

# **Consultation response to the European Commission Public Consultation on a new energy market design**

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07 October 2015

## Summary

- Eurogas, the European association representing the wholesale, retail and distribution of gas in Europe, sees great value in defining the right steps towards improving the way energy markets are working. Eurogas is fully engaged in this discussion as the European association that covers all the above activities for gas. To this end, our response to this public consultation answers most of the questions that concern a broad spectrum of activities.
- Eurogas supports the EU energy policy objectives for sustainable, competitive and affordable energy. We believe that the market is the most appropriate tool to provide the right signals for reaching these policy goals in an efficient way.
- *A priori*, it is important to ensure coherence in the treatment of the various and diverse activities from wholesale to transmission, distribution and retail services, covered in the questions of this public consultation.
- Eurogas also supports the increase of energy from renewable sources in a market-oriented way. However, to assess the effectiveness of the proposed measures, it is necessary to know how renewables are to be integrated into the market, i.e. how a major share of renewables would be combined with conventional capacities and how the pricing and investment mechanisms would function. The consultation paper is leaving this open.
- An important prerequisite for a new energy market design is that Member States remove existing political and regulatory distortions in electricity markets without delay. However, if the market does still not deliver the appropriate signals for the provision of the required level of security of supply, capacity remuneration mechanisms (CRMs) could be part of a new market design. The CRM should be non-discriminatory and market-based, and should respond to demand and supply signals.

Eurogas does not share the Commission's concern that CRMs per se are costly, distort the market and constitute subsidies for fossil fuels. If well-designed, the only difference to an optimal energy-only market should be the costs for the additional provision of firm capacity. These costs should be compared with the impact of existing national state interventions that are not market based and employed to avoid failures (e.g. obligations for grid and strategic reserves, prohibition of closures) and risks to the provision of reliable and affordable energy for European consumers and industry. A CRM can be an appropriate measure to ensure the provision of the capacity needed for an adequately functioning system.

Flexibility should ideally be adequately rewarded by the spot and balancing markets, but if this is not the case, the flexibility needs of the system should be considered in CRM design.

Greenhouse gas emissions reductions should not be addressed through a CRM but through the EU emissions trading system (EU ETS), revised to become fit for purpose again, since

this is the appropriate tool to give the right price signals for long-term investments in cleaner power generation and should not be impacted by other measures.

- Eurogas shares the view that an EU-wide harmonised approach to assess overall generation adequacy is required. The availability of flexibility should be examined in an economic assessment demonstrating whether plants are economically viable in the energy-only market. A generation adequacy assessment should cover principally the ENTSO-E region, as the European networks are highly interlinked. An intermediate definition of regions will need to be drawn up for countries in which sufficient interconnection capacity exists.
- Changes in European electricity market policies as well as national policies on the energy mix impact the gas market and infrastructure. Therefore, an impact assessment of the proposed measures on the gas market should be part of this electricity market design.
- Finally, as this consultation tends to use electricity and energy interchangeably, future documents should distinguish more clearly between electricity and gas where they should be considered as separate fuels or their markets are different.

**1) Would prices which reflect actual scarcity (in terms of time and location) be an important ingredient to the future market design? Would this also include the need for prices to reflect scarcity of available transmission capacity?**

Yes, scarcity prices are essential to enable capacities which are active within the markets to recover their costs. Unfortunately, this is not the case in most Member States due to several state interventions (see our answer to question 2).

At the wholesale level, day-ahead, intraday and balancing markets already express scarcity on very short time slot levels (hourly and even less, as little as 15 minutes).

At the retail level, in many markets customers are not yet exposed to short-term scarcity. For this, both dynamic pricing (at retail level) and short-term metering (with the help of smart meters or advanced meter reading) are necessary.

Scarcity prices at the wholesale level are already expressed at the bidding zone level. Price spreads among bidding zones actually express the scarcity of transmission capacity among the bidding zones and are an effective indicator of the necessity of transmission capacity. There is thus a need for scarcity in the transmission capacity to be fully reflected in the commodity prices, thereby triggering investments in transmission capacity through market demand.

A “copper plate” is usually assumed inside each bidding zone. Transmission system operators (TSOs) have to address potential internal congestions by re-dispatch or by investments (in the long run). To reap the most benefits from the increase of capacity among (and within) markets, cost transparency and cost efficiency of investments should be promoted to identify the most convenient projects. The objective of 15% interconnection capacity (section 3.2 of the consultation) should therefore acknowledge that transmission capacities inside Member States have to be upgraded accordingly.

However, some important aspects have to be considered before reviewing the bidding zones:

- Bidding zones should be as large as possible and they might encompass geographical areas of several countries.
- Bidding zones should be as stable as possible.

**2) Which challenges and opportunities could arise from prices which reflect actual scarcity? How can the challenges be addressed? Could these prices make capacity mechanisms redundant?**

As DG ECFIN has recently stated, “investments in electricity generation are long-term by nature and investors need to assess their future profitability before deciding to invest today”.<sup>1</sup> The electricity market is being challenged by the downward pressure on

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<sup>1</sup> DG ECFIN, “Investment perspectives in electricity markets” (July 2015): “The rising penetration of low-carbon technologies represents a challenge for the electricity sector under the current market arrangements. As their share of production increases, electricity markets will increasingly be dominated

wholesale revenues due to the progressive penetration of subsidised low-carbon technologies with low operating costs. “The issue of market revenues could challenge the ability of market prices, formed today mostly on day-ahead markets, to allow investors to recoup their costs”. Therefore, whatever market arrangements are decided, they should provide the incentives needed for the integration of low-emissions technologies while maintaining system reliability and generation adequacy. However, different policy measures, such as the financial support of technologies not reacting upon market prices or indirect price caps set by cartel authorities, lead to insufficient price signals for investment.

A functioning energy market requires a level playing field for the different technologies. Here, we see ambiguity in the Commission’s approach. On the one hand the Commission strongly supports the pure energy-only market and emphasises market-based principles, but on the other hand low-carbon technologies are somehow exempted from those principles.

The reflection of scarcity in wholesale prices is crucial for cost recovery of capacities via the market. Although it is true that all technologies suffer to some extent from distorted markets, gas-fired power plants particularly are among the first to leave the market. They are usually placed at the very end of the merit order and become increasingly unable to recover their (reversible) fixed costs. This seems to be a paradox as these plants are usually the ones called upon to achieve the climate targets and to respond to the increased need for flexibility. In this context, the social and political acceptance of high prices incurred during scarcity situations is, from our viewpoint, one of the main challenges to be addressed.

If advocating for free pricing and an improved energy market, the potential effects on the retail market should be taken into account and accepted.

The acceptance of scarcity prices also includes the acceptance of physical capacity scarcity. To enable cost recovery of peak load capacity (plants or storage) and trigger new investments, prices have to regularly be set by demand response, i.e. voluntary load reduction. But the market will not always have perfect foresight and the risk of brown-outs will therefore increase.

Hence, the acceptance of scarcity prices will not only demand the acceptance of some temporarily high prices at the wholesale market, but also the political restraint not to intervene in the market, not to support an increasing amount of capacity operated outside the market (e.g. increasing number of specific “reserves”, prohibition of closure) and to bear transitory times of physical scarcity before new builds come into operation. There are

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*by units with low operating costs but high initial capital costs. The risk is that under current market arrangements and without further integrating existing markets, wholesale market price may prove too low to trigger the necessary investments in generation capacity. In such a situation, it needs to be evaluated if generators would require some additional forms of remuneration, which would have to be borne by consumers or tax payers and would need to stand in proportion to the benefits provided.”*

doubts whether politicians will be committed to these necessary pre-conditions for the functioning of peak load pricing.

A stable, consistent and reliable framework for the future electricity market is indispensable for long-term investments. Generally, there are doubts whether price spreads beyond the forward markets will cover investment costs in thermal generation, and whether they will be sufficient to keep existing plants as backup for intermittent RES. We agree with the analysis made by DG ECFIN (footnote 1), "Whereas the electricity market serves the first function well [optimisation of resources already in place], it is not clear whether the current electricity market design will be sufficient to convey the right long term investment signals in a system dominated by low-carbon technologies with low operating costs. However, a proper market framework is important to make these investments happen".

A market-based and non-discriminatory CRM reacting to demand and supply signals can overcome these challenges by providing more timely investment signals than an energy only market (EOM) signal and by providing to investors a part of the revenue stream which is more stable than the one from the energy market alone. However, a well-designed CRM allows efficient capacity providers to recover their costs but does not necessarily guarantee it.

In summary, all current barriers and limitations to the energy markets should be removed in the interest of an integrated EU energy market. In particular:

- The integration of wholesale electricity and gas markets and their improved functioning must remain the priority of policy makers, regulators and involved stakeholders (ENTSO, TSOs, power exchanges) to achieve the completion of the internal market as soon as possible. More integrated balancing markets and better functioning intraday markets which adequately reward flexibility are central to this. The European Commission should therefore ensure that the requirements of the Third Package are fully implemented in each Member State and the timely progress in the development of network codes is maintained.
- The European Commission should increase the pressure on Member States to remove existing distortions, such as regulated end-user prices, restrictions or unnecessary regulatory requirements on plant operations as well as price caps and floors to give energy markets a chance to function properly. This includes eliminating unjustified technical requirements put on generators and other market participants; removing "must-runs" for power plants and the prohibition to exit the market; and promoting price signals to allow free commercial disclosure of assets and socio-economically optimal investment signals.
- Europe must invest in cross-border capacity and overcome national congestion through grid development.
- Prices that reflect short-term scarcity provide incentives and opportunities for new players and for the development of products, enhancing flexibility on the market.

Given the increase of variable electricity generation, this additional flexibility will become more important for the functioning of the market and the system.

- Implementing a CRM can transform the risky scarcity premium of an EOM into a more stable and predictable stream of revenue. This could also facilitate the entry of demand-side response (DSR) into the market: A predictable discount for interruptions is less risky than dependence on some “potential” spikes in spot markets (in order to use the flexibility of DSR). If no spikes occur, the demand side only benefits in flexibility markets. If interruptible plants are contracted as capacity provider in a CRM, they also have a fixed discount. Furthermore, CRMs better coordinate plant closures in times of overcapacity. The overcapacity signals are then clearly set in the market by the capacity targets, while this visibility is missing in an energy-only market.

**3) Progress in aligning the fragmented balancing markets remains slow; should the European Union try to accelerate the process, if need be through legal measures?**

Eurogas sees the need to speed up the integration process, but no need for legal measures in addition to the existing instruments. In general, market integration could be accelerated by faster development of Network Codes that do not postpone any actual harmonisation into the future and that are more concrete. A stronger involvement of stakeholders and the use of pilot projects may also accelerate the process.

**4) What can be done to provide for the smooth implementation of the agreed EU-wide intraday platform?**

NA

**5) Are long-term contracts between generators and consumers required to provide investment certainty for new generation capacity? What barriers, if any, prevent such long-term hedging products from emerging? Is there any role for the public sector in enabling markets for long-term contracts?**

Long-term contracts between generators and consumers should be enabled and possible regulatory and legal barriers removed. Where customers are willing to enter into a long-term contract with generators, the regulatory framework should not create obstacles.

However, considering that in many regions there are no imminent problems of generation adequacy (the coexistence of generation based on variable renewable energy source (RES) and backup capacity increases the available generation capacity for many hours, and many countries have not yet recovered to their pre-crisis demand levels), and considering also the downward pressure on wholesale markets due to low-emission technologies, we currently do not see an interest for customers to enter into long-term contracts on a larger scale. Under the current market design and considering the customer’s point of view, long-term contracts may not be developed because the depressed short-term market does not

value the system adequacy provided. This lack of interest could be the main barrier to the commitment to long-term contracts.

There seems to be a “maturity mismatch” between high competition in the retail sector and the option of quickly switching supplier on the one hand, and long-term contracts of more than two to three years on the other hand. Such long-term arrangements present additional costs which are sunk in case the end consumer switches to an alternative supplier. But domestic customers are usually the ones that should not be put at risk of capacity shortages. Moreover, there is the question of how TSOs in scarcity periods would distinguish the curtailments between customers having balanced positions and those who have not. It is therefore doubtful that long-term contracts will emerge spontaneously in the current market context.

Long-term signals allow for risks faced by investors to be reduced, along with the risk premium (required by the capital market) and capital costs. Eventually, economic market theory proves this is also the cheapest solution for society, including for the customers. The public sector may give such long-term signals by introducing a CRM. A well-designed CRM that puts obligations on contract capacity (either centralised on TSOs or decentralised on suppliers) could be a good method to provide long-term signals to all market participants. Indeed, capacity markets may also include provisions for long-term aspects needed by new investments, exemplified by the UK capacity market and Italian reliability options.

If the EOM is not working efficiently, a well-defined CRM will create an additional market instrument to attract sufficient firm capacity to achieve the targeted adequacy of the system. An adequate CRM would send timely and longer-term investment signals than an EOM and would thereby reduce the risk of having a shortage in electricity markets. If the introduction of a CRM is considered, the market design should be based, as far as possible, on competitive elements to ensure efficient solutions, e.g. by enabling cross-border participation. The aim should be a market design compatible with that of neighbouring markets to minimise market distortions and to avoid overinvestment.

**6) To what extent do you think that the divergence of taxes and charges levied on electricity in different Member States creates distortions in terms of directing investments efficiently or hampers the free flow of energy?**

In addition to our answer to question 2, different production and environmental taxes influence the bids of market players, and thus regional price setting. Regulatory interventions affecting the power generation sector, such as fuel taxes, the Robin Hood tax for energy companies and so on, should be avoided. Instead, the focus should be on developing fair competition on the basis of transparency.

The merit order in the electricity market today at least regional and no longer purely national. Thus, any differences in levies and the taxation of fuels, as well as different implementation of EU law, will create distortions in the market. One example is the non-harmonised application of the well-legitimated tax exemption for natural gas used to

produce electricity, to avoid double taxation as laid down in Directive 2003/96/EC. Practices should be coherent within the EU to avoid distortion of competition.

Customers should have clarity on the components of their energy bill to be able to distinguish between the price of the commodity and other elements of the bill and to be able to compare the price of different fuels.

## **7) What needs to be done to allow investment in renewables to be increasingly driven by market signals?**

At present, RES are not yet fully integrated in the market and are not yet fully accountable for the costs that they impose on the system. These costs include those for backup reserves and real-time balancing capacities from which RES are currently exempted in some Member States. To benefit from (and contribute fairly towards) a smooth energy system and market, power generation from RES should be integrated into the market in line with the same obligations as those of other market players, i.e. meeting scheduling, nomination and balancing requirements, and payment for any imbalance. The same market rules and financial requirements should apply equally to all market operators. Eurogas envisages a market for RES being developed with research and development (R&D) support directed to those RES technologies that are new and not yet mature.

The EU has set a 2030 target of 27% renewables at the EU level. The newly adopted Energy and Environment State Aid Guidelines provide for a market-based support (based on fiscal incentive programmes (FIPs), green certificates or investment aid) in addition to the income from the market. While investment aid does not have a distortive impact on dispatch decisions, operating support (FIP) should be designed in such a way that distortion of competition is avoided as much as possible. Tenders, if well designed, have the benefit of determining up-front the needed volumes and allow more visibility for investors of the possible impact of RES investments on wholesale market price evolution.

Improvements to market rules and technological developments allow RES assets to participate in flexibility markets (e.g. providing flexibility and reserves to the distribution system operator (DSO) and/or TSO). In addition to energy markets and flexibility markets, RES assets should be allowed to participate in capacity markets.

Variable RES might only be able to generate low revenues under a capacity market due to their lower reliability; however, a portfolio combination with storage, demand-side participation and other backup capacity will help maximise RES income from the capacity market segment.

Aggregators will also be able to combine products from small prosumers into standard products needed on balancing markets (TSOs) and DSO flexibility platforms.

However, most of weather-dependant RES (wind, solar photovoltaic (PV)) are often “synchronised”, i.e. they are all producing at the same time, creating very low spot prices. This cannibalisation effect might be minimised over time if RES generation is combined with storage.

Eurogas notes that the problem of reduced operating hours of conventional power plants, as far as this is caused by subsidies to mature renewable energy sources and the weak signals by the EU ETS, may not only affect the outlook for gas-fired power plants. It could also cause a more intermittent use of gas grid infrastructures and have an impact on the profitability of other gas infrastructures (particularly underground storage facilities) which are necessary for the delivery of fuel to the power plants concerned at peak times. Moreover, reduced consumption by gas-fired thermal plants would increase the infrastructure cost to be carried by other gas end-users. This change in commodity gas requirements may also increase the costs for flexibility.

Furthermore, the achievement of EU climate targets, of which gas is recognised as a key contributor, is put at risk. Eurogas is of the opinion that the achievement of a low-carbon energy market should be driven by fair competition among the different low-carbon energy technologies, with the EU ETS as the key instrument. The choice of the most cost-effective technologies to achieve CO<sub>2</sub> emissions reductions would then be the result of a competitive market. Therefore, signals from the EU ETS need to be stronger and in line with climate targets.

**8) Which obstacles, if any, would you see to fully integrating renewable energy generators into the market, including into the balancing and intraday markets, as well as regarding dispatch based on the merit order?**

Eurogas would recommend the following steps to assist the integration of RES into the market:

- There should be a possibility to waive consumption-based fees, taxes and levies, either fully or partially, for electricity that is used for energy conversion and storage, as it is used on an interim basis and not for final consumption.
- The evaluation of energy storage should be incorporated as an alternative option for network expansion in local, national, regional and the EU (ten-year) network development plans. Due to the seasonal aspect of some forms of renewables the conversion of electricity into hydrogen or synthetic natural gas is an important measure to store as much energy as possible in the existing gas grids and underground storage facilities.
- Harmonisation of standards for the level of hydrogen injection into gas grids should be considered, taking into account practices in countries such as Germany and the Netherlands.
- A European wide certification system for renewable gas could be developed.

**9) Should there be a more coordinated approach across Member States for renewables support schemes? What are the main barriers to regional support schemes and how could these barriers be removed (e.g. through legislation)?**

Principally, Eurogas welcomes a more coordinated approach for RES. This will positively contribute to European integration.

However, several questions should be addressed beforehand. The main challenge is the compensation of costs incurred when investments take place. This compensation of costs should be determined from an overall perspective. It cannot be limited to the RES support schemes only, but should assess all other costs related to the development of RES projects in another region (e.g. impact on the necessity and amount of CRMs, grid reinforcements, effects on price volatility, etc.).

Countries could also have different appetites to support technologies, depending, for example, on their level of technological maturity or their potential to develop a local industry.

**10) Where do you see the main obstacles that should be tackled to kick-start demand response (e.g. insufficient flexible prices, (regulatory) barriers for aggregators/customers, lack of access to smart home technologies, no obligation to offer the possibility for end customers to participate in the balancing market through a demand response scheme, etc.)?**

The highest potential for gas DSR is likely to be in the non-domestic sector, as customers in this sector have higher consumption and perhaps more flexible demand. These larger customers will typically have access to metering information on their consumption.

There is a lesser potential in the domestic sector. Another barrier is lack of awareness of the opportunities offered by DSR and the benefits it offers. This can be helped by information and education, to improve the customer's understanding and management of their energy consumption, and by smart meters rolled out in Member States in line with cost-benefit analyses. Smarter appliances are a required enabler, to support the smart-home and smart-services which suppliers will offer. Opportunities are likely to be facilitated by technologies such as hybrid heating systems and micro-CHP.

There may be a need for National Regulatory Authorities (NRAs) to explore frameworks to define key operational arrangements between flexibility service providers and the Balance Responsible Party (BRP)/supplier. It seems unlikely that residential consumers would wish to participate in the gas balancing market. Some might wish to do so via flexibility service providers (such as their Supplier or third-party aggregators), and there should be no obstacles to this arrangement. Any frameworks should be appropriate for particular markets and in principle should be market-based rather than driven by obligations. Furthermore they should set out clear principles for access and management of customer data and the roles and responsibilities of the parties involved.

**11) While electricity markets are coupled within the European Union and linked to its neighbours, system operation is still carried out by national TSOs. Regional Security Coordination Initiatives (RSCIs) such as CORESO or TSC have a purely advisory role today. Should the RSCIs be gradually strengthened also include decision making responsibilities when necessary? Is the current national responsibility for system security an obstacle to**

**cross-border cooperation? Would a regional responsibility for system security be better suited to the realities of the integrated market?**

NA

**12) Fragmented national regulatory oversight seems to be inefficient for harmonised parts of the electricity system (e.g. market coupling). Would you see benefits in strengthening ACER's role?**

The most important regulatory actions are those which will improve the liquidity of the market. As such we fully support the priority of full and effective implementation of the requirements of the Third Package network codes and the emphasis on more competition in the wholesale and retail markets across the EU. Regional cooperation will be a key enabler for the true integration of Member States' markets into an EU internal market.

Eurogas would support a review of the governance of ACER and the processes for developing and enforcing network codes in order to assess where there would be benefits in strengthening both their and the ENTSO roles in dealing with cross border issues.

**13) Would you see benefits in strengthening the role of the ENTSOs? How could this best be achieved? What regulatory oversight is needed?**

See question 12.

**14) What should be the future role and governance rules for distribution system operators? How should access to metering data be adapted (data handling and ensuring data privacy, etc.) in light of market and technological developments? Are additional provisions on management of and access by the relevant parties (end customers, distribution system operators, transmission system operators, suppliers, third-party service providers and regulators) to the metering data required?**

Future role of DSO

DSOs already have a very important role in the development of the European internal energy market. Approximately 99% of all customers and of all renewable gas and electricity injections occur via the DSO grid. Their role will become pivotal in the transition to a new market design, in which they should remain neutral market facilitators. The role of the DSO, however, may differ across Member States, reflecting different market structures, and a new electricity market design should not impose fundamental changes.

There have recently been several DSO-focussed studies and reports developed by both the Commission and CEER. Eurogas considers that the four key principles in the paper "The Future Role of the DSO" are broadly acceptable.

Development of harmonised European network codes in both electricity and gas have demonstrated that full and early dialogue with DSOs is invaluable to deliver robust and fit-

for-purpose network codes. In many areas, the DSO must also maintain very close relations with the TSOs, for example in network planning and information exchange during emergency procedures. Furthermore, the emergence of new local technologies, e.g. biogas, is increasing the importance of the distribution system operator.

### Data Management

We are increasingly seeing the importance of data to inform the customers as often as they wish about their consumption and to support the introduction of new and innovative services to consumers. We would welcome consideration by the Commission of the different types of data.

In respect of gas:

- Technical and regulated data: used for grid operation, balancing<sup>2</sup>, grid tariff billing, operations, etc.
- Commercial data: additional information that can be used for the provision of additional services.

Different structures exist across Member States for handling data. Any approach to data handling should accept these different practices, provided they meet agreed principles in the interest of the market, principal among which is the requirement that all parties who require access to data for their proper functions, including balancing and billing, should have it. All data should be handled in compliance with privacy and data protection laws. The customers should be able to control with whom they share their data, and be free to provide their data to a supplier or third party in exchange for energy services.

DSOs have technical expertise to ensure the efficient operation of the grid and regulated data to deliver the necessary qualified data to the various market actors. While the European balancing network code harmonises the processes for gas balancing, each Member State will have national rules for managing metering data, depending on the roll-out of smart meters and national metering rules.

The collection and processing of commercial data can be a role of the DSO or a third party. Regardless of the party involved this should be done in a manner that ensures:

- Information is provided to parties in a non-discriminatory manner in conformity with the Third Package;
- Data are provided in an accurate and differentiated way and in a timely manner;
- Information is provided using appropriate easy to use electronic facilities;
- Where customer consent is required for data sharing, this consent is provided to the DSO or the appropriate third party and be periodically reviewed;
- Customers' privacy and data confidentiality are always safeguarded;
- The provision of data is done in a cost efficient way.

NRAs should ensure that costs incurred in the efficient delivery of such services are recovered.

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<sup>2</sup> The elements related to balancing are covered by the European network code on gas balancing.

While we do not see the need for adaptations at this point in time, this should be continually assessed. One means of doing such an assessment would be to continue the work of the EG3 taskforce and establish its role formally.

**15) Should there be a European approach to distribution tariffs? If yes, what aspects should be covered; for example, tariff structure and/or tariff components (fixed, capacity versus energy, timely or locational differentiation) and treatment of self-generation?**

The European Commission is currently in the process of completing a European network code for the harmonisation of transmission tariffs. This code is important to facilitate the efficient trade of gas across borders. This rationale does not apply to gas at distribution level since it is not traded across borders.

Therefore, while there is no need at this stage for a European approach to distribution tariffs, it is important that distribution tariffs display certain features in order to facilitate a well-functioning and competitive market.

With regard to distribution tariffs in gas, there are several considerations worth highlighting:

- The fundamentals for tariff design in electricity and gas can differ considerably. Notably gas tariffs need to consider the considerable seasonality of demand and apportion the cost of peak capacity, to a much greater extent than electricity tariffs.
- The presence of competing fuels is also an important factor when designing tariffs for gas distribution.
- Time-of-use tariffs can be linked to the increased grid needs in the winter compared with the summer, or even on a more granular monthly or daily level. In most cases, time-of-use tariffs within the day are not relevant in gas, given that it is currently a typically daily priced product.

With regard to distribution tariffs, any move to amend existing approaches would require careful analysis and consideration of possible unintended consequences. For example, amending the weighting of commodity to capacity charging would be a very significant change and would require significant evidence before it could be justified. Market mechanisms which allow flexibility to be valued will be an important tool to ensuring the grid is optimised.

Furthermore, in competitive markets, suppliers should not be required to reflect distribution time-of-use elements in structuring their retail tariffs. Part of a supplier's function is to design products to meet customer needs. However, suppliers are likely to offer both simple retail tariffs and tariffs which feature explicit time of use elements, giving their customers choice in how distribution price signals are reflected at retail level.

In the future, tariff setting for DSOs should also consider the possibilities to use new technologies and market rules, such as demand-side response instead of network investments in certain cases. As referred to above, this is helped by market-based flexibility mechanisms.

**16) As power exchanges are an integral part of market coupling, should governance rules for power exchanges be considered?**

NA

**17) Is there a need for a harmonised methodology to assess power system adequacy?**

Yes, an EU-wide harmonised approach to assess overall generation adequacy is needed. The availability of flexibility should also be examined in the context of security of electricity supply. If methodologies are different, then it is unclear how the impact from neighbouring markets can be taken into account and there is a risk of not reaching the adequacy target because the neighbouring markets are not adequately modelled and there is too little or too much investment (neither are optimal for society).

Any methodology should not only be based on “static” or “expected” generation parks, but should also include an economic assessment of whether the plants are economically viable in the energy-only market. If they are not, the introduction of a capacity market guaranteeing that the required capacity for adequacy is kept in the system could be considered.

From our perspective, capacity markets can be part of the market design to achieve a targeted level of adequacy; otherwise the cost for society could be greater. An adequately designed CRM does not necessarily “distort” the market, even if it leads to different (spot price) results than the energy-only market would. Likewise, any change in market design influences the market outcome, but does not necessarily distort the market. A new market design element can offer opportunities to all players. Capacity markets could allow demand-side response to step in by granting it a discount for interruptibility in order that it may compete with generation in the capacity market to provide the required adequacy. Demand-side response could be offered the option to receive a (permanent) discount instead of the potential income from the spot market, where its interruptibility could be marketed only when prices are high.

**18) What would be the appropriate geographic scope of a harmonised adequacy methodology and assessment (e.g. EU-wide, regional, or national as well as neighbouring countries)?**

The power system in Europe is a highly interlinked network. Thus any risk from unsecure generation adequacy spreads out and impacts other countries. As there is a significant time lag to adding new generation capacity, common rules on how to ensure system adequacy are needed to avoid a lack of generation capacity in any one country endangering the entire system. Additionally, adequate measures need to be taken to ensure system stability in potential situations of too much generation (e.g. RES-E).

A generation adequacy assessment principally within the ENTSO-E region should be targeted. An intermediate definition of regions should be drawn up in a first phase for those countries (or parts of countries) in which sufficient interconnection capacity exists. Therefore, Eurogas strongly welcomes the recent approach by the Pentalateral Energy Forum (PLEF) for a regional generation adequacy assessment.

**19) Would an alignment of the currently different system adequacy standards across the European Union be useful to build an efficient single market?**

Another important part to achieving a common methodology is to have a target adequacy standard in each Member State.

In principle, Member States should be allowed to set their own adequacy standards, provided they can justify them. As a starting point adequacy quality levels that Member States want to achieve need to be adequately defined and formulated. However, the definition of standards in a Member State entails cross-border issues that need to be addressed at an early stage. When neighbouring markets aim at different adequacy standards it is generally demonstrated that there is “free riding” by a low-standard market benefiting from a high-standard market. Therefore, the adequacy standards should be coordinated at least on the regional level.

Furthermore, different adequacy standards in adjacent markets require clarification of what happens when scarcity occurs simultaneously, in particular when part of the capacity is contracted in a neighbouring Member State: in this case, would the “contracts” of foreign capacity overrule the outcome of market coupling? Or would TSOs block transmission capacity to save their own market first?

In this context, a transparent set of rules for TSO-TSO cooperation to manage shared stress events needs to be prioritised by the Commission and ENTSO-E.

**20) Would there be a benefit in a common European framework for cross-border participation in capacity mechanisms? If yes, what should be the elements of such a framework? Would there be benefit in providing reference models for capacity mechanisms? If so, what should they look like?**

Referring to the answers on previous questions, a common European framework would be beneficial, as it avoids over-procurement of capacity in national systems. Some common adequacy assessment is also needed. We agree with the Commission that different models (in different countries) create additional transaction costs for participation in a neighbouring capacity market, leading to reduced efficiency and to entry barriers in such markets.

However, initiatives are already being taken in some Member States to tackle security of supply with CRMs and cross-border aspects are not always coordinated. Guidelines on cross-border participation should therefore be targeted by the Commission.

CRMs should be designed in a competitive and efficient way, with the following requirements:

- CRMs should ensure the provision of capacity needed to achieve an adequately functioning system. Flexibility should be adequately rewarded by the spot and balancing markets, but if this is not the case, the flexibility needs of the system should be considered in CRM design. This is not the case, for example, if price signals such as price spikes and price volatility are not accepted and prices are capped, or if other interventions such as restrictions or unnecessary regulatory requirements on plant operations endanger the ability of the market to deliver the required flexible resources.
- The requirements should be aligned with the advice of expert groups, and should consider imports from neighbouring countries to avoid any sub-optimal solutions and overcapacity.
- The capacity price should be determined in a competitive way and should respond to the actual supply and demand of firm capacity. The objective of a CRM is to ensure the availability of adequate capacity. If revenues from the energy market are sufficient, the price of capacity should tend toward zero.
- The approach should be technology-neutral, provided that different technologies offer the same level of firm and reliable capacity.
- Existing plants should compete with newly built plants, as well as demand-response measures and electricity storage, for the most efficient solution by following the approach of “one product – one price”.
- The capacity market should be open to electricity undertakings operating in other Member States.

Predictability and reliability are essential preconditions for investors. Therefore:

- The creation of effective incentives for new investments, as well as reliable and transparent market rules, is essential to building confidence in the market. These rules should also determine in which market situation a change of market rules is required, and on which basis the change will be made.
- Adjustments of the CRM as well as changes in the policy and regulatory framework that lead to stranded costs create additional risks for investors and existing operators, making them reluctant to invest. Therefore, the more self-regulating elements a mechanism offers, the fewer regulatory interventions will be necessary.

- Politicians should consider the time lag (e.g. construction period) between the political decision and the effectiveness of the market reaction. Retroactive changes to the legal framework should be avoided.

Experience suggests that any strong regulatory intervention, if insufficiently complementary to the existing energy market, leads the market to call for further regulatory interventions to adjust the system. This increases the risk of adverse “spillovers” to the gas market.

**21) Should the decision to introduce capacity mechanisms be based on a harmonised methodology to assess power system adequacy?**

Yes and no.

As their current situations are different, Member States perceive the “adequacy” issue differently. Member States take initiatives at different times, when they assume that an issue is urgent, and cannot afford to wait for a harmonised methodology to assess power system adequacy.

As defining a harmonised approach might take some time, a harmonised methodology should be targeted, but it should not prevent Member States from developing capacity markets when they are needed to address supply adequacy. Later, both the assessment and parts of the implementation may need to be adapted without creating undue regulatory risk.

**END**