



**SP ENERGY
NETWORKS**

SGAM Smart Grid Forum WS4 Workshop

Utilising the SGAM Methodology
10 July 2014

Presented by Euan Norris

Future Grid Architecture

- Future Grid Architectures will take many forms, but will have the following guiding principles

Visibility

Data from network monitoring & sensing will enable greater understanding of network & customers

Controllability

Enhancing existing automation to cope with increasing bi-directional power flow over network infrastructure

Intelligence

Using visibility & control to maximise use of network capacity

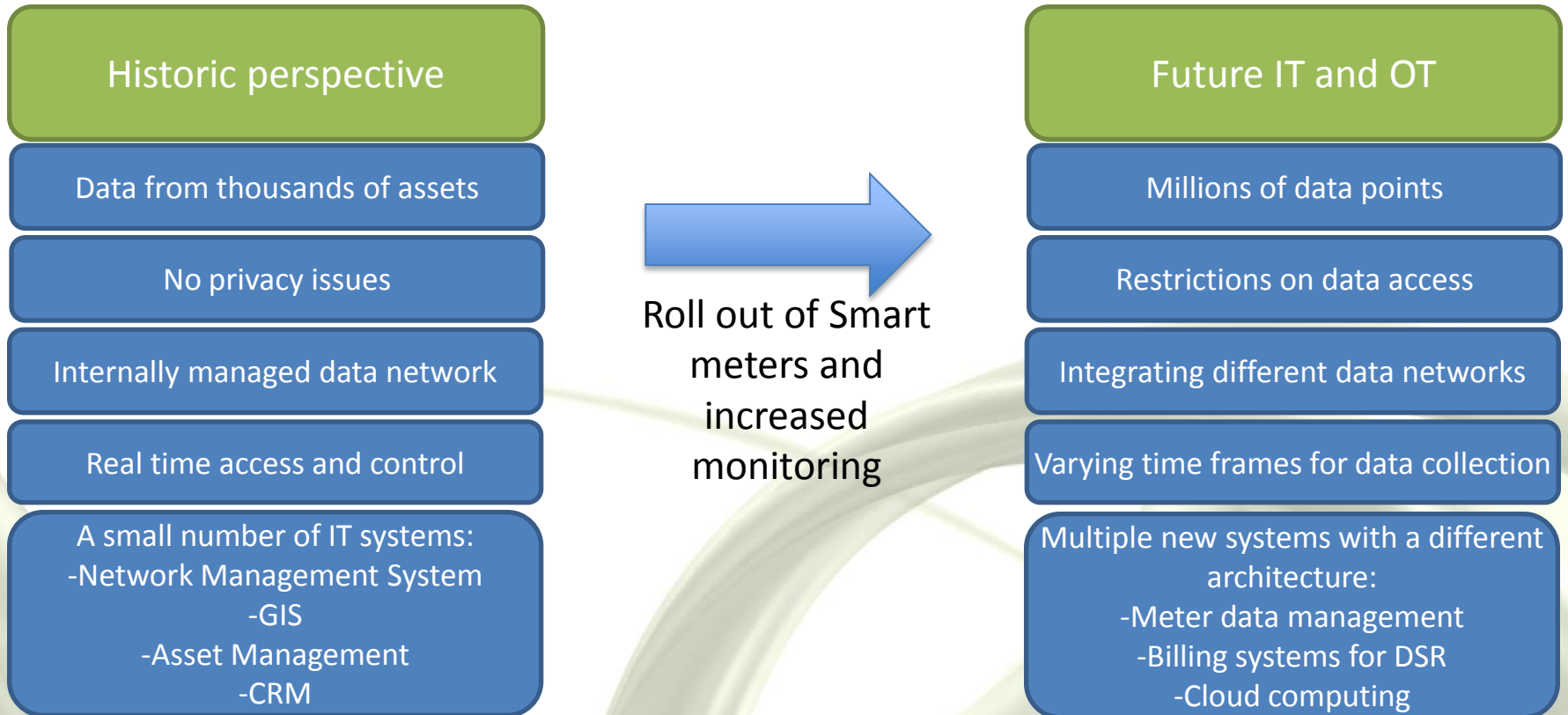
Interoperability

Common standards across networks will allow faster integration & ubiquitous information sharing

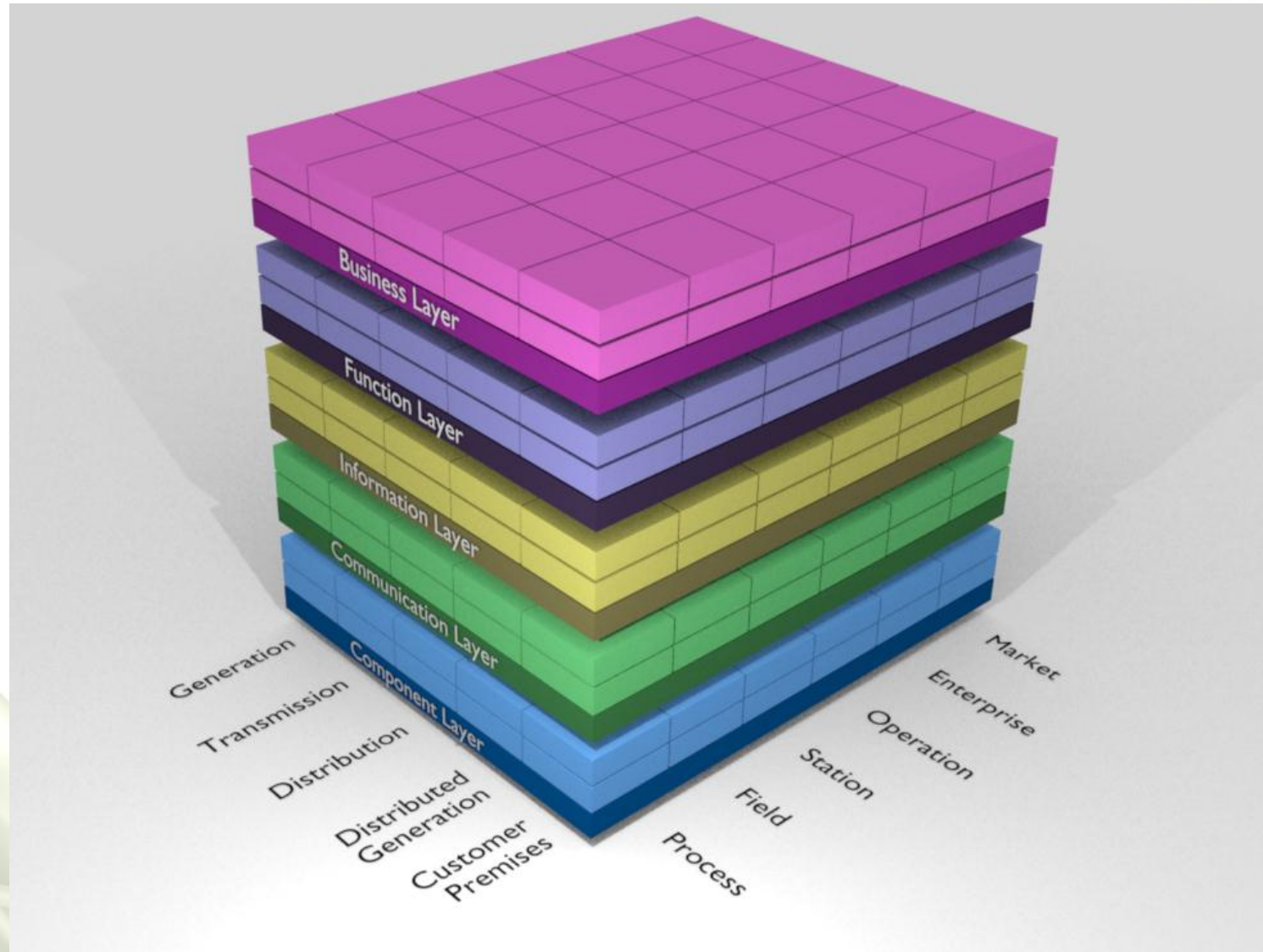
Commercial Mechanisms

New arrangements with network users to provide greater flexibility to manage dynamic networks

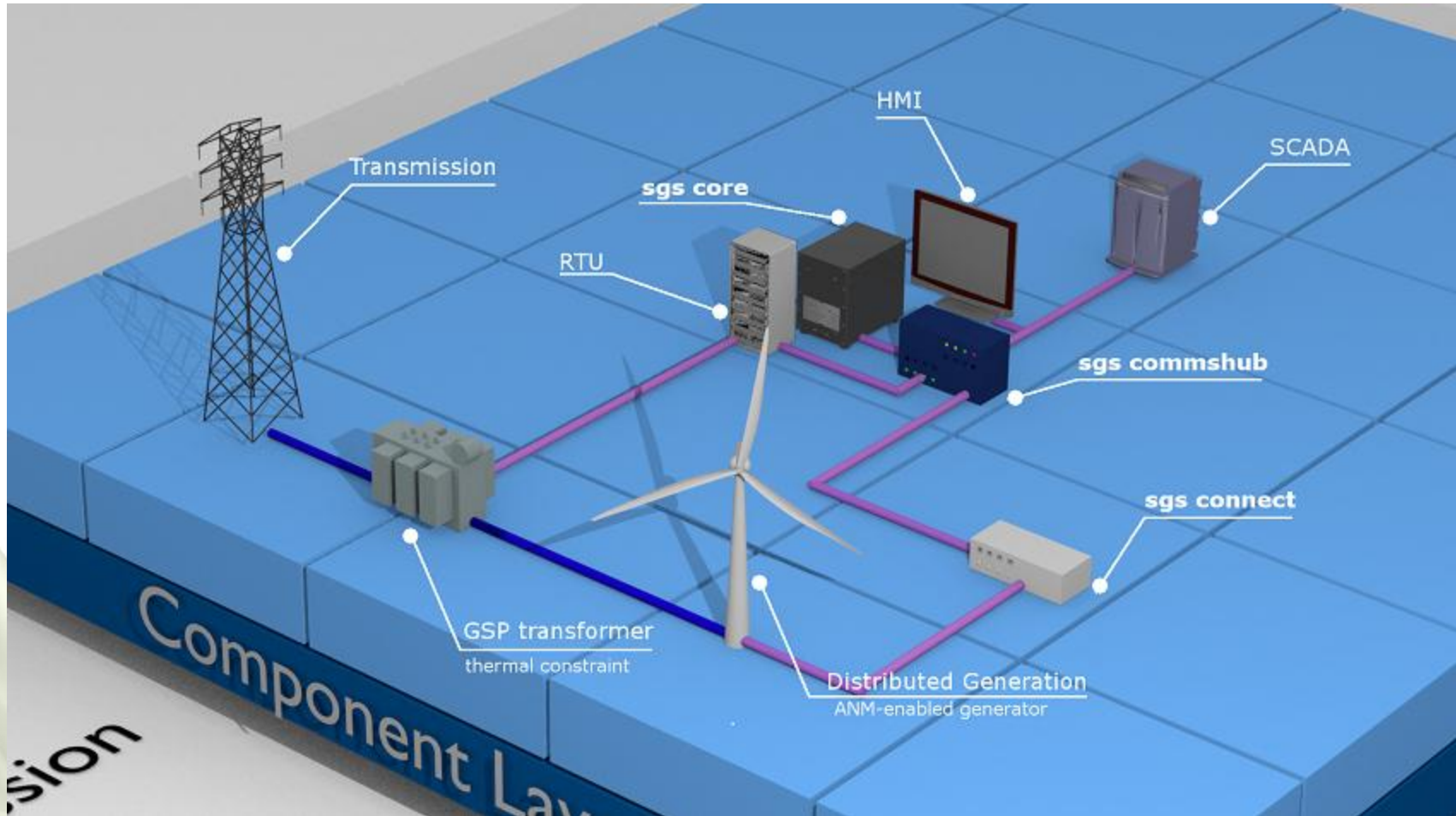
Future IT & OT - Managing the Data Storm



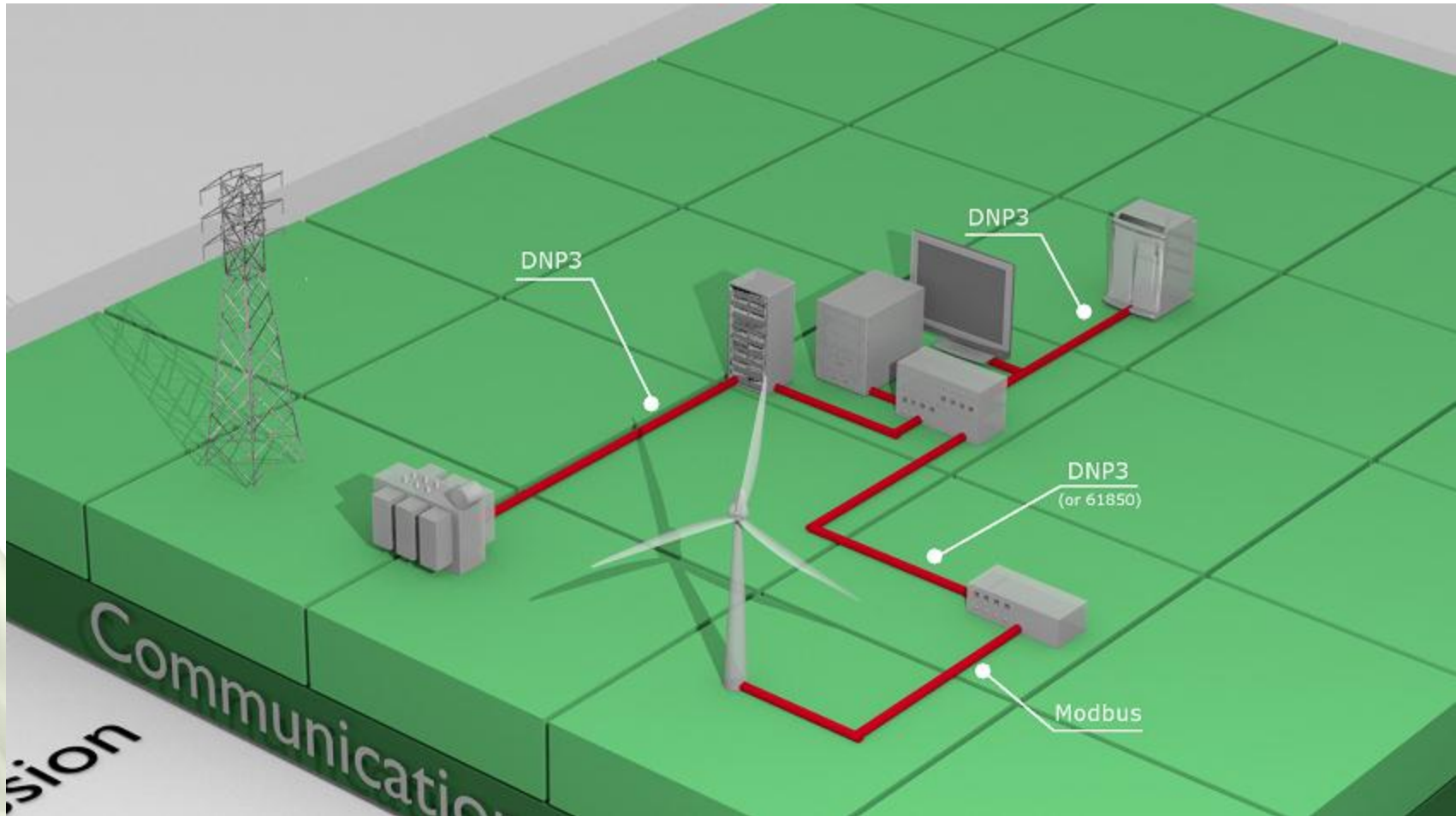
Future Grid Architecture SGAM Methodology – Embedded Generation (Roll Out of ANM)



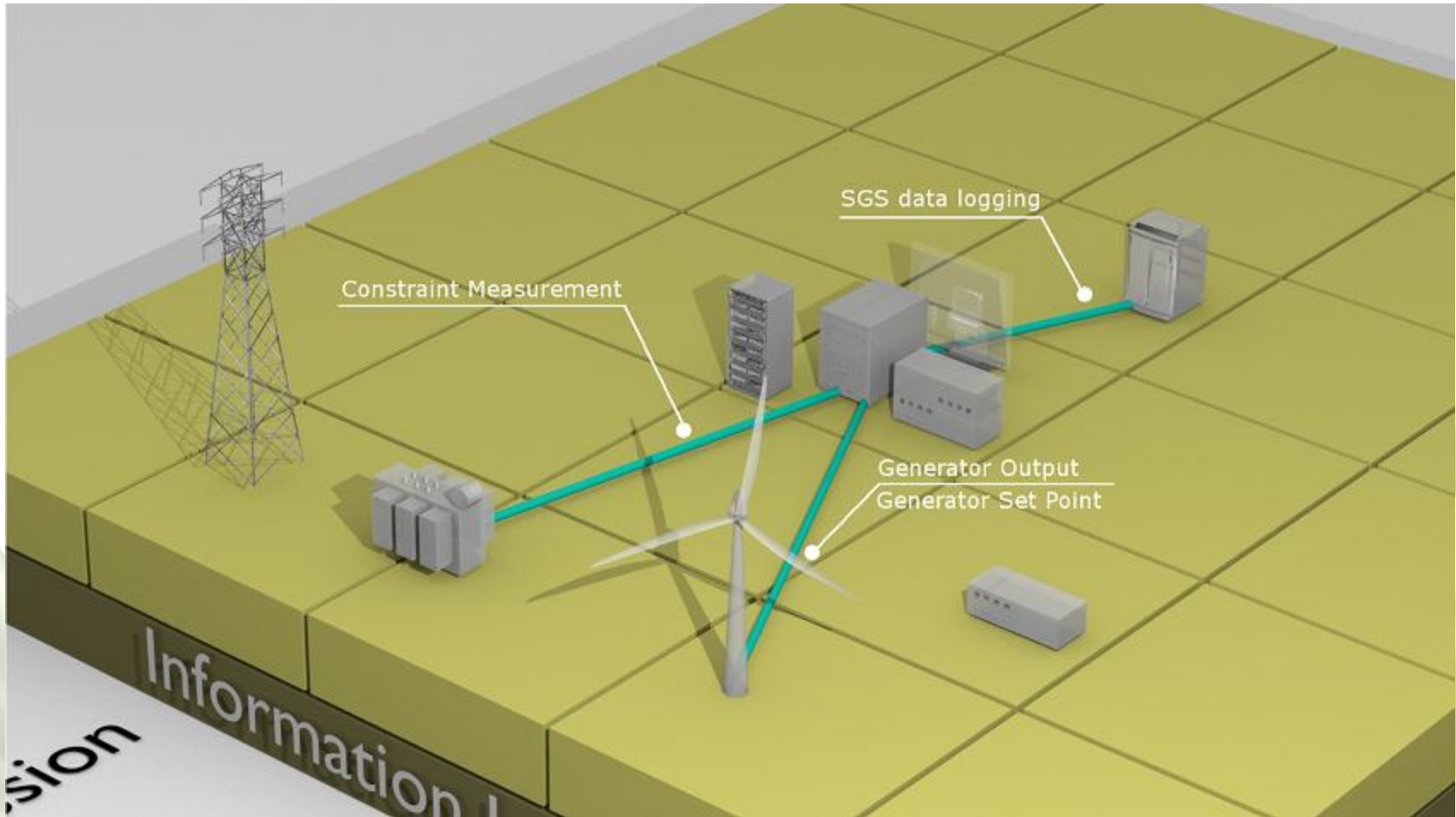
Renewable Generation – Component Layer



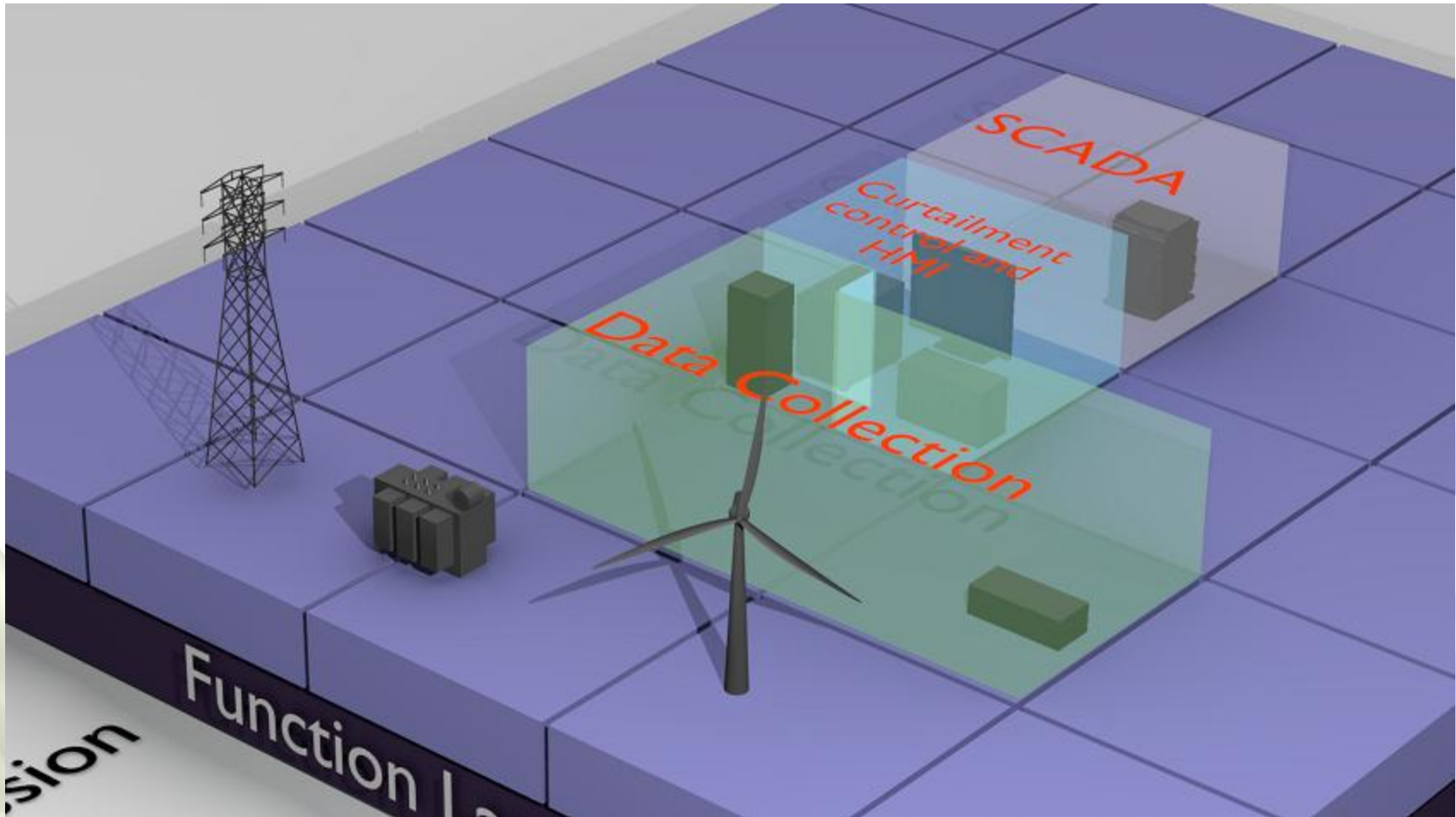
Renewable Generation – Communication Layer



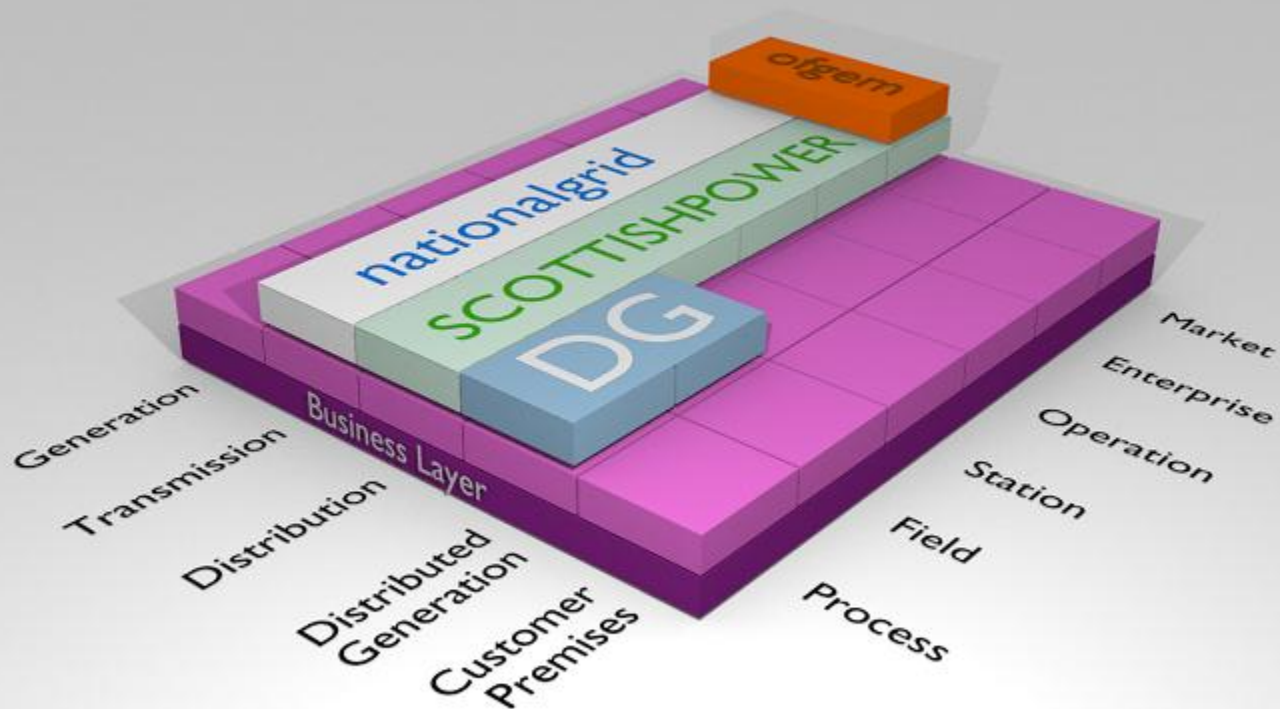
Renewable Generation – Information Layer



Renewable Generation – Function Layer



Renewable Generation – Business Layer





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