spain, UK	
User 4	Greece	
User 5	Portugal	
User 6	France, Spain	
User 7	Italy	
User 8	Italy	
User 9	Portugal	
User 10	France, Italy, Spain	
User 11	France	
User 12	France, Portugal Spain.	
User 13	Spain	
User 14	Spain	
TOTAL: 14 business groups, 21 questionnaires received		

Table 3: Participating users [CONFIDENTIAL]

The following figure shows a map with those countries, highlighted in blue, where users have participated in the 2009 ERGEG Monitoring Exercise of the GGPLNG.



Figure 3: Participating users (by country)



The responses received from users related to the following LSOs' terminals:

LSOs' Terminals	Country	Number of responses	
Bahía de Bizkaia Gas (Bilbao)	Spain	6	
ENAGAS (Barcelona)	Spain	6	
ENAGAS (Cartagena)	Spain	5	
ENAGAS (Huelva)	Spain	6	
ELENGY (Fos Tonkin)	France	4	
ELENGY (Montoir de Bretagne)	France	4	
GNL Italia (Panigaglia)	Italy	4	
Hellenic Gas Transmission System Operator (Revithoussa)	Greece	1	
National Grid (Isle of Grain)	United Kingdom	1	
REN Atlantico (Sines)	Portugal	3	
Reganosa (Mugardos)	Spain	5	
SAGGAS (Sagunto)	Spain	5	
STMFC (Fos Cavaou)	France	4	
TOTAL = 13 terminals, 54 answers			

Table 4: Coverage frequency of LSOs' terminals

Responses were received from all NRAs in the European countries with an LNG market, from all current LSOs including some future LSOs and from 14 user business groups of approximately 40 contacted, providing 54 answers on individual terminals.

ERGEG considers that this represents a good level of participation considering the number of users at each terminal², the degree of LNG market development in each country and the size of users. Therefore, responses could be used to reach useful conclusions concerning the key topic areas identified at the beginning of the study.

Nevertheless, whilst the level or responses is considered sufficient for users, it is not enough from certain markets. For instance, since there are answers provided from only two LSOs and one user operating exempted terminals, it is very difficult to form conclusions on these terminals.

Also, it is important to indicate that no responses were provided by Belgian terminal users. ERGEG has taken these facts into account when analysing and evaluating the responses received and when deriving its own conclusions and recommendations regarding the implications for the future development of LNG systems operation standards.

² There are at least two terminals with a single user, and the users of the six Spanish terminals are roughly the same



ERGEG also thinks that LSOs, NRAs and users have been given adequate opportunity and enough time to take part in the survey; special extensions were given at the time for completion of questionnaires.

In order to comply with some participants' confidentiality requests, individual responses and additional material submitted will not be made publicly available. Only NRAs will have access to all the information submitted. Where possible, ERGEG has analysed the responses in percentage figures, although an effort has also been made to indicate absolute figures.

1.3.3. Contextualisation of ERGEG's 2009 monitoring work

ERGEG would like to stress that the findings in this report should be considered in a wider context of discussion on the promotion of a competitive European LNG market, the securing of the internal energy market (IEM) in Europe, and the removal of impediments to trade and barriers to market entry. This is important given that LNG can play a role in enhancing an accessible, integrated and competitive EU market. A flexible market for LNG within the EU will also enhance short-term security of supply.

ERGEG will also liaise and cooperate closely with the European Commission on how to take the findings of this report forward, in particular in the context of the new Regulation. It is therefore foreseen that the results of this monitoring exercise will feed into the Commission's work and future legislative processes through Comitology.

1.4. ERGEG 2009 monitoring results: Synopsis of findings from LSOs, users and NRAs

In this section, ERGEG will present an analysis of the responses submitted by NRAs, LSOs and users, comparing their different points of view with the aim of assessing whether there are areas where LSOs' views differ from the perception of users. This synopsis will help to identify conflicting areas where there is further need for improvement or investigation. In addition, information received from NRAs has been used in this section to substantiate the overall picture.

The level of participation has differed among users, LSOs and NRAs as shown in the figure below.





Figure 4: Level of responses to the questionnaires

The online questionnaires allowed the possibility of selecting different LNG terminals, even in different countries, for those cases when users have or will have capacity rights in different terminals, or LSOs operated more than one plant, and they needed to provide several answers.

1.4.1. General information regarding current access practice and GGPLNG

The different activities developed by users and LSOs that participated in the monitoring exercise are shown in Table 5 (respondents can develop more than one activity in the gas market).

It can be seen that more than half of LSOs are also TSOs and 36% are also supply undertakings. Only 2 LSOs report to be exclusively dedicated to managing their LNG terminals. The rest are involved in other gas-related activities.

Most users are supply undertakings and traders, 33% also act as wholesale customers and a significant number (22%) are also production companies. The other profiles referred to by users are retailers and last resort suppliers. It is important to highlight that 38% of users indicate that they are part of the same vertically integrated undertaking as the LSO to which the completed questionnaire applies.

Profile	Number of LSOs (out of 14 LSOs)		Number of users (out of 18 users)	
production company	3	21%	4	22%
supply undertaking	5	36%	11	61%
wholesale customer	2	14%	6	33%
trader	2	14%	10	56%
TSO	8	57%	1	6%
DSO	3	21%	1	6%
final customer	2	14%	1	6%
other (e.g. local utility, distribution company, retailer)	2	14%	2	11%

Table 5: LSO's and users profiles



Only 17% of the LSOs have identified potential incompatibilities between the GGPLNG suggestions and their national regulations. The problems identified are:

- Sufficient flexibility must be provided by NRA to promote regional harmonisation and market incentivisation. A "One size fits all" approach may be an obstacle to regional markets. Therefore liquidity, number of players, LNG weight in the regional market, etc. must be taken into account.
- There is a risk of putting too much emphasis on anti-hoarding measurements which could restrict more efficient bilateral trading. Too much pressure, specifically in exempted terminals may limit the expansion of LNG in certain markets where these measures are not really relevant.

Regarding these two comments for potential GGPLNG incompatibilities, ERGEG's opinion is that:

- Although it would be difficult to define standard services which would accommodate all terminal conditions, it seems necessary to clearly assess the nature of the local differences and the feasibility and benefits of certain services and the common definition of tariff structures.
- Some common understanding regarding rules applicable in cases of systematic underutilisation or capacity hoarding would be desirable, even though LNG terminal features must be taken into account in order to protect the option value of capacity holders. These rules should be defined after open dialogue with primary capacity holders to understand the conditions that prevented the use of booked capacity.

1.4.2. Tariffs and tariff methodologies

Tariffs and tariff methodologies are published at all the regulated terminals according to users. They are published in each country in the Official Asset and/or on LSOs' web pages.

71% of NRAs design the tariff methodology, and 57% approve it. LSOs' participation in tariff design and tariff methodology, according to their own responses, is low. 42% of LSOs indicate that they play no role in the design, since they are set by the regulatory authorities. In these cases LSO participation is limited to the provision of requested information. Meanwhile, 25% of LSO's participate at some point in the tariff approval process.

From the analysis of users' answers, the following conclusions have been drawn (the percentages are calculated including users not answering a particular question, mainly in the cases of those in exempted terminals):

- 90 % of users consider that the tariff structure contains a description of its objectives.
- 38 % believe that tariffs are cost reflective. Non compliance is explained, in users view, by the fact that tariffs can be the same for more than one terminal or can be too high in comparison with the costs.
- 52% of users indicate that tariffs are clear with regards to their calculation and LSO's revenues. Non compliance is registered when they are not transparent or the methodology is considered unfair.
- 33% of users point out that within their terminals there is an indication of how to manage additional congestion revenues. Negative answers point towards not having congestion revenues or their management not being clear.



- 86% believe that the competent authorities for tariff setting and appeals are clearly defined.
- 43% consider that tariffs incentivise efficient commercialisation and terminal utilisation. Non-compliance is justified by the following reasons:
 - There is no secondary market
 - Capacity is fully booked, so there is no incentive for efficient commercialisation and terminal use.
 - There are cross subsidies between activities (regasification, transport, etc.)
 - There is no methodology to address congestions and delays, nor are there penalties for the shipper that causes those delays.
 - Even if there are different tariffs at terminals, they do not incentivise efficient use because tariffs do not provide the right signals.
 - $\circ\;$ For an efficient commercialisation, a greater demand is needed (more than one user).
- 43% consider that tariffs are reviewed taking into consideration market evolution.
- 76% indicate that tariff distinguish between capacity and commodity charges.
- 62% consider that tariff distinguish between services. Some answers indicated that the standard bundled services do not distinguish between individual services.

On the contrary, all the NRAs answering this question consider that the GGPLNG recommendations on tariffs have already been incorporated in the national legislation.

ERGEG is aware of the difficulty of a meaningful horizontal comparison, taking into account the different characteristics of the terminals and also the different market situations and regulatory approaches. However, ERGEG is of the view that an effort is needed to further investigate users' complaints and evaluate whether these can be solved, particularly regarding methodology transparency, cost reflectivity or efficient tariffs that will incentivise terminal utilisation.

1.4.3. Roles and responsibilities

Users – LSO's perception

Users are content with the level of LSOs' operation and maintenance of the terminals. In their view LSOs offer all available capacity not excluded from TPA, publishing contractual terms and conditions. Depending on the terminal (there are a few contradictory answers) users generally agree on the fact that there are rules to discourage capacity hoarding.

However 52% of users estimate that offered services do not seek to accommodate market demand. In ERGEG's view a high percentage of these reasons should be analysed. Responses concerning IT system interoperability are also worrying, as 48% of users consider the tools in place need to be improved.

LSOs indicate that users provide in due time and in the requested format, information on access contracts and programming or nomination. 33% of LSOs point out that some of their users do not have adequate IT systems to allow them to communicate with the terminal. No LSO is aware of practices meant to distort or prevent competition in the gas market.



Consequently, ERGEG strongly recommends that LSOs move towards a market approach when defining services (if they have responsibility in this area) and the implementation of IT systems. This will allow better coordination and management of the information to be exchanged among different parties.

Penalties

57% of countries' penalties have been established for LSO's and users in cases of non compliance with their contractual obligations; in 29% of countries the penalties are only applied to users. Penalties are not applicable to exempted terminals.

19% of users have been penalised for non compliance with their contractual obligations. 86% of them consider that applied penalties were proportionate, not being a barrier to new entrants; only 20% consider that they were cost-reflective.

ERGEG is of the opinion that responsibilities for all parties should be appropriately balanced.

1.4.4. TPA services

Arrangements for vertically integrated companies

Only 3 NRAs out of 7 have implemented measures in order to assure confidential information remains confidential and affiliated companies do not have access to business information that may lead to competitive imbalances, when a LSO is part of a vertically integrated company. One NRA indicates that they have defined tools only to maintain information confidential when needed.

Measures implemented refer to: contract clauses, legal functional unbundling, legal unbundling of LSO from production and supply companies, accountant unbundling of regasification, transmission and underground storage activities and appointment of a board of independent administrators.

For one of the exempted terminals, it is stated that functional unbundling obligations are less severe with respect to non exempted terminals, provided that legal unbundling applies and the LSO must appoint a person who holds the responsibility to assure that obligations related to TPA are fulfilled. In all cases it is explained that the company operating the terminal cannot own capacity at the terminal.

ERGEG strongly recommends the use of instruments by NRAs which guarantee an equal treatment of affiliates and independent terminal users.

Type of services offered

In general, NRAs are involved in service design in one way or another. 71% of them indicate that they either approve or participate in the approval process, although only two of them take part in the design itself. In some cases, where NRAs do not participate in the approval process, the NRA is involved in the design. Only one NRA does not play an active role in the service definition.

According to data provided by LSOs, most of the terminals offer long term, short term, firm and bundled products. Components of bundled services are widely harmonised, including reception capacity, LNG storage capacity and regasification capacity. 6 LSOs also include additional services like truck loading, quality control and odorisation. However, contract duration is not so homogenous. For some LSOs, long term contracts mean more than 1 year,



for others, more than 2-3 years. Some LSOs establish a time limit for long term contracts (up to 10 years, up to 20 years, etc.), while others have no time constraint. Depending on the terminal, short term services may go from 1 hour to less than 3 years. In one case, there is only one product to sell: capacity for the next calendar year.

Unbundled services are offered by 7 LSOs: additional storage capacity, additional regasification capacity, quality adjustment, truck loading, ship approval, ship cooling, LNG transfer between ships, LNG ship loading and LNG ship tanks pressure reduction. In one country not offering unbundled services, LSOs explain that a public consultation conducted by the NRA in 2008 showed no need for these services.

On the contrary, interruptible services are only offered by two LSOs. One additional LSO allows users to nominate more regasification capacity than the contracted amount, and considers this extra capacity as interruptible. The only reason provided by LSOs to explain not offering interruptible services is that it is not required by legislation or not needed by the market.

Future LSOs, or LSOs operating exempted terminals, do not provide responses to this set of questions.

ERGEG considers that there are important benefits for users in standardising commercial services across Europe and recommends the further exploration of this possibility. Unbundled services should be clearly defined and offered to the market when required.

Users report different services offered by LSOs in different terminals, as shown by LSOs. From the users' point of view, services are usually publicly available (90% of users) and defined with enough detail (81%). Nevertheless, approximately half of them point out that services have been defined without market consultation (48%), they do not accommodate their needs (52%) and may act as a barrier for new entrants (43% of users). Even where a market consultation is carried out, users explain that in some cases results have not been considered by NRAs.

One exempted terminal indicates that services offered were not consulted with users, and primary capacity was not open to new third parties.

Services that users required as bundled but are not offered:

- Loading and cooling of LNG-Ships
- Gas quality conversion

Services that users required as unbundled but are not offered:

- Truck loading
- Ship cooling
- Extra LNG storage
- LNG ship loading

Explanations for possible competition distortion mentioned by users refer not only to services definition, but also to the management of capacity rights:

- Lack of visibility of the available slots, in advance.
- Unclear rules for penalties regarding LNG storage, above the one included in the bundled service.
- Unclear allocation of slots.



- Regasification modified by LSOs not always following user nominations.
- Newcomers or small users being at an economic disadvantage.
- Dominant position of vertically integrated companies.

In ERGEG's view, services offered should be developed at market request and with market collaboration. Where LSOs are not already offering services needed by the market, they should do so taking into consideration the experience of other European terminals. Also, distortions among terminals need to be prevented and services developed regarding secondary capacity trading, short-term booking and underutilisation of slots.

Contracts and contracting processes

The level of NRAs' involvement in standard contract design is the same as for definition of services.

Standard contracts are established and are being used in all terminals (13 terminals) or are in the process of being developed (2 terminals). In the 73% of terminals, the standard contract is defined in the legislation in force, in some cases totally or partially proposed by LSOs. For the rest, it is the task of LSOs to approve it.

Only 5 LSOs stated that they have a specific time limit to sign the access contract, once the access is allowed.

Contracting processes described by LSOs refers only to the description of the capacity allocation mechanism rather than the explanation of all future steps users have to follow when trying to access the terminal.

ERGEG believes that the contracting procedures are an essential part of the access process to guarantee effective, non-discriminatory access, and it may become a barrier to entry if it discourages users when accessing a terminal, distorting competition. Therefore, it would be of the upmost importance that all the steps constituting the contracting process and user's needs to access the facilities are clearly detailed and made public. A proposition by GLE would be most welcome.

Cooperation with TSOs

From the information provided by LSOs, it clearly emerges that cooperation with TSOs is good regarding the establishment of compatible operational procedures, consistent balancing regimes and coordinated maintenance programs. Concerning the capacity request and the application of CAM and CMPs there is room for improvement. Users on their side are generally satisfied with the level of compliance.

Other interesting ways of cooperation described are the roles of the Technical System Manager, existing in three different countries, which in general coordinate the global network and the signature of a transmission contract between the LSO and the adjacent TSO. In particular it is interesting that in Italy, users do not need to sign a transmission contract to get their gas out of the terminal since regasified quantities are redelivered to the terminal users at the virtual trading point of the network. One LSO explains the existence of a high degree of synchronisation in the planning, construction and operation of LNG facilities and other basic infrastructures as an advantage for coordination. Only 2 LSOs publish agreements with TSOs.



It is important to remember that 8 LSOs are also TSOs.

From many of the users' points of view, cooperation with TSOs also includes compatible services, technical procedures and coordinated capacity subscriptions. Some users ask for coordinated capacity subscriptions and communication of nominations and renominations between operators.

ERGEG considers cooperation of LSOs and TSOs crucial to guarantee effective and non-discriminatory access. The collaboration among them optimises the connectivity of the LNG terminals and the downstream network, so the degree of compliance on this subject is welcome. However, the exchange of information regarding the technical parameters of installations, the terminal nominations and in general the expected flows would allow better management and understanding of the whole system. Information regarding access, services and timing should be coordinated, welldefined and made public. A higher level of cooperation would be desirable with regard to information to be provided by users to LSOs and TSOs.

Terminal code

Many LSOs have developed or are in the process of developing a terminal code. Some LSOs report to have included operational information in the access contracts. In one country, the LNG terminal code is included in the network code applying to all national infrastructures. Users' opinions are in general good regarding the terminal code availability.

Terminal code, in most cases, is defined with NRAs and market participation, being approved by NRAs. In some cases it is proposed by the LSOs.

ERGEG is concerned that some of the terminal codes, as expressed by 5 users' responses, do not describe rules for secondary capacity markets. Other aspects missed by users, although in lesser extent, are the description of CMPs, standard services and conditions, tolerance levels and the establishment of liabilities in case of accident.

ERGEG is of the view that terminal codes should be published in order to allow all system agents to know the rules and procedures before they try to access the facilities, assuring transparency and non-discrimination. ERGEG recommends the inclusion of an appropriate and detailed description of the subjects, pointed out by users in the terminal code.

Scheduling procedures

Scheduling procedures are defined after market consultation by 83% of LSOs (including an exempted terminal) and approved by NRAs in 58% of the cases. 75% of these procedures are public and contain definition of notice periods and priority rules in case of conflicting nominations by capacity holders.

According to one user's statement, the lack of visibility regarding available slots makes it very difficult to reschedule deliveries to the terminals and makes new entrants dependent on primary capacity holders.

As a result, ERGEG encourages LSOs to fully comply with these GGPLNG requirements, in particular, transparency regarding scheduling procedures, since it may act as a barrier to market access.

Users' responses have not revealed any clear preference for a specific notice period. While 5 agents prefer 10 days or less notice periods, 4 select 1 month and 7 select other different



notice period. 5 users explain that the notice periods in place don't suit their needs. They are basically based on annual, quarterly, monthly and weekly delivery programs.

ERGEG would welcome promotion by GLE among its members of an analysis together with a market consultation on the need to standardise notice periods.

On the other hand, 3 out of 12 LSOs state that they have developed scheduling procedures that include cooperation with other LSOs to manage deviation of cargoes in cases of force majeure. These LSOs' facilities are installed in the same country.

It could be interesting to analyse the need to develop these types of initiative in the European framework which allows a wider playing field related to LNG in Europe.



1.4.5. Capacity calculation, capacity allocation mechanisms and congestion management procedures

Capacity calculation

With one exception, all NRAs participate in the design of the capacity calculation, approving the capacity calculation mechanism, defining or approving the principles on which it is based. Some NRAs develop both tasks.

71% of users consider the capacity calculation methodology to be transparent, 81% say it is published on LSOs' website, but only 57% indicates that the LSO considers each service separately.

Definition of CAMs and CMPs

Capacity allocation mechanisms, as well as capacity calculation methodology, are approved or are based on principles defined by NRAs (71%), or defined by LSOs and monitored by NRAs (29%).

Regarding congestion management procedures, 57% of NRAs establish or approve basic principles, 29% participate in the design and 71% approve or take part in the approval process.

According information from NRAs, in 43% of cases for CAMs, and 29% for CMPs, these procedures are defined after market consultation. On the users' side, 52% of responses stated that CAMs and CMPs are defined after market consultation.

The perception of NRAs and users regarding market-based solutions also differs. While 43% of NRAs indicate that CAMs are based on market solutions, and 71% do the same for CMPs, only 24% of users' consider CAMs (and CMPs) currently applied to be market-based mechanisms.

Therefore, ERGEG suggests that market based mechanisms should be taken into account when defining CAMs and CMPs. Furthermore, more information should be released on how these mechanisms work and the motivation for choosing them.

Some NRAs refer to the low rates of market-based CAMs claiming that availability of capacity to be contracted, justifies the application of FCFS methods. Auctions and Open Subscription Periods are other CAMs in force.

Regarding CMPs, NRAs argue that:

- CMPs are not necessary, because capacity is defined in slots and a mechanism for allocating slots is in force.
- Market based CMPs are not necessary, when there is available capacity to be contracted.
- Secondary capacity markets (bulletin board) substitute for CMPs.
- CMP definition is ongoing.

Looking at user's responses about CAM and CMP, only 62% say they are transparent and 52% that they are non-discriminatory. Low values of compliance have been obtained while asking if they facilitate development of competition, liquid trading of capacity and efficient capacity use, if they are compatible with spot markets and with trading hubs, and if they foster investments. For these aspects, compliance values vary between 15% and 45%. Users underline that:

• in some cases, there is a lack of a secondary capacity market



- CAMs and CMPs are discriminatory in comparison with other facilities
- regulation for CAMs and CMPs is still being developed
- CAMs favour existing long term "take or pay" contracts
- there are not transparent, public and non-discriminatory CMPs
- in some terminals, UIOLI rules are not well designed and do not encourage shippers to release unused capacity
- CMPs have been announced, based on auctions, but have not been implemented
- the lack of UIOLI rules do not promote secondary capacity trading

ERGEG believes that CAMs and CMPs are primary tools to avoid discrimination, so rules for capacity allocation need to be carefully addressed and explained to the market. The GGPLNG establish a common framework for CAMs and CMPs. Therefore the correct implementation of GGPLNG provisions on CAM and CMP are of great importance. Nevertheless, some users' answers reveal little understanding of the mechanisms in place. Consistent, effective, simple and transparent arrangements in all terminals, closely supervised by Regulators, are required.

It is especially important to design these mechanisms to ensure compatibility with liquid trading, spot markets and efficient capacity use.

On the other hand, underused and/or underutilised capacity is only defined in three countries:

- 1. In Belgium, underused capacity occurs when a slot is not used by a terminal user.
- 2. In Italy, if users have not completely used the capacity booked for a multi year period (except in the case of Force Majeure in a thermal year), they are obliged to offer to the market, through the LSO, the amount of the capacity unused for the remaining part of the multi year contract. If no party buys the capacity it is returned to the user.
- 3. In Spain, capacity is considered as underutilised if, within the first 6 months of the contract, the monthly capacity used is below 80% of the monthly contracted capacity, at least in one month. The Technical System Manager is in charge of monitoring systematic underutilisation of LNG terminals during the life of the users' contracts which can result in refusal of access.

Reasons provided to explain the lack of definition are:

- "*ship or pay*" defined as a penalty for the underuse of the subscribed capacities
- CAM design itself prevents contractual congestion. CAMs are not based on a reserved (contracted) capacity concept. All capacity is allocated for periods of less than one year. Capacity not booked by traders is brought back to the market via short term UIOLI. On the other hand, in case of primary capacity scarcity LSO may apply *backpack* or *capacity goes with costumer* principles (CGWC).

ERGEG would welcome the clear definition of underused and systematically underutilised capacity. Appropriate anti-hoarding capacity mechanisms will optimise the operation of the terminals, thus creating a fair and level playing field for new entrants.



CAMs and CMPs preferences

According to LSOs' questionnaires, the most used CAMs for current capacity is FCFS (First Come First Served). Other CAMs referred to are: the rucksack principle, auctions and first committed first served. In some cases, the applied CAM depends on the service offered. For new capacity, FCFS, open season with pro rata and sales are mentioned.

Asked about their preferences, users prefer FCFS (66%) as a first option for current capacity, while 31% would like to have auctions, and 6% a pro rata mechanism. For new capacities, users' views change: 65% of responses select auctions as their preferred option, 29% chose FCFS and 6% pro rata.

Some users explain that the FCFS is more appropriate if there is sufficient available capacity, and market based CAMs are necessary in cases where there is insufficient capacity.

CMPs currently in force are short and long term UIOLI, restriction of nomination rights, secondary capacity markets, auction and UIOSI mechanisms. On the other hand users prefer secondary capacity markets (76%) as the favourite CMPs and 24% prefer UIOLI or use it or lend it. One agent states that the secondary capacity market is hampered when there is only one user at the terminal. Only 5 LSOs (4 countries) have implemented secondary capacity trading tools (bulletin board and electronic platforms).

Users chose these CMPs because they consider them to be the most efficient, effective, market-based solution. They believe them to be fair and to provide the highest potential contribution to market liquidity without penalising capacity holders.

Despite 11 LSOs stating that a CMP mechanism is in place, only 3 report that it has been applied in the past year. Where used, the CMP, mainly affects the regasification capacity rights, but also the truck loading capacity.

CMPs should be implemented by LSOs. They should be designed taking into consideration market preferences, once these preferences have been established.

Refusal of access

In 57% of the countries NRAs approve access exemption rules, and in 86% they monitor them. 71% of NRA responses show that access exemption rules are public and 57% indicate that they are common for every LNG terminal in the country.

Regarding exemptions from access, 57% of NRAs monitor the exemptions and 57% of NRAs act as the appeal body for non granted exemptions. Exemptions from access are approved by the NRA only in one country while in others the NRA don't play any role with regard to TPA exemptions.

ERGEG considers that principles governing access exclusion must be transparent and non-discriminatory. From ERGEG's view, transparency regarding refusal of access rules is needed, since this information may be essential for future terminal users.

1.4.6. Transparency

The analysis of transparency performed in this monitoring exercise aims to obtain users points of view regarding the publication of information by LSOs and regulators.

System users were asked about the existence of a terminal code and the publication of another twelve additional information types such as: available capacities, definition of services or rules and applicable penalties. Questions for the different information types were



arranged within the same structure. The first question asked if the information type was applicable or not, depending on the regulation or the existence of an exemption. Subsequent questions enquired whether the information type was published only in the national language or also in English, if users could find the information on internet and if it was available free of charge.

The responses indicate that 100% of the LSOs publish information on: terminal codes; existing, short term and future terminal capacities. Other information types such as standard service contracts, maps of terminals, maintenance plans and contracted or available capacity are published in the 90% of cases. Least published information types are: rules and penalties applied and information on interruptible services.

With regard to the publication of the relevant information types in English, it is observed that nearly any of them rises above a percentage of more than 50%, which in **ERGEG's opinion** is an issue to be improved in order to facilitate the European market integration. Practically all the information published is available free of charge through internet, with particular exceptions, commonly for the same terminals or countries.

Transparency is an indispensable feature of a fair and competitive system. There is full agreement by ERGEG members on the need to provide transparent and detailed information regarding access terms, tariffs and conditions, and also technical rules for each LNG terminal. Revision of the users' opinion on the effective publication of this transparency criterion, including the tariffs, indicates that there is a global recognition of an adequate transparency level, with potential improvements for some particular information types.

1.4.7. Trading of capacity rights

According to the opinion of users secondary markets are currently only in operation in two countries. In one case the existent trading scheme is considered as a secondary market by some but not all of the respondents. On the other hand, users indicate that there are no secondary markets operating in another three countries. Where secondary markets are said to exist they are considered to ensure equal treatment for capacities; LSOs have put in place services to promote capacity trade.

From the LSO's view, secondary capacity markets have been put in place by 42% of LSOs, corresponding to the terminals of 4 countries.

ERGEG considers that secondary capacity markets need to be fostered for the dynamic and competitive growth of the market, responding to the most common user complaint.

1.5. Outlook and recommendations

ERGEG's overall conclusions drawn from the 2009 Monitoring Exercise of the GGPLNG are outlined in this section.

ERGEG would like to repeat the statement made in Regulation 1775/2005/EC that nondiscriminatory and transparent access practices for LNG systems are key to improving gas market functioning. Within its GGPLNG, ERGEG's declared aim was to provide guidelines on how LSOs and NRAs should design the regulatory framework, and provide services, in order to ensure that non-discriminatory, transparent and effective access conditions to the terminals are provided to all potential users, in particular to new market entrants.



ERGEG is aware that, from a user's perspective, GGPLNG publication is a way of providing results which facilitate the access to LNG systems in terms of standardisation. ERGEG is conscious of the fact that the GGPLNG are voluntary, that existing system access practices might not fit with the GGPLNG, but since the requirements outlined in the GGPLNG are very general, some might claim compliance anyway.

However, findings in this monitoring exercise also show that whilst **users generally** appreciate the current implementation in several areas, like transparency or terminal **code**, they favour greater standardization, wider service provision and hence implementation of general practices at European level, in line with the GGPLNG.

Findings from ERGEG's 2009 Monitoring Exercise of the GGPLNG show that there are significant differences in LNG access practices across Europe. There seems to be different opinions on the level of compliance of some aspects, when taking into consideration the view of NRAs/LSOs and the vision of users, commonly the latter being the one most critical. System access and services offered are complex and, therefore, some users reported that certain arrangements may represent barriers to market entry. Reasons can be numerous, for example: the lack of unambiguous rules to avoid congestion problems, visibility in advance of available slots, secondary markets establishment or clarity in penalties application.

In ERGEG's opinion, although it would be difficult to define standard services which would accommodate all, a certain degree of improvement is necessary regarding tariff structures, some services, definition of CAMs and CMPs and anti-hoarding principles.

When non common accepted principles are adopted, the incompatibilities detected must be clearly justified, assessing the nature of the local differences and the feasibility and benefits of the chosen mechanism. In this sense, it is true that it is difficult to perform a meaningful horizontal comparison, taking into account different characteristics and services provided. It is important to establish a common basis, and the correspondent methodologies, to reduce some of the significant complaints detected from users.

Secondary markets must be fostered for the dynamic and competitive growth of the market, responding to the most common user complaint.

Rules to avoid congestion problems, and the mechanisms to manage them, must be settled, under consensus-building, and also by taking into account the preferences expressed in this monitoring exercise.

There is global appreciation of a **satisfactory transparency** level. Improvements can be made in some particular areas such as the publication of more information regarding certain services, slot availability or penalties. An important area where improvements can be made is the provision of some of this information in **English** as the basic language particularly for third countries users.

As a global consideration, valid for all the regulatory aspects analysed, **more time would be beneficial** in order to allow NRAs and LSOs to fully implement GGPLNG provisions in their systems, to be aware of the potential benefits of GGPLNG implementation and of the issues raised by this monitoring exercise.

On the other hand, in some **markets the number of users is still low**, so new surveys should be done in the future, once the market develops.



2. PART II

Information provided by survey participants during the public consultation has been aggregated and is presented, when possible in figures or tables, in this section of the monitoring report. The details of comments and explanations received from respondents are also included in this section. Additional clarifications provided which do not correspond to specific question, have been included in an "additional comments" section.

2.1. NRA's response summary

2.1.1. General Information

Table 6: Current and Future Terminals that are referenced in the monitoring responses

	Name of the terminal/location	Country
1	Barcelona	Spain
2	Bilbao	Spain
3	Cartagena	Spain
4	Fos Tonkin	France
5	GNL Italia Spa	Italy
6	Huelva	Spain
7	Montoir de Bretagne	France
8	National Grid (Dragon)	United Kingdom
9	National Grid (Isle of Grain)	United Kingdom
10	National Grid (South Hook)	United Kingdom
11	Adriatic LNG	Italy
12	Reganosa (Mugardos)	Spain
13	REN Atlantico (Sines)	Portugal
14	Revithoussa	Greece
15	Sagunto	Spain
16	Fos Cavou	France
17	Zeebrugge	Belgium





Figure 5: Terminals falling into different access regimes

Figure 6: TPA access to LNG facilities implementation







Figure 7: Conflicts between GGPLNG and national legislation

2.1.2. Tariffs and tariff methodologies





Please provide a list of other relevant national authorities involved in setting the TPA tariffs regime / methodology

Country	National authority
FRANCE	CRE proposes the tariff and the Minister has two months to approve its proposal (the minister can approve or cancel the proposal but can not modify it).
GREECE	The Tariff methodology is proposed by RAE and approved by the Minister of Development"
SPAIN	Ministry of Industry

Table 7: Other national authorities involved in tariffs setting



Figure 9: Incorporation of GGPLNG recommendations

For those aspects not included, please indicate the reasons for the "no" answers

- Description of tariff objectives are not clear enough and could be improved
- Not applicable as the terminal is exempted from the requirement to provide regulated third party access, therefore no tariffs are calculated



2.1.3. Roles and responsibilities



Figure 10: Penalties established

Figure 11: NRAs' role regarding penalties





If other, please specify:

France

- CRE has defined in its tariff a "ship or pay" mechanism in order to give incentives to the shippers to optimise their contractual subscription.
- CRE has put in place a penalty for the late cancellation of slots.
- The contract between the operators and the shippers introduces the fact that the operator may, in the event of consequential lose duly justified by third parties as a result of a proven breach on the part of the operator of its contractual obligations, be liable with regard to the shipper for the justified payment of compensation.

Greece

- Administrative sanctions are imposed on those violating the provisions of the Law 3428/2005 (Gas Directive transposed into national law)
- According to the Law 3428/2005, disputes related to natural gas, are under permanent arbitration of RAE.
- The draft network code foresees penalties for non compliance, for both LSOs and users. RAE participates in their approval.

Spain

• The penalties for non-compliance of contractual obligations are exclusively related to imbalance charges. Users must comply with the regulatory framework in force including the balancing procedures. In this context, tolerance levels established on the balancing procedures must be fulfilled by all terminal users.

Portugal

• ERSE is responsible for approving and monitoring the application of imbalance charges.


2.1.4. TPA Services



Figure 12: NRA's role in designing services







If yes, please specify what arrangements are put in place.

Country	Arrangements to put in place
FRANCE	The confidentiality relative to the commercial information is covered by the contract between the users and the LSO. If the contract is not respected, CRE can interfere by request of the party which considers that has suffered a prejudice.
ITALY	Obligation regarding functional unbundling and appointment of a board of independent administrators. In case of exempted terminals, provided that legal unbundling applies, functional unbundling obligations is less severe. In this case LSO must appoint a person (guarantee) who holds the responsibility to assure that obligations related to TPA are fulfilled.
SPAIN	For the LSOs without ownership unbundling, legal unbundling of LSO and production and supply companies, and accountant unbundling of regasification, transmission and underground storage activities

Table 8: Arrangements put in place with vertically integrated LSOs



2.1.5. Capacity calculation (CAC), capacity allocation mechanism (CAMs) and congestion management procedures (CMPs)



Figure 14: Role of NRAs for CAC, CAMs and CMPs

If other, please specify:

Italy:

- There is no provision in the law for NRA to determine the capacity of the infrastructure, nor the methodology ex-ante. Capacities are determined by the LSOs and communicated to the NRA.
- [Note of NRA: The criteria applied for the calculation of the terminal capacity are defined in the regasification code that is verified and approved by the NRA]

United Kingdom:

 Not directly applicable at the Isle of Grain terminal. However, Ofgem monitors the design and implementation of the secondary capacity access mechanism at the terminal.





Figure 15: Definition of methodology







If other, please specify:

Country	Other CAMs definition
BELGIUM	Capacity is defined as number of slots. Such slots are "standard" and include storage and send-out capacity. The number of slots is determined as a fixed number on annual basis.
FRANCE	Concerning Montoir and Fos Tonkin, the CAM in place is the "FCFS" principle Concerning Fos Cavaou, an OSP has been organised on 2007 for the 10% short term capacities (3 years): the ex aequo company found an agreement to share equally the capacities. After these 3 years, the short term capacities are going to be offered again to the market, according to the same procedure.
GREECE	The capacity calculation methodology will be defined in the natural gas system network code. The public consultation on the draft code and its supportive documents was completed at the end of January 2009
SPAIN	Infrastructures design model in Spain provides 10% of extra entry capacity to the gas system. Consequently, there is available regasification capacity to contract at LNG terminals, and then, the CAM in force is FCFS.
PORTUGAL	The CAM applied in Portugal for the basic infrastructures (transmission network, LNG and storage facilities) are based on OSP. This means that there are specific periods were the market agents demand the capacity they need in the basic infrastructures. If the LSO can fulfil all market agents' needs the capacity in the LNG terminal is allocated. Otherwise, the capacity is allocated by auctions in line with a market based CMP. The LSO perform OSP for unloading of methane carriers and send out from the LNG terminal to the transmission network. The OSP are performed each year and all months within the year. As a result of the OSP's the LSO establishes yearly and monthly schedules, which are firm concerning LNG unloading. The monthly OSP must comply with the yearly OSP, otherwise the yearly commitments are no longer firm, meaning a short term UIOLI is applied. The transmission network has also a weekly OSP and nomination (day-ahead allocation of capacity). The LNG loading of road tankers doesn't need annual booking; the applied CAM is through FCFS.



Figure 17: CMPs definition



If other, please specify:

Country	Other CMPs definition
BELGIUM	Not applicable given the way slots are defined and the capacity is allocated
FRANCE	UIOLI is in place at the French terminals: the operator publishes the 25th of month m the available slots for month m+1. A bulletin board is proposed on the website of the operators
GREECE	CMPs will be defined in the natural gas system network code. The public consultation on the draft code and its supportive documents was completed at the end of January 2009
SPAIN	Regulation also establishes long term use it or lose it

Figure 18: Unused capacity clarification



If yes please specify:

Country	Other CAMs definition
BELGIUM	Underused capacity occurs when a slot is not used by the LNG Terminal customer
ITALY	In Italy, if the users, in a thermal year, have not completely used the capacity booked for a multi annual period, except in the case of Force Majour, he has to offer to the market, through the LSO, the amount of the capacity unused for the remaining part of the multi annual contract. If nobody buys it, the capacity goes back to the user.
SPAIN	Underused capacity is defined in Royal Decree 949/2001, published in the Official Assets. LSOs must evaluate shippers' use of capacity during the first 6 months of the contract. Capacity underuse occurs if, within the period of these 6 first months of the contract, the monthly capacity used, at least in one month, is not above 80% of the monthly contracted capacity.





Figure 19: Rules for rejecting TPA to LNG terminals

Figure 20: Authorities' role for rejecting TPA to LNG terminals





2.1.6. Transparency



Figure 21: Transparency regulatory provisions

2.2. LSO's response summary

2.2.1. General Information

Table 9: Role and involvement of LSOs:

Profile	Number of LSOs (out of 14 LSOs)	
production company	3	21%
supply undertaking	5	36%
wholesale customer	2	14%
trader	2	14%
TSO	8	57%
DSO	3	21%
final customer	2	14%
other (e.g. local utility,		
distribution company,		
retailer)	2	14%





Name of the terminal/location	Current (C) or future (F)	Regasificati on capacity (GWh/day)	LNG storage capacity (GWh)	Number of users owing capacity rights	Fully exempted	partially exempted (% TPA)	regulated TPA
Reganosa	с	115	2050	4			x
ENAGAS Barcelona	с	461	3642	11			x
ENAGAS Cartagena	с	377	2948	9			х
ENAGAS Huelva	с	377	3103	13			х
SAGGAS	с	279	2050	3			х
BBG	с	223,3	2055	8			х
Adriatic LNG	f	255	1686	1		80	
GNL Italia	с	118	594	2			х
Fos Tonkin	с	223	1012	3			х
Montoir	с	319	2428	7			Х
Fos Cavou	f	152	2226	6			х
Fluxys	с	105	2563	4			х
Desfa	с	202	877	1			х
REN Atlántico	с	251	1552	1			х
National Grid	с	427	2055	6	х		

Table 10: Main terminals characteristics

Figure 22: Conflicts between GGPLNG provisions and national legislative framework



Identification of potential conflicts:

Portugal

 Enough flexibility must be provided for the NRA to make available regional harmonisation and market incentives. "One size fits all" approach may be an obstacle to regional markets.



Liquidity, number of players, LNG weight in the regional. Only then the global market may be developed.

UK

• There is a risk of putting too much emphasis on anti-hoarding, therefore restricting a more efficient and normal bilateral trading. Too onerous application of exemption criteria may limit expansion / new terminals in certain markets where these measures are not really relevant

2.2.2. Tariffs and tariff methodologies





Other comments:

France

The market, including the LSOs, is consulted by the NRA during the tariff design period. Final proposal by the NRA.

Italy

 TPA capacity: NRA issues consultation and regulates methodology, LSOs submits tariff proposal based on methodology and NRA approves it if it is consistent with the criteria defined by the NRA.

Spain

- LSOs role is limited to the provision of the information requested by the regulatory authorities.
- Tariffs are set by the regulatory authority after users consultation/participation





Figure 24: Publication of tariffs

2.2.3. Roles and responsibilities







Reasons for "no" answers and clarifications:

France

 Shippers are in communication with the Operations team which deals with all operational and commercial matters and serves as an interface with the terminals.

Italy

 According to the Regasification Code only information needed to reprogram the unloading is requested

Spain

 Terminals users generally provide, in due time and format, the information required by the regulation. The regulation in Spain does not establish how to manage divergences from accepted terminal use programs, nomination or renominations.

Portugal

 There is no formal TPA support information system installed (project is underway). The number of users is expected to increase this year.

2.2.4. TPA services



Figure 26: Services offered in the terminals

If some service is not being offered, please explain the reason:

France

 Services ticked above are considered sufficient since this was confirmed by market consultations conducted by the NRA. The services are designed by the NRA, in collaboration with the operator and by considering the operational constraints of the terminal. Only bundled services covering the full capacity of the terminal have been defined so far.



Italy

• Future Terminal services will be offered according to technical/commercial capabilities of the Terminal and the applicable regulation with initial priority on providing bundled regasification service.

Spain

- No capacity is offered in Spanish terminals under a regulatory definition of "interruptible", although a fraction of the regasification capacity offered could be considered as such.
- Terminal users are allowed to program regasification capacities higher than their booked capacities. If capacities are available the programs by users will be considered viable.

Portugal

• The Terminal and all its services are regulated. Tariffs are unbundled. "Pay per use" is the rule.

Please specify the duration for long-term and/or short term services, if offered

France

- There are no duration limits for ST or LT services in the tariff in force. The only existing limitation corresponds to the difference between "continuous" and "uniform" services the latter being available for shippers unloading 12 cargoes per year minimum.
- [Note of NRA: For the terminal of Fos Cavaou, 10% of the technical capacity are dedicated to the short terms contracts, defined by CRE as equivalent to 3 years.]

Greece

According to the draft Network Code, the minimum duration of long term contracts is one calendar year.

Italy

- TPA, long term must be offered:
 - In the case of partially exempted terminals up to 10 years,
 - In the case of completely regulated terminals up to the 7th following thermal year; (each year the LSO offer available capacity for the following thermal year and for the period year +3 to year + 7);
- Short term can be offered on an annual / monthly / spot basis.

Spain

- Short-term services are offered for a minimum period of 1 day.
- There is no maximum limit for the duration of long-term contracts in the regulation
- According to national legislative framework, short-term refers to contracts with a duration of less than two years and the long-term those of duration equal or more than two years.

Portugal

• Long means one year. Short means daily for storage as an example







Figure 27: Bundled services offered

If other bundled services are offered, please specify which:

France

- Measurement and gas quality control.
- Odorisation and counting before injection in the transportation network
- For the long-term service: flexibility of the send-out and overdraft authorisation
- For the short-term service: priority for the send-out

Spain

Truck loading





Figure 28: Non bundled products offered

If other non-bundled services are offered, please specify which:

Belgium

- Ship loading gassing-up cool-down
- Truck loading
- Ship approval
- Quality adjustment

Greece

Cooling down of LNG Cargoes

Italy

- Wobbe Index correction
- Ship LNG tanks pressure reductions if it exceeds 1.200 mm of H20 gouge

Spain

- Loading of LNG trucks and cooling of ships
- Loading of ships with LNG
- LNG transfer between ships.
- Tank truck loading





Figure 29: Standard contract definition







If there is a contracting process in place, please explain it:

Belgium

 There are Main Conditions for access to the LNG facility drafted by Fluxys LNG and approved by the regulator (CREG) on 17/06/2004. In those Main Conditions the contracting process is defined. Shippers must sign a framework agreement with Fluxys LNG in line with the Main Conditions and the Network Code.

France

- For the available capacity, contracting capacity is feasible at any time on a "first committed first served" basis.
- For the specific case of Fos Cavaou, the 10% of the capacity dedicated to short terms contracts (i.e. 3 years) has been allocated in June 2007. The capacity allocation mechanism has been proposed by the LSO and amended by the NRA.

Greece

• In the Transmission Code a Reference Contract Agreement for LNG shippers is included.

Italy

- For partially exempted terminals is conducted an Open Season for TPA capacity based on current regulation defining requirements, prioritization and duration. Subsequent subscription processes will be conducted annually and during the year for any potential remaining nonexempted available capacity according to the applicable regulation
- In the case of totally regulated terminals before the start of the Thermal Year during open subscription periods defined by the Regasification Code users can request capacity for the same thermal year and for the 5 thermal years +3 to +7. During the Thermal Year open subscription periods are defined also to buy regasification capacity for the remaining part of the year and spot cargoes. In case requests exceed the available capacity a priority and pro-rata mechanism applies At the end of the booking process the LSO and the users sign a regasification contract.

Spain

• The contracting process and the time limits set for signing the contracts are defined by the Spanish regulation in the Royal Decree 949/2001;

Access request

Users willing to access LNG terminals will send a formal request to the facilities' owners detailing the schedule and program of use.

When the access request is incomplete or incorrectly formulated, LNG terminal user will return it to the solicitor in a period of 3 working days, indicating the information that shall be completed or corrected. The user shall complete or correct the above mentioned information within six working days, although the initial date requested will be kept to guarantee access priority. If the information has not been completed or corrected within this period, the initial request will not be considered valid, and a new request must be formulated.

Access requests will be sent by the owner of the LNG terminal to the CNE, who will keep an updated list of the solicitors of access and the priority order.

Owners of LNG terminals that have received a formal access request will have to submit it within 6 working days, together with an analysis of the situation of their own facilities, to the System Technical Manager, who will analyse the situation of the whole system in order to assess the viability, and also to the owners of all the facilities that are connected to the delivery points of the natural gas. In a maximum period of 12 working days, the owners of the facilities



and the System Technical Manager will send a viability report of the requested service to the owner of the LNG terminal. In case of non-viability, other alternatives will be included. If no reports are sent within the established period, the viability of the access request will be understood to be accepted.

In a maximum period of 24 working days from the formal access request, the owner of the LNG terminal will have to give a response to the solicitor, accepting or rejecting the request. In case of rejection, the owner of the LNG terminal will have to communicate its decision to the Directorate General for Energy Policy and Mines (Ministry of Industry, Tourism and Trade) and to the CNE at the same time.

In the cases in which the access request is made by a consumer that is, at the moment of the request, consuming gas in conditions similar to the ones requested, the previous periods will be reduced by half.

In case of disagreement with the response received, or if a response has not been received by the solicitor within the established period, it is able to raise its access request to the CNE.

LNG terminal access booking

As soon as the access request has been accepted, the solicitor will be able to book regasification services. The contract shall be signed by the solicitor and the owners of the facilities.

The contract will have to be signed by all parts within 24 working days from the acceptance of the access request. If the contract has not been formalised within such a period, the solicitor will be able to file a conflict of access to the CNE.

The owners of the LNG terminals are obliged to attend the reduction of capacity requests by users provided that the request is made 3 months in advance and is made 1 year after having carried out the initial reservation of capacity (or proceeded to change it) and effective use of the capacity has been made. When the reason of the request for reduction of capacity is a customer switch from one shipper to another, the communication will have to be made 1 month in advance.

For short-term capacity access request to regasification, storage and entry to the transmission and distribution system, it will not be able to make this request more than 12 months in advance of the starting date of the requested services.

According to the regulation, the CNE has developed standardised models for the publication of the booked and available capacity.

 One LSO indicates that it has developed an automatic reservation system available on its website. Through this system, any user can check the availability of capacity and apply for it.

Portugal

• There is a GENERAL TERMS contract defined by the regulator and applicable to all Users, and a PARTICULAR TERMS contract defined by the LSO and approved by the regulator, applicable to each user. Any user may start the contract any time within the thermal year





Figure 31: Cooperation with interconnected TSOs

If other, please explain:

Greece

• As it is mentioned before, DESFA is at the same time the national TSO and LSO

Italy

- According to the Italian Regulation, the LSO must secure grid access for its Users by entering into a Transportation Agreement with the interconnected TSO(s) on their behalf
- Transmission capacity at the network entry point is bought by the LSO which signs a transport contract with the TSO. Regasified quantities are redelivered to the terminal Users at the Virtual Trading Point (PSV) of the network.

Spain

A high degree of synchronization in the planning, construction and operation of LNG facilities has been ensured through (1) a coordinated planning of infrastructures by the government, (2) the approval of a single System Code for all basic infrastructures, and (3) by the existence of a integrated infrastructures operator (Technical System Manager) highly regulated in national legislation

Portugal

 In Portugal there is the role of Global Technical System Manager that coordinates all high pressure infrastructures in the country, therefore all the options are previously ensured. The balancing regime is special since the GTS is able to manage the global system Network, underground storage, and terminal on the intra-day and the users see only daily quantities in general.





Figure 32: Terminal code

Figure 33: Definition of terminal code



If no please explain the reasons:

France

 All necessary information is included in the access contract, which is published on the website of the LSO

Italy

 Each LSOs has to define its Access Code after consultation with terminal users and interested parties according to the criteria defined by the NRA that verifies and approve it.



[Note of NRA: Currently it's approved the Code of the Panigaglia terminal (GNL Italia) while a
draft code for the Rovigo terminal has been prepared to be submitted to market consultation,
and afterwards to the approval procedure of the NRA.]



Figure 34: Scheduling procedures for cargoes unloading

2.2.5. Capacity calculation, capacity allocation mechanism (CAMs) and congestion management procedures (CMPs)

5.1 Who designs the CAMs and CMPs? 🗖 yes 🗖 no 14 12 58% 58% 10 75% 75% 83% 8 Number of LSOs 6 42% 42% 4 2 25% 25% 17% 0 CMPs are Other CAMs are CAMs are CMPs are designed by designed by designed by the designed by the LSO LSO national national legislation/NRA legislation/NRA

Figure 35: Design of CAMs and CMPs





Figure 36: CAMs applied for new capacities

If other, please specify:

France

- CAM and CMP have been proposed by the TSO under supervision of the NRA
- [Note of NRA: CAM and CMP are proposed by CRE through the tariff, after a market consultation.]

Spain

 CAMs and CMPs are contained in the relevant regulations for the natural gas sector, are approved by the Ministry of Industry, Tourism and Trade, and have been designed after market participation/consultation.



Figure 37: CAMs for current capacities



If other, please specify:

Belgium

Investment is based on the outcome of an open season

France

- For the available capacities, the CAM in force is the "FCFS" mechanism.
- For the expansion project of Montoir, an open Season with a pro-rata rule and limitation of the maximum share for any given group of companies had been organised.
- For new capacities, it is still to be defined and could include priority criteria and mechanisms pro-rata and lottery
- [Note of the NRA: For short term capacities in Fos Cavaou (10% of the technical capacity), the CAM includes priority criteria, mechanisms pro-rata and eventually lottery if necessary.]

Italy

- TPA CAM principles defined by NRA
- Specific CAMs for the allocation of new capacity in Panigaglia are expected to be defined.

Portugal

 Accepting schedules by GTS and LSO is a cycle that starts on the year and finishes with the nomination. Ships are firm on a monthly basis. Congestion, if any, will be solved by auction.





If others please specify:

Italy

Future Terminal - Contract structure under development. Italian Regulation governing CMPs



Portugal

 Auction. There are no capacity rights owned by the users. They get the capacity based in scheduling process and if a conflict arises during the process has to be solved by auction until the next phase.

For each selected answer, please explain the details of the applied mechanisms

Belgium

• Chapter IV and Chapter X of the Main Conditions are detailing how CPM works.

France

- Secondary Capacity Market: Shippers can re-sell their capacity, subject to a credit check by the LSO. A Bulletin Board is in place to facilitate such deals. All the customers have the possibility to sell a slot at any time to any other shipper. The Bulletin Board made available by LSOs on the website might be used to publish the offer.
- Firm Short Term UIOLI: Capacity unused by a shipper in his Monthly Programme is marketed by the LSO.
- In case a customer has reserved a capacity and has not programmed for the next month as many unloadings as defined in the reservation, the slots are made available to any shipper on the website of one LSO. In case congestion is observed, all the information is provided by the LSO to the NRA.

Italy

- According to regasification the code
 - 1. Procedures for trading of capacity rights among users are available.
 - 2. The regasification capacity not programmed on the month M-2 for the month M is made available for the booking process during the thermal year 6.
 - 3. Long term capacity not used by a user during the thermal year is made available to other Users from the next thermal year on.

Spain

- Short term UIOLI: Terminal users are allowed to program regasification capacities higher than their booked capacities. If capacities are available (e.g. because other terminal users have not programmed all of their regasification capacities), the programs by users will be considered viable. Otherwise, the program would be rejected for the part of the capacity not viable. This extra capacity over the capacity booked by the user is a short-term capacity right that can be considered as an interruptible capacity which becomes firm after the last renomination. For nominations up to 105% of the daily booked capacity, users will pay the same capacity term (measured in unit terms) for the extra capacity over 100%. For nominations over 105% of the daily booked capacity term for the fraction of capacity exceeding 105%.
- Long term UIOLI: in order to guarantee the use of booked capacity and in addition to the minimum payment obligations, capacity solicitors have to pay, in favour of the owners of the LNG terminals, a bail, for an amount equal to twelve months of the fixed term of the corresponding access tariff, applied on 85% of the capacity booked by the terminal user. This bail will be returned to the user one year after the beginning of the supply. Capacity rights and the bail are lost if during the first six months of the contract capacity utilisation does not go over 80% at least in one month of booked capacity. The terminal user only loses a percentage of the bail and of the capacity equal to the corresponding decrease in the utilisation rate.

If the System Technical Manager observes that there is, or that could be, a continued underutilisation of booked capacity, and that this situation could result on a refusal of access to other users, due to lack of available capacity, the System Technical Manager will reduce the capacity booked by the shipper, who would lose capacity rights equal to the capacity not being



used, as well as the proportional part of the bail. According to the NGTS 4.8, In case of unavailability of facilities, the allocation of available capacity is made in proportion to the capacity booked by each user.

- Restriction of renomination rights: According to the Network Code, In case of unavailability of facilities, the allocation of available capacity is made in proportion to the capacity booked by each user.
- Other: The programs for ship unloading are limited, according to the NGTS 3.6.1, by the physical availability of storage capacity at LNG tanks. The System Technical Manager may refuse an unloading program if the safety of the system is put in danger. Under the former wording of the rule, it was explicitly specified that LSOs, in cooperation with the System Technical Manager, would make their best efforts to make programs viable, including the coordination of all LNG terminals in the gas system. Cooperation between terminals/LSOs to manage cargo deviations is neither explicitly included in the current NGTS 3.6.1, nor explicitly excluded, and may be used in practice.

United Kingdom

SCM is offered by all existing customers regarding their individual capacity rights. These
Customers can also sell/trade their rights or do third party deals. UIOLI is also offered by the
terminal.



2.2.6. Trading of capacity rights

Figure 39: Trading of capacity rights





Figure 40: Description of offered services

2.3. Users' response summary:

2.3.1. General Information

The type of user in relation to the stage of its activity is presented in this table:

Table 11: User's type

Respondents: Users	Percentage
Past user	15%
Current user	55%
Future user	35%

User company's roles can be seen in the following tables:

Table 12: Role and involvement of users:

Respondents: Users	Percentage
production company	22%
supply undertaking	61%
wholesale customer	33%
trader	56%
TSO	6%
DSO	6%
final customer	6%
other (e.g. local utility, distribution company, retailer including public	
services)	11%





Figure 41: Relation of users with LSO's.

2.3.2. Tariffs and tariff methodologies



Figure 42: Publication of tariffs and methodology.

Users outline that tariffs are published in the regulation and in LSO's websites





Figure 43: Tariff regime structure

Some of the reasons provided for the "no" answers among the different users for the different countries are:

2) Is cost reflective

France

- The tariff has been determined directly by LSO, so it is not clear that they are cost-reflective.
- [Note of NRA. The tariff is proposed by CRE and is validated by the Minister. The tariff is cost reflective and the methodology used is detailed in the explanatory statement of the tariff.]
- It wasn't because the price was the same for all the terminals, but it's changing.

Portugal

- Tariffs structure gives an excessive weight to the LNG storage activity because it was not consider that part of the LNG tanking costs should be allocated to the emission activity which needs some LNG buffering; in what concerns the penalties scheme, the established values are not transparent, not cost reflective and discriminate small/new users.
- [Note of NRA. Tariff structure is cost reflective. In fact the excessive weight of the storage activity is related to the capital costs of the storage tanks, much higher than regasification and pumping equipment. It is clear that "part of the LNG tanking costs should be allocated to the emission activity which needs some LNG buffering", but it is also clear that this consideration is accounted in the bundled service itself (unloading/storage/emission). Although these remarks, as the Portuguese Tariff code will be revised in the next semester a new methodology will be subjected to public consultation taken into account the subject discussed.]



3) Is clear regarding the calculation of tariffs and LSO revenues

Spain

- Tariff structure calculation is not transparent
- In general, TPA charges are increasing each year without a "fair "methodology. In addition to that some of the TPA charges, as "LNG excess" are too high and they can cause problems regarding security of supply, among others.
- In Spain there is a liquidation system with no direct relation between tariffs and LSO revues.

4) Specifies the allocation of additional revenues from congestion

France

• There is no specific allocation of additional revenues from congestion.

Spain

- Congestion doesn't generate revenues
- [Note of the NRA: here the user refers to the physical congestion; contractual congestions solved through UIOLI could generate revenues to the system that goes to pay the retribution of infrastructures.]

Portugal

- The tariff structure/regime does not specify the application of eventual congestion revenues
- [Note of NRA. The regulatory framework specifies that congestion revenues are applied in tariff reductions or in infrastructure investment.]

5) Specifies the competent authority/ies for tariff setting and appeals

France

- There is no authority fixing the tariffs but the Terminal Operator.
- [Note of NRA: The tariff is set by the NRA.]

6) Incentivises efficient commercialisation and terminal use

France

- The capacity is fully booked on both terminals so there is no incentive for efficient commercialisation and terminal use.
- Among others, there are cross subsidies among activities (regasification, transport, etc.).
- There is not any methodology to solve congestions and delays. There aren't penalties for the shipper that causes those delays.
- Even there are different costs among terminals, there is not any efficient incentive to use them and they do not provide signals to foster efficient use of terminals.

[Notes of NRA:]

- The operator publishes every month the number of slots which are available for the following month
- A bulletin board is proposed on the website of the operator
- A penalty for late cancellation of a berthing slot is in force



Italy

- Implementation of the calculation of the tariff is made based on a "load factor" decided every year for the next that is not known nor regulated by predefined criteria. Reducing the estimated "load factor" means a direct increase in the tariff discouraging, in the end, the use of the terminal in the next year
- Finally, the regasification service considered is bundled therefore the tariff is only one.
- [Note of NRA. The tariff structure comprise terms for the booked capacity (one term for LNG volume that the user has the right to deliver and one term for the number of berthing rights) and for the volume of Lng effectively delivered.]

Spain

There's no secondary market in place and utilisation is based in shippers' needs

Portugal

- For an efficient commercialisation large demand is needed
- Tariffs and penalties structure penalises small/new operators, with lower modulations and higher LNG storage residence times, creating an incentive for usage of Spanish terminals and transit in Spain
- [Note of NRA: Presently, ERSE propose a new tariff methodology related to small usage of natural gas basic infrastructure, namely the LNG terminal and the transmission network. This tariff intends to prevent the market agents, who are willing to use the LNG terminal for small periods, the obligation to pay the capacity term for one year.]

7) Is reviewed taking into account market evolution

France

- There is no authority fixing the tariffs but the Terminal Operator
- [Note of NRA. The tariff is set by CRE, which takes into account the evolution of the market through the considered level of subscription.]

Spain

Not applicable

Portugal

- Tariff structure has not changed from the first regulatory year to the second, even if no new entrants have applied for usage and have issued comments on the reasons for their non usage
- Invite of NRA: The tariff setting methodology is established ex-ante to the tariffs calculation in the Tariff Code. The Tariff Code is approved under a public consultation process. The present tariff code was approved in September 2006 and was applied in one regulatory period (3 years). It will be revised in the second semester of this year under a public consultation process and the user's needs and comments will be taken into consideration. We consider that these procedures provide a stable regulatory environment that benefits all stakeholders.]

9) Distinguishes between services (regasification, LNG storage, ships unloading, etc)

France

Standard bundle services does not distinguish between individual services

Italy

• The terminal offers a bundled regasification service only



2.3.3. Roles and responsibilities

The chapter aims to collect the opinion about the role performed by the LSO and the penalties applied.



Figure 44: LSO's tasks compliance

3.2 Have you ever been penalised for non-compliance with your contractual obligations?

Table 13:	Penalties	applied	to	Users
-----------	-----------	---------	----	-------

Respondents: Users	Percentage
Yes	19%
No	76%
No answer provided	5%

If yes explain the penalty applied and the body responsible for setting the penalties

Italy

- Scheduling penalties apply even in case of Force Majeure for the shipper
- [Note of NRA: Indeed Force Majeur relates to events referred to the operation of the terminal.]
- We couldn't fulfil with the contractual annual capacity due to under deliver of the supplier



Spain

- A user booked capacity for potential clients supplied through LNG trucks, finally it was impossible to find clients close to LNG terminal so it did not use capacity. The capacity was removed following UIOLI and the penalty is regulated
- By underutilisation the capacity was removed by the TSO, that in Spain is the Technical System Manager of the gas natural network

Respondents: Users	Percentage yes	Percentage No
Proportionate	86%	14%
Cost-reflective	20%	80%
Not a barrier to new entrants	80%	20%

Table 14: From your experience, applied penalties were:

Reasons for the no answers

Italy

- Scheduling modification has just an operational cost that should already be included in the fix cost of the terminal operations
- Inote of NRA.: In adition to the operational costs referred to the modification of the schedule, not included in the fix costs, the current regulation discourage the modification of the schedule because it affects the regasification schedule of the other users. The LSOs does not retain the amount received in case of modification of the schedule that is deducted by allowed revenues. Furthermore the entity of penalties change with time: the more in advance the schedule is modified the less the user pay, the schedule can be modified with only a minimum charge up to 8 days before the scheduled berthing.]

Spain

- Some imbalances could have been sorted out by market based solutions that would precisely define costs
- The penalty is not cost reflective, it is only a way to avoid capacity hoarding. On the other hand, you need capacity for potential clients, if you are not successful in contracting new clients you lose the capacity with a penalty.

Portugal

- Current applicable penalties are clearly not cost reflective, not proportionate and create not only
 a barrier to new entrants but also a potential economic rent to the current incumbent, and only
 terminal user
- [Note of NRA. The balancing penalties in the LNG terminal are not cost reflective, but it is a way
 to avoid capacity hoarding by its only user. The application of CAM produces a firm schedule
 so the LNG terminal users must pay penalties in the case their LNG storage usage collides with
 other market agent's firm schedule rights. This means that a market agent pays a penalty if he
 didn't respect is binding schedule, not allowing another user to unload a LNG cargo in his firm
 window]



2.3.4. TPA services

These questions aim to evaluate the opinion of terminal Users related to TPA services offered by LSOs,



Figure 45: Services offered by the LSO

Reasons for no answers

2) Are defined in sufficient detail

Italy

- The allocation rules provided by the terminal code do not guarantee any certainty about the actual daily profile since the allocation can be changed on an "ex-post" basis by the terminal operator.
- Invite of NRA: The Regasification Code provides for the methodology used by the terminals for the allocation of the gas that is been regasified. It's the outcome of the trade-off between the opportunity for the shippers to have the gas redelivered during the month with a constant rate determined on the basis of the delivery scheduled during the month and the necessity to adjust the regasification rate if the effective deliveries are not in line with the schedule the users were properly consultated on this topics and there were a general agreement.]

Portugal

 It is not clear how the penalties scheme is defined and applied; there is no objective number of days of LNG storage above which penalties are applied; attribution of slots mechanism is unclear

3) Are defined after market consultation

France

- The market consultation is done by NRA but few changes have been made.
- [Note of NRA.: Do not agree with the sentence, few changes have been made.]



Spain

No market consultation has been made

4) Accommodate your needs

Spain

 We miss trading tools such as LNG storage without regasification contracts associated, possibility of trading in AOT without booking transportation.

Portugal

- The rules established for the use of the LNG terminal penalise new/small users; to reduce economic costs new/small users have to undertake swap agreements with other agents but currently the terminal is being used only by the incumbent, which is therefore in a position to maximise its revenues in a potential swap
- [Note of NRA: The number of days of LNG storage depends on the outcome of CAM and isn't predefined ex-ante. The optimization of the LNG terminal, especially in relation with LNG storage, gives LSO some degree of freedom regarding the unbundled services.]

5) May act as a barrier to new entrants

France

May act as barrier as there is no sufficient visibility in advance of the available slots which
makes very difficult to schedule deliveries to the terminals. If you want to program unloading in
advance there, you always have to go through the capacity holders.

Spain

- Non-vertically integrated companies can not access the Spanish market.
- [Note of NRA: There is free capacity in all Spanish terminals and moreover there are several non –vertically integrated companies operating in the Spanish market.]
- The introduction of non-standard clauses in the access Contract model (defined by the national regulatory authority, CNE and published by Ministry of industry) has had as a result the withdrawal of our rights according to the Royal Decree 949/2001.



Figure 46: Type of Services offered by LSOs



Other services needed suggested by users

France

- Loading of LNG-Ships is a very useful service which could be interesting to have.
- Gas quality conversion

Italy

- The capacity to receive and to regassificate Libyan LNG.
- [Note of NRA. It's not a problem of available capacity but a problem of the terminal to treat the Lybian LNG whose quality parameters exceed the limits defined of the Panigaglia terminal].

Spain

Not all terminals in Spain are able to offer loading and cooling of LNG-Ships



Figure 47: Terminal code





Figure 48: Notice period for unloading cargo at terminals

If different from the current notice period, please specify and explain

Italy

• 1 month but with the possibility of exchange windows or part of them with other users

Spain

- Annual delivery programs establish the first slot allocation mechanism. Spot discharges can be made at any time
- Discharge windows for short-term cargoes are communicated only after the long-term client cargoes are placed. Spot discharge windows are released only in the last week of the previous month.



Figure 49: Cooperation between LSOs and adjacent TSOs


2.3.5. Capacity calculation methodology



Figure 50: Capacity calculation methodology







Reasons of no answers

France

- There are not any transparent, public and non-discriminatory rules to avoid congestion problems.
- [Note of NRA: Do not agree with this consideration.]
- No CAC has been published
- The lack of available capacity is the main problem in the French market. The capacity is allocated on a first-come-first-serve basis and secondary capacity is announced on a bulletin board. However UIOLI rules are only broadly defined and do not encourage shippers to release unused capacity

Spain

- The regulation for congestion is on development. There are not any transparent, public and non-discriminatory rules to avoid congestion problems.
- [Note of NRA: This is a comment referred to physical congestion not to the contractual one where regulation is defined]
- Secondary markets haven't been developed. Lack of integration among different LSO prevents the development of a liquid gas HUB. A new regulation piece is being discussed and may fill these gaps.
- Although CAMs and CMPs are applied in the same way to all users in the same terminal, that does not mean that the mechanism is not discriminatory in comparison with other facilities in Spain.

Portugal

 Capacity allocation mechanisms discriminate in favour of existing long term take or pay contracts. Despite congestion management procedures are said to be based on auctions no such procedure has been implemented and no signals have been provided. The lack of UIOLI rules does not promote secondary capacity trading

[Notes of NRA:].

- It's important to state that this applies only to the contracts signed before the Directive 2003/55/CE came into force. Nevertheless, the agent who owns these specific contracts must participate in the OSP and it is subjected to all obligations and procedures, including short term UIOLI, as well as any other market agent. Up to now, no CMP had been performed, meaning that the capacity was sufficient for all requests. There is only one LNG terminal user, but there wasn't, until today, any TPA refusal.
- As pointed by the NRA, the number of days of LNG storage depends on the outcome of CAM and isn't predefined ex-ante. The optimization of the LNG terminal usage, especially in what concerns to LNG storage, gives the LSO some degree of freedom in the unbundled services.





Figure 52: CAM preferences for new capacities

If other, specify

France

- We propose a pro rata with the possibility to renounce to the capacity if we're not satisfied with the results.
- In the current situation of a lack of capacity, market-based capacity allocation mechanism is necessary.

Spain

- FCFS if there is available capacity. If there is no available capacity the users and potential users should be properly informed so as to have the same opportunities.
- In the Spanish System there isn't a lack of entry capacity so there is enough available capacity for third parties. In this scenario the capacity allocation mechanism applies is not a critical issue.





Figure 53: CAM preferences for current capacities

If other, specify:

France

- We propose a pro-rata with the possibility to renounce to the capacity if we're not satisfied with the results.
- In the current situation of a lack of capacity, market-based capacity allocation mechanism is necessary.

Spain

• In the Spanish System there isn't a lack of entry capacity so there is enough available capacity for third parties. In this scenario the capacity allocation mechanism applies is not a critical issue.





Figure 54: CMPs preferences

If other, please specify:

Spain

 In general terms, we support mechanisms that foster more transparent markets, and particularly secondary markets.

France

At present, most of entry capacity is already booked by incumbents. In this scenario, congestion
management procedure is a key point to release unused capacity and promote the entry of new
players.

Portugal

• The application of the "secondary capacity market" mechanism to the Portuguese terminal is hampered due to existence of only one user - the incumbent; moreover, the regulation established does not foresee a formal capacity reservation and payment (payment is made according to actual usage).

[Notes of NRA:]

- In Portugal we don't have secondary markets implemented for any of the basic infrastructures. The reasons are basically because:
- All capacity is allocated on the primary market on short term one year at most.
- The CAM is based on OSP with UIOLI in all allocation periods. This means there can't be contractual congestions. If there aren't contractual congestions and there aren't capacity rights to trade it's not possible to implement secondary markets. In our case, not to have a secondary market implemented is not a weakness of the regulatory framework.



2.3.6. Transparency

Questions are related to which of the following information is available and how the information is published.

Results of transparency responses can be observed in the present graphic that summarises the thirteen aspects analysed, which are:

- 1. Is terminal code publicly available?
- 2. Are existing terminal capacities publicly available?
- 3. Are future terminal capacities publicly available?
- 4. Is contracted capacity publicly available?
- 5. Is available capacity publicly available?
- 6. Are short term capacities publicly available?
- 7. Are spot services publicly available?
- 8. Are historical capacity utilisation rates publicly available?
- 9. Are maps indicating LNG terminals publicly available?
- 10. Are updated maintenance plans publicly available?
- 11. Are rules and penalties applicable to terminal users and compensation payments publicly available?
- 12. Are standard services contracts publicly available?
- 13. Are conditions for interruptible services publicly available?

Results are presented following this structure for each criteria:

- a) Applicable; Is there a requirement for applying this criteria?
- b) If the criteria is applicable; It is published?
- c) From the total published; It is also published in English?
- d) From the total published; It is available on the internet?
- e) From the total published; It is free of charge?







Figure 55: Transparency Criteria 1-4





Figure 56: Transparency Criteria 5-8







3. Other comments received and not included in the responses summary

3.1. Comments of NRAs

NRAs Roles and responsibilities regarding penalties

Greece

- By decision of RAE's issued after hearing the interested parties, administrative sanctions are imposed on those violating the provisions of the law 3428/2005 (Gas Directive transposed into national law) or the legislative acts issued thereafter or the terms of the Licenses granted according to the provisions hereof depending on the gravity of the violation, the violator's extent of activities and the frequency of the violation By decision of the Minister of Development issued after a proposal from RAE, the minimum and maximum limits of the fines may be readjusted.
- According to the law 3428/2005, disputes that incur due to the exercising of activities that relate to Natural Gas, including disputes between Customers and Natural Gas Undertakings are heard before the permanent arbitration of RAE. Anyone with a lawful interest may submit before RAE an accusation against the TSO or (LSO since DESFA IS both), a person exercising activity of Distribution Network operation etc for violation of their obligations as provided by the provisions of law 3428/2005, of the legislative acts issued by authorization thereof or of the license granted to them. RAE decides on the accusation within a time-limit of two (2) months.
- The draft network code foresees penalties for non compliance for both LSOs and users. RAE participates in their approval.

Capacity calculation (CAC), capacity allocation mechanism (CAMs) and congestion management procedures (CMPs)

Country	Other CAMs definition
FRANCE	1- Fos Tonkin: there is still available capacities until 2014 2- Montoir: there is still available capacities until 2010 and after 2012 3- Fos Cavaou: every 3 years, 10% of the technical capacity of the terminal is proposed to the market (based on short term contracts, i.e. 3 years) 4- A mechanism of UIOLI is in place on the French terminals: the operator publishes the 25th of the month m the available slots for the month m+1. 5- A bulletin board is proposed on the website of the operators

CMPs definition



Unused capacity clarification

Country	Other CAMs definition
SPAIN	Underused capacity is defined in Royal Decree 949/2001, published in the Official Assets. LSOs must evaluate shippers' use of capacity during the first 6 months of the contract. Capacity underuse occurs if, within the period of these 6 first months of the contract, the monthly capacity used, at least in one month is over 80% of the monthly contracted capacity. The Technical System Manager is also in charge of monitoring shippers' use of LNG terminals during their life contracts to detect systematic underutilisation of the contracted capacity by a shipper which can result in denial of any other shipper's access request. CNE plays the role of the appeal body and deals with shippers' complaints when they lose their contracted capacity and the deposit due to capacity underused.

3.2. Comments of LSOs

Communication with users

Spain

• Although there are "no" answers as such, it is useful to clarify the following:

Eventually, some users have not communicated the infringement of the Estimated Time of Arrival. Enagás is not aware of practices from users in its terminals meant at distorting or preventing competition in the gas supply market. Regulatory authorities in charge of competition policy are responsible of the monitoring of such behaviours.

Services offered in the terminals

France

- Services ticked above are considered as sufficient since this was confirmed by market consultations conducted by the NRA.
- The services are designed by the NRA, in collaboration with the LSOs and by considering the
 operational constraints of the terminal. Only bundled services covering the whole capacity of
 the terminal have been defined so far. A public consultation conducted by the NRA during
 summer 08 established that the market actors support the services offered and ask for the
 stability of such services

Italy

 Future Terminal - under development (services will be offered according to technical/commercial capabilities of the Terminal and the applicable regulation with initial priority on providing bundled regasification service)

Spain

- Special tariffs for interruptible services are only contemplated for transportation services in areas where the pipelines are saturated
- No capacity is offered in Spanish terminals under a regulatory definition of "interruptible", although a fraction of the regasification capacity offered could be considered as such.
- Terminal users are allowed to program regasification capacities higher than their booked capacities. If capacities are available (e.g. because other terminal users have not programmed all of their regasification capacities), the programs by users will be considered viable.



Otherwise, the program would be rejected for the part of the capacity not viable. This extra capacity over the capacity booked by the user is a short-term capacity right that can be considered as an interruptible capacity which becomes firm after the last renomination.

- For nominations up to 105% of the daily booked capacity, users will pay the same capacity term (measured in unit terms) for the extra capacity over 100%. For nominations over 105% of the daily booked capacity, users will pay a higher capacity term for the fraction of capacity exceeding 105%.
- It has not been required due to the regulation
- There is a network code applicable to all infrastructures in the Spanish system (LNG plants, transmission and storage facilities)

Portugal

- The Terminal and all its services are regulated. Tariffs are unbundled. Pay per use is the rule. There is no payment for scheduling. There are no capacity rights sold. Only regasification has a fixed term related to the peak flow of the previous 12 month. Scheduling is bundled regarding slot use but storage is unbundled as well as ship unloading.
- The monthly schedule for LNG unloading is binding. The emission of natural gas for the transmission network has also a weekly OSP and nomination (day-ahead allocation of capacity).
- The LNG loading of trucks doesn't need annual booking, so the applied CAM is thru FCFS.

Duration of services offered in the terminals

Please specify the duration for long-term and/or short term services, if offered

France

- There are no duration limits for ST or LT services in the tariff in force. The only existing limitation corresponds to the difference between "continuous" and "uniform" services the latter being available for shippers unloading 12 cargoes per year minimum.
- For the terminal of Fos Cavaou, 10% of the technical capacity are dedicated to the short terms contracts, defined by CRE as equivalent to 3 years.

Italy

- Future Terminal under development. According to current regulation on LNG TPA, long term can be offered up to 10 years, short term can be offered on an annual / monthly / spot basis.
- Long term up to 5 years. The regulation differs for partially exempted terminals and for totally
 regulated terminals. In the first case the capacity is offered for ten years periods, in the former
 capacity is offered within a 7 years horizon: before the beginning of the thermal year capacity
 can be bought for that year and for the years +3 to + 7.

Spain

Short-term services are offered for a minimum period of 1 day.

There is no maximum limit for the duration of long-term contracts in the regulation. Enagás has never rejected any capacity request on the grounds of "excessive" duration. The longest duration ever requested by a shipper at an Enagás LNG terminal has been 25 years. Requests for more than 20 years are rare in practice, since capacity contracts at LNG terminals are generally linked to upstream LNG supply contracts, which do not exceed 20-25 years.

 According to national legislative framework, short-term refers to contracts with a duration of less than two years and the long-term those of duration equal or more than two years.



Portugal

• Long means one year. Short means daily for storage as an example. There aren't long term capacity commitments (reserved capacity) for more than one year.

Greece

• The long term contracts have a minimum duration of 1 calendar year

Characteristics of the contracting process

If there is a contracting process in place, please explain it

Belgium

- There are Main Conditions for access to the LNG facility drafted by Fluxys LNG and approved by the regulator (CREG) on 17/06/2004. In those Main Conditions the contracting process is defined.
- The Network Code, defining the operating rules is as well drafted by Fluxys LNG and approved by the regulator.
- Shippers must sign a framework agreement with Fluxys LNG in line with the Main Conditions and the Network Code.

France

- Contracting capacity is feasible at any time on a "first committed first served" basis.
- 10% of the capacity of Fos Cavaou are dedicated to short terms contracts (i.e. 3 years). A sale has been organised in June 2007 for these short terms capacities. The capacity allocation mechanism has been proposed by the LSO and completed by the NRA. Criteria had been defined to evaluate the priority of the different requests. The ex-aequos after the first phase of the sale have had the possibility to group their demand before a lottery chooses the winner. The same mechanism should be used to allocate the short term capacities at the end of these first period of 3 years.

Greece

 In the Transmission Code mentioned here above, a Reference Contract Agreement for LNG shippers is included.

Italy

- Conducted an Open Season for TPA capacity based on current regulation defining requirements, prioritization and duration. Subsequent subscription processes will be conducted annually and during the year for any potential remaining non-exempted available capacity according to the applicable regulation
- Before the start of the Thermal Year during open subscription periods defined by the Regasification Code users can request regasification capacity up to 5 years. During the Thermal Year open subscription periods are defined also to buy regasification capacity for the remaining part of the year and spot cargoes. In case requests exceed the available capacity a pro-rata mechanism applies. At the end of the booking process the LSO and the users sign a regasification contract.

Spain

- The contracting process and the time periods set for signing the contracts are defined by the Spanish regulation in the Royal Decree 949/2001
- Contracting process is fully regulated on Spanish legislation (RD 949/2001)

Portugal



• There is a GENERAL TERMS contract defined by the regulator and applicable to all users, and a PARTICULAR TERMS contract defined by the LSO and approved by the regulator, applicable to each user. Any user may start the contract any time within the thermal year