Ad hoc Group on GAS

Status review on Third Party Access in the Mediterranean region

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EXECUTIVE SUMMARY

One of the most important preconditions to achieve an integrated, competitive and secure gas market in the Mediterranean region is ensuring that participants in the gas markets have easy-accessible and non-discriminatory access to the infrastructures.

As foreseen in MEDREG Action Plan 2011-2012-2013, the Ad-Hoc Group on Gas (GAS AG) has two tasks regarding Third Party Access (TPA):

- Study on TPA status in the region and future needs in order to develop an integrated Mediterranean market (2011).
- Carry out a document of Guidelines of Good Practice (GGP) on TPA for gas in MEDREG countries, and a possible monitoring of compliance with these GGP in the Mediterranean region (2012-2013).

This report presents the results of the research regarding the first task.

The main conclusion of this monitoring exercise is that regulated TPA to the infrastructures is linked to the degree of development of the gas market. Many of these obligations are stated for EU countries at the gas Directive EC/73/2009 and the Regulation EC/715/2009. The more developed a gas market is, in terms of penetration of gas consumption, openness and liberalization, the more likely is that the TPA to the infrastructures is regulated, the rules for access to the infrastructures are published and the regulator has competencies regarding the approval of these rules.

In view of the results obtained, it can be stated that the situation of TPA to infrastructures in the Mediterranean region gas markets can be improved and some measures can be proposed pursuing to this goal. This will be done in the second stage of this work, when the Guidelines of Good Practice (GGP) on TPA for gas in MEDREG countries will be developed.

Also it is important to stress that several limitations and difficulties have been faced when carrying out this study, namely regarding the fact that not all regulators have completed the questionnaire circulated to obtain the required information nor have confirmed the collected information. In eight of the countries, no answers were given nor the tables were confirmed and therefore no information regarding these countries is given in the present document. It is the case of Egypt, FYR of Macedonia, Lebanon, Libya, Morocco, Palestinian Territories, Syria and Tunisia.
1 INTRODUCTION AND BACKGROUND

1.1 Aim of the document
The Association of the Mediterranean Regulators for Electricity and Gas (MEDREG), set up in 2006 as a working group and in 2007 as a non-profit association, has got among its general objectives “to promote the achievement of a consistent harmonized and investment-friendly regulatory framework aimed at providing the maximum benefits to energy consumers of the Mediterranean region”.

In particular, the Ad-Hoc Group on Gas (GAS AG), as stated in MEDREG Action Plan 2011-2013, has planned to study possible recommendations and requirements that could lead to the development of an integrated, competitive, secure and functioning gas market in the Mediterranean region, starting from the assessment of the current status of natural gas and LNG markets, of sector regulation in the MEDREG countries and its expected evolution.

To achieve this objective of developing an integrated gas market in the region in the long-run, one of the most important prerequisites is to ensure that all suppliers and consumers have easy and non-discriminatory access to the infrastructures.

In the Action Plan 2011-2013, the GAS AG has included as one of the subjects to be examined the TPA to the infrastructures status in the Mediterranean, in two steps:

- Study on TPA status in the region and future needs in order to develop an integrated Mediterranean market (2011).
- Carry out a document of Guidelines of Good Practice (GGP) on TPA for gas in MEDREG countries, and a possible monitoring of compliance with these GGP in the Mediterranean region (2012-2013).

This document aims at developing the first step, a status review of the current situation regarding TPA to the infrastructures of the gas system and markets in Mediterranean countries and other related issues (section 2), summarizing the main findings and conclusions of this study (section 3).

1.2 Description of the process
In the exercise of investigating the status of TPA to infrastructures in the gas sector in each Mediterranean country, the process that has been applied can be described as follows:

- The first step of the process was the preparation of a questionnaire on TPA (see Annex), with a set of questions on several categories to be addressed to NRAs, regarding TPA and other related issues. This questionnaire was based in the 2008 benchmarking questionnaire so that the work of members could be based in updating and completing the former questionnaire.

- The next step consisted in circulating the questionnaire to all the NRAs or competent ministries of the Mediterranean region. This was done, in March 22nd, by e-mail sent to all regulators or competent ministries in the region, requesting the answers until April 15th, 2011. As a result of this step, questionnaires from eleven countries were received (see Table 1). The main findings and results for these countries were presented in the 8th meeting of the GAS AG, which took place on the 28th April 2011 in Ankara.
• After this meeting, and in order to obtain a picture as complete as possible of the TPA situation in the whole region, including those countries that did not answer the questionnaire, information from the 2008 benchmarking questionnaire was collected and the answers were summarized in tables, each one for a topic. With this process information regarding six more countries was obtained.

• The referred tables were sent to the NRAs or competent ministries of the respective countries for confirmation, corrections or additions. This phase took place between June 17th and end of July 2011. As a result of it, three answers were received, confirming or completing the information, but from countries that had already participated in answering the questionnaire.

• The report was circulated among all regulators or competent ministries in the region, for their review, and all the comments received were integrated. This phase occurred from August 31st till the end of September 2011 and four answers were received.

• The comments received were integrated and the document was discussed at the 9th Meeting of the Gas Ad Hoc Group, in October 14th, 2011.

• From October 28th till November 18th, 2011, the final document, with the last comments integrated, was sent to the Gas Ad Hoc Group for online approval.

• The document was approved by the General Assembly in the 12th meeting, 14th December 2011.

The results of the described process, in terms of level of response and contributions received, are shown in Table 1.
Table 1: Contributions received from the MEDREG countries

<table>
<thead>
<tr>
<th>COUNTRIES</th>
<th>2008</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Answer received</td>
<td>Observations</td>
</tr>
<tr>
<td>1. Albania</td>
<td>no natural gas consumption</td>
<td></td>
</tr>
<tr>
<td>2. Algeria</td>
<td>×</td>
<td></td>
</tr>
<tr>
<td>3. Bosnia-Herzegovina</td>
<td>×</td>
<td>no gas regulatory authority</td>
</tr>
<tr>
<td>4. Croatia</td>
<td>×</td>
<td></td>
</tr>
<tr>
<td>5. Cyprus</td>
<td>×</td>
<td>no natural gas consumption</td>
</tr>
<tr>
<td>6. Egypt</td>
<td></td>
<td>no gas regulatory authority</td>
</tr>
<tr>
<td>7. France</td>
<td>×</td>
<td></td>
</tr>
<tr>
<td>8. FYROM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Greece</td>
<td>×</td>
<td></td>
</tr>
<tr>
<td>10. Israel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Italy</td>
<td>×</td>
<td></td>
</tr>
<tr>
<td>12. Jordan</td>
<td>×</td>
<td>no liberalized market</td>
</tr>
<tr>
<td>13. Lebanon</td>
<td></td>
<td>no answer</td>
</tr>
<tr>
<td>14. Libya</td>
<td></td>
<td>no answer</td>
</tr>
<tr>
<td>15. Malta</td>
<td>×</td>
<td>no natural gas consumption</td>
</tr>
<tr>
<td>16. Montenegro</td>
<td>×</td>
<td>no natural gas consumption</td>
</tr>
<tr>
<td>17. Morocco</td>
<td></td>
<td>no gas regulatory authority</td>
</tr>
<tr>
<td>18. Palestinian Territory</td>
<td></td>
<td>no answer</td>
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<tr>
<td>19. Portugal</td>
<td>×</td>
<td></td>
</tr>
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<td>20. Slovenia</td>
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<td>no answer</td>
</tr>
<tr>
<td>21. Spain</td>
<td>×</td>
<td></td>
</tr>
<tr>
<td>22. Syria</td>
<td></td>
<td>no answer</td>
</tr>
<tr>
<td>23. Tunisia</td>
<td>×</td>
<td>no gas regulatory authority</td>
</tr>
<tr>
<td>24. Turkey</td>
<td>×</td>
<td></td>
</tr>
<tr>
<td>Sum</td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

1.3 Methodology, limitations and assumptions

On the methodology, it is necessary to explain that this investigation exercise takes account of some background context facts and is based on the following criteria, assumptions and limitations:

- This study takes into account the different levels of market development in the Mediterranean countries. In the region there are countries with no gas consumption, or with gas consumption but no liberalized gas market.

- Some limitations and difficulties have been faced when developing this study. Namely and most important, as explained before, not all countries have responded or at least confirmed the tables with the resumed information for their countries filled-in by the drafters of this document. In four countries, Greece, Israel, Morocco and Tunisia, no answer was given to the 2011 questionnaire and so the information considered regards the 2008 benchmarking questionnaire. In six of the countries, no answers were given (both in 2008 and 2011) nor the tables were confirmed and therefore no information for these countries is in the present document. It is the case of Egypt, FYR of Macedonia, Lebanon, Libya, Palestinian Territories and Syria.
- In some other cases, the respondents have adopted different criteria when answering on the topics of the questionnaire, or have interpreted the questions in a slightly different way. In order to keep the findings coherent and obtaining consistent results, some slight adaptations have been made in some particular questions, in most cases standardizing. This criteria was also used in filling the tables that were sent for members’ confirmation.

- Regarding LNG terminals (regasification) and underground storage, only countries which have these facilities were concerned when assessing the results of the survey. This is done in order to show more precise information for such facilities, not existing in most of the countries.

2 STATUS REVIEW OF THIRD PARTY ACCESS TO INFRASTRUCTURES IN GAS MARKETS OF MEDITERRANEAN COUNTRIES

The present section describes the general situation regarding the status of TPA to infrastructures of gas markets in the countries covered by this study, this is, all countries in the Mediterranean region. This section focuses on some general aspects regarding market opening, unbundling, TPA to infrastructures, methodologies for capacity allocation and congestion management, tariffs, anti-hording mechanisms, mechanisms to promote market opening, quality of service and dispute settlement.

The section shows for each issue, in the first place, a figure that resumes the status of each country, then it is explained some particular remarks and finally, there is a conclusion on each issue.

2.1 Market opening

One of the issues that is intimately related with the TPA to infrastructures is the degree of market opening in each country, in order to evaluate, in one hand, whether all gas consumers are eligible for choosing supplier in their country, and in the other hand, if there is a reasonable number of suppliers operating in the country.
Figure 1: Eligible consumers

As shown in the graph, the results reveal that in most gas consumer countries that responded the questionnaire, all consumers are eligible to choose their supplier. Some particular remarks can be made:

- In 8 countries all consumers are eligible to choose their supplier. This is the situation in Croatia, France, Greece, Israel, Italy, Portugal, Slovenia and Spain.
- In some other cases, a threshold for eligibility was established. This is the case of Algeria (140 millions therms/year approx. 14.5 million m³/year), Bosnia-Herzegovina (electricity generation, annual consumption higher than 150 million m³ in the Federation of Bosnia and Herzegovina) and Turkey (700,000 m³/year).
- There is no liberalized market in Jordan.
- There is no natural gas consumption in Albania, Cyprus, Malta and Montenegro.
- There was no answer from Egypt, FYR of Macedonia, Lebanon, Libya, Morocco, Palestinian Territory, Syria and Tunisia.

As a conclusion, in most gas consumer countries that responded the questionnaire, all consumers are eligible to choose their supplier.

Figure 2: Number of suppliers - more than one

As shown in the graph, the results reveal that in most gas consumer countries that responded the questionnaire, there is more than one supplier. Some particular remarks can be made:

- In 6 countries there is more than one supplier. This is the situation in Croatia (one wholesale supplier and 39 retail suppliers), France (the market share of the alternative suppliers is 8%), Italy (having ENI Group a dominant position), Portugal (6 retail suppliers), Slovenia (one new entrant), Spain (wholesale market - 29 active traders - biggest new entrant 15% market share; retail market - 13 relevant suppliers; Incumbent 37% market share) and Turkey (15% wholesale market new entrants).
- In some other cases, there is just one supplier. This is the case of Algeria, Bosnia-Herzegovina and Jordan (no liberalized market).
- There is no natural gas consumption in Albania, Cyprus, Malta and Montenegro.
• There was no answer from Egypt, FYR of Macedonia, Greece, Israel, Lebanon, Libya, Morocco, Palestinian Territory, Syria and Tunisia.

As a conclusion, in most gas consumer countries that responded the questionnaire, there is more than one supplier.

2.2 Unbundling and regulator competencies

Other important issue is the level of unbundling of each infrastructure analysed: transmission, underground storages and LNG terminals.

![Graph showing unbundling in transmission](image)

**Figure 3: Unbundling in transmission**

As shown in the graph, the results reveal that the level of unbundling in the various countries, in the transmission infrastructures, is diverse. Some particular remarks can be made:

• In some countries there is ownership unbundling. This is the situation in Croatia, Israel, Portugal (the Portuguese Transmission System Operator is ownership unbundled from market activities like supply and is legal unbundled from other regulated infrastructure activities like underground storage and LNG) and Spain (the main TSO and Spanish System Operator – ENAGAS - is ownership unbundled and has a functional separation of its activities as System Technical Manager from the transmission system operator; other transmission companies must be legally unbundled).

• In some other cases, there is legal unbundling. This is the case of Algeria, Bosnia-Herzegovina (legal, organizational and decision making unbundling in the Federation of Bosnia and Herzegovina; legal and account unbundling in the Republika Srpska. Brčko District of Bosnia and Herzegovina, in 2012), Cyprus (legal, organizational and decision making unbundling), France, Greece, Italy (corporate unbundling from all other gas sector activities, except for storage activities) and Slovenia.

• In some countries, there is account unbundling. This is the case of Malta, Tunisia and Turkey.

• There is no unbundling in Jordan (after an exclusivity period the Transmission Company has to unbundled its activities to transmission Co. and market Co.).

• There is no natural gas consumption in Albania and Montenegro.

• There was no answer from Egypt, FYR of Macedonia, Lebanon, Libya, Morocco, Palestinian Territory and Syria.
In the case of underground storage, only the 7 countries with this type of infrastructures were analysed. As shown in the graph, the results reveal that the level of unbundling in the various countries, in the underground storage infrastructures, is also varied. Some particular remarks can be made:

- In some countries there is ownership unbundling. This is the situation in Croatia, Portugal (the Portuguese Transmission System Operator is ownership unbundled from market activities like supply and is legal unbundled from other regulated infrastructure activities like underground storage and LNG; other underground storage companies must be legally unbundled) and Spain (the main TSO, Spanish System Operator and only SSO in Spain at the present situation – ENAGAS - is ownership unbundled and has a functional separation of its activities as System Technical Manager from the transmission system operator; if there were other underground storage companies, they should be legally unbundled).

- In other cases there is legal unbundling. This is the case of France and Italy (account and managing unbundling from transport and dispatching and to corporate unbundling from all other gas sector activities).

- In other countries, there is account unbundling. This is the case of Greece and Turkey.
In the case of LNG terminals, only the 6 countries with this type of infrastructures were analysed. As shown in the graph, the results reveal that the level of unbundling in the various countries, in the LNG terminals, is also diverse. Some particular remarks can be made:

- In some countries there is ownership unbundling. This is the situation in Portugal (the Portuguese Transmission System Operator is ownership unbundled from market activities like supply and is legal unbundled from other regulated infrastructure activities like underground storage and LNG; other underground storage companies must be legally unbundled) and Spain (the main TSO and Spanish System Operator – ENAGAS - is ownership unbundled and has a functional separation of its activities as System Technical Manager from the transmission system operator; the other LNG companies must be legally unbundled).

- In other cases there is legal unbundling. This is the case of France and Italy (corporate unbundling from all other gas sector activities, except for storage activities).

- In other countries, there is account unbundling. This is the case of Greece, and Turkey.

As a conclusion, the level of unbundling in the various infrastructures and countries is diverse.

In what regards the regulator competencies in unbundling the following analysis can be made.

![Figure 6: Regulator competencies regarding unbundling](image-url)

Regarding the regulator competencies, the situation is also highly varied. Some particular remarks can be made:

- In some countries the regulators have to certify the TSO’s, a competency that arises from the Gas Directive EC/73/2009. This is the situation in France, Greece, Italy, Portugal and Spain.

- In some other cases, regulators issue decisions regarding unbundling. This is the situation of Bosnia-Herzegovina (decisions for individual entities which pertain to unbundling in the Republika Srpska. Brčko District of Bosnia and Herzegovina; no regulator in the Federation of Bosnia and Herzegovina) and Jordan (implementation of the unbundling process when occurs).
• In some countries, regulators have monitoring competencies in what regards unbundling. This is the case of Croatia (monitors separation of accounts), Cyprus (monitors and secures the unbundling functionality), Israel (supervises licensee’s activities), Malta (monitors the effective unbundling of accounts) and Turkey (monitors and issues penalties and fines).

• There is no involvement of the regulator regarding unbundling in Algeria and Slovenia.

• There is no natural gas consumption in Algeria and Slovenia.

• There was no answer from Egypt, FYR of Macedonia, Lebanon, Libya, Morocco, Palestinian Territory, Syria and Tunisia.

As a conclusion, the regulator competencies regarding unbundling in the various infrastructures and countries are diverse.

2.3 Third Party Access to the infrastructures

Regarding the status of TPA to the transmission infrastructures, the underground storage and the LNG terminals the following analysis can be made.

As shown in the graph, the results reveal that in most countries the TPA to the transmission infrastructures is regulated. Some particular remarks can be made:

• In most countries TPA to the transmission infrastructures is regulated. This is the situation in Algeria, Croatia (negotiated TPA to upstream pipeline networks), France, Greece, Israel, Italy (exemption for the interconnector Italy-Greece), Jordan, Portugal, Slovenia, Spain and Turkey.

• In Bosnia-Herzegovina TPA to the transmission infrastructures is negotiated.

1 Unbundling – Regulator competencies, according to Act on the Gas market (Official Gazette, No. 40/07; 152/08; 83/09; 91/11) in Article 49 all conditions for unbundling activities, including unbundling of activities of the transmission system, distribution system and storage system operators are defined. Also in Article 51 provisions for unbundling of accounts are defined. Furthermore, Article 52 provides that the NRA have competencies to take all necessary information, direct access to business records, book-keeping documents, financial reports and other documents of the gas undertaking.
There is no natural gas consumption in **Albania, Cyprus, Malta** and **Montenegro**.

There was no answer from **Egypt, FYR of Macedonia, Lebanon, Libya, Morocco, Palestinian Territory, Syria** and **Tunisia**.

### Underground Storage

![Graph showing TPA in underground storage](image)

In the case of underground storage, only the countries with this type of infrastructures were analysed. As shown in the graph, the results reveal that in most countries the TPA to the underground storage is regulated. Some particular remarks can be made:

- In most countries TPA to the underground storage is regulated. This is the situation in **Croatia, Italy, Portugal, Spain** and **Turkey**.
- In **France** TPA to the underground storage is negotiated.
- There was no answer from **Greece**.

### LNG

![Graph showing TPA in LNG terminals](image)
In the case of LNG terminals, only the countries with this type of infrastructures were analysed. As shown in the graph, the results reveal that in most countries the TPA to the LNG terminals is regulated. Some particular remarks can be made:

- In most countries TPA to the LNG terminals is regulated. This is the situation in France, Italy (exemption for three new regasification terminals), Portugal, Spain and Turkey.
- In Greece TPA to the LNG terminals is negotiated.

As a conclusion, in most countries TPA to the transmission, underground storage and LNG terminals is regulated.

2.4 Network Code and Third Party Access rules

One of the issues that is also interesting to analyze regarding TPA is the existence of rules published in an individual document or included in the Network Code, and who is the entity responsible for their approval.

As shown in the graph, the results reveal that in most countries there are TPA rules or Network Code and in some countries they do not exist yet, but are in preparation. Some particular remarks can be made:

- In most countries there are TPA rules or Network Code. This is the situation in Algeria, Croatia, France, Italy, Portugal, Slovenia, Spain and Turkey.
- In some other cases, there are no TPA rules or Network Code. This is the case of Bosnia-Herzegovina, Greece (in preparation), Israel, Jordan and Morocco (in preparation).
- There is no natural gas consumption in Albania, Cyprus, Malta and Montenegro.
- There was no answer from Egypt, FYR of Macedonia, Lebanon, Libya, Palestinian Territory, Syria and Tunisia.

As a conclusion, in most countries there are TPA rules or Network Code and in some other countries they do not exist yet, but are in preparation.
As shown in the graph, the results reveal that in most countries the regulator is the competent entity for the approval of the TPA rules or Network Code. Some particular remarks can be made:

- In most countries the regulator is the competent entity for the approval of the TPA rules or Network Code. This is the situation in Algeria (general access contracting conditions and monitoring of their application approved by the regulator, Network Code approved by the Ministry of Energy), Bosnia-Herzegovina (under operators proposal in the Republika Srpska, Brčko District of Bosnia and Herzegovina; Ministry approval in the Federation of Bosnia and Herzegovina), Cyprus (operators proposal), France, Israel, Italy (regulator fixes criteria and obligations for the operators; operators define their code according to those criteria and obligation; regulator checks if the code fulfils those requirements and approves or modifies it accordingly), Malta, Portugal (the Access to Networks, Infrastructures and Interconnections Code and the Operation of Infrastructures Code are approved by the regulator, the operational procedures are proposed by the operators and approved by the regulator), Slovenia (prepared by the TSO), and Turkey (operators proposal).

- In some other cases, the Ministry is the competent entity for the approval of the TPA rules or Network Code. This is the case of Croatia (TPA rules under proposal of the regulator and Network Code prepared by TSO), Greece (proposal of the TSO and regulator consenting opinion), Jordan and Spain (regulator, as a consultative independent body, participates as secretariat of the working group for update and modify the Network Code, proposes regulatory improvements and issues advisory reports on their amendments).

- There is no natural gas consumption in Albania and Montenegro.

- There was no answer from Egypt, FYR of Macedonia, Lebanon, Libya, Morocco, Palestinian Territory, Syria and Tunisia.

As a conclusion, in most countries the regulator is the competent entity for the approval of the TPA rules or Network Code.

### 2.5 Methodologies for Capacity Allocation and Congestion Management

Regarding the methodologies for capacity allocation and congestion management, each country has its own methodology, which is summarized below:

- **Algeria** (annual capacity subscription according to the access contract).
• **Bosnia-Herzegovina** (clear methodology is not defined yet).

• **Croatia** and **Turkey** (Pro-Rata).

• **France** (firm capacity products - with short and long term notice - for yearly, monthly and daily subscriptions, interruptible capacity products, H-L conversion capacity products; Open Seasons for capacity to be developed; Open Subscription Periods for existing capacity with Pro-Rata allocation, if the requests are higher than the offers, and First Come First Served (FCFS) principle, if the requests are below the offers; congestion management: short term interruptible UIOLI and long term UIOLI).

• **Israel** (there is no congestion anticipated in the coming years; use-it-or-lose-it and first come first serve models are being discussed).

• **Italy** (Transmission and LNG: Infra annual, annual or multiannual allocation (max duration: 5 years allocated two years in advance) with priority: (i) parties in long-term import contracts underwritten before August 1998, for the average daily quantity corresponding to the ACQ (annual contractual quantity), (ii) parties in long-term import contracts underwritten before August 1998, for the average daily quantity corresponding to the ACQ, (iii) parties in yearly import contracts, and parties in item 1 and 2 for the allowable capacity not satisfied, up to DCQ and (iv) parties in other import contracts (e.g.: spot imports); Storage: annual allocation with priority: (i) strategic reserves, (ii) domestic production and (iii) suppliers with reference to the amount of domestic market owned; the amount to be reserved to the single operator in relation to his market is determined by the regulator; strong provisions of UIOLI; pro rata allocation in case of congestion in each of the categories).

• **Jordan** (set by contracts; congestion management is the responsibility of National Electricity Co. - the Buyer - to decide the quantities of natural gas in each power plant).

• **Portugal** (annual, monthly and weekly scheduled programs and daily nomination; congestion management by explicit auctions according to existing market rules already published, based on payment for right of capacity on a marginal bid basis).

• **Slovenia** (Pro-Rata system; the network user once per year specifies the annual capacity request; so far no congestion).

• **Spain** (Transmission and LNG: First-Come-First-Served (FCFS); interconnections between Spain and France allocated through a joint coordinated mechanism between French and Spanish TSOs, Open Subscription Period via pro rata, both for long and short-term, for the existing capacity, and Open Season for the new capacity to be developed as of 2013 and 2015; Underground storage: part allocated directly to suppliers according to the firm sales in the previous year and the remaining part is allocated via yearly auctions; congestion management procedure based on an ex-post Use-It-Or-Lose-It (UIOLI) system).

• There is no natural gas consumption in **Albania**, **Cyprus**, **Malta** and **Montenegro**.

• There was no answer from **Egypt**, **FYR of Macedonia**, **Greece**, **Lebanon**, **Libya**, **Morocco**, **Palestinian Territory**, **Syria** and **Tunisia**.

### 2.6 Tariffs

One of the most important issues in what regards TPA are the tariffs, namely the type of tariffs that are in place, who approves them and the criteria used to both design and apply them.
As shown in the graph, the results reveal that, mainly, two types of transmission access tariffs systems coexist in the analysed countries, entry-exit and postage stamp. Some particular remarks can be made:

- In some countries the transmission access tariffs are entry-exit. This is the situation in Croatia\(^2\), France, Italy (in the underground storage tariffs are equal for all operators and there’s an adjustment mechanism to compensate revenues among operators), Portugal, Slovenia (entry-exit in preparation), Spain (same prices for all transmission network entries; in the underground storage there are fees for injection/withdrawal and storage; in the LNG terminals there is a LNG unloading tariff, a regasification tariff, a LNG storage fee, a loading trucks tariff and a ships tariff) and Turkey.

- In some other cases, the tariffs are postage stamp. This is the case of Algeria, Greece and Israel.

- In Bosnia-Herzegovina the tariffs are zonal.

- There is no natural gas consumption in Albania, Cyprus, Malta and Montenegro.

- There is no liberalized market in Jordan.

- There was no answer from Egypt, FYR of Macedonia, Lebanon, Libya, Morocco, Palestinian Territory, Syria and Tunisia.

As a conclusion, mainly, two types of transmission access tariffs systems coexist in the analysed countries, entry-exit and postage stamp.

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\(^2\) **Tariffs** - Regulator competencies: NRA (HERA) adopts methodologies, i.e. Tariff systems and gives opinion to Ministry on tariff proposal from energy subjects. In the process of preparing opinions, HERA performs all the analysis and assessment related to tariff proposal. Also, very recently in November 2011, HERA adopted new Tariff system for gas transmission based on incentive regulation (revenue cap) and entry-exit model.
As shown in the graph, the results reveal that in most countries the regulator is the competent entity for the approval of the tariffs. Some particular remarks can be made:

- In most countries the regulator is the competent entity for the approval of the tariffs. This is the situation in Bosnia-Herzegovina (in the Republika Srpska, Brčko District of Bosnia and Herzegovina; Ministry approval in the Federation of Bosnia and Herzegovina), Cyprus, France, Israel (after public hearing), Italy, Malta (regulator approves at least the methodologies), Portugal, Slovenia (methodology set by the regulator; TSO present prices for regulator’s approval) and Turkey.

- In some other cases, the Ministry is the competent entity for the approval of the tariffs. This is the case of Algeria (proposed by the TSO and set by the regulator), Croatia (methodologies approved by regulator; tariffs proposed by the TSO and regulator’s opinion), Greece (proposed by TSO and regulator’s opinion; future tariff setting methodology defined in Tariff Regulation, prepared by regulator following TSO recommendation and public consultation) and Spain (regulator proposal).

- There is no natural gas consumption in Albania and Montenegro.

- There is no liberalized market in Jordan.

- There was no answer from Egypt, FYR of Macedonia, Lebanon, Libya, Morocco, Palestinian Territory, Syria and Tunisia.

As a conclusion, in most countries the regulator is the competent entity for the approval of the tariffs.

Regarding the criteria to design the tariffs, each country has its own methodology, which is summarized below:

- **Algeria**: Tariffs are designed on the basis of methods of use of networks, over-costs induced by public service obligations, indirect services and transition costs. Tariffs are transparent and non discriminatory. Network access tariffs are uniform all over the country for transmission system.
Bosnia-Herzegovina: Tariffs are based on justified costs of performing activities in order to provide the functioning and development of the system; Provide the energy undertaking to achieve revenue requirement to compensate all justified costs of performing activity and get fair return on the investments; Revenue requirement and justified costs are determined separately for each regulated activity and for each energy undertaking. Costs of performing the activity, whose accounting is unbundled from other activities performed by the energy undertaking, are allocated to calculation elements and consumption categories defined by the tariff system. Allocation of costs of energy undertaking to calculate elements and consumption categories is based on the principle of causality which provides allocation of the system costs to those users due to whom those costs occurred.

Croatia: Methodologies used for establishing tariffs are based on justifiable business expenses, maintenance expenses, replacement, facility construction or reconstruction and environmental protection, including a reasonable deadline for the recovery of funds invested in energy facilities, machines and networks. Allowed revenue of the energy subject should cover business expenses generated during the energy activity, as well as ensure return on regulated assets.

France: Tariffs were designed according to the global structure of the 3 balancing zones (GRTgaz North, GRTgaz South and TIGF). The principles of assets remuneration and of investment incentives are established on a four year basis for the two TSOs. The remuneration rate of the RAB is set at 7.25% (before taxes). Regarding the investment incentives mechanism, an additional bonus of 300 base points is granted for a 10 year period to investments aiming at developing additional transmission. A more incentive-based approach has been adopted regarding the quality of service; a productivity improvement objective for the operating charges has also been introduced. In order to draw up its tariff proposals, CRE systematically consults market players on the main evolutions they expect. Hearings are also held with the parties contributing to CRE consultation.

Greece: The methodology for the calculation of the current tariffs is based on a rate-of-return regulation approach. For each year over a certain period, the annual required revenue of the TSO is calculated taking into account both capital charges and operating expenditures. The Weighted Average Cost of Capital (WACC) used in the calculation of return on capital is 10.06% nominal pre-tax or 6.56% real pre-tax. Tariffs for both the transmission system and LNG terminal comprise of a capacity charge and a commodity charge (90/10 ratio).

Israel: ROA and normative expenses.

Italy: Tariffs must grant a fair remuneration of the invested capital. Operating costs are recovered as long as they are efficiently sustained. An efficiency recovery factor is generally applied.

Portugal: Additive tariffs. Each regulated activity has at least legal unbundling providing for allowed revenues determination and tariff price calculation, independently. The access tariff is then computed by the summation of each activity tariff applicable. Tariff prices structure adherent to marginal or incremental costs structure. Non-discrimination, prevent cross-subsidization and transparency principles are followed.

Slovenia: WACC, incentive based.

Spain: Additive tariffs. The end-user price has to include the access tariff and the best forecast of the energy costs. Sufficiency of revenues in the short-medium term. Cost reflectivity: recovery of the costs of regulated activities through the access tariff. Efficient allocation of the cost of access among customers (no cross-subsidies).

Turkey: Cost based tariffs.
In what regards the **criteria to apply the tariffs**, the following information is available:

- **Algeria**: Allocated capacity, maximum absorbed load, pressure level category.
- **Croatia** and **Italy**: Equal for all system users.
- **Portugal** and **Spain**: Pressure and level of consumption.
- **Slovenia**: Annual consumption.

### 2.7 Anti-hoarding mechanisms

One of the issues that is also important, in what regards TPA analysis, is the existence of anti-hoarding mechanisms.

![Figure 14: Existence of anti-hoarding mechanisms](image)

As shown in the graph, the results reveal that in most gas consumer countries that responded the questionnaire, anti-hoarding mechanisms are in place. Some particular remarks can be made:

- In 8 countries there are anti-hoarding mechanisms. This is the situation in **Croatia** (use-it-or-lose-it), **France** (use-it-or-lose-it), **Greece** (use-it-or-lose-it and specific provisions such as release of contracted capacity in case of under usage from the shipper), **Italy** (use-it-or-lose-it at the entry points), **Portugal** (traders must justify their customers’ needs when scheduling their programs and allocated capacities not confirmed in the subsequent scheduling processes is made available to the market players - use it or lose it), **Slovenia** (use-it-or-lose-it), **Spain** (user underutilising - less than 80% - of the booked capacity during the first six-month period automatically loses fraction of underused capacity and have to set in advance a proportional part of a caution - only the first year; use-it-or-lose-it: systematic capacity underutilisation - average less than 80% in any of the previous 12 months - and when pending capacity requests that cannot be met, fraction of underused capacity is released) and **Turkey**.

- In some other cases, there are no anti-hoarding mechanisms. This is the case of **Algeria**, **Bosnia-Herzegovina**, **Israel** and **Jordan** (no liberalized market).

- There is no natural gas consumption in **Albania**, **Cyprus**, **Malta** and **Montenegro**.

- There was no answer from **Egypt**, FYR of **Macedonia**, **Lebanon**, **Libya**, **Morocco**, **Palestinian Territory**, **Syria** and **Tunisia**.
As a conclusion, in most gas consumer countries that responded the questionnaire, anti-hording mechanisms are in place.

2.8 Mechanisms to promote market opening

Another issue that can be analysed, when studying the TPA status, is the existence of mechanisms to promote market opening.

![Figure 15: Mechanisms to promote market opening](image)

As shown in the graph, the results reveal that in most gas consumer countries that responded the questionnaire, mechanisms to promote market opening are in place. Some particular remarks can be made:

- In 6 countries there are mechanisms to promote market opening. This is the situation in France (20% of transport capacity products are short term notice booking; GDF SUEZ releasing long-term reservations gas import capacity to below 50% by 1 October 2014), Italy (market share limitations for operators; gas release obligations for Eni Group), Portugal (gas release auctions and short duration and utilization tariffs), Slovenia (gas release programs foreseen but not used; contracts are most of them of one year, some of two years), Spain (gas release program 2002 applied to import contract incumbent at the main entry point Maghreb-Tarifa) and Turkey (reduction of eligible consumer limit and contract release).

- In some other cases, there are no mechanisms to promote market opening. This is the case of Algeria, Croatia and Jordan (no liberalized market).

- There is no natural gas consumption in Albania, Cyprus, Malta and Montenegro.

- There was no answer from Bosnia-Herzegovina, Egypt, FYR of Macedonia, Greece, Israel, Lebanon, Libya, Morocco, Palestinian Territory, Syria and Tunisia.

As a conclusion, in most gas consumer countries that responded the questionnaire, mechanisms to promote market opening are in place.

2.9 Quality of service

Another issue that can be analysed is the quality of service, namely the existence of quality rules or Code and the competent entities for quality of service.
As shown in the graph, all the countries that answered the questionnaire have quality rules or Code. Some particular remarks can be made:

- All the countries that answered the questionnaire have quality rules or Code. This is the situation in Algeria, Bosnia-Herzegovina, Croatia, France, Israel, Italy, Jordan, Portugal, Slovenia and Spain.
- There is no natural gas consumption in Albania, Cyprus, Malta and Montenegro.
- There was no answer from Egypt, FYR of Macedonia, Greece, Lebanon, Libya, Morocco, Palestinian Territory, Syria, Tunisia and Turkey.

**As a conclusion,** all the countries that answered the questionnaire have quality rules or Code.

As shown in the graph, the results reveal that in most countries the regulator is the competent entity for ensuring quality of service. Some particular remarks can be made:
In most countries the regulator is the competent entity for ensuring quality of service. This is the situation in Algeria (proposes standards; indicators are set up in consultation between regulator, Ministry of Energy and operators; regulator follows up the operator’s performance regarding these indicators on a quarterly and yearly basis), France (set up indicators in collaboration with operators and monitors them), Israel (quality of service is partially covered in the GTA, approved by the regulator), Italy (fixes standards for quality of services, checks if standards are complied with, issues fines and reimbursement to consumers/users if operators are not compliant with standards), Jordan (proposes International Standard), Portugal (responsible for publishing the Quality of Service Code and supervising its enforcement) and Slovenia (approves quality specifications in the Network Code).

In some other cases, the Ministry is the competent entity for ensuring quality of service. This is the case of Bosnia-Herzegovina (regulator gives consent to operational rules for the system operator and to general conditions of supply of natural gas in the Republika Srpska, Brčko District of Bosnia and Herzegovina), Croatia (establishes standards) and Spain (regulator assumes a consultive role).

There is no natural gas consumption in Albania, Cyprus, Malta and Montenegro.

There was no answer from Egypt, FYR of Macedonia, Greece, Lebanon, Libya, Morocco, Palestinian Territory, Syria, Tunisia and Turkey.

As a conclusion, in most countries the regulator is the competent entity for ensuring quality of service.

2.10 Dispute settlement

The last issue to be analysed is the dispute settlement, namely its existence and the competent entities.

As shown in the graph, all the countries that answered the questionnaire have dispute settlement. Some particular remarks can be made:

- All the countries that answered the questionnaire have dispute settlement. This is the situation in Algeria, Bosnia-Herzegovina, Croatia, Cyprus, France, Greece, Israel, Italy, Jordan, Portugal, Slovenia, Spain and Turkey.
- There is no natural gas consumption in Albania, Malta and Montenegro.
• There was no answer from Egypt, FYR of Macedonia, Lebanon, Libya, Morocco, Palestinian Territory, Syria and Tunisia.

As a conclusion, all the countries that answered the questionnaire have dispute settlement.

As shown in the graph, the results reveal that in most countries the regulator is the competent entity for dispute settlement. Some particular remarks can be made:

• In most countries the regulator is the competent entity for dispute settlement. This is the situation in Algeria (conciliation department and arbitration room), Bosnia-Herzegovina, Croatia, Cyprus, Greece (voluntary basis) Israel (official process of hearing), Italy (out-of-court settlement and arbitration), Portugal (mediation and conciliation methods), Slovenia (administrative procedure), Spain (arbitration body if agreed by parties involved) and Turkey.

• In two countries other solutions were adopted. This is the case of France (Dispute Settlement Committee) and Jordan (arbitration)

• There is no natural gas consumption in Albania, Malta and Montenegro.

• There was no answer from Egypt, FYR of Macedonia, Lebanon, Libya, Morocco, Palestinian Territory, Syria and Tunisia.

As a conclusion, in most countries the regulator is the competent entity for dispute settlement.
3 CONCLUSIONS AND WAY FORWARD

Main general conclusions

The main conclusion of this monitoring exercise is that regulated TPA to the infrastructures is linked to the degree of the gas market opening. Many of these obligations are stated for EU countries at the gas Directive EC/73/2009 and the Regulation EC/715/2009. The more developed a gas market is, in terms of penetration of gas consumption, openness and liberalization, the more likely is that TPA to the infrastructures is regulated, the rules for access the infrastructures are published and the regulator has competencies regarding the approval of these rules and of the access tariffs to the infrastructures. These conclusions are shown in the following table for each of the TPA matters analysed. The different shades of green show the percentage of existence and implementation of rules regarding the different analyzed TPA issues. The countries where there is no gas consumption of infrastructure are marked in white. The countries in dark grey are those which did not answer to the questionnaire nor confirmed the tables that resume the information for their countries previously circulated.
### Table 2: Status review of TPA matters in the MEDREG countries

<table>
<thead>
<tr>
<th>Market opening</th>
<th>All consumers are eligible</th>
<th>More than 1 supplier</th>
<th>Unbundling</th>
<th>Regulator competencies</th>
<th>Tariffs</th>
<th>Ant-hording</th>
<th>Market promotion</th>
<th>Quality of service</th>
<th>Dispute settlement</th>
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GLOBAL: >80% 80%-60% 60%-40% 40%-20% 20%-0% No answer No gas consumption
Generally and as a conclusion per subject it is possible to remark:

- The status of market opening, the quality of service and the dispute settlement are generally satisfactory in the countries that answered the questionnaire.
- The unbundling, the TPA to the infrastructures, the existence of methodologies for capacity allocation and congestion management, the transmission access tariffs, the existence of anti-hording mechanisms and of mechanisms to promote market need some improvement.

As a conclusion of an analysis per country, it can be stated that there are the following groups of countries according to the degree of existence and implementation of rules regarding the different analyzed TPA issues:

- In a first group of countries, with more than 80% of existence and implementation of rules related to TPA, – **France, Italy, Portugal, Slovenia, Spain** and **Turkey** – generally all consumers are eligible to choose their supplier, there is more than one supplier, the access to the infrastructures is generally regulated and the TPA rules are published and available to all users as well as the methodologies for capacity allocation and congestion management. With the exception of Slovenia and Turkey (no information), the tariffs are entry-exit. Both anti-hording mechanisms and mechanisms to promote market opening are in place. With the exception of Spain, in these countries the regulators have competencies regarding unbundling, TPA, tariffs and quality of service.
- In a second set of countries, between 60% and 80% of existence and implementation of rules related to TPA, – **Israel** and **Croatia**.
- In a third set of countries, between 40% and 60% of existence and implementation of rules related to TPA, – **Algeria, Bosnia-Herzegovina, Greece** and **Jordan** – there is not a real market opening; nevertheless the TPA to the infrastructures is regulated, with the exception of Bosnia-Herzegovina. The tariffs are postage stamp, with the exception of Jordan, and there are no mechanisms to promote market opening. In Jordan there is no liberalised market.
- In **Greece** and **Israel** no answer was given to the 2011 questionnaire and so the information considered regards the 2008 benchmarking questionnaire.
- In **Albania, Cyprus, Malta** and **Montenegro** there is no gas consumption.
- In **Egypt, FYR of Macedonia, Lebanon, Libya, Morocco, Palestinian Territory, Syria** and **Tunisia** no answers were given nor the tables were confirmed and so it was not possible to integrate them in this study (one answer from Morocco and Tunisia in the 2008 benchmarking questionnaire).

These overall results can also be presented in a map format, with a code of colours indicating the overall existence and implementation of rules regarding the different analyzed TPA issues. The following figure shows the map of TPA in Mediterranean countries in this visual format. The different shades of green show the percentage of existence and implementation of rules regarding the different analyzed TPA issues. The countries where there is no gas consumption of infrastructure are marked in white. The countries in dark grey are those which did not answer to the questionnaire neither confirmed the tables that resume the information for their countries previously circulated.
Future improvements

It is important to state again that several limitations and difficulties have been encountered when carrying out this study, which has prevented the results to be more detailed or complete, namely because not all the regulators have responded or at least confirmed the tables that resume the information for their countries. In eight of the countries, no answers were given nor the tables were confirmed and therefore no information for these countries is in the present document. It is the case of Egypt, FYR of Macedonia, Lebanon, Morocco, Libya, Palestinian Territories, Syria and Tunisia.

The participation of all MEDREG countries in answering the questionnaires is of primordial importance enabling to share information and knowledge among all in light of the common interest. The sharing of information and knowledge is a key factor to the promotion of wide Gas Markets in the MEDREG countries. In light of this the updating of this document with information from the countries referred to is considered relevant.

Proposal of way forward

The first action that is proposed to be taken after the approval of this report is publishing it in MEDREG website, together with the country answers to the questionnaire on TPA in their final most updated version.

Taking into account the results of this benchmarking study, a document with the Guidelines of Good Practice (GGP) on TPA for gas in MEDREG countries will be developed.
1. **Ownership of facilities**

   a) Describe the ownership status of the most important gas facilities: transmission networks, entry points, international interconnectors connected with the national transmission network, LNG and storage facilities.

   b) Identify whether all gas infrastructures in the country are subject to any, negotiated or regulated Third Party Access (TPA). If not, identify any infrastructure that is not subject to TPA. Please include the basis for any exclusion and describe the type and ownership of infrastructure not subject to TPA.

2. **Unbundling requirements**

   a) Describe the market activities as set forth in national legislation. Note whether such activities are unbundled and what kind of unbundling exists among them (account, legal, organizational, decision making or ownership unbundling). In particular, describe unbundling requirements of transmission and distribution companies, also specifying the legislation which introduced them.

   b) If no unbundling or only partial unbundling has occurred, please indicate any existing timetable for the introduction of stricter unbundling requirements.

   c) Describe any involvement of the regulator in the implementation of any unbundling underway or in setting guidelines for the unbundling process.

3. **Access to natural gas facilities**

   a) Please provide a brief summary of economic and technical rules and procedures for the access to natural gas infrastructures. In particular, describe the method of access (negotiated or regulated) to:
      - the transmission system, including transit pipelines;
      - LNG terminals;
      - storage facilities

   b) What bodies are responsible for the elaboration and approval (and amendment) of these rules? In particular, distinguish between roles and duties of regulators and TSOs (transmission system operators).

   c) Does national legislation provide the application of anti-hoarding arrangements (like use-it-or-lose-it requirements)? Please, specify what mechanisms and who is responsible for applying them.

   d) Have the anti-hoarding mechanisms already been applied?
4. Market opening (new question)

a) Which are the agents that can have access to each infrastructure, under the TPA regime?

b) Please indicate whether all gas consumers are eligible for choosing supplier in your country. If not all consumers are, please specify the current consumption threshold for being eligible, and the relevant dates for reducing this threshold or extending eligibility to all customers.

c) If TPA to gas infrastructures legally exists in your country, please clarify if there is also a real opening of the market in practical terms (no entry barriers, new entrants, etc.). Indicate number of new entrants and their market shares in the wholesale and retail markets.

d) Which mechanisms are in place in order to promote market opening (gas release programs, swaps, short duration contracts, etc.).

5. TPA Tariffs

a) Identify the types/categories of TPA tariffs for all the activities as set forth in national legislation; also describe the methodology applied (identify whether distance-based, entry-exit, zonal, postage stamp, other) as well as the legal basis for such methodology.

b) Which body is responsible for the approval or determination of tariffs or tariff methodology?

c) Which criteria are used to design tariffs?

d) Which criteria are used to apply tariffs (pressure level of consumption, etc.)?

e) What tariffs are being applied (please specify and link the corresponding regulation?)

6. Capacity allocation and congestion management

Describe the method of capacity allocation and congestion management (first come first serve, Pro-Rata, combination of two, auctions, other) for transmission and distribution system, LNG, storage and the regulator’s role.
### 7. Quality of service standards and gas grid code

Describe the regulator’s role in defining standards for quality of the service and gas grid code with reference to transmission and distribution service.

### 8. Dispute settlement system

Describe the dispute settlement system related to TPA and identify the responsible authority.

### 9. Other comments

Please identify any other gas legal and regulatory issue related to TPA not covered by the above questions.

### 10. Future developments

For each of the above questions, specify if any legislative or regulatory reform is currently under discussion and what is the more likely outcome of the reform process.