Executive summary

The German gas transmission system operators (TSOs) have produced the present consultation document on the 2016 Gas Network Development Plan (NDP) to publish the results of the network development planning process as required under the German Energy Industry Act (Energiewirtschaftsgesetz) and the German Gas Third-Party Access Regulations (Gasnetzzugangsverordnung). This fifth consultation document on the national NDP is based on the TSOs' scenario framework document for the 2016 NDP, which was confirmed by the national regulatory authority Bundesnetzagentur on 11 December 2015.

The 2016 NDP is the first to model – based on one reference scenario - two different cases for an alternative distribution of supply sources for high calorific value gas (“H-gas”). Both modelled cases rely on the same assumptions about distribution system operators, gas-fired power stations, storage facilities and industrial customers. The results for both alternatives have confirmed that the measures defined in the 2015 NDP enable a stable development of the networks. Additional development measures will be necessary in the 10-year period under review this year.

The TSOs propose to implement the development measures required under case Q.2, which builds on additional capacity available following expansion of the Nord Stream pipeline to meet the increased demand for H-gas in Germany.

The TSOs have based this decision on the assessment that this case provides a more robust level of supply security than case Q.1. In selecting case Q.2 the TSOs ensure that they can respond to future changes in the development of the supply sources available to meet Europe's gas demand. The network development proposal now put forward includes all projects planned under case Q.1 and thus also meets the requirements arising under an alternative distribution of supply sources.

The TSOs propose to carry out the following network development measures:

- The additional capacity required in 2022 will be provided by building some 744 km of new gas transmission pipelines and adding around 425 MW of new compressor capacity, which requires a total investment spend of approximately €3.6 billion including pressure control and measurement equipment.

- The additional capacity required in 2027 will be provided by building some 802 km of new gas transmission pipelines and adding around 526 MW of new compressor capacity, which requires a total investment spend of approximately €4.4 billion including pressure control and measurement equipment.

Among other considerations, the above investment will be provided by the German TSOs to secure that the supply areas currently receiving low CV gas (L-gas) can be converted to H-gas. Compared with the previous NDP, the number of projects required to implement the switchover of L-gas network areas to H-gas supplies, and the required level of investment, have again gone up due to the longer planning period. Over the course of the past year the TSOs have continued their extensive coordination efforts with distribution system operators as part of the market conversion process, which was launched in the meantime. The results of those discussions have been incorporated into this consultation document, which carries the complex plans further into the future and provides updated and more detailed information. The TSOs consider it their central task to maintain security of supply throughout the ongoing market conversion process.
The measures required for expanding the transportation network require a significant level of investment on the part of the TSOs, the cost of which is reflected in the transportation tariffs. All parties involved in the NDP process must therefore ensure that, in the long run, the network development projects are viable from a macroeconomic viewpoint whilst being economically reasonable for the companies undertaking the investment at a time when shippers are committing themselves for ever shorter contractual periods. In view of this background, what is particularly needed is a stable and sustainable regulatory framework that provides rates of return which appropriately reflect project risks.