



## **DECISION PAPER**

# **PROPOSED MODIFICATIONS TO GAS SUPPLY CODE**

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## **1 Introduction**

The Gas Supply Code (“Code”) sets out the standards and procedures which gas licensees must comply with to ensure safe operations of the gas supply system. The Code also sets out the rights and obligations of gas licensees for and in relation to the conveyance of gas and provision of gas supply.

## **2 Proposed Modifications to the Gas Supply Code**

- 2.1 Pursuant to Clause 1.6 of the Code, EMA has sought written comments/feedback on the proposed modifications of the Code to enhance and clarify the requirements in respect of the Inspection Programme for Gas Installations or Gas Fittings, Transmission System Planning and Development, and related Cyber Security Measures.
- 2.2 Feedback was received from 1 respondent when the consultation closed on 23 April 2024. EMA has carefully considered the feedback and our responses are in [Appendix 1](#).

## **3 EMA’s Decision**

- 3.1 EMA has taken into account the feedback received. Additionally, to simplify the language in the Codes of Practice, EMA has used “must” instead of “shall” where applicable. To avoid doubt, “shall” and “must” convey the same meaning. EMA has decided to modify the Code as set out in [Appendix 2](#) and the proposed Code modifications will come into effect on 7 Oct 2024.

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## Appendix 1

### EMA's Response to Comments/Feedback

Modification Ref. No.	Clause	Public/ Industry	Comments	EMA's Response
GSC/2024/01	9.2 (b)	SP Group	<ul style="list-style-type: none"> <li>HDB (responsible person) has engaged SPPG (Gas Transport Agent) to conduct gas riser pipe inspection as its contractor.</li> <li>SPPG (Gas Transport Agent) is exempted from requiring a gas service worker licence to carry out gas service work under the Gas Act.</li> <li>We would like to clarify with EMA if the proposed code change conflicts with HDB's engagement of SPPG as its contractor.</li> </ul>	HDB is allowed to continue to engage SPPG as a contractor to carry out gas service work at premises where HDB is the responsible person.
GSC/2024/04	9.3 (b)	SP Group	<p>With the deletion of the clause "<i>The inspection of the gas installation... after the soundness test by a professional engineer; and</i>", we would like to clarify with EMA:</p> <ul style="list-style-type: none"> <li>if each soundness test will be valid for 3 years; and</li> <li>the annual inspection requirement for the responsible person under 9.3(a)(i) and/or the retail consumer under 9.3(a)(ii) will be no longer required for these 3 years.</li> </ul>	To clarify, annual inspection by a licensed gas service worker or a professional engineer is required for the gas installation or gas fitting as specified in clauses 9.3(a)(i) and (ii). Additionally, where there is any part of the gas installation or gas fitting not accessible for inspection, soundness test must be carried by a licensed service worker or a professional engineer every 3 years, as provided for under clause 9.3(b).
GSC/2024/08	9.7	SP Group	<p>No objection to the proposed code change.</p> <p>In addition, we propose the following amendments for consistency purpose:</p> <p>"The gas retailer and shipper, where applicable, <del>shall</del> <b>must</b> provide the gas transporter with all relevant information pertaining to its consumers, <u>including the location of gas installations or gas fittings where gas is supplied</u>, to enable the gas transporter to implement and maintain the inspection programmes as stipulated in clauses 9.2 and 9.3."</p>	EMA has no objection to the proposed amendment.

Modification Ref. No.	Clause	Public/ Industry	Comments	EMA's Response
-	12.1	SP Group	<p>To align to the proposed code change to clause 12.5 (a), we propose to delete "annual" as follows:</p> <p>"The gas transporter shall be responsible for the <del>annual</del> formulation of a Ten-Year Transmission Network Development Plan for the development and augmentation and expansion of the gas transmission network in accordance with the guidelines and criteria set forth in clause 14 of the Code. The plan shall take into account the gas demand forecasts made by the Authority, proposals for additional injection or offtake as advised by the Authority and all firm and proposed capacity certificates that have been issued by the gas transporter."</p>	<p>SP Group's proposed deletion of "annual" is rejected as notwithstanding the proposed code change to clause 12.5(a), the gas transporter must continue to prepare and submit a Ten-Year Transmission Network Development Plan annually.</p>
-	12.2	SP Group	<p>To align to the proposed code change to clause 12.5 (a), we propose to delete "each year" as follows:</p> <p>"The gas transporter, in formulating its Ten-Year Transmission Network Development Plan or any adhoc transmission network development proposals which may include but not limited to assets renewals, network enhancements or modifications, shall ensure that the network design and any addition of network elements shall not affect the security and reliability of the existing gas supply system. The gas transporter shall prepare and submit, <del>each year</del>, a Ten-Year Transmission Network Development Plan to the Authority for approval. As and when necessary, or as required by the Authority, the gas transporter shall submit the adhoc transmission network development proposals to the Authority for endorsement and approval respectively. The gas transporter is required to complete approved adhoc transmission network projects or projects in the Ten-Year Transmission Network Development Plan within the stipulated completion dates, unless otherwise specified by the Authority."</p>	<p>SP Group's proposed deletion of "each year" is rejected as notwithstanding the proposed code change to clause 12.5(a), the gas transporter must continue to prepare and submit a Ten-Year Transmission Network Development Plan annually.</p>

Modification Ref. No.	Clause	Public/ Industry	Comments	EMA's Response
-	12.3	SP Group	<p>To align to the proposed code change to clause 12.5 (a), we propose to delete “each year”. In addition, we propose to insert “supply” to align with the current practice as follows:</p> <p>“To facilitate gas transporter's preparation of its Ten-Year Transmission Network Development Plan, the Authority shall provide gas transporter <del>each year</del> with the ten-year rolling gas <del>supply and</del> demand projection with their respective expected locations.”</p>	<p>SP Group's proposed deletion of “each year” is rejected as notwithstanding the proposed code change to clause 12.5(a), the gas transporter must continue to prepare and submit a Ten-Year Transmission Network Development Plan annually.</p> <p>EMA will provide both gas supply and demand projections to the gas transporter to facilitate its preparation of the corresponding Ten-Year Transmission Network Development Plan. Accordingly, EMA has accepted SP Group's proposed insertion of “supply” into clause 12.3.</p>
-	12.7	SP Group	<p>We propose to insert “supply” to align with the current practice as follows:</p> <p>“The Authority shall review the gas transporter's rolling Ten-Year Transmission Network Development Plan, taking into consideration the projected gas <del>supply and</del> demand, to ensure that system security and stability are maintained, network reliability meets the security standards prescribed by the Authority and that the Ten-Year Transmission Network Development Plan is not excessive based on the security standards. The Authority shall provide detailed comments and require the gas transporter to revise the Ten-Year Transmission Network Development Plan accordingly.</p>	<p>EMA will provide both gas supply and demand projections to the gas transporter to facilitate its preparation of the corresponding Ten-Year Transmission Network Development Plan. Accordingly, EMA has accepted SP Group's proposed insertion of “supply” into clause 12.7.</p>
GSC/2024/11	Appendix 4 (14-b)	SP Group	<p>We propose that the term “Addition or removal of CII's equipment/devices and/or cybersecurity components” does not encompass situations where, due to asset renewal or maintenance, a one-to-one replacement of a CII's equipment/devices and/or cybersecurity components without any changes to firmware, operating system, brand, or model, is carried out.</p>	<p>No material change submission by SP Group is required if the CII equipment/devices is a one to one replacement change and there is no alteration to the firmware/OS, brand, or model.</p> <p>For Remote Terminal Units' (RTUs) or any other devices changes where there is high frequency of</p>

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			Specifically for Remote Terminal Units, due to the high frequency of replacement activities, we propose the criteria to qualify for a material change and frequency of reporting to be mutually agreed between EMA, CSA and PowerGas.	replacement activities, a milestone-based reporting/submission of material changes by SP Group is acceptable. The material change request by SP Group must include details of the proposed milestones in the inventory list update submission.

**Modifications to the Gas Supply Code**

Modification Ref. No.	Clause	Original Text	Modified Text
<b>Inspection Programme for Gas Installation or Gas Fitting</b>			
GSC/2024/01	9.2 (b)	<p>The gas transporter shall be responsible for establishing and implementing the following systematic inspection programmes for all residential premises:</p> <p>the gas transporter may require the responsible person of every residential building with multiple consumers to engage a licensed gas service worker or a professional engineer to carry out inspection or soundness test where necessary, of the gas installation or gas fitting linking the gas service isolation valve up to the meters of individual residential units in the building in accordance with a systematic five yearly inspection programme.</p>	<p>The gas transporter <del>shall</del> <u>must</u> be responsible for establishing and implementing the following inspection programmes for all residential premises:</p> <p>the gas transporter <del>may</del> <u>must</u> require the responsible person of every residential building with multiple consumers to engage a licensed gas service worker or a professional engineer to carry out inspection or soundness test where necessary, of the gas installation or gas fitting linking the gas service isolation valve up to the meters of individual residential units in the building in accordance with a <del>systematic</del> five yearly inspection programme <u>approved by the Authority</u>.</p>
GSC/2024/02	9.3 (a)(i)	<p>The gas transporter shall be responsible for establishing and implementing the following systematic inspection programmes for all non-residential premises:</p> <p>for gas installation or gas fitting linking the gas service isolation valve to the meters of individual non-residential units within a building, annual inspection shall be carried out by a licensed gas service worker or a professional engineer, as the case may be, appointed by the responsible person;</p>	<p>The gas transporter <del>shall</del> <u>must</u> be responsible for establishing and implementing the following <del>systematic</del> inspection programmes for all non-residential premises:</p> <p>for gas installation or gas fitting linking the gas service isolation valve to the meters of individual non-residential units within a building, annual inspection <del>shall</del> <u>must</u> be carried out by a licensed gas service worker or a professional engineer, as the case may be, appointed by the responsible person.</p>



Modification Ref. No.	Clause	Original Text	Modified Text
GSC/2024/03	9.3 (a)(ii)	for gas installation or gas fitting from the meter to the gas appliances, annual inspection shall be carried out by a licensed gas service worker or a professional engineer appointed by the retail consumer;	for gas installation or gas fitting from the meter to the gas appliances, annual inspection <del>shall</del> <u>must</u> be carried out by a licensed gas service worker or a professional engineer appointed by the retail consumer;
GSC/2024/04	9.3 (b)	if any part of a gas installation or gas fitting referred to in clauses 9.3(a)(i) and (ii) is not accessible for inspection, soundness test shall be carried out by a professional engineer appointed by the responsible person once every three years. The soundness test for gas installation or gas fitting shall be carried out at the operating pressure. The inspection of the gas installation or gas fitting by a licensed gas service worker in clauses 9.3(a)(i) and (ii) will not be required for a period of 12 months after the soundness test by a professional engineer; and	if any part of a gas installation or gas fitting referred to in clauses 9.3(a)(i) and (ii) is not accessible for inspection, soundness test <del>shall</del> <u>must</u> be carried out by <u>a licensed gas service worker or</u> a professional engineer appointed by the responsible person once every three years. The soundness test for gas installation or gas fitting <del>shall</del> <u>must</u> be carried out at the operating pressure. <del>The inspection of the gas installation or gas fitting by a licensed gas service worker in clauses 9.3(a)(i) and (ii) will not be required for a period of 12 months after the soundness test by a professional engineer; and</del>
GSC/2024/05	9.3 (c)	for a gas installation or gas fitting of non-residential premises operating at any pressure above 30 mbars, the gas transporter may, in discharging its obligation under section 29(4) of the Act, require the responsible person to appoint a professional engineer to certify annually the fitness for such part of the gas installation or gas fitting for which the afore-mentioned person is responsible.	for a gas installation or gas fitting of non-residential premises operating at any pressure above 30 mbars, the gas transporter <del>may</del> <u>must</u> , in discharging its obligation under section 29(4) of the Act, <del>require</del> <u>notify</u> the responsible person to appoint a professional engineer to certify annually the fitness for such part of the gas installation or gas fitting for which the aforementioned person is responsible.

Modification Ref. No.	Clause	Original Text	Modified Text
GSC/2024/06	9.4	For gas installation or gas fitting referred to in clause 9.3, the gas transporter may, in order to ensure that the said gas installation or gas fitting is maintained at all times in a safe and proper operating condition, functions at all times in a reliable manner and is reasonably protected against damage, notify and require the responsible person to engage a licensed gas service worker or a professional engineer, where applicable, to carry out the inspection on the gas installation or gas fitting and submit a certificate of fitness to the gas transporter.	For gas installation or gas fitting referred to in clause 9.3, the gas transporter <del>may</del> <u>must</u> , in order to ensure that the said gas installation or gas fitting is maintained at all times in a safe and proper operating condition, functions at all times in a reliable manner and is reasonably protected against damage, notify and require the responsible person to engage a licensed gas service worker or a professional engineer, where applicable, to carry out the inspection on the gas installation or gas fitting and submit a certificate of fitness to the gas transporter.
GSC/2024/07	9.5	If any person after being notified by the gas transporter under clause 9.4 fails to comply with the inspection notice, the gas transporter may, subject to the power provided to it under relevant provisions of the Act, arrange with the relevant gas retailer or shipper to take necessary actions to discontinue or disconnect, where applicable, the supply of gas to the relevant gas installation or gas fitting.	Clause 9.5 to be removed.  (The succeeding clauses to be renumbered accordingly.)
GSC/2024/08	9.7	The gas retailer and shipper, where applicable, shall provide the gas transporter with all relevant information pertaining to its consumers to enable the gas transporter to implement and maintain the programme of inspection as stipulated in clauses 9.2 and 9.3.	The gas retailer and shipper, where applicable, <del>shall</del> <u>must</u> provide the gas transporter with all relevant information pertaining to its consumers, <u>including the location of gas installations or gas fittings where gas is supplied</u> , to enable the gas transporter to implement and maintain the <del>programme of inspection</del> <u>programmes</u> as stipulated in clauses 9.2 and 9.3.
<b>Transmission System Planning and Development</b>			
GSC/2024/09	12.5 (a)	a detailed plan for the 18 barg and above networks for the next ten years for transmission network expansion, enhancement, upgrading, replacement and re-configuration;	a detailed plan for the <del>18 barg and above networks for the next ten years for transmission network</del> expansion, enhancement, upgrading, replacement and re-configuration <u>for 18 barg and above networks over a rolling 10-year period as stipulated by the Authority;</u>

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GSC/2024/10	12.5 (f)(vi)	maximum gas velocity within the gas transmission network for the next ten years.	maximum gas velocity within the gas transmission network for <del>the next ten years</del> <u>a rolling 10-year period as stipulated by the Authority.</u>
<b>Cyber Security Measures</b>			
GSC/2024/11	Appendix 4 (14-b)	New clause.	<p><u>CII Owners must provide to the Cyber Security Agency (with the Authority copied) any material change to the design, configuration, security or operation of the critical information infrastructure (“CII”) no later than 30 days after the change is made to the following:</u></p> <ul style="list-style-type: none"> <li>• <u>Network architecture or topology of CII;</u></li> <li>• <u>Functionality of CII;</u></li> <li>• <u>Application/Software Platforms of CII;</u></li> <li>• <u>Outsource or insource of CII operation;</u></li> <li>• <u>Addition or removal of CIIs’ equipment/devices and/or cybersecurity components;</u></li> <li>• <u>Key stakeholders responsible for cybersecurity of the CII.</u></li> </ul>
<b>Transmission System Planning and Development</b>			
-	12.3	To facilitate gas transporter's preparation of its Ten-Year Transmission Network Development Plan, the Authority shall provide gas transporter each year with the ten-year rolling gas demand projection with their respective expected locations.	To facilitate gas transporter's preparation of its Ten-Year Transmission Network Development Plan, the Authority <del>shall</del> <u>must</u> provide gas transporter each year with the ten-year rolling gas <u>supply and</u> demand projection with their respective expected locations.
-	12.7	The Authority shall review the gas transporter's rolling Ten-Year Transmission Network Development Plan, taking into consideration the projected gas demand, to ensure that system security and stability are maintained, network reliability meets the security standards prescribed by the Authority and that the Ten-Year Transmission Network Development Plan is not excessive based on the security standards. The Authority shall provide detailed	The Authority <del>shall</del> <u>must</u> review the gas transporter's rolling Ten-Year Transmission Network Development Plan, taking into consideration the projected gas <u>supply and</u> demand, to ensure that system security and stability are maintained, network reliability meets the security standards prescribed by the Authority and that the Ten-Year Transmission Network Development Plan is not

Modification Ref. No.	Clause	Original Text	Modified Text
		<p>comments and require the gas transporter to revise the Ten-Year Transmission Network Development Plan accordingly.</p> <p>The gas transporter shall revise and resubmit the plan to the Authority within one month from receipt of the Authority's comments or otherwise stated by the Authority. The Authority shall approve the gas transporter's re-submitted Ten-Year Transmission Network Development Plan if the Authority is satisfied with the plan.</p>	<p>excessive based on the security standards. The Authority <del>shall</del> <u>must</u> provide detailed comments and require the gas transporter to revise the Ten-Year Transmission Network Development Plan accordingly.</p> <p>The gas transporter <del>shall</del> <u>must</u> revise and resubmit the plan to the Authority within one month from receipt of the Authority's comments or otherwise stated by the Authority. The Authority <del>shall</del> <u>must</u> approve the gas transporter's re-submitted Ten-Year Transmission Network Development Plan if the Authority is satisfied with the plan.</p>