

Network Innovation Competition Full Submission

Supplementary Answer Form

Tick if this answer is Confidential: ☐

Tick if this answer has been provided verbally: ☐

Project code:	SPT EN 01	Question Number	16
Question date	20-08-2013	Answer date	21-08-2013
Submission section question relates to	Section 5.3		
Topic	Knowledge Dissemination		
Question	It is stated that the VISOR project "raises market and regulation issues with respect to the ownership of the collected data, their value and secure transmission". Please explain the extent to which these issues will be addressed within the project and whether they could place any constraints on the overall effectiveness and delivery of the project.		
Notes on question			
Answer	<p>The VISOR project team has taken care to account for the commercial sensitivity of data used for the project.</p> <p>The existing arrangement of data exchange is that NGET is working as the national system operator, and as the interface between TO and any third part, an example can be found in Part 4, Section D of STC (version 5, November 2012). Such data is subject to the confidentiality set out in Section F of STC.</p> <p>It is difficult to classify Phasor Data regarding whether this data is deemed to be subject to Part F, and to which extent, should be controlled.</p> <p>The VISOR project, as a trial project, will ensure that all contributors be covered by Non Disclosure Agreement, compliant with Section F. As the majority of study and analysis work is to be led by the Academic partner and by external technical consultants, the VISOR project will provide data only to those Business Personnel who require access to the data and always on a strict need-to-know basis solely for or in relation to the Permitted Activities. Therefore, the current ownership of collected data will not cause any constraints.</p> <p>There are three key data sharing aspects to VISOR:</p>		

- **Sharing of TO WAMS & SSO data with NETSO**

This is a critical component of the project, where data from individual TO WAM systems will be aggregated at the central VISOR server, located at NETSO. The structure of the WAMS data centres is configured such that each utility will have ownership and visibility of the data that is already authorised. The TOs have access to WAMS data from their own network, and the GBSO collates data from the entire GB system.

Through the STC (system operator/transmission owner code), TOs have an obligation to provide necessary information to enable the NETSO to operate their assets – this is already performed with slower-rate SCADA data under STC Procedure 04-3 (Real time Data Provision). *Hence, no significant market or regulatory constraints are expected regarding this aspect.* It should be noted that WAMS data provides steady-state and dynamic summary information, and does not define the operating state of generation. WAMS data is therefore less commercially sensitive than SCADA information.

- **Sharing of Model & Offline Data for Studies**

This is another critical component of the project, where system model data, along with SCADA and WAMS data records, will be exchanged – potentially between TOs, NETSO, Academic partners and the WAMS supplier. The project team has taken into account the potential confidentiality issues surrounding this data.

The components of dynamic model validation work will be carried out using historic files of captured data. Any off-site work will be carried out using an anonymised model, such that the control models of individual generators cannot be identified. Also, the Suppliers and Academic partners can carry out modelling studies under the direct supervision of SPT and National Grid on their premises. The Hybrid State Estimation work will be carried out using data captured and provided as off-line files. There are already precedents for these arrangements, in particular the selected academic partner (University of Manchester), has a pre-existing working relationship with NETSO in this area.

- **Sharing of a reduced, GB-wide dataset with TOs**

The VISOR project proposes to provide a high-level GB dataset to TOs as well, to provide visibility of system oscillatory behaviour. To this end, the project will seek to demonstrate to NGET a reasonable and practical case for this data sharing, including measures to ensure that such information cannot be used for purposes other than those permitted.

This component of the project should be explored as a vital contribution to WP4B (Optimal WAMS Architecture), since data sharing is a key question to be addressed in the deployment of interconnected power systems and their associated monitoring. However, it does not represent part of the critical path of the project, and would not place constraints on the project delivery.

It is concluded that the constraints will not affect the overall effectiveness and delivery of the project. The confidentiality terms and data sharing

	<p>arrangements required have all been encountered as part of previous monitoring and study projects.</p> <p>The project will take detailed consideration into the nature of phasor data (as part of Work package 4B), in addition to consulting with ENTSO-E (the European Transmission Operator) and NGET regarding future arrangements. A report is expected, as an outcome of these exercises, to provide examples of how phasor data should be used locally (i.e. at TO level), and the interaction of data flow between NGET (as the NETSO) and TOs.</p>
Attachments	
Verbal Clarifications (Consultants)	