GSMR: Gas Quality Data Provision Options

No.	Options	Data Source	Who designed for	Data available to	Pros	Cons	Other considerations / additional criteria	Possible to Future Proof? Y/N
1	Publish CV and Wobbe data measured at GDN offtake points	GDNs	All - especially Sensitive customers	All	*Few parties to obtain consent from – contractual relationship can be tied into the code *Would enable all shippers and consumers to see gas quality data from Offtake points all around the network and make their own inferences on what this means for them. *Existing flow of data from GDN offtake to NGT via telemetry that can be used. The obligation for GDNS to send data is in OAD Section D and Annex D-1. *Could be published on NGT gas data portal (formerly MIPI). *If locational gas quality data is available to gas engineers when dealing with domestic customers they can fine tune equipment following repair instead of setting the appliance up based on a test gas	*Unsure as to how many parties would use the data & its value	*Assumption data is 'real time data' /as close to real time as possible - currently full refresh of data can take up to 14 mins. *Assumption = publish to everyone (a solution which limits the viewership of the data may be more complex and costly). *GDN consent is required *What level of accuracy and timing is required?	Y- if new measurements are added to OAD they can be incorporated into this option e.g. hydrogen.
2	Publish all parameters that are currently measured at GDN offtake points (CV, RD, Wobbe, N & CO2)	GDNs	All - especially Sensitive customers	All	*Few parties to obtain consent from – contractual relationship can be tied into the code. *As above with the addition of other Gas Quality parameters measured and sent via telemetry in accordance with OAD Section D. These additional parameters may be useful to some to see.	*Unsure as to how many parties would use the data & its value	*As above	*As above

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3	Publish Wobbe Index, Calorific Value at entry points (incomers vs feeders)	DFOs / NGT	All - (Especially customers located close to an Entry point) *Sensitive Customers *GDNs	All	*If comingled gas only need to publish measurements from feeders so no consent required because data is NGT's. Likely to be a good indicator of what sites receive that are located close to NTS entry points	*Issues around confidentiality of gas quality data. *Publication of data from entry points would, in most cases, not be a true reflection of gas quality delivered to site (accuracy). *The different measurements (equipment) could lead to issues with the frequency and publication of the data. *In the case of comingled gas where there is an outage gas quality delivered by a particular gas terminal may be easily identifiable and NGT could be in breach of the NEA (confidentiality clause) - even if NGT publish at feeder level may still need consent.	*More useful to some customers than others (due to the location of the sensitive customer. *Assumption use of real time data is as close to real time as possible. *Potential need for training to interpret data. *Each entry point is different therefore needs to be reviewed on a case by case basis.	Y- Hydrogen measurement may become more important in the future and could be incorporated into relevant documentation and incorporated into this option.
4	Publish Wobbe Index, Calorific Value, only at entry points downstream of which there are sensitive customers e.g., CCGTs	DFOs / NGT	*Sensitive Customers	All	*Useful data for sensitive parties to spot and take action on gas quality fluctuations if we publish 'real time data' / data as close to real time as possible. And as option 3	*Issues around confidentiality *The different measurement equipment could lead to issues with the frequency and publication of the data. * Requires additional terms in contract and consent plus need to define who is a sensitive customer and how far away they are from a source of supply.	* Definition of sensitive customers needed - does this include location? If we are publishing to all, is the definition needed? *Assumption use of real time data. *Potential need for training to interpret data	*As above.

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5	Produce [annual] 'heat maps' of where low Wobbe gas might feature	DFOs & NGT	All	All	*Forward looking data from relevant DFOs and historical data can be used to provide an indication of where low Wobbe gas will feature *Can be used for worst case scenario(s) on multiple sites	* Unsuited to low Wobbe situation which DFOs are saying is for exceptional events only. *Does not account / show where blips / one off events are likely to occur because not based on real time data *Assumes a relatively steady state when modelling *DFOs need to provide data on ongoing basis. *Requires DFO consent to provide data for publication.	*Historic data? * Forecast data? *Combination of both?	
6	[Automated] email alert of real time change in Wobbe Index & CV due to gas change.	DFOs / GDNs	* Sensitive Customers *UK-Ireland Interconnector *GDNs	Those who request	* Sensitive customers are informed of potential gas quality risk.	*Currently not BAU - it may be resource intensive if not automated and human error could occur. *Potentially significant impact to Control Room activities (if not automated) depending on number of counterparties who request it. *Confidentiality issues *Unclear how this would be delivered at present. *Potential CNI implications.	*What does real time change mean? What does a step change mean? - Below 47.2 MJ/M^3 - by - how much? - When it goes up as well? *Who are the sensitive customers? *At what point does this data come from - offtake or entry point or both? *Potential need for training to interpret data.	Currently unclear how this would be delivered therefore unclear if / how this can be future proofed.

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7	Forecast Service of Gas Quality Data – CV & Wobbe Index	DFOs GDNs	All	All	*NGT already use SIMONE simulation tool	*Based on previous work undertaken on this, this option requires significant investment and a standalone project to implement. *NGT already use SIMONE simulation tool, but this would require a significant upgrade and investment and resource to be used in this manner. *Due to the complexity and interconnected nature of the NTS it may not be possible to provide a meaningful forecast per offtake. *Accuracy - forecasts are subject to a number of factors outside NGT's control, for example, the system's meshed nature or a change in flow by a storage site / interconnector / large offtake after a forecast has been published which changes the gas quality delivered to the sensitive consumer. This then diminishes the accuracy of the forecast. *For DFO data, consent is required	*Likely only be able to forecast a few hours ahead at most. *May require additional Gas Analysers. *The shorter the timeline the more accurate the forecast. * Potential need for customer training to interpret data.	N -there are data accuracy challenges relating to forecasting that are not future proofable.