

Gas Network Innovation Competition Full Submission
Supplementary Answer Form

Project: H21

Tick if this answer has been provided verbally: ☐

Project code	NGNGN05	Question Number	11
Question date	3 rd Sept 2019	Answer date	5 th Sept 2019
Submission section question relates to	N/A		
Topic	QRA		
Question	The need for a comprehensive QRA covering both upstream and downstream of the ECV is clear but why should the consolidation of the QRAs be part of the H21 project rather than being funded through the Hy4Heat project		
Notes on question			
Answer	<p>As a Network Operator, it is a requirement for each Operator to understand the "risks" on their network. With the transition to hydrogen the Operators need to be able to ensure the network is as safe or safer than when distributing natural gas.</p> <p>By combining the QRA's, we will understand the whole risk and address any additional areas that are identified by the combined QRA. These could include the replacement of all metallic service connection, installation of an excess flow valve in the service connection to prevent a major leak into or within the property.</p> <p>Having control of the QRA will enable the team to understand the risks first hand and be able to incorporate any additional testing within the current programme. The current QRA would continue with the phase 2 QRA team, who are experts in risks associated with gas networks, rather than risk generalists.</p> <p>The results would then be able to be amended within the QRA to determine the impact on the "risks" and whether they were viable with our experience of operating and maintaining a gas network.</p> <p>One of the key requirements of the NIC framework is to make the information freely available and engage with stakeholders. With all of the GDNs being involved with the H21 NIC projects we are able to feed this</p>		

	<p>information back to them, which should prove invaluable to both the H100 and Cavendish projects. If the QRA work is funded by the Hy4Heat project, it is likely work would be conducted by the Hy4Heat team.</p> <p>The QRA being produced as part of the Phase 1 NIC would be further developed and expanded with the results of testing carried out in the Phase 2 NIC. The body of work involved in both the Phase 1 and 2 NICs will be much more extensive with regard to the behaviour of the current gas distribution networks once converted to 100% hydrogen than will arise from associated hydrogen projects (Hy4Heat, H100 etc.).</p> <p>The Phase 1 and 2 NICs are investigating the effects upon existing networks assets, considering the differential leakage and subsequent possible risk of this, assessing the changes that will be needed to risk modelling, looking at the possible changes that might be required to operational procedures etc. All of the findings from these will impact upon, and be reflected within, the NIC QRA. As the more comprehensive QRA it makes sense for the H21 NIC team to integrate findings from the other project QRAs and to act as a central collation point for this.</p>
Attachments	