Future of DSM in Competitive Markets

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Networked Home Customer Services

Service Provider 1
Service Provider 2
Service Provider 3

DRM

Electric boiler
Washing Machine
Appliance
Meter
Lighting
Security

Networked Home Customer Services

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New operational framework for DSM

- Supply and network completely separate
- Supply business energy purchase benefit from DSM
- Network business benefit difficult to involve in DSM equation
- Growth of embedded micro generation (fuel cells, PV, CHP)
New operational framework for DSM

• Matching demand to local generation capacity
• Distribution networks become active like transmission
• DSM an essential part of energy sustainability and supply management
Domestic Scale Micro CHP
Political/regulatory framework for DSM

- Governments impose DSM obligations on supply businesses
- kWh volume cap on supply businesses
- Certificate trading via ESCOS
- Support for renewables
- Governments impose efficiency standards for applications
- Governments promote energy saving
Implementation framework for DSM

- “Taxation” support for obligations on suppliers
- “Taxation” support for “renewables”
- Households pay for higher efficiency standards
- “Taxation” support for energy saving promotion
- Energy is now lower cost item
- Majority of people aware of environmental issues
Implementation framework for DSM

- Less aware of energy linked to environmental issues
- Less aware of their use of energy linked to environmental issues
- Less aware of what they individually can do to influence environmental issues
Implementation framework for DSM

- How can DSM flourish in this environment?
- How should DSM position itself?
Non Optional DSM (at point of delivery)

How much can Governments increase standards and regulations and costs to force and subsidise energy saving? (building regulations, energy ratings)
Optional DSM (at point of delivery)

How to encourage and motivate individuals to save energy?

• Accept lower temperature
• Accept slight inconvenience
• Pay extra for energy efficient devices
• Reduce lighting
• Better planned cooking schedules (inconvenience)
• Invest in additional insulation/glazing (cost)
• Invest in heat recovery (cost)
Non optional and optional DSM

- Condensing boilers
- CHP
- etc

Asking for reduced lifestyle/convenience. Needs very strong message

- Education
- Incentives
- Information
- Reward
Future of DSM

• How much “Taxation” led DSM is acceptable?
• What methodologies and information processes will motivate individuals to consider environment when operating switches (food and weight)?
• What is the balance between optional and non optional DSM?