

ERA Principles					
Ref	Principle	Further description	Other considerations	Consequences	Other Info/Sources
P.1	Universal roll-out of SRSM meters for all domestic gas and electricity customers. All suppliers agree to use the SRSM specification and subsequent change control process.	SRSM meter functionality includes: 2-way comms; Remote configuration (inc. credit and prepay), monitoring and management of the metering system; Flexible tariff capability; Electronic storage and display of metering data; Import/Export to support Microgeneration capability; Capability to enable and disable supply remotely; Meter load management (subject to cost benefit analysis).	Legislative measures to be agreed. Energy bill legislation proposed to enable licence changes. Interoperability is essential in order ensure retail competition is not compromised in any way, and to minimise instances of meters being exchanged adding unnecessary costs to suppliers and ultimately customers. SRSM accreditation body required (or SMOF code of practice for example), within industry governance arrangements	Without this, smart metering will only be rolled out to those customers where a Supplier only business case exists. This has been estimated at 25-30% of customers. This will only then realise energy and carbon reductions for those customers and will not deliver additional benefits for suppliers and customers alike. Not having a universal rollout will widen the gap between the fuel poor and other sectors of society as it will encourage niche marketing. There is a dependency on the preferred or chosen market model/roll-out method and any affects this may have in relation to the planning stage.	Energy White Paper 2007 - Chapter 2 (2.64). DEFRA's Energy Efficiency Action Plan - 2007. Prime Minister Rt Hon Gordon Brown - <i>speech on Climate Change at the Foreign Press Association - 19 November 2007</i> . BERR Metering and Billing consultation - ERA response Oct 07
P.2	Gas and electricity meters installed and commissioned at the property at the same time for roll-out.		This principle should be accommodated, regardless of market model. Operational efficiencies of installing both gas and electricity meters at the same time are essential from a both a financial and customer disturbance point of view. A reduction in operational complexity must also be a key consideration where possible and practical.	This must be done practically and reduce operational issues. It must ensure that the principles of retail competition are not compromised (e.g. option for single fuel supply).	BERR Metering and Billing consultation - ERA response Oct 07.
P.3	A stranded asset mechanism will be required for a smart metering roll-out.	This is a consequence of gas and electricity installation at the same time, as well as any accelerated roll-out.	An acceptance that stranding of legacy meters will exist, and that appropriate fair and equitable financial mechanisms are required in order to leave no party unfairly disadvantaged. This must cover both regulated and commercial meter assets.	The liability for stranding costs will be dependent on each supplier's existing commercial arrangements. An economic assessment of stranded asset values is required, likely to be led by Ofgem as suggested by BERR.	BERR Metering and Billing consultation - ERA response Oct 07.
P.4	The need for true interoperability.	Any supplier must be able to talk or communicate with any meter with which they are authorised to do so.	Requires a common communications platform (or recognised interoperable set of communications platforms), an appropriate commercial and operational framework, and standard meter functionality. Supporting in-home communications and local devices.	Interoperability is essential in order ensure retail competition is not compromised in any way, and to minimise instances of smart meters being exchanged for different smart meters adding unnecessary costs to suppliers and ultimately customers.	SRSM SMOF Objectives and Principles Section 2. BERR Metering and Billing Consultation - ERA response Oct 07. BERR IA - ERA response 2nd June 2008
P.5	Single WAN connection to the energy smart metering system.	It is preferable for only one Wide Area Network connection to the smart metering system in order to reduce cost.	There is a requirement for the HAN to communicate between the metering system and devices in the home (e.g. EDD). This is recognised in the development of an open standard local communications interface (HAN). Must maintain data integrity.	There is no preferred solution for WAN communications, but a practical solution is required which minimises operational issues (e.g. data confidentiality). This appears to be more of a risk in a fragmented market model in a Change of Tenancy event for example where if there are technical problems with communication to/from the metering system, the new supplier may be in a position where the agent visiting the property to resolve the issue may not be an agent of the new suppliers choice.	

P.6	Need to have a minimum number of Government mandates for smart meters.	In order to minimise an excessive number of market tiers (e.g. domestic/micro-SME/SME/I&C) SRSM and AMR (as to be defined for PC5-8/>732mWh) should be the only technologies operating in the whole of the gas and electricity markets. Vital to avoid excessive complexity for roll-out and enduring market operation.	Issues around the treatment of non-domestic customers in profile classes 1 & 2 and domestic premises with gas meters larger than U16 meters. Must be considered with the market as a whole in mind, not approached for particular customer segments.	There is a risk of increasing operational complexity if there are too many technology solutions across market segments. For example, if non-domestic supplies in Profile classes 1 & 2 are mandated with AMR for example, and there is a change of use to domestic, there will need to be a change of meter, adding unnecessary costs to suppliers.	BERR Metering and Billing consultation - ERA response Oct 07.
P.7	All licensed domestic gas and electricity suppliers and appropriate industry parties will have an obligation to operate to the operational framework for smart metering.	Compliance with the operational framework is a mandatory obligation in order to deliver a truly interoperable solution for smart metering.		Interoperability is essential in order to ensure retail competition is not compromised in any way, and to minimise instances of meters being exchanged adding unnecessarily costs to suppliers and ultimately customers.	SMOF Objectives and Principles Section 2
P.8	The smart metering solution must be resilient and resist external interference.	The metering system as a whole must be fit for purpose. It must be at the suppliers control and not a mix of supplier (meter) and consumer (comms) for example. It must deliver security, reliability, control, integrity, quality and scalability.	Metering system solution options and communications requirements for the delivery of a smart meter roll-out are subject to further development and evaluation.	Any technology option that has the potential for customer interference or a dependency on a customer provided service is not a robust utility solution. It is essential to have a high reliability solution for a service that is the responsibility of the utility service provider. Dumb and Smart Box is not a utility robust solution.	SMOF Objectives and Principles Section 2. BERR IA Model response 220308.
P.9	Roll-out of SRSM meters at domestic customers homes to be completed within 10 year period.	This has been set as an expectation by Government. The 10-year period shall start on the commencement of the Energy Bill, and includes a 2/3 year planning stage, 5 year installation programme followed by a 2/3 year 'mop-up' exercise.	Important for timescales to be met in order to maximise benefits associated with energy efficiency and carbon reductions. There is also a dependency on appropriate mechanisms for addressing the issue of stranding for legacy meters. There are likely to be multiple mechanisms that will need to be economically fair and equitable (spread across all customers), with no party unfairly disadvantaged.	The Energy Bill may include a start and end date (or timetable) for roll-out. There is a dependency on the preferred or chosen market model/roll-out method and any affects this may have in relation to the planning stage.	Energy White Paper 2007 - Chapter 2 (2.64). DEFRA's Energy Efficiency Action Plan - 2007. Prime Minister Rt Hon Gordon Brown - <i>speech on Climate Change at the Foreign Press Association - 19 November 2007</i>
P.10	Reasonable cost to customers.	Costs to customers must be kept to a minimum. Interoperability is an essential requirement in order to keep costs to a minimum in the longer term (by reducing the instances where meter exchanges take place unnecessarily for either technology or payment reasons). Supplier costs/benefit cases must be maximised to create operational efficiencies	Functional requirements have been considered for incremental cost benefits to minimise the on-costs to customers.	A roll-out of smart meters that results in significant cost increases to end-users is likely to be subjected to intense political and public scrutiny.	BERR Metering and Billing consultation - ERA response Oct 07.
P.11	Minimal disruption for customers.	It is regarded as preferable that SRSM meters should be designed to be "plug n play" and there should be minimal re-visits to customers for maintenance or future enhancements.	Gas and electricity meters installed and commissioned at the property at the same time.	A GB wide implementation of smart meters will be the most ambitious home visit project ever. It is therefore essential that careful consideration is required to ensure minimal disruption to customers throughout the roll-out period. Any increase in customer complaints is likely to have a negative impact on suppliers and the project overall. Customer disturbance is the biggest issue should a roll-out proceed on the basis of a fragmented approach. A co-ordinated programme of PR/Comms to customers will be required.	BERR Metering and Billing consultation - ERA response Oct 07.

P.12	Provision of Information to Customers with Smart Meters.	As a minimum, all customers should be provided with an EDD as a right unless they opt to receive information by other means.	In order to deliver innovation, suppliers should have the flexibility to deliver 'in home' information via other means (e.g. via TV or internet based solutions) if the customer agrees.	Non-provision of an EDD should be dependant on customer opt-in to receive communications through alternative means.	BERR Impact Assessment of Smart Metering Roll-Out for Domestic Customers and for Small Businesses - 22 April 2008.
P.13	Suspension of re-certs/policy exchange during roll-out.	In order to minimise stranding costs, there needs to be an acceptance that there will be a suspension of re-cert/policy exchanges for legacy meters once installation roll-out of smart meters begins.	Where operationally possible in emergency situations, it will be preferable to install smart meters (replace the faulty meter and either the other gas/electricity meter in the emergency visit) when responding to an emergency situation. Where this is not possible, or in exceptional circumstances, suppliers accept that 'legacy or dumb meters' will be installed to restore supply/make safe an emergency situation.	Under the current regulatory regime, suppliers are subject to financial penalties for uncertified meters in their portfolio. There needs to be assurance that there will be no fines for uncertified meters during a smart meter roll-out. Legacy meters will continue to be read manually when in situ, therefore visual meter inspections will continue and will help provide assurance in relation to safety.	BERR Metering and Billing consultation - ERA response Oct 07.
P.14	The infrastructure to support energy smart metering may be considered for use for other utilities and services in the future.	The roll-out of energy smart metering requires a GB wide WAN communications infrastructure for the delivery of data to and from the meters. Whilst the energy sector is not responsible for delivering a communications platform for non-energy products and services, there is a recognition that the infrastructure for smart metering could be utilised for other products and services.	The ERA is mindful of the fact that a comms solution for smart metering may be utilised for other purposes. However, it must be noted that any 'inter-connection' framework is not in scope for the SRSM project.	This must not constrain the delivery of the energy solution in any way including time, cost or solution option.	SMOF Objectives and Principles Section 2
P.15	A roll-out of smart meters must seek to reduce operational complexity, and improve efficiency of the energy industry.	Wherever possible, a roll-out of smart meters must also seek to reduce operational complexities. Also consider opportunities for efficiencies for gas and electricity combined (e.g. common timescales). Consideration should also be given for common processes for multiple participants (e.g. GT's, IGT's DNO's and IDNO's).	Will deliver enhanced data quality generally, and at certain events such as Change of Tenancy, Change of Supplier etc.	Potential for - fewer constraints in business processes e.g. batch processing, time windows; improvements in the speed of data exchange; reduction in distributed sources of data; direct contact with metering system for key data.	BERR Metering and Billing consultation - ERA response Oct 07.
P.16	Smart metering should deliver the platform to enable energy savings.	Smart metering must facilitate: Complex tariffs; Customer information display; Export capability for Microgeneration.	Consideration required for Post 2011 obligations along with 2020 emissions targets.	Without this enabling platform, the benefits associated with energy savings/carbon benefits will not be realised.	
P.17	Market model for roll-out may be different for enduring operation.		If a fragmented model is defined by Government for smart metering operations, a more co-ordinated approach may be required for roll-out to meet other principles effectively.		