BEUC RESPONSE TO CEER PUBLIC CONSULTATION ON DEMAND RESPONSE PROGRAMMES

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Below are BEUC's key demands:

- The shift towards a smarter energy market will inevitably have implication for consumers. We therefore consider it as a priority that general consumer rights regarding for instance complaint handling, switching or access to information are transferred and where necessary adapted to the smart energy context.
- It is of key importance that consumers are provided with the necessary information to make the best use of demand response. In this respect it is therefore essential that reliable price comparison websites exist, that consumers have access to their consumption data and that consumers can use their data to compare offers and get advice.
- Consumer privacy and security are key aspects in the change towards smart energy systems. Data access and ownership and the permission to gather data need to be carefully considered. Key principles like privacy by design and data minimisation need to be in place.

Question 1: Stakeholders
For the purpose of this document, we have chosen to focus on the following stakeholders: customers, micro generators, DSOs, metering operators, suppliers, ESCO and NRAs. When describing the role of the metering operator CEER recognises that the DSO in the majority of the European countries is responsible for this activity. Do you agree to the stakeholders chosen as the focus of CEER's advice?

BEUC believes the principal stakeholders have been identified. However, we also consider a role of Member State government's as very important, especially in terms of reviewing the overarching regulatory framework. As many European countries have separate regulators for energy supply, energy products and smart appliances, and advice, we are likely to see the increasing convergence of energy supply with products and services and other industries such as water, telecommunications and digital. Many European countries have separate regulators for energy supply, energy products and smart appliances, and advice. We are therefore likely to see the increasing convergence of energy supply with products and services and other industries such as water, telecommunications and digital. Within these multitudes of competences, it should be assured customers are well-aware about their rights and know who to contact if need be. At the same time, we are convinced that also Alternative Dispute Resolution bodies should be considered as one of the key stakeholders as they can offer cheap and effective solutions to individual consumer disputes.

Moreover, we think that even a role of standardisation bodies is indispensable in the area of demand response as standardisation of relevant elements within the energy supply chain will enable to remove barriers to trade and thus open up the market to broader competition and lower costs for energy utilities and customers. BEUC believes standardisation work in the area of smart energy systems should address the minimisation of potential consumer risks (e.g. confusing tariffs schemes; remote switching or disconnection; disclosure of personal data) as well as the maximisation of potential benefits for all consumers.

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Question 2: Definition
CEER does not intend to establish an exclusive definition for demand response, but for the relevance of this advice document, we have chosen the following. Do you agree with CEER's definition for demand response?

Changes in electric usage by end-use customers/micro generators from their current/normal consumption/injection patterns in response to changes in the price of electricity over time, or to incentive payments designed to adjust electricity usage at times of high wholesale market prices or when system reliability is jeopardized. This change in electric usage can impact the spot market prices directly as well as over time.

BEUC agrees with the selected definition of demand response as an adequate working description for the purpose of the CEER advice.

Question 3: Market monitoring
Issues raised in the text:
- Complaint handling
- Customer information on their rights
- Customer complaints monitoring

Do you see a need for extra measures in this area?

BEUC welcomes the emphasis on consumer protection but believes more needs to be done to protect consumers' rights and ensure they benefit from demand response. Research has repeatedly shown that consumers have low levels of trust in energy companies and find bills and tariffs confusing. If trust and simplicity cannot be attained, consumers may a) resist installation of the (smart) meters b) be unwilling to adopt the dynamic tariffs that would maximize the use of Smart Grids and c) be unable or unwilling to change their behaviour to be more energy efficient.

Furthermore, BEUC also believes that a systematic monitoring of consumer protections is needed. Stronger protections must be in place for vulnerable consumers, e.g. time of use tariffs and the potential misuse of load limiting by suppliers as a debt management tool, remote switching and disconnection etc.

Last but not least, we recommend that regulators encourage energy companies to get in touch with them to discuss new deals, before rolling them out more widely in order to ensure consumer rights and benefits are safeguarded.

Complaint handling and redress
The Third Energy Package states that consumers must have an effective means of dispute settlement and that there must be "speedy and effective complaint handling procedures". Clarity is needed to ensure that this applies equally to not just the supply of energy but also wider products and services provided by energy companies. Considering consumer experience with complaint handling procedures and redress mechanisms, we firmly believe that crucial improvement is needed in this area.

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Moreover, with the deployment of smart technologies it is important to recognise that complaint handling and redress systems will need to be reviewed to see how far they remain fit for purpose in a 'smart' world. We recommend that Member States review their regulatory frameworks to ensure that the customer experience of energy services market is simple and effective. At the same time, consumer complaint handling and redress mechanisms will also need to be reviewed in light of increased bundled packages – including displays, energy products such as insulation or solar panels, smart appliances, alongside the supply of energy to ensure that customers have the confidence to engage in emerging energy services market.

As stated above, a regulator's remit may currently only cover a single area, e.g. the supply of energy with other regulators or bodies dealing with products and services, and other dealing with telecoms related to the home area network (HAN) and wider area network (WAN).[1] This means that seeking redress and complaint handling can be complex, frustrating and time consuming from a customer point of view. Different rights apply in each context with a different contact point in instances where resolution is not achieved. *For example, if a customer receives an unexpectedly high bill, where should they go and who is responsible? Do they go to their supplier as they sold them the energy deal? Do they contact the display manufacturer as it was the display that should have sent them the signal to change their behaviour? Or is it a problem with their home area network? Which rules apply? What are their rights?*[2]

Long-term contracts

If suppliers chose to differentiate on high-quality displays or energy efficiency packages we are likely to see a rise in long-term contracts that lock-in consumers to recoup costs over a period of months, or even years, as is the case with mobile phones. Experience in the mobile phone sector shows that longer contracts typically offer customers cheaper up-front charges and lower monthly tariffs, but can be significantly more expensive over the life of the contract. Longer contracts limit consumers' ability to switch, putting a brake on competition in the market. In the mobile phone sector, the dominance of two year contracts limited consumers' options for financing their mobile package in the way that suits them best. For example, consumers are very restricted in their choice of 12 month contracts involving higher up-front costs, though this is an option that may suit some people. Customers must be fully informed of the significance of locking themselves into longer deals and how their energy bills may increase if their lifestyle changes (e.g. they start working from home, fall ill or have children). Thus we urge the Member States to address long-term and roll over contracts where the customer might be exposed to significantly higher amounts of risk and to ensure that suppliers provide customers with the information they need before signing up to new deals and to prevent unfair contract termination fees.

[1] For example in UK, the regulator Ofgem only regulates the supply of electricity and gas, not energy products and services which are covered by the Office of Fair Trading. The home area network is potentially covered by the regulator for telecommunications, Ofcom.

[2] Our UK member, Consumer Focus, reported about a case from a smart grid pilot project when the customers had signed up to a critical peak pricing trial. They were told they would be rewarded with a cheaper tariff if they shift their load away from peak times and therefore they responded to signals via their display. Then, the customers received a high bill and queried this with their supplier as they claimed to have always switched when told. The supplier told the customer to contact the display manufacturer as it may have been a problem with their display not sending the message. The display manufacturer said that they would check the display but the customer would have to pay for this if there was nothing wrong with it. They suggested that they check that their in-home communication system was working appropriately and to check this with the supplier. In short, the customer was left with a huge bill, but did not know who to contact to resolve it. It was left up to him to find out what the problem was, what rules applied (different in each case as the supply was covered by the energy regulator, the display by UK Office of Fair Trading and the HAN by the telecoms regulator).

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Switching

With smart meter technology, we consider the three week switching period is irrelevant and therefore call for significant shortening of this process (24 hours) as this will be beneficial both for customers and market competition.

Question 4: Customers role regarding offers reflecting actual consumption patterns

Role: The customer is the key stakeholder in order for the full potential of demand response to be realised. Ultimately, he/she must make use of the services provided drawing from available information and an understanding of his/her consumption. CEER believes that the following is needed in order for the customer to take full advantage of offers reflecting actual consumption patterns:

- A reliable price comparison website to view the relevant offers;
- Information on consumption and cost at least monthly free of charge, in a clear and concise manner;
- Access to information on consumption and cost data on consumer demand;
- Information should be provided through a choice of at least two communication channels, for example an in-home display, website, SMS, via smartphones etc.;
- Easy-to-launch complaint and solid redress schemes in place.

The level of detail and frequency of access to information will depend on the offer the customer has chosen.

Reliable price comparison website

Price comparison tools available online are at present the easiest and the best way to compare the different offers of energy suppliers in a particular region. However, the structure and information provided to consumers must be impartial, up to date and accurate in order to support consumer choice and to allow consumers to switch to a better deal. Moreover, the main features/attributes of a good price comparison tool should be the actuality and in general the inclusion of all available tariffs on the market the price comparison website deals with as well as the possibility – provided by the search options – to find the tariff the consumer is looking for. It is also important to bear in mind that the tariff complexity (as one of the key issues to tackle) can significantly undermine the web-sites' ability to offer good advice. At the same time, while the process of switching might become quicker in the long run, unless action is taken, finding the best deal may become harder for customers.

Although smart meters will facilitate a range of new tariffs (for example, multiple rate time of use tariffs, critical peak pricing, energy efficiency packages, remote control of appliances, more localised pricing and single energy tariffs amongst them), tariff complexity becomes a serious problem which can undermine the websites' ability to offer good advice and thus disengage consumers to be active in the energy market. Thus, with the smart meter roll out there is a risk of adding further complexity to a market that customers already find hard to navigate.

Furthermore, it also needs to be borne in mind that significant numbers of consumers do not have access to the internet. Therefore, in our view, regulators should ensure

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that the service is also available over the phone and by hard copy communications in order that customers have the tools they need to find the best deal.

Moreover, we support CEER recommendations that suppliers should use at least three registers during a 24 hour period. The emphasis of the best practice should be on ensuring that customers are able to understand new tariffs and make informed choices about their energy tariffs. If not, appropriate steps should be taken to limit the number of rates.

Information for consumers

In order to enable consumers to become active players, the information plays an essential role. As also set in the Third Energy Package, energy consumption information should be provided to consumers free of charge, in comparable formats and at appropriate level of detail. The information provided will however not automatically empower the customer, if she/he is not in a position to usefully interpret the data and adapt his behaviour towards more energy efficiency. Thus, it should be also assured that customers are equipped by in-home displays and provided with accurate, real-time, understandable and usable information on their energy consumption that allows them to compare all deals available (e.g. indicate current rate of consumption in monetary terms). It is equally important that customers have the freedom to choose how the new technology is used (e.g. how to receive the information, whether to accept the standard display or upgrade to more sophisticated equipment, where the meter/display is located etc.). Moreover the information should be communicated in a way convenient to particular customer (e.g. bearing in mind the customers who do not have access to internet etc.).

Access to information

We strongly believe customers should have access to real-time information on energy usage as well as historic data on their energy consumption free of charge at any time in a format that enables them to make like-for-like comparisons with other deals available on the market. The granularity of data provided to the customer must be of sufficient detail for the customer to understand the impact of switching to a new deal (for instance, if offers for time of use are half hourly, they should have free access to their half hourly profile). Some suppliers are strongly resistant to this proposal and want to charge customers to access their own energy consumption data.[3] If suppliers start to charge consumers for their own data, this will act as a barrier to customers making informed switching choices.

Moreover, customers should also be able to share this information easily with accredited third parties. In this way they will be able to use any number of the price comparison services and green advice agencies that are likely to emerge from the introduction of smart metering – including automatic review and switching.

Potential of demand response

We welcome the emphasis on consumer protection but believe that more needs to be done to protect customers and ensure they benefit from demand response and smart meters in general. We firmly believe that customers should always have a possibility to opt out.

[3] Our UK member, Consumer Focus, reported about a case when one supplier was charging micro-businesses 52p a day to access their own energy consumption data via an online portal.

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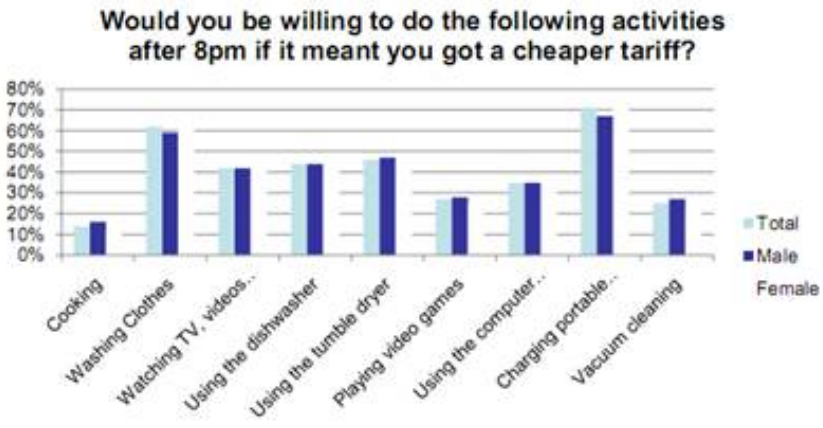
In case the household is equipped by a smart meter, it should still be up to the customer to decide if s/he wants to opt in for demand response. As also shown in the research of our member Consumer Focus, customer interest in demand response is relatively low particularly where people have to significantly change their lifestyles and barriers to interest will need to be overcome with tailored social marketing campaigns.

Customer interest in demand response (Consumer Focus research, 2010)

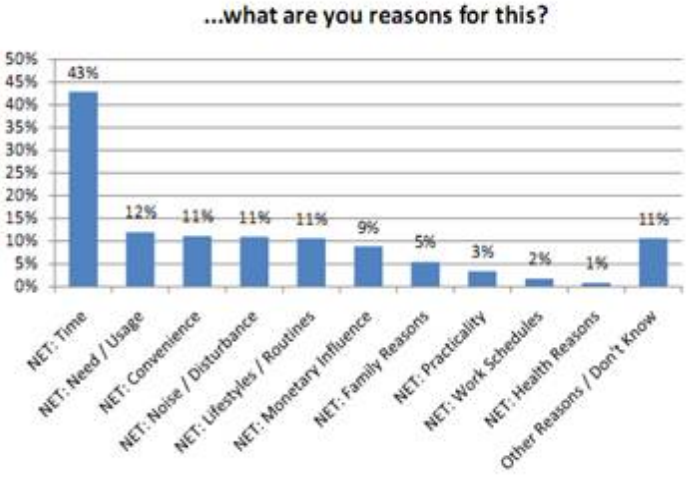
- People unwilling to change behaviour
- Appetite for automation not yet properly tested
- Charging devices and washing only two where 50% + willing to shift



Online survey
Base 2,048
March 2010

Households with children less willing to shift

Key reason against not taking action link with inconvenience/lifestyle



Online survey
Base 2,048
March 2010

Recommendations

- Social marketing strategy to deliver behaviour change including national awareness campaign

The CEER consultation documents outlines a vision of a world in which electricity customers and micro-generators make informed choices about their usage of electricity in the short term and their selection of appliances in the longer term. There are a number of challenges to delivering benefits from demand response and therefore BEUC recommends that customers should be provided with assistance to be able to understand the impact of demand response. This could be done for instance with *projected bills based on actual energy use* over a number of seasons before signing up to new deals. Customers should have the advantages and disadvantages of new pricing structures clearly explained to them. This should include the impact of important lifestyle changes.

However, as not all consumers will be *able* to shift their load or reduce consumption at peak times, regulators should ensure that all customers continue to have a choice in whether or not they accept demand response tariffs. New offers should not be compulsory as these can disadvantage more vulnerable consumers[4]. Therefore, it should be left up to the customer to choose about her/his role and if s/he wants to opt-in for such a service. For instance, the UK Government's March 2010 impact assessment for rollout of domestic smart metering recognised that "bill savings for some customers may be offset by bill increases by other customers". For example, a working family may need to use their electricity at what are currently peak times, when they come home from work, when the children come home from school. This could have detrimental impact of the affordability of energy for some households which will inevitably face higher charges. Therefore, we call upon the EU Member States and regulators to fully consider the implications of pursuing cost reflective pricing if changes in system balancing and settlement are pursued, in particular the impact on low income customers. Last but not least, new protections should be considered around remote power capacity reduction to safeguard consumers.

We also strongly recommend performing a distributional analysis on the impact on different social groups and if/how these groups can access the benefits of new deals. Apart of level of income, this analysis should take into consideration vulnerability, heating type, dwelling and location among other factors. All of these issues will influence the degree of flexibility the household has to shift their load and help assess any benefits and risks.

There is very little evidence of the customer experience of direct load control of appliances and this will require specific regulation. In particular, what are fair terms and conditions? Will the customer be able to override appliances and switch them on and off when they want to? What is a fair penalty if they do override?

To conclude, we encourage the National Regulatory Authorities to pursue pro-competitive policies ensuring transparency and a stable regulatory framework enabling demand response followed by monitoring and reporting to ensure customers' rights are well-protected.

[4] For example, in Victoria, Australia concerns that time of use tariffs would be a 'tax on the poor' led to a halting of rollout and protections being put in place. The State government recognised that not all customers would benefit from new time of use tariffs or be able to afford smart appliances to enable them to take advantage of cheaper direct load control offers.

Question 5: Micro generators role regarding offers reflecting actual consumption patterns

Role: The micro generator contributes to demand response by regulating consumption and injection to reflect wholesale prices. To fulfil this role, the following needs to be in place:

- Possibility to sell electricity;
- A regulatory scheme on how to deal with payments/settlement for micro generation (feed in tariffs, net payment etc.)
- Micro generator to be provided with information on consumption and injection data and costs, at least monthly free of charge, in a clear and concise manner;
- Access to information on price data, on demand; and
- Information should be provided through a choice of at least two communication channels, for example an in home display, website, SMS, via smartphones,etc.

Distributed generation will increase in the near future when more and more consumers will install micro-generation. We agree that micro generators should be able to sell electricity, that a regulatory scheme should govern payments, and that customers should have regular access to information. However there is a risk of information overload and that efforts to regulate injection to reflect wholesale prices will deter the take-up of micro-generation. Moreover, we are concerned about the use of different pricing mechanisms on the take-up of micro generation because the more uncertainty there is about revenue from micro generation systems the less attractive the offer to consumers (domestic or business).

Some micro generators may currently be aware of the benefit of using energy generated on-site, to avoid the cost of importing energy, but may have limited control over this due to the relationship between renewable energy and weather patterns. Any automation system would have to take into account local generation in operating appliance controls. Furthermore, for micro-generators to get the benefits of dynamic pricing they would need remote access to their appliance controls. There may also be little, if any, benefit in buying smart appliances to maximise onsite use of energy generated onsite. This will depend on a comparison of the cost of the appliances and related communications against the additional savings from avoiding importing energy. Such a comparison will be complex and the area is open to miss-selling if costs and savings are either not presented or misrepresented.

BEUC supports CEER's recommendation regarding information on consumption and injection data and costs at least monthly free of charge in a clear and concise manner. But the data must also be relevant. If they cannot understand the information, and not use it to their benefit from making changes to their behaviour or tariffs, then the data has no value.

We welcome the customer having access to price data on demand, both of the value of incoming energy and also the exported energy and that used on-site. These prices should take into account variables such as feed-in tariffs and avoided import so that the consumer sees the full benefit of micro generation.

The granularity of data provided to the customer must be of sufficient detail for the customer to understand the impact of switching to an export tariff or the benefits of using smart appliances. Customers must be prompted to compare the costs of new appliances with potential savings to see if they would be better off overall. We fear demand side response policies may result in miss-selling of smart appliances that serve no benefit to consumers.

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Question 6: Metering operators role regarding offers reflecting actual consumption patterns

Role: The metering operator offers services to provide, install and maintain metering equipment with functionalities that enable demand response. The metering operator is also responsible for carrying out the meter reading.
To fulfil this role, the following needs to be in place:

- A minimum set of functionalities (hourly metering or three registers, remote reading, remote power capacity reduction/increase, software to be upgraded remotely);
- Inter-operable communication standards; and
- A duty to deliver accurate metering data in a timely manner to relevant stakeholders, for example communicating with DSO´s for balancing matters.

Question 7: DSOs role regarding offers reflecting actual consumption patterns

Role: Increasing demand response places new challenges on balancing local grid networks. The DSO must manage these challenges while ensuring that the distribution network does not constrain the development of demand response.
To fulfil this role, the following needs to be in place:

- Information on metering values regarding consumption and injection;
- A distribution network system capable of dealing with fluctuation in usage resulting from increased demand response; and
- A regulatory scheme on how to deal with payment/settlement for micro generation.

Question 8: Suppliers role regarding offers reflecting actual consumption patterns

Role: The supplier has the key role in developing innovating pricing formulas that reflect actual consumption, to enable the take-off of demand response.
To fulfil this role, the following needs to be in place:

- Timely and easy access to information on customers' metering values regarding consumption and injection;
- Timely and easy access to information on wholesale prices;
- An interface enabling communication on consumption and data between the customer and supplier;
- Capacity to analyse large volume of data quickly, and;
- A regulatory scheme on how to deal with payment/settlement for micro generation.

Question 9: ESCOs role regarding offers reflecting actual consumption patterns

Role: ESCO's offer services and products that will ensure that customers and micro generators can benefit from offers reflecting actual consumption/injection patterns, such as home energy management systems, in home displays, smart appliances, software applications, energy storage devices etc. To fulfil this role, the following needs to be in place:

- Timely and easy access to information on relevant data according to the offer between the customer/micro generator and the supplier;
- Access to relevant metering data, and;
- Possibility to aggregate consumption from different customers in a demand response programme.

N/A

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Question 10: NRAs role regarding offers reflecting actual consumption patterns
Role: The NRA establishes a regulatory framework that enables demand response, as well as implementing appropriate monitoring measures. The NRA clearly defines stakeholder roles and responsibilities and develops appropriate incentives for relevant stakeholders, including grid tariffs that stimulate energy efficiency, to facilitate implementation of demand response and remove potential barriers.

We do agree with CEER recommendation. For more details, please, see BEUC answer to question 4.

Question 11: Customers role regarding interface with the home
Role: The customer can use the information available through the gateway to adjust consumption. To fulfil this role, the following needs to be in place:
- A means to access to the metering values from the gateway

We support CEER's recommendation that the customer has to have an access to a gateway and that s/he can also choose which service providers can access this gateway. However, as already highlighted above, the information on energy consumption provided to customers will not automatically change customer energy use behaviour. If the customer cannot usefully interpret the data and adapt his behaviour towards more energy efficiency, the costs of smart meters will heavily outweigh potential benefits. Thus, there are sensible requirements for in-home displays all customers should be equipped with. This principle should be applied also for any other part of communication channel.

Moreover, there will need to be robust standards around the home interface used to communicate price signals to customers, to ensure that signals are communicated reliably.

Last but not least, the energy services market must be open to competition and so there must be interoperability between smart meters, smart appliances and ESCO energy management information systems through the use of a common data dictionary.

Question 12: Micro generators role regarding Interface with the home Role: The micro generator can use the information available through the gateway to adjust injection. To fulfil this role, the following needs to be in place:
- A means to access to the metering values from the gateway.

We believe adjustments of injections should only be done with the micro generator's permission, but should be automated. Domestic consumers may not be at home to adjust injection, whilst other micro generators are likely only to generate energy as an aside to their core business and would not expect to devote management time to the system without a significant return.

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Question 13: Metering operators role regarding interface with the home Role: The metering operator is responsible that the meter is equipped with or connected to an open gateway. To fulfil this role, the following needs to be in place:
- Open standards for interfaces which enable interoperability two-way communications, so that any stakeholder wanting to connect to a device should not be hindered.

Question 14: DSOs role regarding Interface with the home
Role: The DSO has no role in this matter unless the DSO is responsible for metering, in which case the role of the metering operator is applicable.

Question 15: Suppliers role regarding interface with the home
Role: The supplier develops innovating pricing formulas, enabled by means of easy access to metering values after customer consent. To fulfil this role, the following needs to be in place:
- Interfaces which enables interoperability.

Question 16: ESCOs role regarding interface with the home
Role: The ESCOs develop energy management services, by means of easy access to relevant metering values, after customer consent. To fulfil this role, the following needs to be in place:
- Interfaces which enable interoperability.

N/A

Question 17: NRAs role regarding interface with the home
Role: The NRA monitors the electricity market with special regard to customer confidence, privacy and security. To fulfil this role, the following needs to be in place:
- Clearly defined data protection rules applicable for electricity data communication.

We do agree with CEER recommendation. For more details, please, see BEUC answers to questions 18, 19 & 20.

Questions 18., 19., 20. National point of contact & Privacy and Security issues
It is feasible to expect each national electricity market to establish a national point of contact, for example a database or a hub, to which the metering operator transmits relevant metering values, and to which the relevant stakeholder can then turn to in order to get metering data, after customer consent.

Is there a need for such a national point of contact? Which stakeholder should be responsible for this? Do you see a conflict between issues of privacy and security of data with regards to demand response?

Consumer privacy and security are key aspects in the change towards smart energy systems and smart meters in particular. For successful deployment of smart meters, the consumer's trust plays an essential role. Therefore, smart meters must be reliable, secure and under individuals' control. Data access and ownership and the permission to gather data need to be very carefully considered. At the same time, consumers

should be well-informed about who deals with their data and it has to be remembered that it is the consumer who owns his data and therefore should have appropriate rights and protections here.

Demand response is being introduced in an increasingly competitive environment with many players, who often have little experience with privacy protection. As the amount of sensitive consumer-related data will grow and may be attractive for usages beyond the intended use, BEUC strongly believes it is highly important to follow the data protection legislation in this respect.

Moreover, as demand response generates vast amounts of precise data on the individual consumer the following principles should be applied:

- **Principle of privacy by design** - making privacy the default (to significantly minimise the risks and to secure users' willingness to rely on smart meters, it is crucial to integrate data protection and privacy from the very inception of the deployment of smart meter project and at all stages of its development);
- **Data minimisation** principle which ensures the safe disposal of data and the limitation of data retention;
- Using **privacy-enhancing technologies**;
- **Privacy Impact Assessment** to be performed prior to the data collection (it should be clear what kind of data is needed to perform particular tasks to make sure that only necessary data is collected);
- Using **aggregated instead of anonymized data** (currently, it is almost impossible to ensure the full anonymisation of personal data and it is often possible to 're-identify' or 'de-anonymise' individuals hidden in anonymised data with astonishing ease[5]. As we have also highlighted in BEUC response to the European Commission's Communication on personal data protection[6], the US Federal Trade Commission has acknowledged that the distinction between personally identifiable and non-personally identifiable data is no longer meaningful in light of developments in profiling technology[7]);
- **Technical standards** and systems with a focus on upgradeability to safeguard end-to-end security should be developed to ensure the overall intelligent metering system is future proved and ready to cope with future challenges. Open standards and interoperability are the driving forces for good implementation and thus the cornerstone for all the above. These standards, as with all standards related to public interest issues, must be developed with full and effective consumer participation.

[5] The question as to how the concept of anonymised data is subject to significant academic debate with several recent publications in the United States highlighting the ease with which anonymised data can be 'deanonymised'. De-anonymizing Social Networks, Narayanan and Shmatikov, Security and Privacy, 2009. Also Broken promised of privacy: responding to the surprising failure of anonymisation, Paul Ohm.

[6] BEUC response to the European Commission's Communication on 'A comprehensive approach on personal data protection in the European Union', January 2011

[7] FTC staff report: Self-Regulatory Principles For Online Behavioural Advertising, February 2009.

Centralised vs decentralised databases / data storage

Although the national point of contact in a form of database or a hub may bring certain advantages from competition as well as cost-efficiency point of view, we do believe this solution represents crucial risks for people's privacy and security. Centralised database will naturally create its own demand for data and may potentially become a target of cyber attacks as we have witnessed many times in the past. Also, when considering that data on energy consumption is needed only locally, we believe more decentralised data storage should be applied and the communication between these databases should be managed by an independent party assuring transparency. Therefore, we think the regulator is the most appropriate actor for being some kind of mediator in this process. Nevertheless, before choosing any system of data storage, we ask for a thorough analysis of possible solutions.

At the same time, we strongly believe that the highest protection of personal data will be ensured when storing data at the consumer's side to the highest possible extent. Such a solution would also enable the effective grid management as well as providing enough information to other market players who might be interested in consumers' information (e.g. for providing energy efficiency advice with consumer informed consent).

Data ownership, consumer consent, consumer rights & transparency

Customers as the owner of their data have to have a control over their data – who, when and for what kind of purpose their data is collected, processed and stored. Moreover, consumers should be the only person to have unlimited access to both their detailed meter readings and historic data accessible at any time and free of charge. Therefore, as mentioned above, we do believe the personal data are the best protected if stored at the consumer side to the maximum possible extent. At the same time, consumer should be able to exercise their right to access, correct, object and modify their data at any time.

Customers are very often overwhelmed with information they receive and many of them sign away control of their data. If consumer consent is needed to access their personal data (e.g. for the third parties), it has to be made sure that the conditions they agree to are clear and understandable, therefore *freely given, specific and informed consent from customers is required*[8].

Also, customers should be advised what information regarding their energy consumption is required by law and by whom. For any other (extra) metering data, the customer should choose, in a meaningful way, who has access to it and for what purpose. The customer has the right to reject without penalty to his/her service provision.

Lack of transparency and information as a major deterrent to users in the assertion of their rights:

- If consumers do not know how their data is being used, for what purpose and by whom, they will not be in a position to exercise and enforce their rights. The introduction of a general transparency principle will grant regulatory status and ensure its coherent implementation. The information to the customer (data subject) should include further compulsory elements, such as the competent data protection

[8] Directive 95/46/EC

authority and its contact details, as well as the modalities to access, rectify and delete their personal data. In this respect, BEUC would support the development of standard privacy notices as a tool to enhance transparency and consumer control. Moreover, BEUC believes that Article 29 Data Protection Working Party[9] should take the lead in developing such standard privacy notices together with consumers' representatives and businesses.

- However, increased transparency of privacy notices alone will not resolve all the current issues. It must be clear that e.g. posting policy notices on a website is not sufficient to conclude to have received informed consent from a consumer. The use of Transparency Enhancing Technologies (TETs), the development of notification standards by Data Protection Authorities (DPAs) or even business could conduct focus groups and surveys to find out what the most efficient way to inform consumers is.[10]

Technical solutions ensuring customers have control over their data

There are several technical solutions which can ensure consumers have a control over their data and thanks to which consumer are informed when his/her smart meter is communicating with the outside world and when the data leaves the house. Therefore, it is crucial to collect, process and store data in the most secure way possible (such as in encrypted form when bearing in mind that the highly secured key should be with the consumer). However, as various solutions could be applied in particular EU Member States[11], it is of utmost importance that all solutions protect people's privacy, ensure end-to-end security and are future proof to be able to cope with changes and future challenges.

Question 21: Recommendations missing?
Do you think that there are any recommendations missing to be able to launch demand response? If so, please formulate and if possible according to the relevant stakeholders.

Please, see above.

END

[9] The Working Party has been established by Article 29 of Directive 95/46/EC. It is the independent EU Advisory Body on Data Protection and Privacy. Its tasks are laid down in Article 30 of Directive 95/46/EC and in Article 15 of Directive 2002/58/EC.

[10] BEUC response to the European Commission's Communication on 'A comprehensive approach on personal data protection in the European Union', January 2011

[11] For instance, the German Federal Office for Information Security (BSI) presented the "Protection Profile for Smart Meters". It defines security objectives and corresponding minimum requirements for a "gateway" which will be the central communication component of a Smart Metering System. Based on the protection profile, the gateways may be verified and receive a certificate after positive results with evidence of the protection objectives achieved. The gateway operates as a kind of "firewall" and prevents from attacks specifically through the WAN-sector. It utilizes "access control profiles" to determine when / how often which data shall be sent to which identified and authenticated component or external entity. Only the gateway is "allowed" to establish connections, the other components or external entities are not. The gateway also collects, processes, and stores meter data. In order to guarantee the required authenticity, integrity, and confidentiality, data must always be encrypted and signed before transmission.