"*This is a courtesy translation and in the event there are any differences between the French and English texts, the French text governs"*

NOTE FROM THE FRENCH AUTHORITIES

Paris, le 2 octobre 2015

SUBJECT: Consultation on an EU strategy for liquefied natural gas and gas storage (Courtesy translation)

1. **LNG in the UE today**

Question 1: Do you agree with the assessment for the above regions in terms of infrastructure development challenges and needs to allow potential access for all Member States, in particular the most vulnerable ones, to LNG supplies either directly or through neighbouring countries? Do you have any analysis or view on what an optimal level/share of LNG in a region or Member State would be from a diversification / security of supply perspective? Please answer by Member state / region

LNG import infrastructures are a way to diversify natural gas supplies and so to increase security of supply. Access to LNG should be offered to every willing Member States.

However, regasification plants are costly and are only one source of flexibility among others. The interest of such an investment has to be assessed taking into account the situation of each Member State, especially in regards of their energy mix, diversification of supplies by pipelines, national production, fuel switching and demand-response capacities.

Thus, it is not possible to find a single target for regasification capacity or LNG importations which can be applied to every Member States.

Regarding the regions presented in the consultation, access to LNG being the target, this objective is already fulfilled in Western Europe, a lot of regasification capacities being available in those Member States.

Excess regasification capacities in Western Europe are actually an opportunity for the Member States seeking an access to LNG. For those countries, the costs and benefits of building a local LNG terminal could be compared with the costs and benefits associated with the investments in the new pipelines needed to access the available regasification capacities in Western Europe.

Question 2: Do you have any analysis (cost/benefit) that helps identify the most cost-efficient options for demand reduction or infrastructure development and use, either through better interconnections to existing LNG terminals and/or new LNG infrastructure for the most vulnerable Member States? What, in your view, are reasons, circumstances to (dis)favour new LNG investments in new locations as opposed to pipeline investments to connect existing LNG terminals to those new markets?

France doesn't have such a cost-benefit analysis. Given the downward trend of the natural gas consumption, national objectives aiming to reduce energy consumption of fossil fuels and the upcoming commissioning of the Dunkirk terminal, regasification capacities available in France will be theoretically sufficient to supply the entire national consumption.

Given the uncertainties related to the evolution of medium and long term natural gas consumption in Europe, there is a substantial risk for the European Union of developing infrastructures with limited exploitation potential. Therefore it is necessary to conduct a comparative cost-benefit analysis between

of the construction of new terminals and the development of gas pipelines needed to allow Eastern European Members States to access available regasification capacities in Western Europe.

Question 3: Do you think, in addition to the already existing TEN-E Regulation, any further EU action is needed in this regard? Do you think the use of LNG gas and existing LNG infrastructure could be improved e.g. by better storage possibilities, better network cooperation of TSOs or other measures? Please give examples

The main parameter behind the utilization rate of regasification terminal is the competitiveness of LNG compared to gas imported by pipeline. This question does not directly fall under European regulation.

Question 4: What in your view explains the low use rates in some regions? Given uncertainties over future gas demand, how would you assess the risk of stranded assets and lock-in effects (and the risk of diverting investments from low carbon technologies such as renewables and delaying a true change in energy systems) and weigh those against risks to gas security and resilience? What options exist in your view to reduce and/or address the risk of stranded assets?

The utilization rate of regasification terminals in a given region is mainly driven by the existence of alternative supply sources for natural gas and by the price of LNG compared to them. For instance, the regasification terminal located in the South part of France is more used than the one located in the Northern part of the country, Northern France having an access to pipeline gas from Norway and Russia, currently more competitive than LNG.

Because of the high costs associated with liquefaction and LNG transport, there is a real risk that LNG could be, under normal market conditions, durably supplanted by natural gas imported by pipelines. In order to avoid an excessive dependence on the most competitive gas source, with a view to diversification and security of supply, the possibility could be let to each Member State to put in force, if necessary, LNG import obligations.

Question 5: The Energy Union commits the EU to meeting ambitious targets on greenhouse gas emissions, renewable energy and energy efficiency, and also to reducing its dependency on imported fossil fuels and hence exposure to price spikes. Moderating energy demand and fuel-switching to low carbon sources such as renewables, particularly in the heating and cooling sector, can be highly cost-effective solutions to such challenges, and ones that Member States will wish to consider carefully alongside decisions on LNG infrastructure. In this context, do you have any evidence on the most cost-efficient balance between these different options in different areas, including over the long term (i.e. up to 2050)?

Following the publication of the law on energy transition for the green growth, studies have been launched in order to prepare a pluriannual energy plan dealing with the evolution of the French energy sector, including the natural gas system. The future commissioning of a new regasification plant in Dunkirk, declining perspectives for natural gas consumption and the priority given to renewable energy investments push towards a cautious approach before programming new investments in regasification plants.

2. Potential entry barriers for LNG

Question 6: What in your view are the most critical regulatory barriers by Member State to the optimal use of and access to LNG, and what policy options do you see to overcome those barriers? Have you encountered or are you aware of any problems in accessing existing LNG terminal infrastructure, either because of regulatory provisions or as a result of company behaviour? Please describe in detail.

The principle of third party access to LNG regasification capacities is already providing a relevant regulatory framework. Major challenges for the use of LNG regasification terminals seem more technical than regulatory.

With regard to economies of scale in transport, LNG import is carried by cargo with significant volume. The minimum regasification send-out of an LNG terminal increases for a small supplier the financial risk associated with unloading an LNG cargo. Indeed, the supplier have to sell regasified volumes which exceed its consumer portfolio, whereas the depth of gas markets is limited.

Question 7: What do you think are the most critical commercial, including territorial restrictions and financial barriers at national and regional level to the optimal use and access to LNG?

Recent European actions have been effective to get rid of destination clauses in LNG contracts for delivery in the European Union.

Nevertheless, DAT/DAP contracts (formerly DES contracts) remain the main types of contracts in the LNG market. Compared to FOB or CIF contracts, DAT/DAP contracts can create a relative rigidity in the LNG market, the buyer only taking the possession of the cargo at its final destination.

Question 8: More specifically, do you consider that ongoing EU policy initiatives and/or existing legislation can adequately tackle the outstanding issues, or there is more the EU should do?

Actions conducted at the European level over the past years were successful to remove destination clauses in LNG contracts for delivery in the European Union.

3. International LNG markets

Question 9: How do you see worldwide LNG markets evolving over the next decade and what effects do you expect this to have on EU gas markets? Do you expect a shift away from oil-indexed LNG contracts, and if so under what conditions?

Development of liquefaction infrastructures requires important investments. This fosters the need of financial guarantees in order to raise funds. Those guarantees are often long term contracts based on an indexation in which investors are confident.

Beyond the confidence investors have in it, the use of the oil price indexation for LNG contracts is explained by the guarantee provided to the buyer, who is sure of the relative competitiveness of its LNG purchases with oil products. Contracting procedure of liquefaction capacities in the US shows nevertheless that some buyers are ready to give away this guarantee of relative competitiveness in favor of a less volatile indexation (Henry Hub Price + liquefaction and transport costs).

The characteristics of the European market prices, notably NBP and TTF, do not seem able to provide enough guarantees to serve as an indexation in important long term delivery contracts of LNG. Despite the intervention of a growing number of operators, some producers seem to keep an important market power, particularly given the relative competitiveness of pipeline transportation compared to LNG liquefaction and transportation costs, especially if those pipelines have already been amortized. Under these circumstances, the lack of confidence among investors in the price trends of European gas markets may limit long term funding guaranteed on that basis.

Question 10: What problems if any do you see with the functioning of the international LNG market, particularly at times of stress? Are there specific actions the EU should take, in dialogue with our international partners, including in trade negotiations, to improve its functioning and/or to make the EU market more attractive as a destination for LNG? Could voluntary demand aggregation be helpful in some way?

The utilization rate of existing liquefaction plants is nearly maximal in order to be able to amortize high investment costs. Adding the absence of significant LNG stocks to this lack of spare production capacities, LNG flexibility margins correspond mainly to the possibilities of rerouting LNG cargoes and so correspond to demand-side flexibilities in other LNG importing countries.

Voluntary demand aggregation, compliant with European competition rules, can be an option to increase bargaining power of natural gas importers.

4. LNG technology issues including LNG use in transport

Question 11: What technological developments do you anticipate over the medium term in the field of LNG and how do you see the market for LNG in transport developing? Is there a need for additional EU action in this area to reduce barriers to uptake, for example on technology or standards, including for quality and safety?

Within the Law on energy transition for the green growth, France decided to foster LNG development as maritime bunker fuels. Installation of LNG distribution network in some French ports is planned and French regulation has been adapted accordingly. There is a genuine interest among freight transport stakeholders for the development of LNG fuels.

LNG storage is more difficult and more expensive than oil products storage, which limits interest in building strategic stocks on the same basis. In view of the strategic nature of transport, it would be necessary to ensure that the substitution of liquid fuels by LNG does not lead to additional weaknesses in case of supply crisis.

5. LNG sustainability issues

Question 12: Do you think there are any sustainability issues specific to LNG that should be explored as part of this strategy? What would be the environmental costs and benefits of alternative solutions to LNG? Please provide evidence in support your views.

The environmental impact of LNG depends on which energy it replaces. As a substitute of oil products, LNG is offering new opportunities to reduce greenhouse gas emission and pollution of the transport sector. The French Law on energy transition for the green growth paves the way for developing infrastructures and upgrading the regulatory framework in order to encourage LNG use in this sector.

6. Storage

Internal market constraints and challenges for storage

Question 13: What opportunities or challenges do the supply projections for different sources, in particular LNG and pipeline gas and low carbon indigenous sources, present for the use of gas storage / for gas storage operators?

Decreasing natural gas consumption is a challenge for gas infrastructures operators.

The slowdown of European natural gas production and the growing dependence on imports could however reinforce the importance of natural gas storage for security of supply.

Question 14: Are, in your view, current market and regulatory conditions adequate to ensure that storages can fully play their role in addressing supply disruptions or other unforeseen events (e.g. extreme cold spells)?

Since 2009, market conditions for storage operators have deteriorated. In particular the seasonal spread has more than halved, decreasing the interest for shippers to book storage capacities. As a result, booking of French storage capacities has plummeted. In 2013, nearly 30% of French storage capacities remained unused.

The important correlation between seasonal spreads and bookings of storage capacities shows that natural gas undertakings do not take into account the complete value of storage. If the arbitrage value of storage is taken into account by market operators, it is not the case for the system value or the security of supply value (Natural gas storages are necessary in France to balance the network, especially during a cold spell). The current weak valorization of natural gas storage by market operators is a concern for the sustainability of storage infrastructures. Three storage sites, representing a capacity of 10 TWH, have already been mothballed in France.

This market failure to take into account the whole value of storage requires a public intervention in order to maintain in operation storage capacities needed for security of supply, especially to cope with low probability-high impact events which can be disregarded by suppliers.

Question 15: As an alternative to mandatory reserves, how could market based instruments ensure adequate minimum reserves?

Noting that natural gas markets fail to take into account the full value of storage, France plans a revision of its national storage regulation in order to ensure the effective filling of underground storage facilities and to maintain a high level of security of supply. Following a public consultation of gas stakeholders, orientations are as follows:

- *a market-based mechanism to sell all storage capacities, with the objective of maintaining an easy access to new suppliers;*
- *a regulation of storage operators and a financial mechanism to compensate the potentially non covered costs of storage operators and to ensure the sustainability of storage capacities needed to safeguard security of supply.*

Storage Infrastructure

Question 16: Do you have any analysis or view on what an optimal level/share of storage in a Member State or region would be? What kind of initiatives, if any, do you consider necessary in terms of infrastructure development in relation to storage?

Following adoption of the Law on energy transition for the green growth, work has begun to elaborate a multi-annual energy program. In this program, storage capacity needed to safeguard security of gas supply will be evaluated.

Question 17: Do you think, in addition to the existing TEN-E Regulation, any further EU action is needed in this regard?

TEN-E Regulation is already giving possibilities to Member states in order to foster investment in new energy capacities.

Question 18: Given uncertainties over future gas demand, how would you assess the risk of stranded assets (and hence unnecessary costs), lock-in effects, the risk of diverting investments from low carbon technologies such as renewables, delaying a transition in energy systems and how would you and weigh those against risks to gas security and resilience? What options exist in your view to reduce the risk of stranded assets?

Cf. question 16.

Regulatory framework and potential barriers for storage

Question 19: What do you think are the most critical regulatory barriers to the optimal use of storage in a regional setting?

The main issue is not regulatory but technical, namely the availability of transport capacity allowing the delivery of stored gas to consumers, including in time of crisis. A geographical distribution of storage facilities near consumption areas mitigates the risk associated with transport disruptions.

Question 20: Do you think ongoing initiatives and existing legislation can tackle the remaining outstanding issues or is there more the EU could do? Do initiatives need to include additional issues further to the ones described here?

The market failure to take into account the whole value of storage may justify a public intervention in order to maintain in operation storage capacities needed for security of supply.

Question 21: Do you consider EU-level rules necessary to define specific tariff regimes for storage only or should such assessment be made rather on a national level in view of available measures able to meet the objective of secure gas supply?

Current EU law let Member States choose the regulation applicable to storage. Reopening this question at European level seems premature. However it is essential that, within the process of harmonization of the network transport tariffs at European level, discussions should include common principles aiming not to discriminate access to storage capacities.

Question 22: Have you ever encountered, or are you aware of, difficulties in accessing storage facilities? Has this concerned off-site or on-site storage facilities? Please describe the nature of the difficulties in detail.

Within the framework of opening up of the gas market, France has put in place in 2006 a mechanism regulating the access to underground storage facilities, per se "third party access to storage". This mechanism is organized by decree 2006-1034 (21/08/2006). The objective of this mechanism is to ensure transparent and non-discriminatory access for suppliers to gas storage capacities in sufficient quantities.

One pillar of this mechanism is the allowance of annual "storage rights" to any gas suppliers delivering to end consumers (this mechanism encourages competition but makes storage capacity reservation more price-sensitive). Supplier's rights correspond to the coverage by storage capacities of the seasonal modulation of its end customer portfolio. Rights in volume (in TWh) and in flows (in GWh/d) are determined every year by the Energy Minister taking into account storage capacities needed to cope with a cold winter. Global rights (calculated at national level) are then allocated among suppliers accordingly to their client portfolio. Storage rights ensure to all end customers transparent and non-discriminatory access to a source of flexibility.

Since 2010 the weak seasonal spread makes less attractive for shippers the use of storage facilities. This has led to a decrease of storage subscription rate. Therefore low stocks level at the beginning of the winter limit the capacity to supply all consumers during a cold spell. A consultation process has been opened with gas operators to improve gas storage regulation. A market-based mechanism is foreseen to sell all storage capacities, with the objective of maintaining an easy access to new suppliers.

Question 23: Have you ever encountered, or are you aware of, difficulties related to feeding LNG gas from the storage site back into the gas network? If so please describe the nature of these difficulties (regulatory provisions, company behaviour, technical problems) in detail.

No answer to this question

7. Practical details on responding, consultation events etc.