



Brussels, 27.7.2023
C(2023) 5245 final

<p>In the published version of this decision, some information has been omitted, pursuant to articles 24 and 25 of Council Regulation (EC) No 659/1999 of 22 March 1999 laying down detailed rules for the application of Article 93 of the EC Treaty, concerning non-disclosure of information covered by professional secrecy. The omissions are shown thus [...].</p>	<p style="text-align: center;">PUBLIC VERSION</p> <p>This document is made available for information purposes only.</p>
--	---

Subject: SA.102163 (2023/N) – Germany
Aid for the construction and operation of the Brunsbüttel on-shore LNG Terminal

Excellency,

1. PROCEDURE

- (1) Following pre-notification contacts, pursuant to Article 108(3) of the TFEU, the German authorities notified on 4 July 2023 to the Commission their intention to provide support for the construction and operation of a liquefied natural gas ('LNG') onshore terminal located in Brunsbüttel (Germany) (the 'Project').
- (2) By letter dated 28 April 2023, Germany agreed to waive its rights deriving from Article 342 TFEU in conjunction with Article 3 of Regulation 1/1958¹ and to have the present decision adopted and notified in English.

¹ Regulation No 1 determining the languages to be used by the European Economic Community (OJ 17, 6.10.1958, p. 385).

Ihrer Exzellenz Frau Annalena Baerbock
Bundesministerin des Auswärtigen
Werderscher Markt 1
10117 Berlin
DEUTSCHLAND

2. THE PROJECT

2.1. Project description

- (3) The Project comprises the construction and operation of an LNG onshore terminal to be located in Brunsbüttel (Germany) (the ‘terminal’). The terminal is intended to be ready for the import of LNG by the end of 2026 and will consist of an LNG import, storage and distribution facility with an estimated annual throughput capacity of approximately 10 billion cubic metres per year (bcm/a).
- (4) The Project was originally planned to be carried out by the Dutch company Gasunie together with Oiltanking GmbH and Vopak LNG Holding B.V., the former shareholders of German LNG Terminal GmbH (‘GLNG’). However, Gasunie, Oiltanking GmbH and Vopak LNG Holding B.V. decided not to pursue the Project, which they did not consider to be economically viable in a purely private setting. In January 2022, Germany started holding preliminary discussions with Gasunie in relation to Germany’s possible participation in GLNG. On 4 March 2022, the companies Gasunie and RWE agreed with Germany, via the German State-owned promotional bank KfW, on a memorandum of understanding for the Project. Subsequently, following the memorandum of understanding, Gasunie’s former partners decided to exit the Project and Gasunie took over their shares in GLNG.
- (5) The Project promoter GLNG will have three shareholders, Gasunie (40 %), RWE (10 %), and the German state-owned promotional bank KfW (50 %), acting on behalf of the Federal Republic of Germany (‘the parties’ or ‘the shareholders’).²
- (6) The State support will be provided in the form of a preferential dividend distribution mechanism, whereby KfW agrees to waive parts of its dividends in favour of the other two shareholders in GLNG (proportional to their respective shares) during 15 years of LNG operation of the terminal. The preferential dividend distribution mechanism is agreed upon and enshrined in the Shareholders Agreement between the parties (‘Shareholders Agreement’), which constitutes the legal basis of the measure and contains a stand-still clause.
- (7) After 15 years of operation at the latest, KfW envisages to exit GLNG, while Gasunie and RWE have agreed in the Shareholders Agreement to convert the terminal for the import of alternative energy carriers, such as green ammonia.
- (8) As concerns the construction of the terminal, the engineering, procurement and construction (‘EPC’) will be carried out by the Spanish partnership SENER Ingeniería y sistemas S.A. and COBRA Instalaciones y Servicios S.A. (‘CSJV’) (together ‘SENER/COBRA’), which was selected as the preferred bidder following a tendering process. The EPC contract tendering process was first initiated by Gasunie in Q2 2019, with an expression of interest and pre-qualification exercise and resulted in an 1.5-year negotiation process. GLNG and SENER/COBRA thus concluded a letter of intent (‘LoI’) dated 10 August 2021. Following the resumption of negotiations with KfW, SENER/COBRA agreed to extend the LoI on 16 March 2022. The EPC contract was effectively agreed upon in mid September 2022, which

² The shareholders agreed that, upon closing of the Shareholders’ Agreement, the capital contribution of each shareholder will amount to its quota in the total capital requirement for the development and construction of the terminal. That quota will reflect their respective proportionate holding of company shares in GLNG. The projected total capital requirement for developing and constructing the Project is EUR 1.321 billion (see recital (50)).

allowed the EPC contractor to start preparatory works³. GLNG has, however, not yet taken the final investment decision ('FID'), which is, inter alia, subject to State aid approval pursuant to a standstill clause inserted in the EPC contract. The FID is a prerequisite for the actual execution of the EPC contract. The construction of the terminal has, therefore, not yet started. Moreover, a standstill clause subjecting the granting of aid under the measure to State aid approval is also inserted in the Memorandum of Understanding and in the Shareholders' Agreement.

- (9) The German authorities moreover explained that the tenders for the construction described above were conducted on the basis of national procurement rules, in line with EU public procurement rules.
- (10) Furthermore, the German authorities have stated that the overall Project is carried out in compliance with all applicable EU rules. In particular, the terminal will be developed and operated on the basis of the applicable European and German energy law and in line with the exemption decision of the Federal Network Agency (*Bundesnetzagentur*, 'BNetzA'), which was taken on 19 June 2023⁴ following the Commission exemption decision dated 2 June 2023⁵.

2.2. Objectives of the Project

- (11) The German authorities explained that the construction of the terminal is urgently needed to secure Germany's and the EU's gas supply after Russia has ceased supply to Germany.
- (12) The German authorities point out that until the security of supply through renewable energy sources is reached, natural gas is essential to meet the energy demand in the Federal Republic of Germany⁶. At the same time, as domestic production in North-Western Europe is declining, the Federal Republic of Germany is facing increasing dependence on non-European gas imports. In order to ensure security of supply, greater diversification of supply sources through direct import opportunities in Germany from the global LNG market is of considerable importance.
- (13) The German authorities explain that with a regasification capacity of 10 bcm/a after its operational start in 2026, the terminal will contribute to the German and European gas supply, allowing to replace former Russian gas imports. On the basis of recent data (2021 average, before the cessation of gas supply through Nord

³ The early works performed so far under the EPC contract were limited to preparatory works such as inspections and soil examinations. The preparatory measures do not include any construction work.

⁴ Available at:

https://www.bundesnetzagentur.de/DE/Beschlusskammern/1_GZ/BK7-GZ/2022/BK7-22-0140/BK7-22-0140_Beschluss_final.html;jsessionid=EB9225895C3BBD89B61865AFF74BD328?nn=269738.

⁵ Decision No BK7-22-140 and Commission Decision of 2.6.2023 on the exemption of the German LNG Terminal in Brunsbüttel, Germany, from the requirements regarding third party access and tariff regulation.

⁶ Germany submits that the current primary energy demand (2021) in Germany is 2407 TWh (<https://www.umweltbundesamt.de/daten/energie/energieverbrauch-nach-energietraegern-sektoren#allgemeine-entwicklung-und-einflussfaktoren>). The total energy demand in Germany is projected to decrease to 1886 -1604 TWh by 2045 according to the different scenarios developed by the consortium of Fraunhofer Institute, IFEU, Consentec and TU Berlin (<https://www.langfristszenarien.de/enertile-explorer-de/szenario-explorer/gesamtbilanzen.php>).

Stream 1), Russian imports to Germany that were consumed in Germany were estimated at 55 bcm/a⁷.

- (14) The German authorities point out that this terminal will moreover provide infrastructure to supply the other Member States, especially those that have no access to the sea, and thus no direct gas supply option via LNG terminals. Its connection to the gas pipeline network will allow to supply Central and Eastern European countries. In particular, the Federal Government assumes additional supply needs from Czechia (1 bcm/a), Slovakia (0.15 bcm/a), Austria (0.5 bcm/a), Ukraine and Moldova 4,5 bcm/a (from 2026 onwards: 5 bcm/a as Ukraine's own gas production is assumed to shrink).
- (15) In terms of the EU's total natural gas consumption of currently about 350 bcm/a, the terminal will provide additional import capacity amounting to about 3 %. The German authorities explained that they have forecasted Germany's projected gas consumption in 2030 taking into account the trajectory to meet climate targets. In order to plan for the necessary LNG import capacity in the country to guarantee security of supply in Germany and neighbouring land-locked countries, the German authorities explained that they relied on a conservative scenario. That scenario assumes a decrease in natural gas consumption from 99 bcm in 2021 and 82 bcm in 2022 to a level of around 74 bcm/a by 2030.
- (16) In the medium term, Germany seeks to establish crisis-resistant import facilities that do not only allow to cover actual gas demand, but that also leave space for an additional 'safety buffer' of over 30 bcm/a⁸. In the Federal Government's view, as also stated in its 'Report on Plans and Capacities of the Floating and Fixed LNG terminals' (March 2023), a safety buffer of this size is necessary to ensure security of supply in view of the possible loss of import capacity due to accidents, sabotage or other exogenous events. The largest volumes of gas are currently imported into Germany from Norway (46 bcm/a, of which approx. 29 bcm/a for German consumption). Such a safety buffer is in their view needed in order to protect against the possibility of loss of import volumes from Norway and also to secure supplies to European neighbouring countries⁹.
- (17) Germany explained that in addition to the LNG-terminal in Brunsbüttel, two further land-based LNG-terminals (in Stade and Wilhelmshaven) are currently planned to be established. As the land-based terminals in Brunsbüttel as well as Stade and Wilhelmshaven will not start operation before 2026/2027, Germany employs four Floating Storage and Regasification Units (FSRU) for an interim period. Three

⁷ The stated figure can be found, for example, in the report (page 21) by the BDEW (Bundesverband der Energie und Wasserwirtschaft): https://www.bdew.de/media/documents/Pub_20230601_Jahresbericht-2022-UPDATE-mai-2023.pdf

⁸ This estimate is calculated assuming a decline in gas consumption in the next years and accounting for the increased imports from Norway following Russian's gas curtailment. See document "*Bericht des Bundeswirtschafts- und Klimaschutzministeriums zu Planungen und Kapazitäten der schwimmenden und festen Flüssigerdgasterminals*", 3 March 2023. In particular, the safety buffer is estimated at 34 bcm/a in 2030 and it is calculated as the difference between the expected demand in DE (74.1 bcm/a), Eastern Europe and AUT (6.7 bcm/a), a demand risk premium of 10 % (8.1 bcm/a) and the expected import capacity of LNG (54 bcm/a), other imports of natural gas (64.3 bcm/a) and own production of natural gas (5 bcm/a).

⁹ The security buffer of 34 bcm/a includes transit volumes to neighbouring countries and should be compared against the currently imported volumes from Norway to Germany and neighbouring countries (46 bcm/a).

FSRUs are already installed in Brunsbüttel, Stade and Wilhelmshaven. The FSRUs stationed at these locations will be withdrawn after the fixed terminals have been commissioned and then expected to be re-chartered or used as LNG tankers, as fixed terminals are preferred over FSRUs for both CO₂ emission and economic reasons. Germany moreover argues that the FSRUs alone, with a capacity of around 27 bcm/a in total, would not be sufficient to provide the needed security buffer.

- (18) Germany moreover explained that one further FSRU is already installed at a further location in Wilhelmshaven. As no land-based terminals will replace it, this FSRU can continue its operation as long as there is need for its capacity (naturally limited by the contractual charter period). Also, a privately run and funded FSRU is being operated in Lubmin since December 2022. It is supposed to be relocated to Mukran in 2024. One further privately run and funded FSRU is supposed to be installed in Mukran.
- (19) The land-based LNG terminal in Wilhelmshaven is supposed to start operation in 2026, whereas in 2027, the LNG Terminal in Stade should follow. In 2027 the LNG import capacity is expected to amount to 54 bcm/a.
- (20) The table below shows the expected LNG import capacity in bcm/a in Germany between 2023 and 2030.

Table 1: LNG import capacity in bcm/a in Germany between 2023 and 2030.

LNG Terminal type	LNG terminal	2023	2024	2025	2026	2027	2028	2029	2030
FSRU	Wilhelmshaven I	5	5	5	5	5	5	5	5
	Brunsbüttel	3,5	7,5	7,5	7,5				
	Stade		5	5	5				
	Wilhelmshaven II		4,5	4,5					
	Mukran (private)		5	5	5	5	5	5	5
	Lubmin, later Mukran (private)	5	10	10	10	10	10	10	10
Land-based terminals	Brunsbüttel					10	10	10	10
	Stade					13	13	13	13
	Wilhelmshaven				11	11	11	11	11
Total		13,5	37	37	43	54	54	54	54

Source: German authorities, 'Bericht des Bundeswirtschafts- und Klimaschutzministeriums zu Planungen und Kapazitäten der schwimmenden und festen Flüssigerdgasterminals', 3 March 2023. Note that the line regarding Lubmin has been updated by the German authorities.

- (21) As shown in the table above, provided that the privately-run terminals (FSRU in Lubmin (later Mukran) and Mukran, land-based terminals in Stade and Wilhelmshaven) do not change their capacities, the import capacity of 54 bcm/a will remain constant until the beginning of the 2030s. The FSRU import capacities are flexible and can be reduced if necessary. The total German import capacities of LNG will decrease from 2030 to 2038, as the contract for the FSRU in Wilhelmshaven expires after 10 years.
- (22) The German authorities note that the terms of operation of the floating terminals are still under discussion and that the capacity buffer would only be used in case of future disruptions. Moreover, should demand for regasification capacities be lower than expected, Germany notes that it retains the possibility to exit from FSRU

contracts and shorten the duration of the operation or to re-charter or use the federal FSRUs as LNG tankers flexibly.

2.3. The measure

- (23) The aid measure is a preferential dividend distribution mechanism, by which KfW foregoes part of the dividends it would receive according to its percentage share in the company to the benefit of Gasunie and RWE. The mechanism would be applied during the period of operation of the LNG-terminal, i.e. for a period of 15 years and no longer than the end of the financial year 2043.
- (24) More specifically, the preferential dividend distribution mechanism will take the following form:
- If in a financial year the distributable profit (after tax) is more than or equal to 5 % of the total contributed capital by all shareholders invested until the completion of the construction phase ('invested capital'), the profit shall be distributed pro rata to all three shareholders. KfW, Gasunie and RWE would thus receive the same pro rata dividend in such a year.
 - In financial years in which the distributable profit (after tax) is less than 5 % of the total capital contributed by all shareholders, Gasunie and RWE will receive a dividend of up to 5 % on the invested capital, while the remaining profit is allocated solely to KfW (and thus Germany).
 - If in a financial year the distributable profit (after tax) is lower or equal to 2.5 % of the invested capital, the private investors (who hold 50 % of the shares in GLNG) receive pro rata all the net profits in the form of dividends and KfW does not receive any dividends.
 - However, if no dividend can be distributed in a given financial year or if the dividend distributed to Gasunie and RWE is less than 5 % of the invested capital, they are not entitled to any additional compensation from KfW. Moreover, all shareholders are proportionally liable for losses of GLNG with the equity they have contributed.
- (25) Germany explains that the measure therefore does not guarantee a 5 % annual return but provides a layer of protection against low returns to the private investors (in years when the returns are below 5 % of the total invested capital by all shareholders). If, on the other hand, the annual return for shareholders is above 5 % of the total initial investment, KfW does not forego any dividends to the private investors and receives 50 % of the distributable dividends. Should the Project turn out to be more profitable than expected in the business plan, in particular should the yearly return be higher or equal to 5 % of the total initial investment, no State aid would be paid out under the measure.
- (26) The present value of the aid foreseen under the mechanism in the forecasted central scenario, on the basis of the detailed business plan provided by the German authorities (see Section 2.7) amounts to EUR 40 million (see Section 2.8).
- (27) Furthermore, under the German LNG Acceleration Act, operation of the terminal for the import of LNG is permitted until the end of 2043. As a consequence, the Shareholders' Agreement provides that the Terminal is limited to import LNG for a period of 15 years with start of operations in 2026 and end in 2041, but at the

latest 2043 in case of delays, after which KfW envisages to divest its shares at market price, while Gasunie and RWE, as undertaken in the Shareholders' Agreement, will convert the terminal for the import of green energy carriers.

- (28) Germany commits that KfW will sell its shares at market prices, in line with the conditions laid down in Section 4.2.3 of the Commission Notice on the notion of State aid¹⁰. The Shareholders' Agreement provides that, when KfW exits its shareholding, Gasunie and RWE will have a right of first offer. Germany will carry out an independent expert valuation to establish that the offer reflects the market value of the asset. If KfW refuses the offer, KfW will sell its shares in a competitive bidding process. The other shareholders will be entitled to participate in such open market sale process. However, RWE and Gasunie retain the possibility to exercise a pre-emptive right for the offer made by the highest bidder. If after these steps there is no buyer, KfW will retain its shares. Moreover, KfW is free to terminate at all times and at its own discretion a sales process that it has initiated.
- (29) Furthermore, the Shareholders' Agreement provides for an early exit possibility of KfW before the end of the terminal LNG operational period of 15 years. To this end, the Shareholders' Agreement provides for a termination of the preferential dividend mechanism before its 15-year period (i.e. before 31 December 2041) against payment to Gasunie and RWE of a one-time compensation amount equal to the net present value of the preferential dividend distribution for the remaining period until the lapse of the 15 years. The calculation of net present value of the preferential dividend distribution at the time of early exit follows the same methodology that has been used for the business plan in the central scenario.
- (30) In case this early exit possibility is used, it may lead to a change of the form of aid disbursement but not to any change of the aid amount based on the methodology proposed (see recital (23)). In particular, the expected aid for the remaining period will be verified by an independent expert, based on the proposed methodology, to ensure that the one-off payment at the moment of an early exit does not lead to an additional advantage to any of the beneficiaries. The calculation of the preferential distribution compensation will apply the proposed methodology to quantify the expected advantages the beneficiaries would receive in the remaining years if KfW were not to make use of the early exit possibility. For this calculation, the business plan will be updated at the time of the sale to ensure the quantification is accurate and limited to the amount of aid that would be disbursed over the remaining years also considering any potential developments in costs and sources of revenue which may have taken place in the meantime and that could affect the expected distributable income. The German authorities commit to submit the independent expert valuation to the European Commission.

2.4. Safeguards against overcompensation

2.4.1. Risk sharing during the 15 years of LNG operation

- (31) The German authorities point out that the dividend distribution mechanism is a risk-sharing tool on the basis of the business plan as the central scenario. Germany notes

¹⁰ Commission Notice on the notion of State aid as referred to in Article 107(1) of the Treaty on the Functioning of the European Union (2016/C 262/01).

that in the field of energy, risk-sharing mechanisms (for example, contracts for differences in the support of renewables) are gaining importance.

- (32) Germany stresses that the dividend sharing mechanism for the 15 years of LNG operation ensures that the private investors are willing to participate in the Project. Should the Project turn out to be more profitable than expected in the business plan, less aid would be paid out. In particular, should the yearly return be at least equal to 5 % of the total initial investment, no State aid would be paid out under the measure.
- (33) The German authorities explain that the further provisions in the governance of GLNG prevent that risks are turned ex-post to the disadvantage of KfW during the 15 years of duration of the preferential dividend distribution mechanism:
- The Shareholders' Agreement includes a provision that ensures that 100 % of the distributable earnings are paid out each year, hence eliminating the possibility of retaining earnings above the 2.5 % thresholds for further investments;
 - In case the shareholders unanimously decide to give shareholder loans to GLNG, the Shareholders' Agreement provides that any amounts of repayment of shareholder loans (principal and interest) to Gasunie and RWE from GLNG will be deducted from the preferential dividends allocated to Gasunie and RWE, i.e. will be set-off against the aid.
 - The business plan includes the investments foreseen during the lifetime of the Project. While the initial investment includes the necessary works to enable further green energy carriers conversion investments later, later investments related to the conversion of the terminal for the import of alternative energy carriers will be financed solely by the private investors (likely Gasunie and RWE). Should any unplanned structural investment be undertaken in which KfW would want to participate (or which would be financed from the Project' profits), the German authorities commit to notify it to the Commission;
 - The contracting of all services to GLNG will be conducted on the basis of arm's length principles; and
 - The Third Party Access provisions, in line with the exemption decision, ensure that the owners of the terminal can only make capacity bookings at the same conditions as unrelated third parties.

2.4.2. *Exit value after 15 years*

- (34) The German authorities point out that it is difficult to reliably estimate the residual value of the terminal after the end of the 15-year LNG operation (see recital (71)).
- (35) In particular, the value of the terminal after the 15-year LNG period will largely depend on the degree of development of the hydrogen and green energy carriers market. Germany submits that it is not possible to predict with a high degree of confidence how this market will look in 15 years' time, and that the estimated residual value used for the calculation of the funding gap is subject to a high degree of variability depending on the methodology used for its estimation. Moreover, the residual value of the terminal, even when estimated in a conservative manner, is very large and in the base case amounts to EUR [250-750] million.

- (36) The German authorities have included in the measure a claw-back mechanism in case the actual residual value at the time of exit of KfW after 15 years significantly exceeds the residual value as included in the business plan central scenario, which would only kick in if the private investors have achieved an overall IRR of at least 5 % on their initial investment. The claw-back mechanism shall apply when the preferential dividend ceases to apply after 15 years of operation, regardless of whether KfW has already sold its shares or not.
- (37) At the end of the 15 years of operation of the terminal, the actual residual value will be determined in (i) an open, competitive sale process conducted by KfW, or (ii) based on an independent expert valuation if RWE and Gasunie exert their right of first offer (see recital (28)) or if KfW divests its shares before the end of the 15 years of operation of the terminal. Also in the latter case (early divestment of KfW shares) the actual terminal value will be determined at the end of the 15 years of operation of the LNG Terminal. Extraordinary investments made by Gasunie and RWE for the green retrofitting of the terminal are deducted from the residual value. For the proper determination of the value of the extraordinary investments for the green retrofitting, the opinion of an independent expert will be obtained.
- (38) In order to determine whether the claw-back should kick-in, the German authorities will check whether the actual residual value determined as described above is higher than the residual value which would have resulted in a 5 % return to private investors (the ‘breakeven residual value’), calculated ex-post using actual historical data. If a difference between the actual residual value and breakeven residual value is positive (the “excess residual value”), the amount to be clawed-backed will be 70 % of the excess residual value or the aid that was paid out to the private investors under the preferential dividend mechanism, whichever is lower.
- (39) The German authorities argue that this ensures that the amount that could be clawed-back does not exceed the aid that was paid out to the private investors under the mechanism. The German authorities argue that Gasunie and RWE should be entitled to retain 30 % of the excess residual value, in view of Gasunie’s and RWE’s contributions, in particular of know-how to the implementation of the Project and to maintain an incentive to work towards a successful green retrofitting of the LNG-terminal. The authorities consider that a high excess residual value would be achieved primarily if the private shareholders were to contribute to the success of the Project extraordinarily well, thus building a valuable terminal for the future energy supply of the European Union. This contribution to energy supply and climate neutrality in the European Union is particularly worthy of support and should therefore be positively incentivized.

2.5. The beneficiaries

- (40) The beneficiaries of the measure are the recipients of the preferential dividend sharing mechanism among the owners of GNLG:
- ‘Gasunie LNG Holding B.V.’, of which ‘N.V. Nederlandse Gasunie’ is the sole shareholder and ultimate parent company; and
 - ‘GBV Zweiunddreißigste Gesellschaft für Beteiligungsverwaltung mbH’, of which ‘RWE AG’ is the sole shareholder and ultimate parent company.

2.6. Exemptions from tariff regulation and third party access

- (41) On 15 March 2023, BNetzA granted a provisional exemption within the meaning of Article 36(1)(b) of Directive 2009/73/EC (Decision No BK7-22-140) to the LNG facility at the Brunsbüttel site, which was notified to the Commission on 15 March 2023 ('BNetzA's provisional exemption decision'). On 2 June 2023, the Commission adopted under Article 36 of Directive 2009/73/EC the exemption of the German LNG Terminal in Brunsbüttel, Germany, from the requirements regarding third party access and tariff regulation¹¹ ('Commission exemption decision'). The Commission exemption decision grants an exemption from the third party access and tariff regulation requirements, detailed in the framework for regulated access to LNG terminals¹². The Commission exemption decision is binding on BNetzA who accordingly has amended its provisional decision of 15 March 2023 in accordance to the Articles laid down in the Commission exemption decision. The final decision was published by BNetzA on 19 June 2023.
- (42) The exemption, as granted by BNetzA's exemption decision covers the total annual throughput capacity of 10 billion cubic metres for 15 years, with the following provisions:
- GLNG GmbH needs to charge tariffs on the users of the terminal.
 - LNG GmbH needs to apply a non-discriminatory and transparent procedure for long-term allocation of capacity, including at minimum the following:
 - a. All potential users of capacity need to be pre-registered at GLNG GmbH;
 - b. German LNG is free to offer a variety of products, as far as these are designed in a transparent and non-discriminatory manner.
 - c. The minimum booking requirements for capacity bookings may not exceed 1 bcm per year;
 - d. The minimum duration requirements for capacity bookings may not exceed 10 years.
 - e. The booking year corresponds to the calendar year;
 - f. For the first allocation of long-term capacity, bookings received during a predefined period of 10 business days need to be treated as received at the same point in time. The booking period needs to be announced 10 business days in advance, providing all the required information.
 - g. In principle excess demand for capacity shall be allocated at an equal ratio to the different buyers. Deviating from this the allocation may take into account the duration and the volumes of the bookings, favoring longer bookings and higher volumes;
 - h. For long-term bookings after the first allocation a maximum surcharge of up to 10 % compared to the tariff in the first allocation may be applied. The capacity allocation should be done in a transparent and non-discriminatory manner.

¹¹ See Commission Decision of 2.6.2023 on the exemption of the German LNG Terminal in Brunsbüttel, Germany, from the requirements regarding third party access and tariff regulation.

¹² Verordnung zu regulatorischen Rahmenbedingungen für LNG-Anlagen vom 16. November 2022.

- A minimum of 10 % of the maximum annual capacity needs to be reserved for short-term bookings. For the short-term bookings, at least the following criteria need to be respected:
 - i. All potential users of capacity need to be pre-registered at GLNG GmbH;
 - j. The short-term capacity is to be allocated in slots that shall be distributed over the calendar year as equally as possible. Each slot shall allow for the offloading of at least 150 000 m³ of LNG. There shall be a minimum of eight slots per year;
 - k. Slots shall be allocated annually on a reoccurring date which is to be published. Allocation of slots shall occur via auction or another transparent and non-discriminatory procedure. The auction date is to be announced at least four weeks in advance and all relevant information shall be available at least two weeks before the annual auction;
 - l. The starting price for the auctions can be at most 10 % higher than the base tariff;
 - m. If an auction for short-term capacity is oversubscribed, further auction rounds shall be held. Only those users, which have already participated in the previous auction round may take part in the subsequent round. The starting price shall be increased in each round by a surcharge (a so-called price step). The price steps shall be determined in advance and communicated to the BNetzA, as well as interested parties;
 - n. If a so-called undersell occurs in an auction round, the capacity shall be allocated among the auction participants of the last round via a non-discriminatory and transparent allocation procedure that has been determined and announced in advance by German LNG.
 - o. Only market participants that registered with German LNG but did not book any long-term capacity may participate in the first auction for short-term capacity. Should capacity remain after this first auction, a second auction shall allow for the participation of all registered market participants. Slots not sold in the two auctions shall be allocated on a first come first served basis over the course of the year.
 - Capacity booking contracts need to allow the market participants to resell their capacity rights on the secondary market to other registered market participants. Such a transfer may be rejected by German LNG only on a duly justified basis. All registered market participants will be informed about the available secondary capacity. Capacity holders may resell the contracted capacity on the secondary market until 20 days before the date of the unloading slot.
 - Capacity booking contracts also need to contain a use-it-or-lose-it (UIOLI) provision. The UIOLI provision applies if a capacity holder announces at the latest 20 days prior to the slot that he will not use the slot and does not nominate another registered market participant to which the slot has been transferred. At the latest 19 days before a slot, all registered market participants shall be able to book the freed slot based on a non-discriminatory procedure to be established by the German LNG.

2.6.1. Additional provisions for preserving competition

- (43) GLNG shall notify the BNetzA if at any point in time during the period of the exemption a market player achieves a total level of 65 % or more, combining its

bookings of primary capacity and bookings on the secondary market, of the capacity available for long term booking at the terminal for a duration of five years or more. The competent national authority shall determine whether this market player holds a market share of 30 % or more on either the German upstream or downstream wholesale market for gas. In the event that this market player holds a market share of 30 % or more on any of these markets, the competent national authority shall assess the impact on competition. The BNetzA is invited to consult the German competition authority for the purpose of this assessment.

- (44) Should the competent national authority find that the intended booking would lead to a situation that would be detrimental to competition by risking to creating or strengthening a dominant market position by an undertaking, the BNetzA shall take appropriate measure to prevent a situation that would be detrimental to competition, for example, by limiting the capacity and/or the duration of the intended booking by the concerned market player.
- (45) Should the competent national authority find that the intended booking would not lead to a situation on any of the affected markets that would be detrimental to competition, it shall inform German LNG accordingly and German LNG may continue with the booking process.

2.7. Financial aspects of the Project

- (46) The German authorities have provided the detailed business plan used by the private investors and KfW to evaluate the Project. The business plan provides the central scenario. The main modelling assumptions, required investments, operational expenditures and revenues and the financial return on the Project are summarized as follows.

2.7.1. Modelling assumptions

- (47) The financial model assumes a business operation period of 15 years starting from the fourth quarter of 2026.
- (48) The depreciation period for all assets is assumed at 20 years. The overall corporate tax rate applied amounts to 29.125 %, composed of the corporate income tax (the 'Körperschaftsteuer' tax) and the trade tax for corporations (the 'Gewerbsteuer' tax) at 15.8 % and 13.3 %, respectively.
- (49) The general long-term inflation rate is assumed at 1.5 %, in line with the ECB mandate. In order to calculate the funding gap and the present value of the aid under the measure (calculated as the foregone dividends by KfW in favor of the private investors), the German authorities discounted the projected cash flows using a weighted average cost of capital ('WACC') of 5.07 %¹³.

¹³ The German authorities explained that a 5.07 % WACC has been assumed as it corresponds to the permissible return on equity for investments in new assets of electricity and gas network operators set by the Federal Network Agency in 2021 for the next regulatory period (decision of 12 October 2021, BK4-21-055, BK4-21-055 Beschluss (bundesnetzagentur.de)). Network operators in Germany are allowed to use this interest rate as an "appropriate, competitive and risk-adjusted return on invested capital" when setting network charges. Due to the exemption granted, the LNG terminal is not subject to regulation in this respect; private investors will nevertheless classify it as a comparably regulated project, in particular due to the long-term usage contracts.

2.7.2. *Investment costs*

(50) Total investment costs of the Project (excluding VAT) amount to EUR [1000 - 2000] million, in nominal terms. The eligible investment costs are presented in the following Table:

Table 2: CAPEX of the Project

Investment category	Project capital expenditure (million Euro)
[...]	[...]
[...]	[...]
[...]	[...]
[...]	[...]
[...]	[...]
Total	[1000 – 2000]

Source: information provided by the German authorities.

- (51) The costs associated to the construction of the terminal reported above reflect the best quotation received by the investors following a competitive tendering process.
- (52) As explained in recital (8), the Engineering, Procurement and Construction (EPC) will be carried out by the preferred bidder, the Spanish partnership SENER Ingeniería y sistemas S.A. and COBRA Instalaciones y Servicios S.A. (CSJV).
- (53) The provision of the following items are included in the costs for Engineering, Procurement and Construction ('EPC') Contract which will be carried out by the selected contractor once the investors will sign the Final Notice To Proceed (FNTF):
- Design, engineering and procurement;
 - Jetty foundations and structures;
 - 'Ammonia ready' LNG storage tanks (2 tanks with 165,000 m³ capacity);
 - Civil works such as roads, drainage and landscaping;
 - Onshore piping;
 - Other costs such as buildings, electrical equipment, systems and materials;
 - Commissioning work (such as spare parts);
 - Options, such as a measuring station to the Yara heat-exchange¹⁴ (a facility used for the regasification of LNG).

¹⁴ Yara Brunsbüttel GmbH operates an ammonia and urea facility in Brunsbüttel. GLNG has entered into an agreement with Yara for the supply of heated water from the Yara Plant (facility) to the terminal for vaporisation, creating a heat-cold synergy which creates a minimum environmental footprint for the terminal.

The costs include a contingency budget set at [5-10] %¹⁵.

- (54) The EPC price indexation item is part of the quotation received from the selected EPC contractor. The EPC Price Indexation relies on 8 indices that are being tracked and will impact the final EPC CAPEX. The final EPC price indexation amount will be calculated and added to the EPC CAPEX at the FNTF.
- (55) The German authorities explained that by performing limited up-front investments on the original LNG installation, relatively few, albeit costly, subsequent modifications are required to make a full conversion for the import of ammonia. The upfront investments include the cost to ensure that the initial structural design of storage tanks and their foundations is based on the higher density of ammonia as well as the cost for pre-engineering piping supports and foundations for ammonia service. The German authorities explained that this cost estimate is based on the technical expertise of the investor's technical team and that the EPC contractor has also verified the figure. The German authorities note that in order to achieve the final conversion into enabling the import of ammonia, further investment will be required, such as the upgrade or partial replacement of pumps and the upgrade of the instrumentation and control system, and components to be added, such as an ammonia cracker. It is expected that the addition of a suitable ammonia cracker alone will require a substantial investment. The German authorities note that this equipment would need to be replaced in any case after a 15-year period.
- (56) Further construction investments (row 4 in Table 2), which are not part of the EPC contract, include the Yara connection (heat-exchange), GUD connection (connection to national high-pressure gas grid) and Utility connections as well as a contingency budget. The German authorities explained that this cost item relies on a recent cost estimation performed by an external technical advisor.
- (57) The CAPEX in rows 3 and 4 of Table 2 include a contingency budget set at [15-25] % of the upfront investment because these investments are not backed by a price offer, unlike CAPEX covered by the EPC Contract¹⁶.
- (58) The Project preparation costs concern the costs that are borne by the GLNG parties in the years prior to GLNG start of operations to set-up the Project. These costs include costs related to financial and legal advisory, project management costs, costs related to stakeholder communication, commercial costs as well as the cost of purchasing land.
- (59) The capital expenditure furthermore includes replacement investments estimated as a percentage of the total base investment (excluding the fee for GUD pipeline connection). These are estimated to amount to [...] % in the first two years of operation, [...] % between the third and the fifth year, 1 % between sixth and tenth year of operation and [...] % afterwards. Due to the repurposing of the terminal in 2041, the replacement investments are assumed to stop after 15 years of operation.

¹⁵ The EPC contingency budget is set at [5-10] % based on the experience of Gasunie (and former shareholders) regarding comparable construction projects. The EPC contract is a flat rate and the indexation uncertainty is directly mitigated by the inclusion of the separate cost item 'EPC flat rate indexation evolution'. For the 'other construction' and 'up-front' investment the contingency is set at [15-25] % as these investments are not backed by a price offer and are based on cost estimates with [15-25] % accuracy level.

¹⁶ See footnote 15.

2.7.3. Operating Costs

- (60) The operating costs include the following categories: maintenance and overhaul, energy costs, insurance, land lease, staff and other costs.
- (61) The maintenance & overhaul cost are calculated as [...] % of the total base investment¹⁷.
- (62) The utility costs are estimated to amount to EUR [...] per year, adjusted for inflation. On the other hand, the variable costs of electricity and fuel gas usage incurred by GLNG are charged to the terminal users and therefore are not included in the operating costs.
- (63) The insurance costs are estimated at EUR [...] per year. The estimated staff cost amounts to EUR [...].

2.7.4. Revenues

- (64) The operating revenues of the Project will come from the capacity bookings of the terminal. The marketing of capacities and the charging of fees by GLNG are subject to the conditions as described in recital (42). These revenues will be generated from two main streams, large scale full terminal services and small-scale service.
- (65) The large scale full terminal services comprise two types of capacity products:
 - a) Long-term products: 9 out of 10 bcm have already been sold for EUR 15.5 million per bcm/a in nominal terms as of 2026, whereby [...] % of the tariff will be indexed to the Consumer Price Index ('CPI'). GLNG has already concluded contracts to these conditions with ConocoPhillips and Ineos as well as with RWE for [...] bcm/a. All three contracts are subject to the same conditions. Together, these three contracts encompass 9 bcm/a, meaning that 90 % of the capacities has already been contracted for the entire period that the terminal will operate on LNG. The business plan for long-term bookings is therefore based on already concluded contracts; and
 - b) Short-term products: The regulatory authorities in the exemption decision prescribed that GLNG is required to set aside a reserve quota of 10 % of the maximum annual throughput capacity for short term allocation capacity, 1 bcm per year. In accordance to the European Commission exemption decision, short-term capacity bookings have to be auctioned. The starting price for a slot will be subject to a surcharge of a maximum of 10 % compared to the tariffs for which long-term bookings are remunerated in the respective operating year (i.e. EUR 17.05 million per bcm/a). The business plan assumes short-term bookings at [0-1] bcm/a capacity over the 15 years of operation.
- (66) The small-scale (or break bulk) services aim to split up large-scale LNG shipments into smaller parcels, enabling the distribution and use of LNG for maritime vessels (barges) and trucks. For the small scale capacity a projection is made based on the expected number of small scale movements. The total revenue of small scale services is estimated at a level of EUR [...] per annum.

¹⁷ Germany submits that benchmark data from other projects reflect this maintenance and overhaul cost level of [...] % of base investment for the first operational period of 15 years. These yearly costs are forecasted to start at around EUR [2-8] million in 2026 and to gradually increase with inflation.

- (67) The German authorities explain that the base tariff is within the range of tariffs of other LNG import facilities in North-Western Europe.
- (68) The German authorities have provided a comparison with the following LNG-terminals:
- For Gasunie's Gate land-based terminal in Rotterdam, the most recent sale of throughput capacity (including berthing rights, storage and regasification) was made at a price of EUR 12.5 million per bcm/a;
 - The service tariffs of land-based LNG Terminals Zeebrugge in Belgium and the Montoir-de-Bretagne Terminal in France are respectively 7.4 million per bcm/a and 6.85 million per bcm/a.
 - As regards FSRUs, charter periods are usually 5-10 years (plus options to extend the chartering). The FSRU terminal capacities are marketed to customers who want to exploit short-term market opportunities and look for the flexibility of short-term contracts. LNG customers are generally more risk-averse when committing to longer-term agreements, as future market dynamics and conditions for the import of LNG are uncertain. In the case of FSRUs, customers are willing to pay a higher price due to the shorter contractual commitment and the resulting lower risk of missing market opportunities. At the same time, operational costs of FSRUs are higher than those of land-based terminals due to the charter rates payable to FSRU owners every day of operation. In addition to this, the customers pay for heat which is either provided from external heat sources (such as a power plant process heat) or by the FSRU itself, burning customers' gas for heating purposes.
 - For Gasunie's EemsEnergyTerminal ('EET'), an FSRU in Eemshaven (Netherlands), the most recent sale of throughput capacity was effectuated at a price of EUR 18 million per bcm/a. Germany emphasizes that EET was realized under challenging circumstances within a compressed time frame. The year 2022 was marked by the invasion of Ukraine, leading to a heightened sense of urgency in completing the Project promptly. The time pressure and associated uncertainties during the implementation phase resulted in high project costs, which, in turn, contributed to the higher tariff. Lastly, the willingness of customers to pay a higher price per bcm/a for EET can be attributed to its short-term contractual nature. Unlike long-term contracts that span 15 years, EET only has contracts for five years. LNG customers are generally more risk-averse when committing to longer-term agreements, as future market dynamics and conditions for the import of LNG are uncertain. In the case of EET, customers are willing to pay a higher price due to the shorter contractual commitment and the lower risk associated with it.
 - As regards the FSRU terminal located in Lubmin (Germany), the German authorities explain that this FSRU is not comparable to the EET FSRU and even less so to land-based LNG Terminals. On the cost side, in Lubmin regasification is more expensive due to technical challenges. Specifically, the large floating storage facility (FSU) is not located in the harbour due to the shallow waters. LNG must first be unloaded from the LNG carrier into the FSU. From there it is transported with the help of smaller shuttle ships to the FSRU in the port of Lubmin to be regasified. On the ability to charge higher tariffs needed to cover higher costs, the German authorities explain that the

sale of short-term capacity was done in 2022 in an overheated market, as due to extremely high gas prices (EUR 100/MWh) and forward prices, customers were able and willing to accept significant higher short term annual service charges.

2.7.5. *Residual Value after 15 years*

- (69) The business plan is based on an operational period of 15 years for the import of LNG. At the end of the 15 years of operation and at the latest in 2043, whichever is earlier, the Terminal will be converted to the import of green energy carriers.
- (70) The business case considers both an up-front investment in the terminal to create the conditions for later investments for a conversion to ammonia or alternative green energy carriers (see recital (55)) and a sufficient level of replacement CAPEX and maintenance of the terminal that would allow for a technical life-time of the asset of at least 40 years. Therefore, the German authorities estimate that the asset may be used for the import of green energy carriers for at least another 25 years from 2041 onwards, due to a technical life-time of at least 40 years.
- (71) The German authorities submit that due to the uncertainty surrounding the future market for green energy carriers, the reliability of the estimate of the residual value of the terminal is subject to a high degree of uncertainty. Moreover, in the present case, due to the uncertainty over the future market for green energy carriers after 15 years of operation of the terminal for the import of LNG, it is not possible to produce reliable estimates of future cash flows for the terminal for the import of green energy carriers, therefore a residual value of the terminal needs to be used for the remaining years of technical life-time.
- (72) Against this background, the business plan includes a conservative best estimate for the residual value of the terminal at EUR [250-750] million, which corresponds to the book residual value of the asset (i.e. before further investments for the conversion are taken) with a depreciation period of 20 years. Germany argues that although the actual lifetime of key assets of the terminal is significantly longer than the 20-year depreciation period, this approach is still valid given the high uncertainties with regard to the residual value of the asset in 2041, as this depends largely on the market value of these asset. This market value is predominantly determined by the market demand / price for the terminal's services and thus is influenced by the development of the major macro parameters, such as changes of the energy's sector's set-up (e.g. actual pace of the economy's 'green transformation'), changes in specific technology, or the emergence of competitors.

2.8. Funding gap and aid amount

- (73) On the basis of the business plan, the German authorities have provided the expected IRR of the Project absent the preferential dividend distribution mechanism, the present value of the amount of aid deriving from the preferential dividend distribution mechanism and the calculation of the funding gap related to the Project, i.e. the negative net present value of the cash flows triggered by the Project for the private investors, absent State support. These calculations rely on the financial projections of the business plan. The counterfactual scenario for this Project is that no alternative project would be built.

- (74) Based on the business plan, the German authorities estimate that the return on the entire Project is close to 5 %, the present value of the aid amounts to EUR 40 million and that the funding gap amounts to EUR 44 million. Therefore, the expected funding gap exceeds the expected aid amount under the measure, hence proportionality is ensured.
- (75) The yearly undiscounted (nominal terms) expected aid amount between 2028 and 2042, when dividends are paid, in the central business case ranges between EUR 4.2 million in 2039 and 2040 and EUR 8.5 million in 2042.
- (76) For Gasunie and RWE, the Project IRR (starting at the time of the final investment decision following the closure of the Shareholders' Agreement and reaching until 31 December 2041) is calculated at [2-8] % based on the central scenario in the business plan. Due to the dividend mechanism, the IRR for KfW is projected at [2-8] %.
- (77) The German authorities explain that the business plan is a central scenario for the 15 years of LNG operation. Some buffers have been built in that could, if not used, reduce the amount of aid paid out (on the cost side, but also on the revenue side, as tariffs are indexed to inflation). On the other hand, in adverse scenarios, in which the aid amount would increase, the aid that would have ex-ante been needed for the investors to undertake the Project would increase as well.
- (78) The German authorities have conducted an extreme scenario robustness check. The scenario assumes that the annual profit to be distributed to shareholders would in every year be equal to 2.5 % of the total invested capital by all shareholders, keeping the residual value unchanged. Under this scenario, the amount of aid would be at its maximum and equivalent to EUR 125 million (see recital (86)), but would still not be above a hypothetical funding gap that would result from such scenario. Therefore, the preferential dividend distribution mechanism ensures by construction that the aid amount does not surpass the funding gap.

2.9. Avoidance of lock-in effect of natural gas and contribution to the Union's 2030/2050 climate targets

- (79) The German authorities explain that the German import capacities are not automatically to be equated with the gas volume that is physically landed. Rather, the Project concerns infrastructure, which provides the possibility to import gas if there is a market demand. The quantity actually imported is thus determined by consumption. The national climate protection goals are therefore not affected by the measure.
- (80) Moreover, they explain that the Project is compatible with the Union's long term climate goals, as the terminal will be completely converted for the import of green hydrogen or its derivatives¹⁸ 15 years after the start of operations,¹⁹ at the latest by 2043, and is expected to be used thereafter to import renewable energy sources for

¹⁸ The parties currently envisage that the terminal will be retrofitted for the import of green ammonia. However, the partners are open to all types of technology for green energy carriers (i.e. ammonia, green hydrogen or other green hydrogen derivatives) and will assess the technological options at a later stage.

¹⁹ As undertaken in the Shareholders' Agreement, the terminal will be fully converted for the import of green energy carriers 15 years after the start of operations and at the latest in 2043.

at least 25 years. Under the German LNG Acceleration Act²⁰, the permitted operation time of LNG terminals for the import of liquefied natural gas is limited until the end of 2043.

(81) In line with this legal framework, the private parties (Gasunie and RWE) have undertaken in the Shareholders' Agreement to convert the terminal for the import of alternative energy sources after 15 years of operation and at the latest by 2043. In order to implement the conversion in a cost and resource efficient manner, the parties have agreed on the following:

- The terminal will be constructed taking into account the technical specifications necessary to facilitate a later conversion to ammonia and to allow the use of parts of the facility even after the conversion. Importantly, the LNG tanks will be reinforced to ensure compatibility with ammonia, which has a higher density than LNG. Absent these technical adaptations of the LNG Terminal at the time of construction, it would not be possible to convert the terminal to the import of green ammonia at a later stage;
- Further, the parties have agreed on long-term measures and milestones to be carried out during the operational phase of the LNG Terminal (the "Green Retrofitting Implementation Path"). The Green Retrofitting Implementation Path includes, inter alia, the start of basic and detail engineering, the development of safety and operations concepts, the initiation of permitting processes, etc.²¹;
- GLNG will have two additional managing directors who will from the very beginning of the Project be responsible exclusively for activities related to the later conversion and who will prepare and promote the conversion in all phases of the Project.

(82) The German authorities note that at the time of the conversion to the import of green energy carriers further investments will be required, such as the construction of an ammonia cracker. These investments will be financed by the private investors (likely Gasunie and RWE), not from the income or loans of GLNG or through additional equity injections from KfW. The final decision on what technology will be used among possible green energy carriers will be taken by the private shareholders at the time of conversion, thereby favoring technology-neutrality and allowing the terminal to benefit from future technological advances.

²⁰ Under sec. 5 para. 1 no. 4 of the German LNG Acceleration Act, the planning and environmental permit required for the construction and operation of land-based terminals for the import of liquefied natural gas are to be limited until the end of 2043. Also, sec. 5 para. 2 states: "*For a facility pursuant to Section 2 Paragraph 1 Numbers 1 and 2, which is to be operated beyond December 31, 2043, approval for continued operation can only be granted for operation with climate-neutral hydrogen and derivatives thereof. [...]*".

²¹ [Implementation Path]

2.10. Market information from third parties

2.10.1. *The information submitted by third parties*

- (83) On 1 June 2023, the Commission received a submission from a third party, which the party considered market information. In summary, the submission raised the following issues:
- a. The need for additional LNG capacity is contested:
 - According to the third party, claiming public information by the German government, the construction of 12 new LNG terminals would be planned, eight floating and four stationary land-based terminals for a capacity of 71.6 bcm/a as of 2026. The third party expresses concerns whether all the planned terminals are necessary to secure supply, stressing that floating terminals would be sufficient and that land-based terminals like the planned terminal in Brunsbüttel would lead to overcapacities.
 - The third party argues that Germany was able to meet its gas demand mainly thanks to imports from neighbouring countries and gas storage levels were consistently high and that scientific modelling shows that this will also be possible in the future. Referring to the LNG Acceleration Act, the German government has not substantiated in there why it assumes that there will be much lower imports in the future.
 - b. The hydrogen-readiness of the Project is contested, the third party argues that the terminal will not be ready from the outset for the import of hydrogen or its derivatives, which will require further investments for its conversion, and that there are technical challenges of converting the terminal for the use of ammonia or hydrogen which enhance the risk of lock-in.
 - c. It is argued that the Project creates a lock-in effect for the use of fossil gas, as long-term contracts are necessary to enable the final investment decision of the Project. These create path dependencies for higher emissions from fossil gas consumption in the future. New LNG terminals in Europe also lead to the construction of additional export terminals in other countries and an increased grid infrastructure for fossil gas, contributing to further fossil gas lock-in. This in turn may reduce confidence in the transition and the renewable energy development, and the increased supply of LNG at low prices will incentivise further consumption of fossil gas instead of making demand fall.
 - d. It is argued that the Project does not contribute to achieving the Union's 2030 climate target and 2050 climate neutrality target, as the Project inherently contributes to climate change since fossil gas-based activities and facilities produce greenhouse gas emissions across a wide-ranging life cycle. Moreover, it is unclear how the Project could contribute to the mandatory downward trajectory for the use of all fossil fuels, the national greenhouse gas emissions reduction targets, the German National Energy and Climate Plans and the German Long-Term Strategy (Climate Action Plan 2050) over the lifetime of the Project.

2.10.2. Additional information provided by Germany in response to the issues raised by the third party

- (84) Germany submitted to the Commission a reply to the third party letter, with the following observations:
- a. On LNG import capacities, according to current plans LNG import capacity will amount to approximately 54 bcm in 2027, as opposed to 71.6 bcm/a claimed by the third party (see Table 1 above). In response to the argument that only FSRUs would be sufficient to ensure the supply of gas and thus render the Brunsbüttel fixed terminal superfluous, Germany argues that the FSRUs alone, with a capacity of around 27 bcm/a in total, would not be sufficient to provide a security buffer and that fixed terminals are preferred over FSRUs for both CO₂ emission and economic reasons²², therefore the switch from floating to fixed terminals should be carried out as soon as possible. Moreover, Germany explains that although it was able to ensure gas supply in the last winter even without or only with very small direct LNG imports, this cannot be projected in the future as the reduction in gas consumption was achieved through extreme gas saving efforts and through the operation of more polluting coal-fired power plants, which are part of the network reserve and its safety readiness, authorised until April 2024, which are not a preferable option to natural gas²³. With regard to imports from neighbouring countries, it should be borne in mind that they never supply only to Germany as a destination, but also other countries for which Germany is only a transit market. Demand from these countries is also expected to increase against lost Russian volumes.
 - b. On hydrogen readiness, in addition to the explanation already provided (see recitals (79) to (82)), Germany stressed that, in line with the Amended LNG Acceleration Act²⁴, for the terminal it is demonstrated that equipment components that cannot be retrofitted retrospectively or only at disproportionate costs are already suitable from the outset for the import of ammonia. Moreover, Germany argues that the LNG Acceleration Act specifically demonstrates that land-based LNG terminals are not intended to create longer-term LNG import routes and that the framework for subsequent use for the import of green gases will be established before construction starts.
 - c. Finally, Germany notes that the development of LNG infrastructure for the transitional import of liquefied natural gas is without prejudice to national and European climate targets. The decarbonisation of energy supply in the respective consumption sectors will be continuously driven by increasing the share of renewable energy, savings and technological measures.
 - Germany's 2030 climate targets including the plans relating to an early coal exit depend on a certain amount of gas imports available. Given the loss of

²² FSRUs are less sustainable and are less environmentally friendly than land-based terminals (e.g., on FSRUs regasification energy is usually derived from burning natural gas, while fixed terminals can use waste heat from surrounding industries). The charter cost for FSRUs is also significantly higher than investments in fixed terminals.

²³ Germany submits that more coal-fired power plants with a total capacity of approximately 9 GW (lignite and hard coal) were put in use in the Winter 2022/23 and will remain on standby until March 2024 (current planning). Increased electricity production with coal in the last winter was a direct consequence of a lack of natural gas and resulted in increased CO₂-emissions.

²⁴ The amendment to the LNG Acceleration Act entered into force on 14 July 2023..

pipeline gas imports to Germany following Russia's war on Ukraine, the currently planned LNG terminal capacities are required to not jeopardise these plans. Without sufficient fixed LNG terminal capacities available (in addition to the already planned FSRUs), the coal phase-out plans and related 2030 climate targets may be significantly more difficult to achieve.

- The demand for natural gas will lightly decrease until 2030 according to the long-term scenario used by the German authorities for capacity calculation from 82 bcm/a in 2022 to 74 bcm/a in 2030. Imported LNG does not conflict with the roll-out of renewable energy which is on a clear path to generate 80 % of Germany's electricity demand by 2030. The German LNG infrastructure is designed to react flexibly to the actual natural gas demand and is subordinate to the acceleration of the roll-out of renewable energies (FSRUs will be taken out of operation when not needed).

2.11. Legal basis and Budget

- (85) With regard to national legislation, the main legal basis for the Measure is the Federal Budget Act (Haushaltsgesetz) 2023 (BGBl. I p. 2485) as well as the German LNG Acceleration Act of 24 May 2022 (BGBl. I, 802).
- (86) The State aid is provided through that part of GLNG's distributable income that would have accrued to KfW (and Germany) according to the shareholding but is redistributed to the other two shareholders in accordance with the preferential dividend distribution mechanism. The expected budget is EUR 40 Mio, which can increase up to 125 million (the maximum amount of aid that can be paid under the preferential dividend distribution mechanism, see recital (78)).
- (87) German Authorities have confirmed that they will not implement the measure before the notification of the Commission's decision authorising the measure.

2.12. Cumulation and Transparency

- (88) Germany has confirmed that the aid measure would not be cumulated with other forms of support to cover the same eligible costs.
- (89) Germany confirmed that it will publish on the website <https://webgate.ec.europa.eu/competition/transparency> the notified measure, the identity of the granting authority; the identity of the beneficiary, the aid instruments and amount of aid granted to the beneficiary; the objective of the aid, the date of granting, the type of undertaking; the Commission's aid measure reference number; the region where the beneficiary is located and the principal economic sector of the beneficiary.

3. ASSESSMENT

3.1. The existence of State aid according to Article 107(1) TFEU

- (90) According to Article 107(1) TFEU, the qualification of a measure as State aid requires the following conditions to be met cumulatively:
 - the measure is financed by the State and through State resources;
 - it grants a selective advantage liable to favour certain undertakings or the production of certain goods;

- the measure distorts or threatens to distort competition;
- it has the potential to affect trade between Member States.

3.1.1. Economic Advantage

- (91) The Commission notes that the notified measure will provide an economic advantage to Gasunie and RWE (through their investment vehicles). The Commission notes that KfW acquires ordinary shares in GLNG, while 50 % of GLNG are held by other shareholders. The respective shareholdings are proportional to each party's contribution to the investment cost of the Project. The shareholder agreement provides however that the returns from the shares are not shared by the same proportions, but by means of a preferential dividend distribution mechanism, due to which Gasunie and RWE obtain a certain protection against low returns on their investment at the expense of KfW. The aid amount are the foregone dividends by KfW under the mechanism, compared to a proportional pay-out of dividends. This mechanism constitutes an economic advantage to its beneficiaries which they would not have obtained under normal market conditions.

3.1.2. Selectivity

- (92) The advantage granted by the measure is selective, since it is awarded only to Gasunie and RWE.

3.1.3. Imputability and the involvement of State resources

- (93) Resources from KfW, which is fully publicly owned and for this Project acts on behalf of the government, are considered State resources and its action imputable to the State since the German Government has discretion to decide on the use of these resources.
- (94) In particular, as described in recitals (23) and (24), Germany mandated KfW to agree to the preferential dividend distribution mechanism. Germany will reimburse KfW for all expenses related to the acquisition and indemnify KfW from all risks and disadvantages resulting from the transaction. In turn, all advantages resulting from the transaction will be transferred to and belong to Germany.

3.1.4. Impact on competition and on trade between Member States

- (95) The Commission observes that the terminal is not the only LNG terminal in Germany and North-Western Europe. Also, further LNG terminals are planned to start operations in Germany in the coming years. Gas is traded between Member States, and Germany is connected to the EU grid, with competition among LNG terminals.
- (96) The measure may strengthen Gasunie and RWE's position on the EU market for LNG terminal services. It follows that the measure is therefore likely to distort or threaten to distort competition and affect trade between Member States.

3.1.5. Conclusion regarding the existence of State aid

- (97) Based on the above-mentioned elements, the Commission concludes that the measure constitutes State aid within the meaning of Article 107(1) TFEU.

3.2. Lawfulness of the aid

- (98) By notifying the aid measure before its implementation, the German authorities have respected the notification and standstill obligation laid down in Article 108(3) TFEU. The shareholder agreement between KfW and the private parties contains State aid approval as a closing condition (recital (8)).

3.3. Compatibility of the aid

3.3.1. Legal basis for assessment

- (99) Article 107(3)(c) TFEU provides that the Commission may declare compatible with the internal market aid to facilitate the development of certain economic activities or of certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest. Therefore, compatible aid under that provision of the Treaty must contribute to the development of a certain economic activity. Furthermore, the aid should not distort competition in a way contrary to the common interest.
- (100) The measure aims to finance the construction of an LNG regasification terminal in Germany. Support for gas infrastructure falls within the scope of the Commission Guidelines on State aid for climate, environmental protection and energy ("CEEAG"). The Project constitutes a gas energy infrastructure in line with recital 19, point 36(b), of the CEEAG.
- (101) The Commission has therefore assessed the compatibility of the measure on the basis of the general compatibility provisions of the CEEAG (set out in section 3 of the CEEAG) and the specific compatibility criteria for aid for energy infrastructure (section 4.9 of the CEEAG). In its assessment of the notified aid measure, the Commission also took note of the market information received by a third party and the reply by the German authorities.

3.3.2. Positive condition: the aid must facilitate the development of an economic activity

3.3.2.1. Identification of the economic activity which is being facilitated by the measure, its positive effects for society at large and, where applicable, its relevance for specific policies of the Union

- (102) In line with points 23 to 25 of the CEEAG, Member States must identify the economic activities that will be facilitated as a result of the aid and describe if and how the aid will contribute to the achievement of Union policies and targets.
- (103) The aid will facilitate the development of a new onshore LNG Terminal, thereby developing the trade in natural gas and improving energy security of supply in Germany and in Central and Eastern Europe. The Project will indeed improve access to the global LNG market and hence, bring an additional point of entry for gas. Therefore, the measure supports the development of trade in imported gas in Germany and in the Central European region, which is fully aligned with the EU objectives for secure energy supply, also enshrined in Article 194 TFEU. In this respect, the Commission has already found that aid for the construction or

expansion of LNG Terminals contributes to improving the security of supply in the Union and the functioning of the internal energy market²⁵.

- (104) In line with point 371 of the CEEAG, the Commission considered that modern energy infrastructure is crucial for an integrated energy market that meets climate targets while ensuring security of supply in the Union. Adequate energy infrastructure is a necessary element of an efficient energy market. Improving energy infrastructure enhances system stability, resource adequacy, integration of different energy sources and energy supply in under-developed networks.
- (105) While gas is a bridge energy carrier in the transition to renewable sources of energy, the Commission takes positively into account the contribution to the security of energy supply that this measure will have by allowing to replace a part of Russian gas imports (see recital (13)).²⁶
- (106) Finally, the measure creates the conditions for a later use of the terminal with alternative fuels and hence will contribute to the development of infrastructure for the import of green hydrogen carriers supporting the green energy transition (see recital (79)).
- (107) In view of the above, the Commission concludes that the notified aid measure contributes to the development of trade in LNG with the possibility to contribute to the development of import capacity for renewable fuels, in a manner that improves the energy infrastructure network and security of supply in Germany and in the EU.

3.3.2.2. Incentive effect

- (108) According to point 26 of the CEEAG, aid can be considered as facilitating an economic activity only if it has an incentive effect. An incentive effect occurs when the aid induces the beneficiary to change its behaviour, to engage in an additional economic activity or in a more environmentally-friendly economic activity, which it would not carry out without the aid or would carry out in a restricted or different manner. The aid must not support the costs of an activity that the aid beneficiary would anyhow carry out and must not compensate for the normal business risk of an economic activity (point 27 of the CEEAG).
- (109) Proving an incentive effect entails the identification of the factual scenario and the likely counterfactual scenario in the absence of aid (point 28 of the CEEAG). For aid to infrastructure, the counterfactual scenario is taken as the situation in which the Project would not take place (point 381 of the CEEAG).
- (110) Germany submitted that in the absence of the aid, Gasunie and RWE would not have the incentive to undertake the material investments required for the construction and operation of the LNG Terminal. The analysis provided by Germany shows that without the measure, the construction and operation would not take place because the expected market revenues do not suffice to ensure viability of the Project, leading to a funding gap (see recital (74)). Without the aid, the

²⁵ SA.31953 (2011/N) Construction of a LNG Terminal in Świnoujście, Poland, SA.35165 (2013/NN) and SA.35977 (2012/N) – Greece: Upgrade of the Liquefied Natural Gas (LNG) Terminal in Revithoussa, SA.51983 (2019/N) - KrK LNG Terminal – Croatia and SA.55526 (2021/N) - LNG Terminal Alexandroupolis in Greece.

²⁶ See in general the Communication from the Commission: REPowerEU Plan, 18.5.2022, COM(2022) 230 final.

Project could not materialise and contribute to ensuring security of supply and the development of trade, diversifying away from Russia, in LNG and natural gas in Germany and in the EU. The measure will thus allow the realisation of the benefitting Project, which would not have taken place in the absence of the aid.

- (111) According to point 29 of the CEEAG, aid does not have an incentive effect for the beneficiary in cases where the start of works on the project or activity took place prior to a written aid application by the beneficiary to the national authorities. In cases where the beneficiary starts implementing a project before applying for aid, any aid granted in respect of that project will, in principle, not be considered compatible with the internal market.
- (112) The Commission notes that the Project was originally planned with private partners but was not considered economically viable (see recital (4)). Preparatory works by the EPC contractor only started in September 2022, after the German Authorities had expressed their intent to provide support for the Project (see recital (8)). Finally, the contract with the selected EPC contractor to start works has not yet been signed and works on the Project have not started (see recital (8)). Therefore, the measure complies with point 29 of the CEEAG, as start of works on the Project did not take place prior to the German authorities providing their intention to support the Project, subject to a stand-still clause.
- (113) According to point 32 CEEAG, the Commission considers that aid granted merely to cover the cost of adapting to Union standards has, in principle, no incentive effect. The Commission notes that the Project entails the construction of a new energy infrastructure, which is not in any way related to adapting to Union standards.
- (114) In view of the above considerations, the Commission concludes that the measure has an incentive effect, as it induces the beneficiary to engage in an economic activity, which it would not carry out without the aid.

3.3.2.3. No breach of any relevant provision of Union law

- (115) According to point 33 of the CEEAG, if the supported activity, or the aid measure or the conditions attached to it, including its financing method when it forms an integral part of the measure, entail a non-severable violation of relevant Union law, the aid cannot be declared compatible with the internal market.
- (116) The Commission notes that the terminal has received the Commission's approval of the terminal's exemption from the requirements regarding third party access and tariff regulation (see recital (10)), in line with Article 36 of Directive 2009/73/EC.²⁷ The BNetzA has taken the final exemption decision for the terminal, accepting the amendments put forward in the Commission exemption decision.
- (117) In relation to compliance with national and EU public procurement rules, the Commission's assessment on compatibility of State Aid could be affected by a possible incompliance with EU public procurement rules if it produces additional distortion of competition and trade on the market for the provision of LNG

²⁷ Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009, concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC OJ L 211, 14.09.2009, p. 94

regasification services (market on which the beneficiaries of the aid – Gasunie and RWE – will be active through GLNG).

- (118) The Commission notes that Germany has submitted that the tenders for the EPC contract were conducted on the basis of national procurement rules, in line with EU public procurement rules. In any event, a potential breach of public procurement rules might have produced distortive effects on the market of LNG terminals construction works (market in which the EPC contractor is active). However, the object of the State support to the beneficiaries is to enable them to offer LNG regasification services. Therefore, no additional distortive effect on the competition and trade on the market for LNG regasification services has been identified that would be created by a potential non-compliance with Directive 2014/25/EU, as regards the selection of the EPC contractor. Therefore, in absence of an "indissoluble link" between EU public procurement rules as regards the terminal's construction and the object of the aid, the compatibility assessment of the aid cannot be affected by a potential infringement²⁸.
- (119) Therefore the Commission notes that the lawfulness of its State aid decision does not depend on compliance with national and EU public procurement rules, as the choice of another undertaking for the construction of the Project would not alter the assessment under the State aid rules (see recital (9)).
- (120) The Commission therefore has no indication that the measure contravenes any relevant provision or general principles of Union law and is in line with point 33 of the CEEAG.

3.3.3. *Negative condition: the aid measure must not unduly affect trading conditions to an extent contrary to the common interest*

- (121) Distortions of competition and trade are minimised if the aid is necessary, appropriate and proportionate, and the cumulation and transparency requirements are met.

3.3.3.1. Necessity and appropriateness of the aid

- (122) The Commission recognised in point 372 of the CEEAG that where market operators cannot deliver the infrastructure needed, State aid may be necessary in order to overcome market failures and to ensure that the Union's considerable infrastructure needs are met.
- (123) Energy infrastructure is typically financed through user tariffs and the granting of State aid is a way to overcome market failures which cannot be fully addressed by means of compulsory user tariffs (points 379-380 of the CEEAG).
- (124) The Project is not on the list of projects of common interest (PCI)²⁹. Therefore, the Commission needs to examine if the conditions of paragraph 380(b) of the CEEAG are met. In its assessment, the Commission will consider to what extent a market

²⁸ See Commission Decision of 6.3.2017 on the measure "SA.38454 - 2015/C (ex 2015/N) which Hungary is planning to implement for supporting the development of two new nuclear reactors at Paks II nuclear power station" and Court Case T-101/18.

²⁹ See Commission Delegated Regulation (EU) 2022/564 of 19 November 2021 amending Regulation (EU) No 347/2013 of the European Parliament and of the Council as regards the Union list of projects of common interest.

failure leads to a sub-optimal provision of the necessary infrastructure, to what extent the infrastructure is open to third party access and subject to tariff regulation; and to what extent the Project contributes to the Union's security of energy supply or to the climate neutrality objectives of the Union. In the following, the Commission will assess these points, whereby the security of supply and the sub-optimal provision of infrastructure are considered jointly against the background of the measure.

- *Market failure leading to sub-optimal provision of the necessary infrastructure; contribution to security of energy supply*

- (125) In order to demonstrate the necessity of the measure, it has to be established that the measure is targeted towards a situation where aid can bring about a material improvement that the market alone cannot deliver.
- (126) The Commission notes that Russia's military aggression against Ukraine has disrupted the world's energy system. It has caused hardship as a result of high energy prices and it has heightened energy security concerns, bringing to the fore the EU's over-dependence on gas, oil and coal imports from Russia. In March 2022, EU leaders agreed in the European Council³⁰ to phase out Europe's dependency on Russian energy imports as soon as possible.
- (127) In its REPowerEU communication, the Commission stated that it would assess as a matter of priority whether measures and investments are needed in hydrogen-ready gas infrastructure and interconnectors. The REPowerEU Communication referred to an assessment carried out by the European Network of Transmission System Operators for Gas ('ENTSO-G'), showing that the biggest challenge would be to meet demand in Central and Eastern Europe, but also in the northern part of Germany, if Russian gas imports cease. That assessment revealed that Germany is strongly exposed to dependence on Russian gas, especially its northern market area where demand is concentrated. In the absence of Russian gas imports, the infrastructure bottlenecks are related to insufficient pipeline capacity from West to East Europe as well as insufficient import capacity, including LNG infrastructure. The REPowerEU Communication made explicit reference to the terminal³¹.
- (128) The REPowerEU communication called on Member States to ensure that the identified projects are implemented as quickly as possible in line with the needs and timeline of the REPowerEU Plan. In particular, identified projects, alongside PCIs, should be allocated the status of projects of highest national significance and priority ensuring rapid implementation.
- (129) The German government has stressed that additional LNG infrastructure is essential to diversify gas supplies away from Russia, notably when adopting a law to accelerate the construction of LNG infrastructure in Germany on 1 June 2022³² (see recital (13)).

³⁰ European Council Conclusions (24 and 25 March 2022)

³¹ See Annex 3 of "Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions REPowerEU plan", available at EUR-Lex - 52022DC0230 - EN - EUR-Lex (europa.eu).

³² Gesetz zur Beschleunigung der planungsrechtlichen Genehmigungsverfahren für den Bau der LNG-Infrastruktur (LNG-Beschleunigungsgesetz).

- (130) The Commission positively notes that, on the basis of the information provided by the German authorities (see recitals (13) to (22)), the Project is needed by Germany to contribute to security of supply and that the planned LNG capacity will not lead to higher import capacity of gas than before Russia's invasion of Ukraine. The German authorities justify the capacity necessary for the security of supply including a safety buffer, which is approximately covering the largest single import source, and the Commission takes note of the German submission that the terms of operation of the floating terminals are still under discussion and that the capacity buffer would only be used in case of future disruptions. The Commission notes that the Project's capacity, of which 90 % have been sold, will amount to significantly less than the Russian pipeline gas import capacity and less than the total projected gas demand in 2030 minus the import capacities other than LNG.³³
- (131) The Commission moreover notes that major infrastructure projects like the construction of an LNG Terminal are capital intensive. The financial analysis provided by the German authorities (see Section 2.8) plausibly reveals that the Project would not be sufficiently profitable without the aid measure. Calculated over the lifetime of the Project (15 years), the revenues generated by the Project would not be sufficient to yield a market-oriented return on investment. The funding gap of the Project, amounting to EUR 44 million in the central scenario as assessed below, demonstrates the existence of a market failure.
- (132) It can therefore be concluded that the notified measure contributes to addressing a market failure, thereby alleviating the sub-optimal provision of infrastructure that contributes to the Union's security of energy supply.
- *Third party access and tariff regulation*
- (133) As explained in section 2.5, the Project benefits from the following exemptions:
- Exemption from Article 32 of the Gas Directive (Third Party Access) for a period of 15 years starting from the Commercial Operation Date for 100 % of the Project's regasification capacity, and
 - Exemption from Article 41, paragraphs 6, 8 and 10, of the Gas Directive (Tariffs) for a period of 15 years starting from the beginning of the Commercial Operation Date for 100 % of the Project's regasification capacity.
- (134) The capacity management and allocation rules applied to the terminal under the exemption (see point (42) above) also aim at ensuring that access is granted in a non-discriminatory and transparent manner. This holds true for the first and subsequent allocations of long-term capacity, but also for short-term bookings. 10 % of the terminal's capacity is set aside for short-term bookings and a secondary market, as well as a UIOLI are foreseen.
- (135) The Commission, in its Decision of 2 June 2023 granting a partial exemption for Third Party Access and Tariff regulation to the Project, found that the differences between the capacity management and allocation rules under the exemption and the regulated regime are however minimal³⁴. The main benefit of the exemption is that

³³ See footnote 8 and the document referred to therein.

³⁴ See the Commission exemption decision, recital 127.

it provides legal certainty with regard to the third party access requirements for the duration of the exemption, whilst the regulated rules may change.

- (136) As a result of the capacity management and allocation rules contained in the exemption, all capacity holders were subject to the same transparent and non-discriminatory capacity management and allocation rules. In addition, the binding offer was made in the context of the 2019 market test, when RWE had not yet entered into agreements to become a shareholder of the terminal³⁵.
- (137) Moreover, the Commission concluded that also the exemption from regulated tariffs is narrow in scope and is not expected to be detrimental to the competition between terminals³⁶. The main advantage of the exemption is that tariffs can be fixed for the duration of the exemption, whereas regulated tariffs are subject to regular verification and possible adaptation by the BNetzA.
- (138) With regard to the exemption from tariff regulation, the tariffs charged by the terminal do not discriminate between the different capacity holders, and tariff increases for long-term capacity allocated after the first booking round are limited to 10 % of the base tariff (see recital (42)f and (42)h). The Commission concluded that, the foreseen exemption from tariff regulation is not expected to be detrimental to competition between terminal users³⁷.
- (139) In view of the above considerations with regard to point 380(b) CEEAG, the Commission considers that the notified measure alleviates a market failure, thereby contributing to the security of supply, while the Project is largely open to third party access (taking into account the conditions by the Commission exemption decision) and the deviations from regulated tariffs are minimal. Therefore, the aid is necessary and appropriate.

3.3.3.2. Proportionality and cumulation

- (140) Aid is considered to be proportionate if the aid amount per beneficiary is limited to the minimum needed for carrying out the aided project or activity (point 47 of the CEEAG).
- (141) In accordance with point 381 of the CEEAG, the proportionality of the investment grant is assessed on the basis of the funding gap principle as set out in points 48, 51, and 52 of the CEEAG.
- (142) According to point 48 of the CEEAG, aid is considered as limited to the minimum needed for carrying out the aided project or activity if the aid corresponds to not more than the net extra cost ('funding gap') necessary to meet the objective of the aid measure, compared to the counterfactual scenario in the absence of aid. The funding gap is determined by the difference between the economic revenues and costs (including the investment and operation) of the aided project and those of the alternative project which the aid beneficiary would credibly carry out in the absence of aid.

³⁵ See the Commission exemption decision, recital 123.

³⁶ See the Commission exemption decision, recital 129.

³⁷ See the Commission exemption decision, recital 130.

- (143) According to point 51 of the CEEAG, where the aid is not granted under a competitive bidding process, the funding gap must be determined by comparing the profitability of the factual and counterfactual scenarios.
- (144) To determine the funding gap in such cases, the Member State must submit a quantification, for the factual scenario and a credible counterfactual scenario, of all main costs and revenues, the estimated WACC of the beneficiaries to discount future cash flows, as well as the net present value ('NPV') for the factual and counterfactual scenarios, over the lifetime of the project. The Commission will verify whether this counterfactual is realistic. The Member State must provide reasons for the assumptions used for each aspect of the quantification, and explain and justify any methodologies applied. The typical net extra cost can be estimated as the difference between the NPV for the factual scenario and for the counterfactual scenario over the lifetime of the reference project.
- (145) In accordance with point 381 of the CEEAG, the counterfactual scenario in the case of infrastructure projects corresponds to the situation in which a project would not be realized.
- (146) As submitted by the German authorities, the estimated funding gap of the Project in the central scenario amounts to EUR 44 million. Germany furthermore explained that the discounted value of the expected aid under the measure amounts to EUR 40 million, which is closely below the funding gap (see recital (73)). The Commission notes that this calculation is based on detailed business projections, which the Commission has reviewed, and concludes that the expected aid does not exceed the estimated funding gap.
- (147) The submitted business plan on which the calculation of the expected funding gap and amount of aid is based on the central scenario for the 15 years of operation of the terminal for the import of LNG. The Commission considers that the plan relies on plausible estimates of future earnings and costs, and the underlying assumptions are justified.
- (148) In particular, in relation to the main assumptions underlying the business plan for the operating life of the terminal for the import of LNG, the Commission notes that:
- The modelling assumptions are overall reasonable and in particular the operating life of the terminal for the import of LNG (15 years) reflects the length of the long-term capacity booking for LNG as well as the intention of the private shareholders to convert the terminal to the import of green energy carriers after 15 years of operation and no later than 2043 (see recitals (27) and (65));
 - The main capital investment costs, related to the EPC contract, are backed by quotations received in competitive tendering procedures, while other capital costs are based on estimations performed by external technical advisors (see section 2.7.2). Moreover, the estimated operating costs appear to be inclusive of all main operating costs categories based on the nature of the Project and are sufficiently justified by the German authorities (see section 2.7.3);
 - All possible revenue streams are accounted for in the business plan (long-term capacity bookings, short-term bookings and small-scale services). The revenue from long-term capacity bookings are based on already concluded

contracts with three buyers for 90 % of the terminal's capacity, making the business plan highly robust (see recital (65)), point (a)).

- As regards the prices per bcm/a for long-term capacity, the German authorities have shown that they are within the range of prices for long-term capacity marketed in similar terminals (see recital (67)). In relation to short-term capacity (see recital (65) point (b)), the expected prices reflect the rates allowed by the exemption to tariff regulation (10 % mark-up with respect to the long-term capacity rate) and Germany conservatively projects only 50 % of the capacity reserved for short-term contracts to be sold.
 - The WACC used is conservative as it reflects the permissible return on equity for investments in new assets of electricity and gas network operators set by the Federal Network Agency last year for the next regulatory period (see recital (49)), even though due to the exemption granted, the terminal is not subject to regulation in this respect.
- (149) The Commission furthermore notes that the amount of aid which will effectively be paid under the measure is based on the preferential dividend distribution mechanism. Such mechanism depends on the amount of net profit available in a given year to be distributed to the shareholders, which in turn relies on the same costs and revenues for which estimates were underpinning the funding gap. This implies that the amount of aid disbursed in a given year automatically adjusts based on the realised revenues and costs of the Project during the operating time of the terminal for the import of LNG.
- (150) If upside risks materialise to the central scenario (e.g. higher short-term capacity bookings than expected), the aid disbursed through the preferential dividend will be less than in the central scenario. Specifically, should the distributable income exceed 5 % of the total investment by all shareholders, no aid will be disbursed under the measure.
- (151) Conversely, if downside risks materialise (certain cost increases, for instance in relation to contingencies (see for example recital (57)), or certain revenues would not materialise, the amount of aid paid under the measure would increase. Overall, this feature of the measure provides an added safeguard in relation to the robustness of the business plan itself during the operating life for the import of LNG.
- (152) As the measure could in principle result in the payment of a larger amount of aid than estimated in the central scenario presented by the German authorities, the Commission takes comfort in the fact that, by virtue of the interrelation between the dividend distribution mechanism and the funding gap explained above, the aid amount paid under the measure remains bounded, keeping the residual value of the terminal fixed. This is illustrated in the robustness check provided by the German authorities (see recital (78)), where it is hypothetically assumed that the distributable income would equal 2.5 % of the total investment by all shareholders on every year, meaning that the total amount of aid paid through the measure would be at its maximum. The German authorities show that in this worst-case scenario the aid would still be less than the corresponding hypothetical funding gap, meaning that the preferential dividend distribution mechanism provides downside protection to the private investors.

- (153) The Commission considers that the methodology used to determine the residual value of the terminal (see recital (38)) is appropriate, in view of the mentioned uncertainties and the fact that the economics of the terminal will change after the 15-year period, either by conversion to other energy carriers or by ending the LNG use. Moreover, the Commission finds that the sale of the shares of KfW will not result in an additional advantage as the sale process will be carried out so as to ensure that the shares are sold at market value (see recital (28)).
- (154) According to point 55 of the CEEAG, where a competitive bidding process is not used and future developments in costs and revenues are surrounded by a high degree of uncertainty and there is a strong asymmetry of information, the Member State may be required to introduce compensation models that are not entirely ex ante. Instead, these models will be a mix of ex ante and ex post or introduce ex post claw-back or cost monitoring mechanisms, while keeping incentives for the beneficiaries to minimize their costs and develop their business in a more efficient manner over time.
- (155) Furthermore, point 381 of the CEEAG on the proportionality of the aid for energy infrastructure further specifies that the introduction of monitoring and claw-back mechanisms may be necessary where there is a risk of windfall profits, e.g. when the aid is close to the maximum allowed, while keeping incentives for the beneficiaries to minimise their costs and develop their business in a more efficient manner over time.
- (156) For the 15 years of LNG operation, the Commission considers the central business plan of operation as an LNG terminal plausible, while the dividend distribution mechanism, as assessed above, provides a safeguard against the risk of overcompensation during this period.
- (157) However, the Commission notes that, as explained by the German authorities, it is difficult to reliably estimate the residual value of the terminal after the end of the 15-year LNG operation due to the uncertainty surrounding the future market for green energy carriers (see recital (71)). While the actual residual value of the terminal does not affect the amount of aid paid under the measure, it could in principle affect the size of the funding gap should the residual value ex-post turn out to be higher than estimated.
- (158) The Commission notes that the measure includes an ex-post claw-back mechanism which reduces the risk of overcompensation should the residual value of the terminal turn out to be considerably higher than estimated by the German authorities (see Section 2.4.2). In particular, the claw-back included by the German authorities will ensure that, should the funding gap turn out to be ex-post zero or negative, 70 % of the lower between (i) the aid amount actually paid and (ii) the difference between the actual residual value and the residual value that would have ex-post resulted in a funding gap equal to zero, will be recovered.
- (159) The Commission considers the claw-back mechanism included in the measure by the German authorities an acceptable tool to reduce the risk of overcompensation. The 30 % retention leaves appropriate incentives to the beneficiaries to run the business in an efficient manner.
- (160) Finally, the Commission notes that, should KfW sell its shares before the end of the 15 years of the preferential dividend sharing mechanism, the measure will take

the form of a one-time compensation amount equal to the net present value of the preferential distribution. At that point in time, the business plan will be updated to reflect the actual costs and revenues with the methodology as it was used. The Commission considers that the mechanism agreed upon ensures that it will lead solely to a change in the form of disbursement, namely a yearly dividend payment that depends on actual business performance to a one-time payment of the net present value of the expected preferential dividend payments for the remainder of the 15 years, for which the dividend sharing mechanism is agreed and that is the premise for the partners to invest in the Project. Consequently, the net present value is calculated based on actual information that feeds into the business plan. Therefore, this approach is consistent with the mechanism and does not affect the overall amount established by the methodology assessed in this decision (recital (23)). The outstanding amount of aid to be paid out according to this methodology will be verified through an independent expert valuation and the European Commission will retain the possibility to assess the plausibility of the estimation of the aid to be disbursed (see recital (30)).

- (161) Therefore, the Commission concludes that also in the case when the preferential dividend mechanism will be terminated early, the proportionality of the aid will be ensured.
- (162) The Commission notes that Germany confirmed that the measure would not be cumulated with other forms of State aid to cover the same eligible costs (see recital (88)).
- (163) In view of the above considerations, the Commission concludes that the measure is proportionate.

3.3.3.3. Transparency, reporting and monitoring

- (164) Germany committed to comply with the transparency requirements laid down in points 58 to 61 of the CEEAG. The relevant data of the measure will be published on the website <https://webgate.ec.europa.eu/competition/transparency> (see recital (89)).

3.3.3.4. Avoidance of undue negative effects on competition and trade

- (165) Pursuant to point 382 CEEAG, the Commission will carry out a balancing test on the positive effects of the aid against negative effects on competition and trade.
- (166) In the present case, point 382(b) and (c) are relevant for this balancing test. For infrastructure projects which are exempted, in whole or in part, from internal energy market legislation, the Commission will take into account, in particular, the degree of third party access to the aided infrastructure, access to alternative infrastructure, crowding-out of private investment and the competitive position of the beneficiary or beneficiaries. For natural gas infrastructure investments, the Member State further needs to demonstrate the following positive effects capable of off-setting the negative effects on competition: (i) whether the infrastructure is ready for the use of hydrogen and leads to an increase of the use of renewable gases, or alternatively the reason why it is not possible to design the project so that it is ready for the use of hydrogen and how the project does not create a lock-in effect

for the use of natural gas;³⁸ and (ii) how the investment contributes to achieving the Union's 2030 climate target and 2050 climate neutrality target.

- (167) As regards the competition impact, the Commission has already found that this Project enhances competition in gas supply and that the exemption is not detrimental to competition in the relevant markets, which are likely to be affected by the investment.³⁹ Moreover, the Commission found that the differences between the capacity management and allocation rules and the tariff regulation rules under the exemption and the regulated regime are minimal⁴⁰. The main benefit of the exemption is that it provides legal certainty with regards to the third party access requirements for the duration of the exemption, whilst the regulated rules may change. The Commission already concluded that it has no grounds for concern as regards the impact on competition on the upstream and downstream gas markets⁴¹ and that the exemption from regulated tariffs is narrow in scope and is not expected to be detrimental to the competition between terminals⁴². In any event, the Commission furthermore notes that the Project is not the sole terminal open to third parties in operation in Germany and neighbouring countries. Moreover, the Commission has already concluded that the ownership structure of GLNG is not expected to negatively affect the diversification of supply sources potential, as none of the shareholders are large players in the gas production or supply sectors⁴³. The Commission finally notes that the projected return of the project is oriented at the return for regulated projects (see recital (25)).
- (168) In addition, it was concluded above (see recital (132)) that the notified measure contributes to addressing a market failure, thereby alleviating the sub-optimal provision of infrastructure. The measure is therefore not expected to crowd-out private investment. On the contrary, the assessment above has shown that, absent the measure, private investors would not have pursued the Project. The measure, by de-risking the Project for the private investors, has incentivised 50 % of the investment in the Project by investors other than the German State.
- (169) The Commission notes positively that the preconditions are created at the outset for the terminal to be converted for the import of green energy carriers at the latest by 2043 (see recital (80)). Specifically, at the time of construction, investments will be made to build the storage tanks and pipelines with technical specifications that are compatible with ammonia, a hydrogen carrier which has a higher density than natural gas. Absent these initial investments, it would not be possible to reconvert the terminal at a later date (see recital (55)).
- (170) The Commission acknowledges that subsequent investments at the time of conversion of the terminal will be necessary for the import of ammonia and its reconversion into hydrogen (e.g. building the ammonia cracker), but considers this

³⁸ Similarly, point 74 CEEAG says that for measures involving new investments in natural gas a positive balancing for such measures would be unlikely in principle, unless it is demonstrated that there is no lock-in effect.

³⁹ See Decision "COMMISSION DECISION of 2.6.2023 on the exemption of the German LNG Terminal in Brunsbüttel, Germany, from the requirements regarding third party access and tariff regulation", recitals 74, 76, 100, 101, 102 and 103.

⁴⁰ See the Commission exemption decision, recital 127.

⁴¹ See the Commission exemption decision, recital 107.

⁴² See the Commission exemption decision, recital 129.

⁴³ See the Commission exemption decision, recitals 74 and 75.

reasonable as the market for hydrogen is still developing (see recital (55)). In this respect, the Commission notes that the beneficiaries have committed to convert the terminal for the import of green energy carriers by 2043, where such commitment is enshrined in the Shareholders' Agreement and further preparations will take place earlier (see recital (81)).

- (171) The Commission therefore considers that, while the terminal is not practically operational for the use of hydrogen at inception, Germany has demonstrated that the necessary upfront investments are undertaken, so that equipment components that cannot be retrofitted retrospectively or only at disproportionate costs are already suitable from the outset for the import of ammonia. While later investment is needed for the actual use of hydrogen/ammonia, the Project is capable of leading to an increase in the use of renewable gases.
- (172) In addition, Germany has demonstrated that a lock-in effect of natural gases is prevented, as the German Acceleration LNG Act prohibits the import of LNG from 2043 (see recital (27)(79)), and therefore before 2050, the Union's target for climate neutrality. The use of long-term contracts to book capacity for 15 years (from the start of operations in 2026) does not invalidate this assessment. The Commission notes that Germany projects the use of natural gas in Germany on a downward trajectory (see recital (15)) already until 2030.
- (173) Moreover, the German authorities submit that the business case for LNG terminal infrastructure relies on capacity bookings rather than the actual downstream use of fuels that are regasified, if the capacity is used, and injected in the gas transmission system and therefore does not directly contribute to CO₂ emissions but merely allows for the import of natural gas and alternative fuels. Furthermore, the fact that 90 % of the long-term capacity of the Project has been booked does not *per se* imply that the capacity will be used and that natural gas will be burnt downstream, as the fee of the capacity booking contracts applies regardless of whether the capacity booked is effectively used by customers to import gas or not.
- (174) The Commission notes that the Project is not expected to have an indirect effect on CO₂ emissions in the downstream market as gas imported through the terminal will contribute to replacing the gas volumes previously imported from Russia. Germany has explained that all planned LNG terminals combined will in total provide 54 bcm/a by 2027, which is less than the gas imported from Russia on the basis of recent data (see recital (14) and (19)). In this context, Germany has also explained that the market information, which the Commission had received, was based on incorrect figures as regards the German planning of LNG capacity. It is noted further that the business case for the Brunsbüttel terminal is based on capacity booking contracts, which do not necessarily imply an actual full use of the capacity. Germany's 2030 climate targets including the plans relating to an early coal exit depend on gas imports available as a transition fuel. Given the loss of pipeline gas imports to Germany following Russia's war against Ukraine, the Project will contribute to these plans. Germany has pointed out that its policies aim at a share of renewable energy in electricity of 80 % by 2030 and that a shortage of gas would more likely result in delaying the exit from more polluting coal. In this regard, Germany points to the experience of last winter, where a shortage of gas has led to an increased use of coal (see notably recital (84)a). Therefore, the terminal will contribute to reaching the 2030 climate targets against the current background and potential harm to the environment is mitigated, also through its overall policy effort.

- (175) The Commission furthermore notes that, by the legal stop to LNG by 2043 while opening the conversion of the terminal to renewable gases, the Project will contribute to the 2050 carbon neutrality targets.
- (176) When performing this balancing exercise, the Commission should take due account of the geopolitical situation with Russia's unprovoked and unjustified military aggression against Ukraine. In March 2022, EU leaders agreed in the European Council to phase out Europe's dependency on Russian energy imports as soon as possible. The REPowerEU Plan put forth by the Commission on 18 May 2022 set out actions to structurally transform the EU's energy system, namely to save energy, to diversify supplies, to quickly substitute fossil fuels by accelerating Europe's clean energy transition, and to smartly combine investments and reforms. A number of measures are necessary to contribute to these actions. While gas is a transitional fuel, the Commission considered in its Plan that shifting away from Russian fossil fuels will also require targeted investments for security of supply in gas infrastructure.
- (177) The notified measure clearly contributes to the diversification away from Russian energy imports. The Commission notes the positive cross-border effects, as Germany has emphasised its transit role for land-locked Member States. The Project is expected to become operational in 2026, thus well before 2030, addressing immediate security of supply needs of the Union to enable diversification of supply in the interest of the Union. The Commission considers that these considerations must be given a significant positive weight in the balancing exercise it has to perform.
- (178) With regard to point 72 CEEAG, the Commission notes that the measure will not delay the roll-out of renewable energy in Germany but to the contrary, provide safeguards against the use of even more polluting fossil fuels. It will also contribute to the security of supply, reducing Union's dependency on Russian fossil fuel imports in line with the European Green Deal and the climate objectives for 2030 and 2050. As part of the required balancing, the Commission also takes note of the particular importance of energy infrastructure acknowledged by the legislators⁴⁴.
- (179) Therefore, on balance, the Commission concludes that undue negative effects on competition and trade from the measure are avoided.

3.3.4. Weighing the positive effects of the aid against the negative effects on competition and trade

- (180) A carefully designed aid measure should ensure that the overall balance of the effects of the measure is positive in terms of avoiding adversely affecting trading conditions to an extent contrary to the common interest.

⁴⁴ Investments necessary to improve energy infrastructure and facilities to meet immediate security of supply needs for gas should be eligible for financial support under the Recovery and Resilience Facility (RRF) even if they do not comply with the principle of 'do no significant harm' (Regulation (EU) 2023/435 of the European Parliament and of the Council of 27 February 2023 amending Regulation (EU) 2021/241 as regards REPowerEU chapters in recovery and resilience plans and amending Regulations (EU) No 1303/2013, (EU) 2021/1060 and (EU) 2021/1755, and Directive 2003/87/EC, OJ L 63, 28.2.2023, p. 1–27).

- (181) As shown in section 2.2, the aid will facilitate the development of a new LNG terminal, thereby improving energy security of supply in Germany and in Central and Eastern Europe. As explained in recitals (127) and (128), the Commission has already identified in the REPowerEU communication the Project as needed to ensure security of gas supply of the Union and Germany. By providing an additional source of gas supply, in Germany and in several neighbouring countries, the aid will lead to the diversification of energy sources and the replacement of Russian gas.
- (182) In addition, as shown above, in section 3.3.3, the German Authorities have designed the notified measure in such a way as to minimise the potential distortion of competition arising from the measure. The price at which long term capacity has been allocated is in line with the prices charged by similar terminals (see recital (148)), therefore competition between terminals does not appear to be distorted. Furthermore, by granting access to the regasification capacity to all interested parties (as described in recital (42)), the measure will contribute to additional competition in the gas markets in the region. The overall impact on competition is deemed to be positive. The negative effects on competition are limited.
- (183) Therefore, the positive impact of the aid measure in developing the economic activity at issue outweighs any potential negative effects on competition and trade. On balance, the measure is in line with the objectives of Article 107(3)(c) TFEU as it facilitates the development of an LNG terminal and hence the development of trade in LNG and natural gas in Germany and in the Central and Eastern European region, and does not adversely affect competition to an extent contrary to the common interest.

4. CONCLUSION

- (184) In light of the above, the Commission has decided not to raise objections to the aid granted for the LNG Terminal Brunsbüttel in Germany on the grounds that it is compatible with the internal market pursuant to Article 107(3)(c) of the Treaty on the Functioning of the European Union.

Yours faithfully,

For the Commission

Margrethe VESTAGER
Executive Vice-President