



S M A R T **G** R I D S

Working Group Rapporteurs: End of Session Summary

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Six generic messages

1. **SmartGrids is not about ‘technology for its own sake’.** Every project must add value – or don’t do it. Ensure that the value gain is shared with customers.
2. Many SmartGrids elements exist now: for example, active operation within physically islanded systems, and the demand side participation of large customers. **The challenges we have are those of scale, system materiality, multi-customer impact, and old/new integration.** An aspect of the research agenda could usefully address customer education and engagement.
3. The discussions have emphasised **the importance of deployment** ie achieving technology transfer from academic research to commercialisation and adoption of proven solutions. We need to examine what are **the barriers and incentives for network companies** in two respects: hosting demonstration projects and widespread adoption of successful developments. Research might be valuable to develop **tools to quantify the benefits of new technologies** – identification of financial benefits will be needed to construct convincing business cases.



4. Design principles for smarter networks need to **ensure that sophistication does not result in excessive complication or operationally brittle systems**. Attention should be given to ensuring that resilience is incorporated at each stage of development.
5. We should **not be deterred by the prospect of 'millions of small generators' or 'millions of active demand customers'**! Today's grids competently handle millions of demand customers who don't place advance orders for their electricity! In the same way that demand behaviour can be treated statistically and correlated with various parameters (eg weather, prices) we can be confident that active customers will also behave predictably when considered as a group. Some useful research could be undertaken here.
6. Feedback will be very welcome as the Platform develops the Strategic Research Agenda – but **please make your comments specific**. What exactly is the issue – and how do you believe it should be addressed?

Many thanks for all your excellent contributions.