"LNG, an indicator of the issues facing the gas industry"

Mr Chairman,
Ladies,
Gentlemen,

I am pleased to open this session related to the LNG as this subject is high on the agenda. A quick look back at the period that separates Tokyo from Amsterdam reveals a range of developments and projects that go beyond even the most optimistic forecasts:

- The number of LNG tankers has risen from 140 at the end of 2003 to almost 200 vessels today and is expected to reach some 320 by the end of the decade.
- At the same time, the current liquefaction capacity of 180 M/tonnes a year will soon be increased by the addition of almost 200 to 300 M tonnes/year of further capacity.
- Trains with a unit capacity of 7.8 million tonnes are projected for the end of the decade to cope with this increase.

These remarkable changes can be explained by an environment that will remain favourable for gas in the long run and by the numerous advantages that LNG has to offer:

- first, supply can be optimally adjusted to demand, thanks to the modular design and gradual construction of the new regasification facilities.
- Second is, the possibilities to diversify supply sources and routes and to avoid the risks associated with excessively concentrated sources and transport routes. This last features is more and more important for gas importer countries, especially european ones. Recent events such as those happened at the beginning of the year between Russia and Ukraina for instance, have strengthened this perception.

However, certain issues may interfere with the ideal scenario for the growth of LNG and, in this case, will need appropriate responses from the different market players. I would like to share with you some of these issues :

- Today, this dynamic, buoyant market appears to be a powerful driving force behind the development, international expansion and security of energy markets in general and of the natural gas market in particular.
- Nevertheless, market growth will demand greater rationalisation to increase the fluidity between supply and demand.

A. The growth of LNG in an energy environment that favours natural gas

The certainly expansion of demand for energy is an opportunity for natural gas to play a starring role in the twenty or thirty years to come. Clearly LNG will benefit from these favourable circumstances. Gas markets have been regional until now, but the trend is increasingly toward globalisation, with interactions becoming more common as new supply routes are developed. In this situation, the flexibility offered by sea transport makes LNG an excellent tool for the development of a global gas market.

1) Strong market growth…

The current figures are quite clear. Although LNG's share in the total volume of gas traded each year is quite small – roughly 6% – the global growth rate for LNG trade regularly exceeds that of pipeline gas. Based on optimistic assumptions, LNG's share of the international gas trade could rise to about 38% in 2020, compared with 22% today. Strong growth potential exists in all markets. In the past, the Asian countries have fuelled the growth of LNG, but now the industry is turning its growth strategy to new markets that have a promising potential for increased demand: the United States and the United Kingdom in the Atlantic Basin and China and India in the Pacific Basin. The Atlantic Basin could show the fastest growth rate, at around 10% a year, and will represent more than the half of world demand for LNG by 2020. In the Atlantic Basin, there are around 50 regasification terminals planned or under construction.

These projects still clearly not fully materialized but they bear witness to the vitality of these markets and the optimistic view of the companies. LNG is clearly one of the main priorities in Gaz de France's industrial strategy. Our group is currently the largest European importer of LNG and we plan to maintain and even increase our position. LNG already represents more than one-third of our long term supply, this year.

We have the second-largest reception capacity in Europe. In France, two terminals are already operational and a third will come on stream next year with a total capacity of more than 25 bcm.
The merger currently underway with Suez will reinforce these positions. It is one of the numerous advantages of our merger plan wich aims at creating an european energy leader able to respond to the challenges of an European open market and capable to ensure the security of supply in Europe. This merger between Gaz de France and Suez is clearly a pro competitive operation.

The second positive factor is the fact that :

2) …production costs continue to decline over the période

As a pioneer in the LNG sector for more than 40 years alongside Sonatrach, Gaz de France has witnessed the improvement in the competitive performance of every link in the LNG chain. The cost of providing one tonne of liquefied natural gas, from production to the moment it leaves the regasification terminal, fell by about 20% between 1990 and the start of this decade. The average unit investment for a liquefaction plant fell from about five hundred fifty dollars per metric tonne per year ($550/t/year) in the 1960s to about two hundred and fifty dollars per metric tonnes per year ($250/t/year) by the end of the 1990s. For today's new projects, investment is less than two hundred per metric tonnes per year ($200/t/year). The cost of building standard 140,000 cubic meter (m3) LNG tankers also fell substantially from $250 million in 1995 to about one hundred and fifty five million dollars ($155 million) in 2003.
But the underlying reduction in costs has not offset the increase in LNG prices, which is mainly due to the constraints applying to production capacity. The Henry Hub price rose from one point five dollars per million british thermal unit ($1.5/MM Btu) at the start of the 1990s to eight point five dollars per million british thermal unit ($8.5/MMBtu) in 2005.

Continued high gas prices may lower the expected demand for LNG :

- Major industrial consumers may turn to alternative energy sources, since their reason for originally opting for natural gas was the low price.
- Electric power utilities will step up their investment in new clean coal technology for the generation of electricity and the question of a return to nuclear power will emerge.

Current prices are a threat to sustainable growth in demand, they reinforce some of the questions that still surround LNG and may diminish its considerable potential for growth at least in the short term.

B. LNG: driving force in the global natural gas market?

I will mention two of these questions: the imbalance that exists between supply and demand and the resulting issue of investments.

1. A seller's market?

The LNG market is currently a seller's market and supply remains excessively concentrated.

Current zones of production include two major blocks: Asia, which still accounts for almost 50% of total capacity, and the Middle East, where large-scale projects are ongoing.. Although this concentration fuels worries about security of supply, recent trends in the strategies of the companies have eased these concerns. The increasingly interlinked roles of the different players at every stage of the gas chain has limited the risk of a lack of correlation between markets and prices and has increased the fluidity of the production and sales channels.

However, the conditions of supply and demand required for effective fluidity and an optimal LNG market will only be achieved if efforts to diversify and strengthen the offer are sustained. The traditional players, such as our friends of Algeria, have been joined by producers in Trinidad and Tobago, Nigeria, Egypt and Qatar. Looking at Qatar, we have to commend all the actors for the strengh of their vision. This positive development will avoid market congestion and open the way for gradual rationalisation. But it will be equally important that for new players emerge or gather strength in the years to come. I am thinking in particular of Venezuela, Norway, North and West African countries and, of course, Iran whose contribution to the world gas market remains too small compared to their reserves.

2. Who pays for the investments?

The second question is related to the required levels of investment. From production to regasification, an LNG project represents an investment of between $6 billion and $10 billion. The increasing dependence of the main consumer regions (North America, Europe and Asia) will require new transport infrastructures to be built. The cost associated is estimated by IEA to $250 billion between 2000-2030. Moreover, the significant drop in costs that contributed to the vitality of LNG has come to a halt. In fact costs are, temporarily, on the increase.

Although the industry's aim is to generate economies of scale with these projects by increasing the capacity of liquefaction trains and LNG tankers, the multitude of orders placed for liquefaction terminals and tankers has brought about an increase in costs. So market players are faced with two questions: how can the investments required to develop the LNG market be made and at what cost?

Looking to the European market, weak energy resources have led Europe to turn to its closest neighbours. But this situation, even if it is secured by long-term contracts, is not sufficient. LNG provides a way to balance and rationalise the markets. As last March's Green Paper from the European Union rightly pointed out the investments required for a durable security of supplies are a major concern for Europeans today. LNG will offer a solution to this problem only if Europe acquires the necessary industrial and regulatory resources. Two things seem crucial to me here:

- First, the implementation of a regulatory framework that is stable, durable and constitute an incentive to investment. Progress are clearly needed.
- Second, the emergence of strong players with extensive assets and strong financial resources.

The European LNG market will only achieve rational and long-term development if it is an **attractive** market. To take the example of the Atlantic Basin, high natural gas prices in the US market are already strongly influencing transatlantic LNG transactions. They are already determining to a large extent the final destination of LNG, particularly in the spot market, since producers and importers are rerouting their shipments to the most attractive markets. Ultimately, there is reason to fear a too big shift of LNG supplies toward North America, based on only short term arbitration when stability remains essentials to our industry. Under-utilisation of terminals in Europe or in the US is not to be excluded with side effect on security of supply.

It is therefore important that the European energy market be attractive, and this goal cannot be achieved without a reasonable number of strong operators that are sufficiently large and credible to:

- make the very large financial commitments necessary to supply the colossal volumes of gas that will be essential in both the short and long term
- be considered as a credible counterpart in industrial and commercial discussions with the producing countries
- have a portfolio of contracts for both pipeline gas and LNG (as Gaz de France does), which opens up interesting possibilities for swaps.

Conclusion

To conclude, I believe that LNG is a good illustration of the current and future issues in global gas market. More flexibility and adaptability and more diversification of supply sources and routes: these are the major goals being sought by a gas industry that is gradually becoming more global. Despite the numerous obstacles that operators will have to overcome, in particular to get the necessary volumes to market at the right time to meet demand, LNG remains the best option to achieve the harmonious growth of gas. But, there are two essential features of the LNG market that should be kept in mind:

- On the global level, LNG is indispensable to balance and complement other sources at a time when energy prices are rising to persistently high levels and it is difficult to get a stable and global view of markets. In this uncertain environment, LNG can guarantee security and flexibility for each of the three continental markets and can help to draw those three markets closer together.
- But this favourable outlook remains conditional due to real concerns about current price levels. These concerns clearly have an impact on the sustainable security of energy supplies and require joint action by all stakeholders.

Thank you.