

EXPLANATORY MEMORANDUM TO
THE GAS SAFETY (MANAGEMENT) (AMENDMENT) REGULATIONS
(NORTHERN IRELAND) 2026

S.R. 2026 No. 000

1. Introduction

- 1.1. This Explanatory Memorandum has been prepared by the Department for the Economy (DfE) to accompany the Statutory Rule (details above), which is laid before the Northern Ireland Assembly.
- 1.2. The Rule is made in exercise of the powers conferred by Articles 17(1), (2) and (4)(a)¹, 40(2) and (4) and 55(2) of, and paragraphs 1(1)(c), 14(1), 15 and 20(a) of Schedule 3 to, the Health and Safety at Work (Northern Ireland) Order 1978 and is subject to the negative resolution procedure.²
- 1.3. The Rule is due to come into operation on 7 December 2026, with the exception of regulations 3(2)(d) and (5), 4, 5, 6(2) and (3), 7, 10, 11 and 13, and the Schedule, which come into operation on 7 December 2027.

2. Purpose

- 2.1 The Rule amends the Gas Safety (Management) Regulations (Northern Ireland) 1997 (“GSMR”) relating to health and safety.³
- 2.2 The GSMR are domestic legislation with no basis in European Union (EU) law. These Regulations make various changes to the requirements for the content and characteristics of gas that is permitted to be conveyed in gas networks in NI. In particular, changes are made to enable the additional supply of gas to the gas network from the UK Continental Shelf and the continued use of greener gases such as biomethane. The Regulations also make changes to the way in which the service for reporting gas leaks is provided. The amendments maintain the original policy intent of the GSMR.

3. Background

- 3.1 This Rule covers four main areas:
 - a. the safe management of gas flow through a network, particularly those parts supplying domestic consumers, and a duty to minimise the risk of a gas supply emergency;
 - b. arrangements for dealing with supply emergencies;
 - c. arrangements for dealing with reported gas escapes and gas incidents; and

¹ Article 17 shall be read with S.I. 1992/1728 (N.I. 17), Articles 3(2) and 4(2)

² [Health and Safety at Work \(Northern Ireland\) Order 1978](#)

³ [Gas Safety \(Management\) Regulations \(Northern Ireland\) 1997](#)

- d. gas composition.
- 3.2 Since 1997, the quality of natural gas distributed to consumers in NI has been regulated by the GSMR. The limits on gas quality specified in Schedule 3 to those Regulations were derived from British Gas Corporation ("BGC") standards that were in force up to privatisation in 1986. The basic approach to control of gas quality was originally based on test work by B.C. Dutton and others (working for BGC) in the late 1970s and early 1980s.
- 3.3 The GSMR were developed in response to liberalisation of the domestic gas supply market and the safety implications of that process. The key driver was the need for assurance that liberalisation would not lead to any reduction in safety standards. The Regulations are primarily concerned with the management of the safe flow of natural gas through NI's gas transmission and distribution system, the key objective being to ensure continuity of supply to domestic consumers. The Regulations aim to maintain, and if possible, improve upon, the safety standards achieved by British Gas prior to liberalisation. They require a gas conveyor to prepare a safety case which must be accepted by Health and Safety Executive for NI ("HSENI") and impose requirements in respect of gas escapes and the composition and pressure of gas.
- 3.4 The Regulations apply to the conveyance of natural gas (methane) through pipes to domestic and other consumers and define the gas transmission and distribution network. A key part of the specification is the Wobbe Number (WN) or Wobbe Index (WI), which is used to compare the combustion energy output of different composition fuel gases in an appliance and is also an indicator of the interchangeability of fuel gases such as natural gas. Gases are said to be interchangeable when they may be substituted for one another without affecting the operation of gas burning appliances and equipment and reflect the degree to which they give similar heat input to the appliance, ignite reliably, have a stable flame and completely combust.
- 3.5 The GSMR use the WI as one tool of prescribing what composition of gas is safe to use in the gas transmission and distribution network. Currently, only gases with a WN between 47.20MJ/m³ and 51.41MJ/m³ are permitted to enter the network and be used by consumers. Schedule 3 to the GSMR also prescribes emergency WI limits, and the safe level of oxygen, hydrogen and impurities content, among other characteristics.
- 3.6 Today, UK Continental Shelf (UKCS) supplies meet around 40% of gas demand in the United Kingdom. As easily accessible indigenous natural gas reserves have been depleted, sources such as Liquefied Natural Gas (LNG) (into Milford Haven and the Isle of Grain), pipeline interconnectors with Norway and mainland Europe (Langeled (Norwegian gas) and BBL (Dutch gas)) and biomethane have provided an alternative means of meeting the United Kingdom's gas supply using the established pipeline infrastructure.
- 3.7 Currently, much of the gas from these sources must be processed or blended with diluents in order to comply with the safe gas composition specifications set out in

Schedule 3 to the GSMR. For imported LNG, nitrogen ballasting is used, and for other gases different compositions of gas can be blended to bring them within the permitted WN range.

- 3.8 The current legislation creates significant processing costs and could be a barrier to future diversification of gas sources to support the NI Executive's 2050 Net Zero commitments.
- 3.9 It is reasonable to review the gas quality limits to establish whether they reflect safety or commercial constraints and to determine whether the costs of prescribed regulation of gas quality are justified by the benefits. Technology and operating practices have also evolved since the establishment of these Regulations, and that provides another reason to review the appropriateness of the current regime.
- 3.10 The industry-led OGM gas-quality trial and subsequent report made the case that there is no increase in risk to the network or consumers when gas with a higher WN, demonstrated up to 54.76 MJ/m³, is used. The report also concluded that the gas interchangeability diagram can be simplified and updated.
- 3.11 HSENI has been liaising with the Health and Safety Executive in Great Britain ("HSE"), which has been working closely with the gas industry, the Oil and Gas Authority (OGA), BEIS and Ofgem to ensure that the latest gas-quality safety evidence is brought together and reviewed to establish whether investment barriers to producers and importers can be removed and wider access to gas supplies secured.
- 3.12 Following the OGM report, HSE has received evidence submissions from the GQWG on the safety of operating the gas network with a wider range of WN gas than currently permitted by the GSMR. Other evidence packages have been received on industrial and commercial appliances, gas interchangeability, oxygen content, oxygen depletion sensors, transmission assets and pipeline fracture propagation and the governance process for a proposed alternative to the control of gas quality which is prescribed in Schedule 3 to the GSMR.
- 3.13 HSENI issued a class exemption in 2022 on the permitted oxygen content as set out in Schedule 3, raising the permitted level to 1% mol at network pressures below 38 barg. No prejudice to health and safety standards has been observed as a result of that exemption, and HSENI proposes to formalise it by changing the GSMR accordingly.
- 3.14 A class exemption was also issued in 2023 to incorporate the Incomplete Combustion Factor (ICF) and the Soot Index (SI) limits in Schedule 3 and introduce a relative density of ≤ 0.700 . As above, no prejudice to health and safety standards has been observed as a result of that exemption, and HSENI proposes to formalise it by changing the GSMR accordingly.
- 3.15 Industry has provided the safety evidence to support the proposed changes to Schedule 3 under the leadership of the Institution of Gas Engineers and Managers (IGEM) through its GQWG over the last few years. This has resulted in a proposal to transfer the control of gas quality from the GSMR to an IGEM

standard. The IGEM consultation on the new gas-quality standard ran from 24 April 2020 to 30 July 2020.

- 3.16 The IGEM standard proposal is intended to create greater flexibility when making future specification changes. Flexibility could be valuable, given the likelihood that future changes to the gas specification will be required to meet Net Zero targets.
- 3.17 Safety is paramount in all these proposals, however, and HSENI has a duty to ensure that changes to Regulations do not result in a diminution of safety standards, as set out in the Health and Safety at Work (Northern Ireland) Order 1978 Article 3(2).
- 3.18 Following HSE assessment of evidence presented by the GQWG, the proposals for an increase to the upper WN limit and the transfer of governance of Schedule 3 to an industry standard will not be taken forward as part of this consultation and will now be treated as separate packages requiring further development.
- 3.19 Nearly 30 years have passed since the GSMR came into operation. In that time NI's gas market has been liberalised, new producers have entered the market, the supply mix for NI gas demand has shifted from UK production to imports, and there is a new emphasis on making our energy consumption greener. That has meant that the gas network, as defined by the Regulations, no longer encapsulates the current breadth of gas conveyance occurring in NI, and the Regulations need to be updated and modernised.
- 3.20 All of the above amendments will ensure that the regulatory provisions of the GSMR will extend to, and encapsulate, all current gas conveyance activity. That will mean that the benefits of gas conveyance can continue to be obtained, while ensuring that greener gas sources can be used. The health, safety and welfare risks of gas conveyance can be adequately controlled, and all duty holders will be regulated in the same manner to recognised industry standards.

4. Consultation

- 4.1 HSENI conducted a public Consultation exercise between 12 February and 14 April 2025. Letters were issued to around 400 consultees, including individuals and bodies representative of Section 75 of the Northern Ireland Act 1998 and other organisations with an interest in equality and related issues (including each member of the Northern Ireland Assembly).
- 4.2 During the Consultation period seven formal replies were received.
- 4.3 A summary of the outcome of the Consultation exercise can be found on the HSENI website.⁴

⁴ [Consultation on proposals for amendments to the Gas Safety \(Management\) Regulations \(Northern Ireland\) 1997](#)

5. Equality Impact

- 5.1. The Rule has been screened for any possible impact on equality of opportunity affecting the groups listed in Section 75 of the Northern Ireland Act 1998, and no adverse or differential impacts were identified. There is no evidence to suggest that the proposals will impact disproportionately on any Section 75 group.

6. Regulatory Impact

- 6.1 HSENI is of the opinion that the analysis and considerations as set out in the Great Britain Impact Assessment can be applied to NI on a proportional basis.⁵

7. Financial Implications

- 7.1 The Rule has no financial implications for DfE or HSENI. It is estimated that the total net cost to businesses will be a population-based proportion of the £700,000 estimated by HSE, i.e. around £21,000.

8. Section 24 of the Northern Ireland Act 1998

- 8.1 The Department has considered the matter of Convention rights and is satisfied that there are no matters of concern.

9. EU Implications

- 9.1 This Rule is made under NI legislation, and there are no EU implications.

10. Parity or Replicatory Measure

- 10.1 In Great Britain, the Gas Safety (Management) (Amendment) Regulations 2023 were made on 7 February 2023 and came into force on 6 April 2023,⁶ with the exception of regulation 1(2), which came into force on 6 April 2025.

Department for the Economy

24th August 2026

⁵ [The Gas Safety \(Management\) \(Amendment\) Regulations 2023 Impact Assessment](#)

⁶ [The Gas Safety \(Management\) \(Amendment\) Regulations 2023](#)