

Gas
Transmission

GS(M)R Review:

Initial Thoughts on Implementation

Transmission Workgroup

3rd March 2022

nationalgrid



Recap of HSE's Proposals

Changes to the gas quality specification in GS(M)R Schedule 3

- Reduce the lower limit for Wobbe Index from 47.20 MJ/m³ to 46.50 MJ/m³
- Remove the Incomplete Combustion Factor parameter
- Remove the Soot Index parameter
- Introduce a Relative Density upper limit of 0.7
- Increase the upper limit for oxygen from 0.2mol% to 1.0mol% on below 38 bar systems

Other amendments to align the Regulations with today's network

- E.g. Remove references to 'British Gas plc', include biomethane and LNG terminals etc.

Link to consultation and impact assessment <https://consultations.hse.gov.uk/hse/cd291-revision-gas-safety-management-regulations>

Implementation Issues

This slidepack contains our initial thoughts on how the changes to the gas quality specification might be implemented at NTS entry/storage points, assuming that they are ultimately approved in an amended version of GS(M)R

We would welcome the Workgroup's feedback on our thinking

Wobbe Index: Amendments at NTS Entry Points

HSE Proposal: Reduce the legal lower limit from 47.2 MJ/m³ to 46.5 MJ/m³

‘Do nothing’ would maintain compliance

Which NTS entry/storage/interconnection points wish to reduce their limit?

An ‘enabling’ UNC modification(s) would be required to facilitate contractual changes at individual points

- NGG could make a ‘window’ available during which parties that have an NEA in place, storage and interconnectors could request a change
- We suggest that a single modification enabling NGG to agree to a lower Wobbe limit down to 46.5 MJ/m³ at any NTS entry point would be more pragmatic than individual modifications for individual sites
 - What level of transparency is appropriate in this case and how could that be delivered?

Wobbe Index: Amendments at NTS Entry Points

Operational implementation

- **Measurement ranges on our analysers and telemetry units are adequate**
- **Need to change alarm settings in our operational control system for each relevant entry/storage/interconnection point where a change is agreed**

CV Shrinkage

- **A wider Wobbe range could mean a wider range of CV delivered to the NTS**
- **We therefore wish to assess the potential impact on CV shrinkage**
- **We have issued a questionnaire to all NTS entry terminals seeking views on how CV may change to inform our assessment**

Wobbe Index: Interconnector Considerations

The ability of interconnector operators to accept a lower Wobbe limit for NTS exit will impact on our ability to agree to lower limits at other NTS entry points

We are aware that the legal minimum Wobbe Index and specifications at some interconnection points in NW Europe are greater than 46.5 MJ/m³

We envisage a need to engage further with Interconnector, BBL, and the Belgian, Dutch, French and German TSOs to determine willingness and ability to change limits

Wobbe Index: Interconnector Considerations

We are keeping the TSOs in RoI and NI informed about the progress of the GS(M)R Review

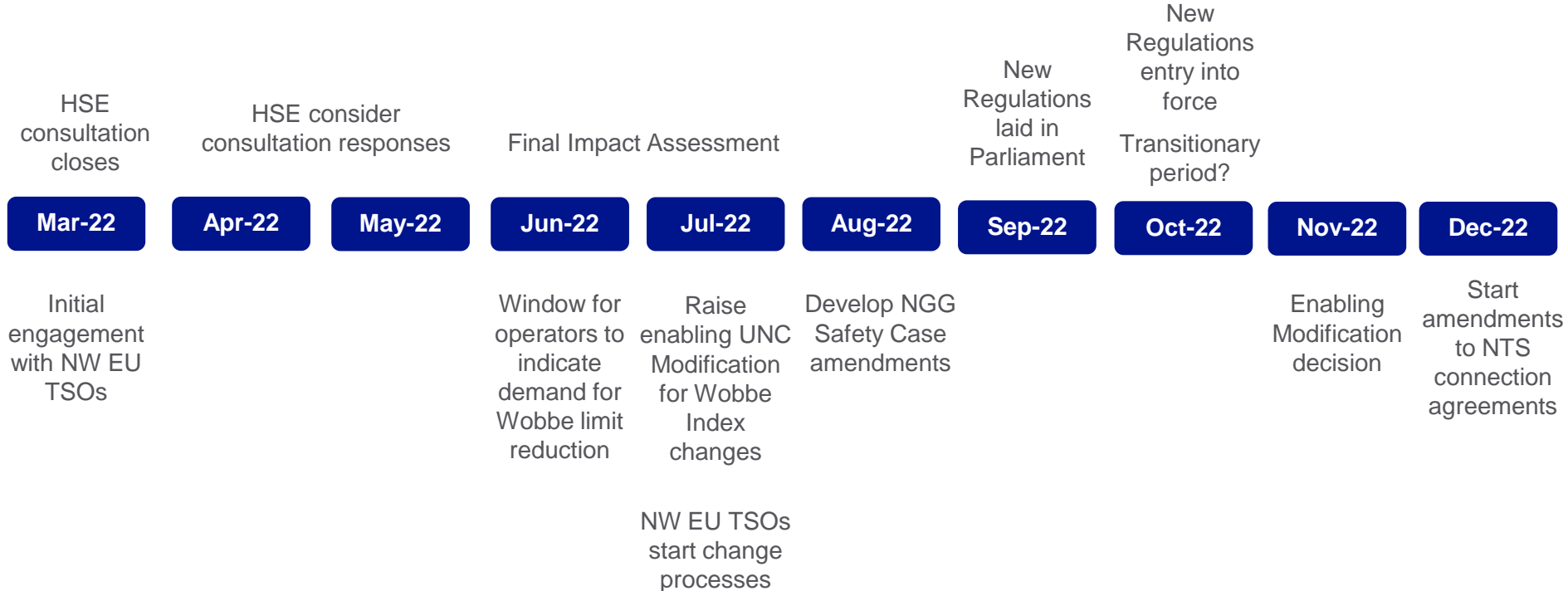
The majority of gas supply to the island of Ireland is delivered through Moffat, therefore we expect any changes to the GS(M)R gas quality specification to be adopted there too

NI: Corresponding amendments to the NI version of GS(M)R

RoI: Amendment to the specification contained within GNI's Code of Operations

We envisage a need for alignment in the timing of these amendments with any Wobbe changes at GB entry points, especially St Fergus

Potential Timetable



Relative Density / ICF / Soot Index

Measurement and monitoring of relative density would become mandatory at all NTS entry/storage/interconnection points (unlike amendments to Wobbe Index)

UNC TPD I2.4.5 provides:

- 2.4.5 Where under any new or changed Legal Requirement there is any requirement, applicable to the characteristics (other than odour) of gas conveyed by means of or tendered for delivery to the Total System, which either does not apply or is more stringent than any which does apply under the prevailing Gas Entry Conditions, such requirement shall (unless expressly provided otherwise under any Special Delivery Arrangement) at the time at which it comes into force be deemed to be incorporated in the Gas Entry Conditions (which will be amended accordingly as soon as reasonably practicable thereafter).

We would therefore need to measure and monitor relative density at all points where gas is delivered to the NTS from the date on which the amended GS(M)R comes into force and associated contractual changes could follow afterwards

We already measure and telemeter RD at NTS entry points; some additional operational activities are expected e.g. setting of alarms, amended procedures

Relative Density / ICF / Soot Index

We do not believe that an enabling UNC Modification(s) would be required prior to contractual amendments with operators to introduce a relative density limit and remove ICF and SI because this would be needed to comply with a Legal Requirement (UNC TPD I2.2.4)

- 2.2.4 Such Network Entry Provisions may (in accordance with the provisions of the relevant Network Entry Agreement) be amended without the consent of any User insofar as may be required to enable:
- (a) the Transporter; or
 - (b) the relevant Delivery Facility Operator to comply with any Legal Requirement.

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