DS3 Programme Status Update

22nd September 2015

- The DS3 System Services Project Plan for the detailed design and implementation phase was published on 20/05/2015 – see here. This document is a three-entity branded document (EirGrid / SONI / SEM Committee) that provides a high-level overview of the project plan as agreed by the TSOs and Regulatory Authorities. The approach being taken by the TSOs and the Regulatory Authorities in delivering the arrangements, as well as the roles and responsibilities of the relevant organisations are also described in this document.

- A draft TSO Procurement Strategy document as part of the DS3 System Services Implementation Project was published on 04/06/2015 – see here. This is intended to be a "living" document that will be updated periodically during the course of the project and as decisions are made and key aspects of the design become clearer. It is anticipated by the TSOs that sections of this document will form the basis of a future published Procurement Policy.

- A DS3 Industry Forum was held in Dublin on 04/06/2015. The forum was well received and attended by over 80 industry participants. The presentations can be found here.

- The RoCoF Alternatives Phase 1 report was published on 25/06/2015 and can be found here. The report was compiled by DNV GL and is accompanied by a summary document drafted by EirGrid and SONI which can be found here. An industry workshop was held at Ballymascanlon House in Dundalk on 08/07/2015 to discuss the report with industry representatives.

- The DS3 Model Development and Studies workstream was closed on 31/07/2015.

- A Windfarm Testing workshop was held on 28/05/2015 at which industry participants were updated on DS3 Testing deliverables and feedback was facilitated on a published testing report and procedure templates. The workshop was well attended and there was positive engagement throughout.

Status

Workstream	Commentary
Communications	• A DS3 TSO-DSO Oversight Committee meeting was held on 20/05/2015 to discuss the TSO-DSO engagement plan. • A Windfarm Testing workshop was held on 28/05/2015 at which industry participants were updated on DS3 Testing deliverables and feedback was facilitated on a published testing report and procedure templates. • A DS3 Industry Forum was held in Dublin on 04/06/2015. The presentations can be found here. • An all-island TSO-DSU teleconference was held on 11/06/2015 to discuss a procedure for the Safe Dispatch of DSUs taking account of DSO time bound access restrictions on DSU activation. • An industry workshop was held at Ballymascanlon House in Dundalk on 08/07/2015 to discuss the RoCoF Alternatives Phase 1 report which was published on 25/06/2015.The presentations can be found here. • The Operational Policy Review Committee meetings took place in EirGrid on 18/05/2015, 07/08/2015 and 04/09/2015. Reports discussed included the EMS Short Circuit Tool, an All-Island POR Study, a Ramping Study and the EWIC Export Study.
System Services	• The DS3 System Services Project Plan for the detailed design and implementation phase was published on 20/05/2015 – see here. This document is a three-entity branded document (EirGrid / SONI / SEM

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	Committee) that provides a high-level overview of the project plan as agreed by the TSOs and Regulatory Authorities. The approach being taken by the TSOs and the Regulatory Authorities in delivering the arrangements, as well as the roles and responsibilities of the relevant organisations are also described in this document. • A draft TSO Procurement Strategy document as part of the DS3 System Services Implementation Project was published on 04/06/2015 – see here. This is intended to be a "living" document that will be updated periodically during the course of the project and as decisions are made and key aspects of the design become clearer. It is anticipated by the TSOs that sections of this document will form the basis of a future published Procurement Policy. • A consortium comprising Poyry, TNEI and DotEcon were awarded a contract to provide EirGrid with techno-economic consultancy support to assist in the development of the principles and methodologies for how various technical aspects will work. The main output of this work package will be reports on regulated tariff design, auction design, and scalar design, which will form the basis of consultation papers. • A draft consultation paper has been prepared on the volume calculation methodology and the service provider portfolios to be used in the methodology. It is expected that the volume consultation paper will issue in the coming weeks. • Mason Hayes & Curran has been awarded a contract to provide EirGrid with a legal opinion as to the most appropriate procurement strategy to lawfully and successfully deliver the required DS3 Systems Services contracts.
RoCoF	• On the Generator Studies Project, SONI published their RoCoF project Six Monthly Report on 18/08/2015 – see here. This report provides an update on the status of the RoCoF Generator Implementation Project in Northern Ireland including the DSO implementation project associated with the RoCoF modification. For reference, the CER also published its Quarterly Report for Q1 2015 to the CER website in Ireland on 13th May, 2015 – see here. • A discussion paper has been issued to the CER and UR on the considerations for the RoCoF remuneration mechanism for Generators. This mechanism is aimed at incentivising generators to finish their studies on the impacts of RoCoF and reach compliance in a timely fashion. • Work is progressing on the TSOs-DSOs Implementation Project. ESBN confirmed that there has been a slow response from wind generators to its G10 Questionnaire issued last June (the aim was to confirm existing records and instruct a change to various settings including those for RoCoF). NIE are progressing with studies that will determine the impact of changing G59 RoCoF settings up to 2 Hz/s. • On the RoCoF Alternatives / Complementary Solutions Project, an industry workshop was held at Ballymascanlon House in Dundalk on 08/07/2015 to discuss the RoCoF Alternatives Phase 1 report which was published on 25/06/2015. The TSOs received fifteen responses to the report from industry representatives. The TSOs have reviewed these responses and will be issuing a briefing note to close out Phase 1. • Phase 2 of this project is currently being scoped by EirGrid. This phase will consider more detailed studies of possible synchronous and non-synchronous solutions.
Grid Code	• The Dynamic Model Modification to the Ireland Grid Code was tabled at the February Grid Code Review Panel meeting. The modification proposal was not issued to the CER based on feedback received at this meeting. Taking this feedback on board, the dynamic model modification will be brought to the September 2015 Grid Code Review Panel meeting. • The corresponding Dynamic Model Modification to the SONI Grid Code

	has been issued to URegNI and a decision will be made following the September 2015 Grid Code Review Panel meetings. • The TSOs undertook a review of Over Frequency (OF) reserve clauses in the Grid Codes - The review indicates that OF reserve is currently being managed in the NCC and no Grid Code changes are required at this time however modifications will be captured during Network Code adoption.
DSM	• A procedure for the Safe Dispatch of DSUs taking account of DSO time bound access restrictions on DSU activation has been drafted and agreed by the DSU Industry. This is an interim measure and a RAs-led consultation will be held in December 2015 with regard to developing a longer term solution. • A cross industry workshop on the proposed All Island DSU Application form was held on 28/08/2015. It is expected that this form will become effective in September.
Voltage Control	• A Distribution Code modification related to increasing the reactive power capability of embedded 'non-cluster' distribution wind farms (Type C- and D-connected) was approved by the ESBN Distribution Code Review Panel at a meeting on 09/06/2014 pending publication of a document by ESBN providing comfort on modified Gate 2 and Gate 3 offers related to the design of connections. • NIE are continuing to study the connections of non-cluster wind farms to ascertain if the connections are capable of supporting unity power factor. To date six wind farms have been studied leading to small power factor changes. • Progress continues to be made on the Cauteen Nodal Voltage Control Pilot Project. The final control modes of the Nodal Voltage Controller are close to being agreed with ESBN. • Meetings took place with NIE regarding reactive power settings for distribution-connected wind farms in Northern Ireland. NIE are to study the connections of non-cluster wind farms to ascertain if the connections are capable of supporting unity power factor. It appears that no modifications are required to the NIE Distribution Code.
Frequency Control	• An interim Ramping Assessment Tool has been developed and is currently being implemented into the control centres. It is envisaged that the tool will go live by end Q3 2015. • An Over Frequency Generation Shedding Schedule has been developed and will be presented at the next DS3 Advisory Council on September 22nd. • The EWIC Export study is complete and will be presented at the next DS3 Advisory Council on September 22nd. • A report detailing sensitivity studies related to the VDIFD issue will be presented to the OPR Committee on 17/09/2015. This report has focussed on related protection settings, relay performances etc.
Control Centre Tools & Capability	• Work on the EMS Integration Project is on-going. Live telemetry is being fed to the new platform in Dublin and Belfast. Conversion of existing EMS displays (300+) to the new harmonised template is on-going and Operations are reviewing modified displays. Initial RTU communications circuit testing to the new EMS has commenced. Site Acceptance Test commenced on 20/07/2015. • The EMS Short Circuit Tool was successfully launched in the NCC and is already facilitating revised network topologies.
Model Development & Studies	• The DS3 MDS workstream was closed on 31/07/2015.

WSAT – Wind Security Assessment Tool	• Following the launch of frequency stability WSAT functionality one-to-one training for control centre engineers was completed. The WSAT User Manual for Grid Controllers is in use in DRAFT form and will be finalised following more experience with real-time frequency analysis. • Multiple STAR (Short Term Active Response) demand models have been created for each hour for which STAR is available – the models have been installed in the WSAT pre-production server. • The TSAT v PMU (Phasor Monitoring Unit) Frequency Comparison report and TSAT v PMU Voltage Comparison report are complete. • The Scope for forward–looking WSAT is currently being drafted.
Renewable Data	• A comprehensive report on the dispatch-down of wind energy in 2014, as required under European and Member State legislation, is currently being prepared – this will issue later this year • Work is on-going to include reason codes from the new EMS Wind Dispatch Tool in the Quarterly Wind Constraint and Curtailment Reports. • Industry engagement on the new report template for Wind Constraint and Curtailment Reports using the Control Centre Wind Dispatch Tool as a data source has been completed. • Work has commenced on developing the new reporting methodology and this will also be issued to industry for feedback in Q4 2015 and the new reports will be issued thereafter.
Performance Monitoring & Testing	• A Windfarm Testing workshop was held on 28/05/2015 at which industry participants were updated on DS3 Testing deliverables and feedback was facilitated on the published report and procedure templates. The workshop was well attended and there was positive engagement throughout. • Work has begun on the development of the Enhanced Performance Monitoring System platform – this tool will facilitate automated ancillary services and Grid Code performance monitoring.

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