We would like to offer our views as a long-standing market player in Spain with experience of market reforms in other countries (e.g. the Italian LNG regulatory reform concluded in 2017), to enhance the current debate prompted by the Spanish National Commission of Markets and Competition’s (CNMC in its Spanish acronym) proposal to redesign the Spanish LNG market.

In this position paper we:

- identify the key challenges in the existing LNG market design in Spain; and
- propose measures that, in our opinion and given the characteristics of the overall Spanish natural gas market, represent the best way to manage such challenges.

SPANISH LNG MARKET: WHAT ARE THE CHALLENGES LIMITING ITS ATTRACTIVENESS IN THE CONTEXT OF THE GLOBAL LNG MARKET?

The LNG global market is getting increasingly responsive to price signals. While the broad price dynamic puts Europe in competition with other destinations, particularly in Asia, more and more LNG flexibility contributes to mitigating demand shocks and meeting seasonal needs, including for Europe. Once the decision to send an LNG cargo to Europe is taken, the specific market fundamentals and costs of the individual European markets are key in determining which country the delivery is made to.

Through its various companies, Shell has been active across the liquefied natural gas (LNG) value chain globally and has been operating in the Spanish energy industry for more than 100 years. We have been an LNG shipper to Spain since 2000 and we are currently focusing on in-tank trading, regasification to PVB (Spanish acronym for the virtual balancing point), bunkering, and cargo deliveries. In addition, we have LNG ships that follow the best commercial opportunities in Europe. In Spain, Shell has also been active in sales to industrial customers, power generation and power trading.

In this context, local inefficiencies limit the attractiveness of the Spanish LNG market and limit:

- The potential utilisation level of Spanish LNG terminals;
- Their ability to contribute to market liquidity and competition; and
- Their ability to contribute to the formation of a robust gas-price signal.

1 See annex 1 for a summary.

2 UK peak needs in the early days of March 2018 were almost entirely met by additional LNG deliveries and the share of spot deliveries has been increasing since 2010, reaching 30% of overall deliveries in 2018 (cf. Shell LNG Outlook 2019).
To reverse this trend and extract maximum value from Spanish LNG terminals for the benefit of consumers, we suggest focusing on three problematic areas:

1. MARKET FRAGMENTATION AND LOW LIQUIDITY; 
2. OPERATIONAL COMPLEXITY; AND 
3. RELATIVELY HIGH EXPLICIT COSTS AND TARIFFS.

1. MARKET FRAGMENTATION AND LOW LIQUIDITY

The Spanish natural gas market is characterised by relatively low liquidity when compared to other Western European markets\(^3\), limited interconnectivity with more liquid hubs, and a complex access regime to underground storage\(^4\). In addition, the LNG market offers limited flexible primary capacity products for either storage in tank or regasification (see paragraph on Operational Complexity).

To respond to the existing overall limited access to flexibility, market participants:

- historically, have concentrated regasification capacity demand primarily at one terminal to be able to build the profile, which better responds to their commercial needs through bilateral trades.

- trade primarily via LNG volume swaps accounting for more than half of the liquidity in the aggregated Spanish natural gas market.

Notably, market participants with larger local portfolios are better placed to ensure efficient optimisation of local positions and effective arbitrage across terminals.

2. OPERATIONAL COMPLEXITY

The Spanish LNG market is faced with unnecessary operational complexities which could easily be resolved by improved market design. We offer two examples in this regard:

A) The clustering of operations at one terminal increases the operational risk in two respects:

- **At the facility**: possible congestion at the terminal may lead to higher risks of delayed/diverted cargoes;

- **Within the national gas network**: possible concentration of injections at one terminal may create network congestion in the transport system which needs to be addressed by transmission system operator interventions, for instance via the procurement of locational products on the balancing market or reducing capacity availability at other points of the system.

B) Another case of unnecessary operational complexity is due to the nature of existing bundled products, such as “unloading + tank + regasification”, in that they allow only for straight regasification into the PVB. This contributes to the low-level utilisation of storage in tank, as it limits shippers’ ability to use the storage capacity as an extension of the PVB. The possibility to acquire unbundled tank storage capacity and regasification, would give shippers a flexibility option to service for local demand.

\(^3\) MIBGAS still does not have the desired liquidity: MIBGAS reached a negotiated volume of 3.8% of total national demand in 2017, which increased in 2018 mainly due to a temporary shortage of supply. (source: MIBGAS).

\(^4\) Reference is primarily to the existence of priority rights for market participants holding an end-user portfolio, and to the fact that short-term storage products are not yet commercialised despite the provisions of Royal Decree 335/2018 (Article 6 – Productos estándar de contratación de capacidades).
3. RELATIVELY HIGH EXPLICIT COSTS AND TARIFFS

Reducing the cost of using Spanish LNG terminals may lead to increased price alignment between Spain and other European markets.

In addition to the above, market participants are faced with relatively high tariff levels. The Ministry’s 2019 decision to enable small-scale LNG operations by establishing competitive tariffs is a first step in the right direction. However, a comprehensive reform of tariffs at terminals should be undertaken.

The decision by the CNMC and CRE on the MIDCAT project should enhance the case for LNG market redesign, furthering the case for low tariffs. Reducing the cost of using Spanish LNG terminals may lead to increased alignment between Spain and other European markets. This could help make Spain a key reference market for LNG in Europe.

Tariffs are a clear initial metric considered by global LNG market participants when making commercial decisions. Having relatively higher tariffs than competing LNG terminals in other parts of Europe provides an incentive to shippers to take their mobile LNG operations to other terminals. An empirical example of increased utilisation because of reduced explicit costs is the OLT Terminal in Livorno, Italy, where bookings increased in 2018 by over 30% compared to 2017 and are currently at record levels, after auctions with low reserve prices were introduced to allocate capacity.

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5 As advertised on their main page – https://www.oltoffshore.it/en/
6 ARERA Decision 660/2017/R/Gas allows, both for long and short-term regasification capacity products, for the use of auctions reserve prices lower than the regulated tariffs, as defined based on the regulated asset base. This design does not generate situations of under-recovery for terminal operators as any delta between the allowed revenues and the amount received via the auction bids is consolidated at the year of each tariff year and recouped via a coefficient paid by network users at all the entry points of the transmission system. The overall increased welfare generated by higher liquidity in the Italian gas market and the benefit in terms of security of supply provide the justification behind the market design, which could possibly further benefit by moving the coefficient to the exit points of the transmission system. This would better allocate the regasification costs to those that benefit the most from increased LNG import. Please note that the Italian Regulator is now considering extending these rules to the allocation of capacity for small scale LNG services.
SHELL’S LNG MARKET REDESIGN POSITION

Shell considers that reform of the Spanish LNG market should have the ambition to increase market competitiveness and efficient utilisation of LNG infrastructure available in the country, to benefit Spanish consumers. We also believe that a timely and complete market reform would enable the Spanish LNG market to become a key reference for the rest of Europe.

Hence, Shell would like to encourage the CNMC, with the support of the Ecological Transition Ministry, to continue with the market reform process outlined in the consultation document published in September 2018.

In fact, within the broader context of the Spanish natural gas market, the proposal provides some key answers to the problems identified in the previous section and it may unlock a wider and more competitive participation in the Spanish LNG market. For the reform to be rapidly effective focus should be on:

- clarity on when the changes will be rolled out;
- a minimum set of features to be fully implemented at the latest at the start of gas year 2020/21.

These are:

a) The introduction of a single regasification and storage contract across all plants;

b) The reduction in tariffs to competitive levels across all plants; and

c) The introduction of unbundled products.

In addition, while we deem the proposal capable of positive contributions to a better-functioning market, to achieve a more effective reform we would like to suggest amendments in the following areas:

1. **MAXIMISING MARKET FLEXIBILITY**;
2. **SUFFICIENT AVAILABILITY OF DIFFERENT TYPES OF CAPACITY PRODUCTS**; AND
3. **SETTING COMPETITIVE LNG MARKET COSTS**.

### 1. **MAXIMISING MARKET FLEXIBILITY**

Our view is that in order to increase market’s liquidity, efficiently exploit existing infrastructure and increase terminal revenues, the Spanish LNG market design should provide maximum flexibility for all types of operations.

In line with the CNMC proposal, we consider that this can be achieved through the combination of a bundled regasification and storage capacity product, as well as unbundled and interruptible capacities.

However, greater product flexibility should not come at the expense of removing the existing ability to procure annual capacity all year round.

This ability should be maintained by either keeping the existing arrangements or by having at least four dates a year to procure capacity. In parallel, all tariff multipliers for short-term products should be set at one, or close to one.

Greater product flexibility should not come at the expense of removing the existing ability to procure annual capacity all year round.

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7 INF/DE/122/18 – Documento de consulta pública sobre la propuesta de nueva regulación de los servicios prestados por las plantas de regasificación de GNL (see Annex I for overview).

8 Currently, annual capacity can be acquired from the terminals staring as and when required. This means that a Shipper can access annual capacities once commercial negotiations for the LNG had concluded.
Shell considers that access to capacity during the year is important for three main reasons:

- **LNG is a commodity traded in a competitive worldwide market where operations are very reactive to price signals.** LNG operations are not scheduled and planned in the same way as for piped gas. The current rolling-year approach for procuring capacity provides the necessary flexibility for the Spanish LNG market to be an attractive destination when European prices are competitive in the global market;

- **Acquiring annual capacity flexibly is important for suppliers providing competitive gas to industrial customers.** Our experience suggests that Spanish large consumers do not contract for their gas needs in alignment with Network Code for Capacity Allocations Mechanisms (CAM NC) auction calendar. Customers have different points in the year when they contract, the most common being on a calendar-year basis; and

- **Lack of capacity contracting flexibility could become a barrier to competition.** As mentioned above, the existing flexibility in capacity bookings enables gas shippers to be efficient and competitive in managing large consumers demand. This is particularly true for small shippers that in this way avoid procuring more expensive short-term capacity.

### 2. SUFFICIENT AVAILABILITY OF DIFFERENT TYPES OF CAPACITY PRODUCTS

The availability of sufficient bundled and unbundled products, as well as firm and interruptible capacity, is another important feature requiring consideration. Capacity product design has direct implications on infrastructure utilisation and barriers to entry to the market.

Shell considers that the introduction of unbundled services should be a cornerstone of Spanish gas market reform. We expect that in addition to facilitating capacity optimisation, the introduction of unbundled services will:

- enable smaller shippers to develop operational niches;
- increase infrastructure utilisation;
- enhance competition; and
- help LNG users to better respond to price signals.

Shell considers that the introduction of unbundled services should be a cornerstone of Spanish gas market reform.

This said, we also support parallel partial (e.g. 20% of the overall available capacity) offering of bundled services, as this may contribute to increased utilisation of the infrastructure. Compared to unbundled services, bundled services may simplify activities, particularly for standard operations, and enable easy access to capacity to deliver LNG/gas.

Bundled capacity product availability would benefit new entrants and smaller and occasional participants as it reduces the operational and cost risks of capacity mismatch. This is particularly true if combined with a well-functioning secondary capacity market, allowing market participants to freely trade of capacity.
Notably, bundled services would be attractive, if they are offered at a tariff that is lower than the aggregation of the tariffs of the underlying individual services.

That said, we consider that the bundling of services should not lead to the bypassing of the PVB (regasification capacity should not be bundled with capacity at European interconnexion points), neither should it delink the Spanish LNG market from the PVB. This would lead to the fragmentation of the overall Spanish wholesale gas market.

3. SETTING COMPETITIVE LNG MARKET COSTS

For the Spanish LNG market to become a reference for Europe, the costs of participating ought to be more competitive in the context of other European terminals.

As LNG is largely a commoditised product driven by worldwide supply and demand, the Spanish LNG market would mainly compete on net margin, based on the cost of serving the market, hence relatively high tariffs increase the net cost of serving the market and make it less attractive.

On this basis, our suggested approach would be to ensure that the price for each capacity product is set by taking into consideration spreads with other relevant LNG markets. In other words, the cost of regasification capacity should be lower than the spread between the Spanish virtual trading point and the next most competitive market for LNG.

The recently reformed Italian LNG market provides an example of how a reduction in tariffs can increase LNG deliveries and infrastructure utilisation. Following the logic described above, the Italian regulator moved away from a cost-based tariffs methodology towards a market-based mechanism for price setting. As a result, Italian LNG terminals have substantially improved their overall revenue level as cheaper capacity has led to more capacity being booked.
As already hinted at in the second section of this paper (Shell’s LNG market redesign position), Shell considers that a crucial element for a successful LNG market redesign lies in the way it will be implemented. We consider that the process should be governed by **three principles**:

1) **Transparency** – The implementation process should facilitate the planned involvement of shippers and other market agents;

2) **Simplicity** – The CNMC should aim to minimise the number of separate legislative processes, aiming for a single significant change procedure; and

3) **Certainty** – Providing a clearly developed and set-out road map, including the definition of the transitional period.

A robust, simple, clear and binding roadmap will minimise disruption to existing and planned operations. It would help bring the benefits of the target model forward, because participants would be able to plan and execute commercial undertakings based on the anticipated new improved market design.

We consider that a key element missing from the proposal relates to the process and timeline that the CNMC intends to follow.

In addition, we consider that regardless of the market redesign road-map, the CNMC should commit to a back-stop date to implement the already legislated change, such as Royal Decree 984/2015.

Shell considers that a crucial element for a successful LNG market redesign lies in the way it will be implemented.
ANNEX 1 – CNMC’S LNG MARKET REDESIGN PROPOSAL

In 2018, there was significant debate in the industry about how the Spanish LNG market should be reformed. Following this debate, the CNMC consulted on its proposal in September 2018.

The CNMC’s stated policy objectives can be summarised in four principles:

- facilitating competition;
- reducing complexity;
- increasing existing LNG infrastructure utilisation; and
- supporting Spain’s objective to become a European LNG reference hub.

According to the CNMC’s assessment, the aggregated regasification and storage plan model is the one of the five assessed that can best deliver against its objectives.

The figure below provides a summary of the main characteristics and changes that the aggregated regasification and storage model offers.

The proposal suggest that the model will be implementing the legislated changes in relation to competitive allocation procedures (Royal Decree 984/2015) and services on offer and respective tariffs (Royal Decree 335/2018).

<table>
<thead>
<tr>
<th>Services bundling and unbundling</th>
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</thead>
<tbody>
<tr>
<td>Bundled – unloading, storage and regas.</td>
</tr>
<tr>
<td>Unbundled – loading/unloading of ships, regas, storage, truck loading, ship-to-ship, ship cooling, bunkering and PVB-to-regas tank.</td>
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<thead>
<tr>
<th>Offering of services</th>
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<tbody>
<tr>
<td>Non-interruptible</td>
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<tr>
<td>Interruptible – Only PVB-to-regas tank (day-ahead and intra-day)</td>
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<tr>
<th>Selection of location for relevant products to be chosen by participants</th>
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<tbody>
<tr>
<td>The relevant products – loading/unloading of ships, ship-to-ship loading, ship cooling, bunkering and truck loading</td>
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<tr>
<th>SO control of aggregated plant services</th>
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</thead>
<tbody>
<tr>
<td>Aggregated plant products – Regas, storage, and PVB-to-regas tank.</td>
</tr>
<tr>
<td>The SO will centrally manage the physical location on a daily basis, on the back of shippers nominations.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Allocation of service capacity</th>
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<tbody>
<tr>
<td>The allocation will be managed on request by participants</td>
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<tr>
<td>If demand exceeds supply, allocation will be made through an auction.</td>
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<table>
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<tr>
<th>Flexibility of use of plant specific services</th>
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<tbody>
<tr>
<td>Once windows have been assigned flexibility around their use will be allowed, as long as the plant’s capacity allows and other users are not affected.</td>
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<tr>
<th>Charging for services</th>
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<tbody>
<tr>
<td>Allocated services will be charged regardless of utilisation.</td>
</tr>
<tr>
<td>A caveat maybe considered for storage contracts to be based on use</td>
</tr>
</tbody>
</table>

Summary of main characteristics of CNMC’s proposed aggregated regasification and storage model.