

GTS Investment Plan for 2020-2030

Addendum

1 July 2021



Introduction

In 2020, GTS has drawn up an investment plan (IP) in accordance with Article 7a of the Gas Act. This IP2020 provides an overview including substantiation of GTS's investments in the short and long term.

This document is an addendum to the IP2020. The reason to write an addendum to this IP is because two proposed investments were not included in the IP2020. Via this addendum, GTS submits these intended investments to the market, ACM and the Minister of Economic Affairs and Climate.

Adjustments compared to IP2020

The first investment is the result of a request from the NAM to convert a connection. More concretely, the investment concerns the conversion of the UGS Grijpskerk connection. The NAM intends to convert UGS Grijpskerk from H-gas storage to (pseudo-) G-gas storage. GTS is adapting the connection for this conversion. As an G-gas storage facility, UGS Grijpskerk can fulfill the back-up role for the G-/L-gas market, so that the back-up role for the Groningen field will become redundant.¹² The conversion of the connection makes it possible to close the Groningen field approximately 2 years earlier.

The second investment concerns the acquisition of five connecting pipes. The investigation into the acquisition of four of these connection pipes and this investment is described in IP2020, but the outcome was not yet known at that time. Now that the investigation has been completed, GTS is happy to provide more insight into the intended acquisition and the investments involved. As a result of a consultation reaction during the market consultation, GTS intends to also take over the connection pipe assets from a fifth connection point.

In this addendum, GTS explains the two investments using a societal cost-benefit analysis (SCBA). The investments have no impact on the scenarios, bottlenecks or the other investments described in the IP2020.

Process

GTS has submitted the concept addendum to the market for a consultation of four weeks. GTS has subsequently processed a view of a market party on the addendum and submitted the design to ACM and the Minister of Economic Affairs and Climate. They then reviewed the draft addendum within the statutory period of 12 weeks and concluded that GTS made its intended investments within reason. GTS is therefore now publishing the definitive addendum.

¹ Advice on security of supply for required Groningen volumes and capacities for gas year 2021/2022 and further, dated 29 January 2021, our reference L 21.0042 (in Dutch)

² Gas extraction estimate Groningen 2021/2022 and further, dated 11 February 2021, reference DGKE-PDG / 21010549 (in Dutch)

SCBA – UGS Grijpskerk G-gas	
Identification number	I.014385
Name and location of asset	UGS Grijpskerk
Pressure level	66-80 bar
Investment classification	Replacement investment
Starting year	2020
Brought into operation	2022
How does the investment address the bottleneck	The NAM intends to convert UGS Grijpskerk from H-gas storage to G-gas storage. To this end, GTS will have to convert the H-gas connection of UGS Grijpskerk to a connection to the G-gas network of GTS. The actual application for this change of connection was submitted by the NAM to GTS on 18-12-2020.
No action	If GTS chooses to reject the request to change the connection, GTS does not fulfill its statutory duty as described in Article 10 paragraph 6 and Article 10a paragraph 1 of the Gas Act.
Preferred alternative	<p>The measures include:</p> <ul style="list-style-type: none"> • connecting UGS Grijpskerk at the Grijpskerk location to the G-gas system; • connection to two G-gas pipes at the Ten Boer location for additional transport capacity to the east. <p>Because of pressure protection, quality separation and switching options, the couplings are provided with double shut-off valves and pressure safety devices.</p> <p>The basic budget for the measures is approximately EUR 5.5 million.</p>
Alternatives	<p>An alternative is to fill and withdraw UGS Grijpskerk via the existing connection. However, this is not a viable option for a number of reasons:</p> <p>To realize this alternative, five valves would have to be installed. These valves are necessary to separate the different gas qualities and pressures at compressor station Grijpskerk. To create installation space for these valves, the existing adjacent infrastructure must be adapted.</p> <p>In addition, additional measures must be taken in order not to limit the operational capabilities of the compressor station Grijpskerk. The total costs for this alternative will therefore be approximately 15% higher than the preferred alternative.</p>
Differences analysis	UGS Grijpskerk can only be connected to the G-gas system at the Grijpskerk location. In order to be able to fully handle the send-out capacity, a connection between different G-gas pipelines at the Ten Boer location is required.
Support for impact estimation	<p>After completion of the measures, the Groningen field could be closed approximately 2 years earlier.</p> <p>The measures are realized at locations where existing assets are present. The impact on the local environment is therefore marginal.</p>

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SCBA – UGS Grijskerk G-gas continued previous page

SCBA – UGS Grijskerk G-gas

Rationale for selection of proposed alternative	<p>When assessing the various options, GTS applied the following criteria:</p> <ul style="list-style-type: none"> • costs; • process safety; • minimal technical adjustments; • operability; • possibility to discharge off-spec gas via existing connections with L- and H-gas system.
With capacity expansions: a sensitivity analysis	<p>In order to ensure that sufficient capacity is available in the G-gas transport system in an eastbound direction when producing G-gas from UGS Grijskerk, a link must be made between two G-gas pipelines at the Ten Boer site. Without this link, UGS Grijskerk cannot fulfill the backup role.</p>

SCBA – Acquisition of five connection pipelines	
Identification number	Acquisition of five connection pipelines
Name and location of asset	301348 – TAQA – Bergermeer 301531 – Aben Green Energy – Westdorpe 301542 – SKW – Alkmaar 301543 – Bio Energy Coevorden (BEC) – Coevorden 301570 – RWE - Moerdijk
Pressure level	301348 – 66 bar 301531 – 40 bar 301542 – 66 bar 301543 – 40 bar 301570 – 80 bar
Investment classification	Extension investment
Starting year	2021
Brought into operation	2021/2022
How does the investment address the bottleneck	<p>As described in IP2020, GTS has investigated whether it is possible to take over the connection from eight connected parties. The background is that, since January 2020, GTS must once again realize the full connection (including connection pipe) as a result of a legislative amendment. The eight present connected parties would therefore be the only ones, of which GTS only manages the connection point and does not have a complete connection.</p> <p>GTS described this study in IP2020, but the definitive outcome was not yet known at that time. It has now become clear that it is possible to take over the connection line in four cases. In the other cases, an administrative change to a connection is sufficient because there are no assets to be taken over.</p> <p>We would like to further explain this acquisition through this SCBA.</p> <p>As a result of the market consultation, GTS intends to take over the connection pipe and the delivery station from a fifth connected party. It concerns the connection point of RWE Moerdijk.</p> <p>RWE was not one of the eight aforementioned parties, as RWE only became an connection point as a result of the takeover of the EHD networks by GTS in 2020. This means that it has only become a connected party of GTS since 1 January 2021. The to be acquired assets of RWE have the same legal status as that of the four other parties, namely that of a connection point. At the time of consultation of the addendum, this connection point was not considered. GTS is now adding the acquisition to the investment plan.</p> <p>At the moment of acquisition, the assets of RWE will meet the GTS specifications, as is the case with the connections of the other four parties.</p>
No action	If no measures are taken, these connection pipelines remain in the ownership and management of the connected parties.

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SCBA – Acquisition of four connection pipelines

Preferred alternative	<p>The purchase price is calculated based on the regulatory system that applies to GTS. This means that GTS calculates what the current asset value would have been if 1) GTS had installed the connection pipelines itself at the investment amount paid by the connected parties, and 2) these pipelines would have become part of the regulated asset base of GTS in accordance with the applicable regulatory system.</p> <p>This method results in a current asset value of approximately EUR 9-14 million. The estimated acquisition price per connected party is shared with ACM on a confidential basis. GTS proposes to acquire the connection pipelines at this value.</p> <p>An independent accountant will validate the purchase price supplied by the connected party.</p> <p>GTS will acquire the connection pipelines under the following conditions:</p> <ol style="list-style-type: none"> 1. the connection pipelines have an expected economic and technical life of at least 20 years from the moment of acquisition, in line with the standard Business Case approach for gas infrastructure projects in the Netherlands. 2. the connection pipelines have been installed and maintained in accordance with or comparable with the GTS specifications and are in good condition.
Alternatives	Does not apply.
Differences analysis	Does not apply.
Support for impact estimation	It concerns an acquisition of existing assets. No adjustments will be made to these assets after the acquisition; there is no impact on the environment.
Rationale for selection of proposed alternative	Does not apply.
With capacity expansions: a sensitivity analysis	Does not apply.

Appendix I: Consultation matrix

Nr	Party	Consultation response
1.1	RWE	<p>In addition to the conversion of UGS Grijskerk, this addendum concerns the acquisition of four connection pipes, the research of which is described in IP2020, but has not yet been resolved.</p> <p>In concrete terms, four connection pipes are mentioned, whereby our branch pipe Moerdijk has not yet been mentioned.</p> <p>We would like to point out that we have been in talks with GTS about a takeover of our branch pipeline since September 2018.</p> <p>We started those talks because it became clear to us that GTS was in talks with Zebra, Enduris and Enexis about the acquisition of EHD assets.</p> <p>From the start, we have made it clear that our pipeline is also part of the Zebra network because this pipe with the Zebra main pipe and the EHD assets from Enduris and Enexis functioned as a whole, both in terms of management (including balancing) and maintenance. Ultimately, as of January 1, 2021, GTS only acquired the EHD assets from Zebra, Enduris and Enexis.</p> <p>Since then (so since 1/1/2021) GTS has only managed a connection point for our WKC Moerdijk and not the connection line.</p> <p>GTS has mentioned in its addendum about eight affiliates involved in the study in IP2020. It is true that at the time of IP2020 only eight connected parties had a connection line under their own management (GTS only manages the connection point) and that 4 of these eight are now being taken over.</p>

Response GTS	Method of processing
GTS understands RWE's wishes and intends to take over the connection pipeline from RWE.	Added to the final addendum

Colophon

Design

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