

SMETS 2 consultation questions

Chapter 4 – SMETS 2 Development

1.	Do you have any comments on the criteria used in the evaluation of the application layer standards?
	Landis+Gyr believes that DECC's analysis of the characteristics of the UK smart metering HAN is both correct and comprehensive. We consider it particularly critical that DECC made the decision to mandate open standards between all devices to support device interoperability. In light of this, the criteria used by DECC to evaluate application layer standards are entirely appropriate.
2.	Do you agree with the proposal to adopt ZigBee SEP / DLMS as the HAN application layer standards for GB?
	Landis+Gyr has been deeply involved in the discussions with Government and other stakeholders and believe that the proposals as outlined in the consultation are the correct ones for the GB market.
3.	Do you agree that equipment should be required to comply with SMETS and a GB Companion specification for ZigBee SEP / DLMS?
	Landis+Gyr believes that this approach is entirely appropriate.
4.	Do you agree with the overall approach proposed in relation to the HAN physical layer? If not, please provide a rationale and evidence for your position.
	<p>The approach adopted by DECC is pragmatic and recognizes that industry will need to adopt a number of physical layer solutions to enable 100% coverage in the HAN. By choosing to define a common application layer that can easily be adapted to a range of physical layer solutions, DECC has allowed industry the best possible foundation on which to build a cost effective deployment.</p> <p>For the short term, Landis+Gyr considers that the existing 2.4GHz radio solution offers a viable route for the majority of installations, allowing Suppliers to gain traction in the market with little technical risk. The technical development of 868MHz radio and wired (e.g. PLC) solutions is already underway and will provide a solid base of in-fill options, with availability broadly in-line with the start of the mainstream rollout.</p> <p>Whilst Landis+Gyr is aware of some equipment manufacturers raising concerns over the ability of some of the in-fill technologies to support sufficient bandwidth for IHD's, we do not consider this to be a significant problem: given the relatively broad mix of technologies that will be required to support 100% HAN coverage and the very aggressive price point for communications hubs, it seems self-evident that most in-fill solutions will be hybrids, with in-fill hubs supporting more than one HAN option. This would avoid manufacturers having to develop a range of point solutions for both hubs and devices and would allow two simple production communications hub variants: pure 2.4GHz and 2.4GHz + 868MHz + PLC. From experience on other volume deployments, we believe the cost points for a two variant approach are likely to be much more attractive than a three variant approach. The benefit of a two variant hub approach is that IHD and meter providers will be able to make use of the in-fill variant of choice for any given device, optimizing HAN device choice for all parties.</p>
5.	Do you have any comments on the criteria used in the evaluation of the physical layer of the HAN?
	<p>The criteria used were appropriate for a pure physical layer trial.</p> <p>Landis+Gyr believe that the results obtained represent an entirely valid worst case and are useful when</p>

	<p>viewed in that context. Our experience of deploying almost 1 million 868MHz-based smart meters with UK Suppliers suggests that the property type profile used by DECC may not be born out in real life, but again, as a worst case view it serves a very valid purpose.</p> <p>Finally, we would stress that the trial was a physical layer trial and did not take account of the varying characteristics of different modulation schemes or the improvements in radio performance at 2.4GHz when compared to, say, 868MHz that simple economics has driven.</p> <p>Based on early deployment results for our 2.4GHz SEP solution which shows better than 80% coverage of non-high rise buildings, we expect real world results for our SMS to be significantly better than the results obtained in the DECC trial.</p>
6.	What are your views on the compatibility of the reserved spectrum 870-876MHz with 868 MHz and the value of considering the use of this band?
	<p>Whilst the 870-876MHz band would potentially provide greater performance, the task of gaining access to the band would be a significant challenge for DECC. The uncertainty that any proposed spectrum acquisition would introduce would inevitably lead to manufacturers deferring the task of finalizing their respective 868MHz designs until the outcome was certain. In light of our responses to questions 4 and 5 above, we would recommend DECC focus on the 868MHz band and allow industry to focus on developing the right range of in-fill solutions in the right timescale to support the mass rollout phase.</p>
7.	Do you consider that additional measures should be taken to encourage the development of an 868 MHz solution?
	<p>As a member of the SSWG, BEAMA, CEDIG and the ZigBee Alliance, Landis+Gyr is committed to the development of a ZigBee SEP-over-868MHz solution and associated equipment in realistic timescales. We do not believe that additional measures are needed.</p>
8.	Do you agree with the approach to allow the market to determine the balance between 2.4 GHz and 868 MHz? If not, please provide rationale and evidence.
	<p>See responses to questions 4 and 5 above. Landis+Gyr believes that, provided the application layer for UK smart metering HAN connectivity is defined, a competitive market approach will ensure that an appropriate set of physical layer technologies, including but not limited to 2.4GHz and 868MHz radio is available to support 100% HAN coverage for UK households.</p>
9.	What are your views on the costs and benefits of the three options identified for deploying wireless solutions (i.e. 2.4 GHz as the default; dual-band Communications hubs; or market led)?
	<p>As mentioned earlier, it is inevitable that the early phase of the UK roll out will be based on 2.4GHz radio. At the point that an 868MHz-based system becomes available the market will be well placed to decide on the most economic options. The market will decide whether to bear the additional cost of a universal dual band communications hub.</p>
10.	Do you agree with the proposal for a 'fit for purpose' installation obligation on suppliers?
	Yes
11.	Do you have any views on the proposed approach to developing a wired HAN solution?
	<p>Landis+Gyr is working both independently and as part of the SSWG to support wired HAN trials. Whilst DECC suggest that a wired HAN may be used in a limited number of building types, we consider that it may well become a more widely used solution. It seems increasingly likely that end-user solutions will seek to make use of the full set of data available to IHDs and CADs and we anticipate that – where a 2.4GHz HAN is unavailable - wired HAN connectivity will become the default 2nd choice. Accordingly, we wholeheartedly support DECC's work to drive for a wired HAN trial as part of a focus on developing a</p>

	standardised wired physical layer solution for SM HANs.
12.	<p>Do you agree with the proposed scope of functional requirements for a communications hub? Are there any other functions that should be included and what would be your rationale for including those functions (including estimated costs and benefits)?</p>
	<p>DECC will be well aware of Landis+Gyr's concerns over the scope and development of the communications hub. The UK communications hub is a complex device that in our view belongs in the IT and not the meter manufacturer's space. We remain sceptical that the recent move by BEAMA to develop a communications hub working group will drive any noticeable improvement in the communications hub DDS.</p> <p>The hub will form a critical part of the overall SMS and we consider the lack of direct involvement of the CSP bidders in the hub definition process to be a significant gap in the CSP selection programme. We would both recommend and encourage DECC to require the remaining CSP bidders to provide an optimum hub design and price as part of their bids. This would allow DECC to understand what the providers of the wide area networks and associated network management systems that will underpin the UK's smart metering programme believe the hub ought to be able to do and how it ought to be able to do it.</p>
13.	<p>Do you have views on the specification for an 'intimate' interface between electricity meters and communications hubs?</p>
	<p>Landis+Gyr has no specific objection to an intimate physical interface. Developing a common hub mounting configuration (physical mounting) ought to be relatively easily achieved, as should a common mains power connection. If this simple and achievable scope were the target of an intimate interface then – providing the commercial imperative is sufficiently compelling - we would expect industry to agree such a solution with or without DECC's guidance or mandate.</p> <p>However, whilst we see no issue with an intimate physical interface, Landis+Gyr has grave concerns over the potential scope and benefit of the so called intimate interface. We are aware that some of our industry colleagues believe that such an interface could also be developed to support data connectivity. We consider that task to be far from trivial. The potential for the prospect of an intimate data interface to cause significant uncertainty in the market and to thus delay preparations for the mass rollout and limit investment in developing universal hub solutions for the UK market cannot be underestimated.</p> <p>In order for an intimate interface to comply with Questions 2 and 3 in the consultation, Landis+Gyr would expect it to support the following aspects:</p> <ul style="list-style-type: none"> • In common with all other HAN devices, intimately-interfaced communications hubs must be both interchangeable and interoperable <ul style="list-style-type: none"> ○ To be interchangeable, any intimate data and/or power interface and language must be open/standards-based • Questions 2 and 3 above propose the use of ZigBee as the HAN connectivity protocol <ul style="list-style-type: none"> ○ To use ZigBee, any interface – including an intimate data interface – would require a ZigBee SEP protocol 'stack' ○ Any wired interface would require the same ZigBee stack as would be needed to drive a 2.4GHz or 868MHz radio interface or a PLC interface ○ So every HAN device INCLUDING an intimate hub using a wired data interface would have to carry a ZigBee chipset ○ A wired interface between electricity meter and hub would only allow the deletion of the radio portion of the ZigBee chipset • To be open, any wired data interface would also then need to be standardised <ul style="list-style-type: none"> ○ First requires the definition of a set of physical layer communications standards ○ This defines the characteristics of both sides of the connection to allow the interface to

	<p>support 2 totally independent devices</p> <ul style="list-style-type: none"> ○ A data modulation schema would need to be developed and agreed (ZigBee radio, for example, uses a pre-defined modulation schema) ○ For an intimate (wired) interface, the interface specification would additionally need to define impedances, voltages, limits, behaviours of each element would also need to be defined <ul style="list-style-type: none"> • Once fully defined and agreed, industry would need to document the specification, get it approved by ZigBee and finally build the solution <p>With all of the key components required to support a wireless link still present in both devices and with the new components required to support the wired link then required in both the meter and the hub, plus the costs of the physical location solution and of the power-plus-data connector, it seems highly unlikely that an intimate data plus power interface could offer a lower SMS cost than the wireless solution preferred by DECC.</p> <p>It should be noted that the process described above deals with a properly logically-separated hub and meter. There are a number of less complete separations that might be considered where at a superficial level the work involved in achieving a standardised separation might seem more limited. However, for any such less complete separation it becomes critical to consider the end-to-end integrity of the SMS.</p> <p>If, for example a DLMS data interface was selected then the hub would effectively need to act as an end point for the ZigBee environment, terminating and unwrapping ZigBee SEP clusters destined for the electricity meter and forwarding just the DLMS COSEM objects. This not only requires additional processing capability in the hub but also implies a completely different set of functional demands for the hub itself: such a hub would need to provide ZigBee cluster execution and a set of appropriate DLMS master attributes to allow it to converse with a DLMS-only meter. Forcing those attributes into the hub would also change the degree of security that would be required in both the hub and the electricity meter, as both would need to rely on a DLMS-based security solution for the hub-to-meter link, with the hub then adding a ZigBee based security regime for other HAN devices.</p> <p>Once the overall system is considered, apparently trivial architectural separation solutions rapidly drive greater complexity and cost than would be achieved through a full logical separation at the ZigBee level.</p> <p>Given these considerations, if an intimate interface is to be allowed as a variant, Landis+Gyr would recommend that its scope be clearly defined to avoid needless debate and confusion for industry.</p>	
14.	<p>Do you agree with the Government's marginal preference for the CSP-led model for communications hub responsibilities, or do you prefer the supplier-led model? Please provide clear rationale for the advantages and risks associated with your preferred option.</p>	
	<p>Landis+Gyr would tend to agree with DECC's preference to have the CSP own the hub responsibility. The CSP's networks and network management solutions will be critically dependent on the hub. In contrast, provided DECC's intention to ensure that all HAN's operate on a set of open and standard interfaces is successful, Suppliers will most likely have little interest in the hub. It would therefore seem counter-intuitive to have anyone but the chosen CSP(s) own the responsibility for the hub.</p>	
15.	<p>Do you agree with the proposal that a CHTS-compliant communications hub should not be mandated for opted out non-domestic sites and that suppliers should be free to use whatever type of communications equipment best supports their processes and WAN service?</p>	
	<p>The exemption provided by DECC has allowed Suppliers and service providers serving the non-domestic market to continue to deploy advanced metering solutions in the run-in to the core smart metering</p>	

	programme. This exemption has clearly supported UK businesses in their energy saving and carbon reduction programmes in the short term. However, it would seem illogical to allow this exemption to continue beyond Foundation and in doing so deprive the DSP/CSP providers of volume that will drive volume and hence (it can be assumed) price reduction in the services offered to all DCC-connected meters. Landis+Gyr would therefore tend to support the discontinuation of 'opted out' status for non-domestic sites once conditions for the mainstream rollout have been met, allowing all domestic and non-domestic connections to drive DSP and CSP volumes and hence contribute to optimizing the cost of all UK smart metering connections and data services.
16.	Do you agree that the gaining supplier should bear the costs of installing an appropriate communications hub if they decide to switch between opted in and opted out?
	Landis+Gyr believes that this question should be reviewed in the light of responses to Question 15: if opted out status is discontinued from a DSP/CSP services perspective post the start of the UK's mass rollout, an appropriate swap out date will need to be established for presently opted out non-domestic sites. Once set, that date will drive the replacement of all non-CHTS compliant hubs/meters and the argument over where the costs should fall will effectively be neutralised.
17.	Do you agree that the design and implementation of outage reporting functionality should be assigned to CSPs, documented in the communications hub technical specification?
	This seems to be a logical approach. Depending on the CSP(s) selected, the provision of outage reporting may require a very different technical approach. It would therefore be inappropriate to have the solution defined or specified by any other organization.
18.	Do you agree that it would be inappropriate to require meters operated outside DCC to be required to implement outage reporting? Please provide rationale to support your views
	Landis+Gyr agrees that it is inappropriate to require meters operated outside DCC to have to implement outage reporting, it should be a commercial decisions between the Supplier and customer.
19.	Do you agree that maximum demand registers should be included in SMETS? Please provide evidence to support your position and provide evidence on the cost implications of delivering this functionality via back office systems or via the meter.
	Landis+Gyr agrees with the inclusion of maximum demand registers in SMETS. A definition of this has been agreed with DNO and incorporated into SSWG specification. The SMETS requirement must be consistent with the DNO, SSWG specification.
20.	Do you agree with the proposal not to include the capability to generate additional voltage alerts based on counter thresholds in SMETS 2? Do you have any evidence that could justify including this functionality in SMETS 2?
	The work done by BEAMA in conjunction with ENA, mentioned in the answer to Question 19, also looked at generating additional voltage alerts. A paper from this work recommended that voltage alerts, as described above, should not be included since the benefits gained from providing such data were "small" compared to cost and delay.
21.	If DNOs were permitted to access remote disablement functions, should control logic be built into DCC systems or meters? If the logic should be built into meters, should the logic be specified in SMETS 2? Please provide rationale to support your position including estimates of the cost of delivering this functionality under the different options being considered and any evidence relating to safety issues associated with each option.

	<p>It is clear that as the scope of the UK's smart metering and smart grid deployment expands, there will be an increasing range of control functions that non-Supplier parties will wish to initiate. Remote disablement is just one such function. Because of the potential range of parties that might wish to drive SMS actions in the future and the potential range of those actions, we believe the control logic can only plausibly sit in the DCC systems, where they can be adapted and controlled centrally. Any other option would require an unrealistically costly 'predictive' set of control logic options to be built into every meter and hub.</p>
22.	<p>Do you agree that variant smart electricity meters should be specified in SMETS 2 and that the cost uplift for variant smart meters is similar to that for variant traditional meters? Please provide evidence of costs to support your views on cost uplifts.</p>
	<p>Landis+Gyr believe that the currently-predicted range of smart meter variants will both reduce and evolve as Suppliers start to exploit the CSP and DSP systems to the full to emulate many of the traditional meter variants. We would recommend that if meter variants are specified in SMETS2, the variants be limited as far as possible to avoid the specification of meter types that will be redundant in practice.</p>
23.	<p>Do you agree that randomisation offset capability should be included for auxiliary load control switches and registers as described above? Do you have views on the proposed range of the randomisation offset (i.e. 0 – 1799 seconds)? Please provide evidence on the cost of introducing this functionality.</p>
	<p>Landis+Gyr is inclined to see this as something of an old world paradigm. It ought to be possible for the combination of DSP and CSP to provide a properly orchestrated activation of auxiliary load switches: randomization offset could actually damage the ability for the DSP/CSP combination to optimize the management of any part of the grid to meet the best possible case for any given DNO/generator.</p> <p>Landis+Gyr would recommend that this question, plus questions 21 and 22, be considered from a system perspective in conjunction with the DSP and CSP bidders to understand what could be achieved.</p>
24.	<p>Do you support Option 1 or Option 2 for 'pairing' a CAD to the HAN? Please present the rationale for your choice and your views on the implications that these options have for the technical design of the solution.</p>
	<p>As mentioned previously, Landis+Gyr considers that the CAD will rapidly become the most important device in the SMS to the end consumer. We have a strong preference for a secure and securely-connected primary CAD which can be installed by the consumer and which can then provide a universal interface for other consumer devices to be simply and easily linked to the consumer's own discrete portion of the HAN without further interaction with the DSP.</p> <p>As a consequence of this view, we are firmly in favour of Option 2.</p>
25.	<p>If Option 2 were adopted, do you agree that obligations should be placed on energy suppliers to support this process by submitting 'pairing requests' to the DCC on request from their consumers?</p>
	<p>This really should be a DSP function that can be invoked automatically by the consumer UNLESS the Supplier concerned wants to take an active role. There is no reason why a Supplier should have to be involved in the process if a valid customer, 'known' to be valid by the DSP, wishes to bind a CAD to the HAN.</p>
26.	<p>Do you consider that other CAD installation options should be pursued? If yes, please explain the approach you favour and your reasons.</p>
	<p>As mentioned in our responses to questions 24 and 25, we support Option 2, but with some modification to simplify and automate the process as far as possible.</p>
27.	<p>Do you agree with the proposal to include in SMETS 2 a specification for a PPMID, connected via the HAN, as described above?</p>

	<p>Landis+Gyr agrees with this proposal. Today there is an obligation on Suppliers to install meters in positions accessible for consumers. This is especially required for those provided with prepayment meters. It is known, however, that there are currently many meters that are not in convenient locations for prepayment use and it will not be convenient to relocate all of these. Since changing from credit to prepayment will be much simpler in a smart metered world, and there will be payment tariffs needing interaction with the meter, each property needs to be considered as a potential prepayment consumer and it must be assumed that not all meters will be in convenient locations after the roll out. For this reason a PPMID needs to be part of SMETS 2. Landis+Gyr believes that the PPMID can only be connected to the SM HAN since 2-way communication with meters is required.</p> <p>Given the significantly increased functionality of a PPMID IHD, then it should be offered as a variant within SMETS2 and supplied to customers as required. A PPMID IHD may not be so good for delivering energy savings as an equivalent display only IHD if both must meet the same price point.</p>
28.	<p>Would including the capability to enable gas and electricity supply through a PPMID connected via (a) a wireless HAN or (b) a wired HAN meet GB safety requirements? What impact would including this capability have on the cost of smart metering equipment? Please provide evidence to support your answers.</p>
	<p>Landis+Gyr understands that the objective of this proposal is to allow Suppliers to provide prepayment customers with a conveniently located PPMID device rather than relocate meters to a more convenient position, thus reducing cost and time-on-site and avoiding complex re-wiring/re-piping that might be required to move meters from meter rooms to the customers' premises.</p> <p>The objective is understandable but does raise the potential of a PPMID being connected in a HAN where one or more CADs are also connected and are onward-connected to the internet. In extremis, it is possible to envisage a situation where a malicious attack via the Internet might seek to deliberately disable and then re-enable a gas supply with the specific intent of causing gas to flow without an appropriate pilot light to consume it. For this reason, Landis+Gyr does not support option (a): the use of a wireless connection for a PPMID that is capable of re-enabling an electricity or gas meter.</p> <p>Option (b) allows for the concept of a device with a specific 'release' button that is hard wired to the meter concerned and that can be used to confirm a consumer's acceptance that a pre-armed meter should be enabled. Provided the hard wired connection is isolated from all other functions in the PPMID, effectively making it a remote extension of the 'enable' button on the meter, this solution seems both practical and highly secure. The development of an appropriate solution will clearly require significant industry alignment (standardised low voltage meter connection points, provision of standby power to the PPMID, common button press processes and so on) but does offer a fully failsafe solution for situations where customers cannot readily access their meters but wish to take advantage of prepayment energy solutions.</p> <p>Landis+Gyr would welcome the opportunity of working with DECC to help to define an appropriate solution and set of accompanying standards.</p>
29.	<p>Do you agree with the proposal that the communications hub should be specified such that it can support multiple smart electricity meters? How many smart electricity meters should be supported by each communications hub?</p>
	<p>This question links to Q12. Landis+Gyr would recommend that DECC do not limit the thinking on multiple meters to solely electricity meters: communications hubs should be able to support several different metering devices. Pragmatically, we would suggest that 4 meter connections plus IHD and CAD would provide for most installation configurations.</p> <p>It should be noted that this response only applies to single premises.</p>
30.	<p>Do you agree that a specification for a HHT interface to the HAN should be defined? If yes, please identify the functions that this interface would need to support and the scenarios in which such functionality could be required.</p>

Landis+Gyr believe that if a HHT can be used with the SM HAN, without breaching the end to end security of the whole system, then the functionality requirements for the device should be specified in SMETS 2. The main purpose of the HHT would be to provide installation and maintenance of smart metering installations and hence Landis+Gyr would wish to be part of any future work with stakeholders to decide the functions required.

Chapter 5 - Governance and Assurance of Security and Interoperability

31.	Do you agree with the proposed approach to the governance of security requirements? If you propose alternative arrangements please provide evidence to support your views.
	The security requirements have been developed with inputs from many stakeholders including BEAMA and SSWG. The approach is a reasonable one, and is considered to be appropriate for the UK smart metering programme.
32.	Do you agree with the proposal to establish independent assurance procedures for DCC and DCC users? Please explain your views and provide evidence, including cost estimates where applicable, to support your position. Comments would also be welcome in relation to the impacts and benefits of the proposed approach with regard to small suppliers.
	No comment
33.	Do you agree with the proposal that re-testing should occur at least at set intervals and more frequently when significant changes to systems or security requirements are introduced? Please explain your views.
	This seems to be an overly-complex approach. There is no reason that retesting should occur by rote – the UK SMS functional set is not a dramatic departure from existing functionalities and as such it seems an unnecessary burden for industry to carry a periodic retest burden for anything other than a significant change to either a product or to the end-to-end SMS (e.g. security system changes).
34.	Do you agree with the proposal to establish an independent security certification scheme for smart metering equipment? Do you have any views on the proposed approach to establishing a certification scheme or evidence of the costs or timelines for setting up such a scheme or submitting products for certification?
	<p>DECC's requirement for an independent security certification scheme is a sensible approach. The suggestion seems similar to past certification schemes for metering where manufacturers have presented meters to Ofgem for approval and then carried out self-certification of their products. This process will also need to include firmware update certification.</p> <p>Given the volume of devices involved, DECC need to consider that the deployment of smart meters and systems might well incur delays due to many companies trying to present their products for certification/approval to the seemingly few independent test houses available at the moment. This could of course be alleviated by CESG recruiting more test houses or expanding facilities.</p> <p>Obviously, at this stage we are unaware of what charges would be made for such certification/approval and the on-going costs related to the ability to self-certify. These costs were not factored into our original cost estimates for products.</p>
35.	Do you agree that sanctions for non-compliance with security requirements should be included in the SEC? Do you have views on the nature of the sanctions that might be imposed?
	Given the degree of concern from consumer advocacy bodies with regard to security, it seems entirely reasonable that sanctions for failure should exist for any manufacturer, system provider or other party that fails to meet the relevant security standard(s). Sanctions would need to be appropriate to the risk

	created.
36.	Do you agree with the proposal to, in effect, extend the arrangements already proposed for SMETS installations prior to DCC operation, to all installations being operated outside DCC? Please provide evidence of the costs that might be incurred and the impact of this approach on small suppliers.
	No Comment
37.	Do you agree that interoperability is central to the development of a successful smart metering solution and that activities related to the assurance of SMETS equipment should be governed by SEC? Please provide views on the governance arrangements that would be appropriate for assuring interoperability of smart metering equipment.
	Interoperability is clearly absolutely central to the successful roll out of the UK's smart metering solution. We believe that the work carried out by Landis+Gyr, as a founder of the SSWG, has established the basis for this interoperable system. We also believe that the SSWG is well placed to complete the work required to deliver the end-to-end interoperable solutions required. Landis+Gyr believes that industry should manage the governance of any future interoperability assurance regime. It would be sensible for the SSWG to have a formal position on any relevant SEC sub-group focusing on interoperability – at the very least until the mass rollout is fully underway and the UK solution set has stabilized.
38.	Do you agree with the creation of an 'approved products' list and the requirement on suppliers and CSPs to obtain, retain and provide evidence of appropriate certification should apply regardless of whether they intend to enrol the equipment in DCC?
	The planned industry led initiative to cover all smart metering products mandated by the program would allow products to be approved and placed on a list. There are many question to be answered on how this system would work, but in principle Landis+Gyr would support this approach.
39.	Do you agree that protocol certification (against a GB Companion Specification) should provide adequate assurance that a product will meet interoperability requirements? Please explain your views and identify any additional assurance testing that you consider to be necessary and the rationale for including such testing.
	The planned industry led initiative to cover all smart metering products mandated by the program would be designed and managed to provide sufficient assurance on interoperability and other compatibility issues. The development of the initiative will be open to many stakeholders including Government.
Chapter 6 - Operational licence conditions	
40.	Do you agree with the Government's proposals to require energy suppliers to operate specific aspects of smart metering equipment functionality for domestic consumers? Please provide rationale to support your position.
	Landis+Gyr agrees that all functionality, including the option to connect a CAD interface, must be made available to the consumer. The consumers also need to be aware of the functionality and it is not clear from the SMICoP Draft Smart Metering Installation CoP that there is any requirement to inform the customer of the CAD during installation (2.4.4). It is accepted that too much attention to the CAD when it is not being installed may be confusing to consumers. However, it is also possible that a failure to reference the CAD during installation may leave the consumer uncertain as to their right for obtaining and connecting a CAD. There should be an agreed statement with regard to the potential services provided by the CAD at installation and consumers should be left with documentation setting out the options for services available via a CAD to the meter. This would equate to the digital switchover which explained the advantage of subscription services.
41.	What are your views on the Government's proposals to require energy suppliers

	to operate specific aspects of smart meter equipment functionality for micro-business, but not other non-domestic, customers?
	No Comment
42.	Do you agree that the licence conditions as drafted effectively underpin the Government's policy intentions for consumer operational requirements?
	No Comment
43.	What are your views on the Government's proposals for obligations to be included in the SEC for information to be made available to Network Operators and ESCOs via the DCC?
	No comment
44.	Do you agree with the Government's proposals for the timing of the introduction of operational requirements? Please explain your reasoning.
	Landis+Gyr would like to see it mandatory for suppliers to use the data from the smart meter installation within one billing period of the smart meter installation. Paragraph 220 as written appears to mean that a meter installed today need not be used for accurate billing until December 2019.
Chapter 7 – Next Steps	
45.	Do you agree with the proposed changes to the smart metering regulatory framework to reflect the CSP-led model for communications hub responsibilities? Are any other changes necessary?
	Landis+Gyr agrees with the changes proposed.
46.	Do you agree that the equipment development and availability timelines are realistic? Please give evidence.
	<p>The timescales outlined have been developed in conjunction with BEAMA members and Landis+Gyr would agree that they are largely achievable. However there are a number of potential issues that could cause there to be delays. The timeline for product delivery previously provided by BEAMA gives a view as to the planned timescales and the potential delays that could occur. Industry needs confidence to make substantial investments.</p> <p>Landis+Gyr is confident that, provided the changes between SMETS 1 and SMETS2 are minimal, it should be entirely possible for SMETS2 compliant, interoperable equipment to be available in the market in time for the mass rollout. Indeed, Landis+Gyr expect to be able to demonstrate interoperability to SSWG HAN Version 2.3 (SMETS1) with at least 2 other manufacturer's equipment during the first half of 2013, with a third by Q3 2013.</p>
47.	Do you agree that SMETS 2 should only be designated when the Government has confidence that equipment to satisfy the new requirements is available at scale? Should a further period of notice be applied to ensure suppliers can manage their transition from SMETS 1 to SMETS 2 meters?
	<p>Landis+Gyr agrees with this view.</p> <p>From the point that designation occurs there should be an overlap period of 12 months between SMETS 1 and SMETS2 to allow training and logistics and avoid stranding of products in the supply chain.</p>
48.	What are your views on when responsibility for the SMETS modifications process should transfer from the Government to the SEC?
	When SMETS2 is designated.
49.	Which of the options (standing sub-committee or non-standing sub-committee) would you prefer in relation to modifications to the SMETS?

	Landis+Gyr has no specific preference with regard to the options covered in this question.
50.	Are there any particular areas of expertise that the sub-committee will need to fulfil its role, in terms of membership composition?
	Landis+Gyr would suggest that the make-up of the subcommittee be carefully considered once its scope and purpose is fully defined: it is critical that DSP, CSP and SMS designers and manufacturers are properly and fully represented moving forward: the involvement of these parties to date has been limited and we are concerned that industry may suffer as a consequence.