

Fostering energy markets, empowering consumers.

Evaluation of Responses

Stakeholder comments on CEER's Public Consultation on Dynamic Regulation to Enable Digitalisation of the Energy System

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EXECUTIVE SUMMARY

The Council of European Energy Regulators (CEER) appreciates and welcomes the comments and feedback received to its public consultation paper "Dynamic Regulation to Enable Digitalisation of the Energy System". This Evaluation of Responses accompanies CEER's Dynamic Regulation to Enable Digitalisation of the Energy System Conclusions Paper.

Through a public consultation (from 18 March 2019 – 14 May 2019), CEER sought views on whether we have correctly understood the potential value propositions and the enablers needed to achieve them. We appreciate the feedback also on the range of draft regulatory proposals that should be prioritised.

A total of 47 external respondents submitted views. Overall, although there were detailed differences of views particularly among industry and consumers (or their representatives), respondents expressed strong support for CEER's analysis of digitalisation in the consumer interest.

CEER's Conclusion Paper "Dynamic Regulation to Enable Digitalisation of the Energy System" takes into account suggestions made by stakeholders and has provided further clarification and detail on our recommendations. It also reflects recent developments in energy policy at European level, in particular the revised legislative provisions for the energy sector (Clean Energy for All Europeans¹) and for general consumer law (New Deal for Consumers²), as well as regulators' further thinking on timely energy regulatory trends and issues. This Evaluation of Responses document accompanies CEER's Dynamic Regulation to Enable Digitalisation of the Energy System Conclusions Paper and provides CEER's considered reaction to the comments submitted during the public consultation.

¹ https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/clean-energy-all-europeans

² http://europa.eu/rapid/press-release_IP-19-1755_en.htm



1 Stakeholder responses

The public consultation on CEER's "Dynamic Regulation to Enable Digitalisation of the Energy System" paper was launched on 18 March 2019. Reactions were sought, via an online questionnaire, by 14 May 2019.

In total, 47 responses from external stakeholders were received, of which 1 was confidential. The comments were received from a variety of organisations (Annex 2). Within this total, 3 responses were submitted from consumer organisations, one-third were network operators, a further third were provided by energy suppliers and industry organisations and the others included platforms, research organisations. CEER appreciates the involvement and input from respondents.

A large number of respondents are both involved in electricity and gas, but electricity-specific respondents outnumbered gas specific ones. 90% of respondents involved in electricity or electricity & gas, while 10% only focus on gas. Approximately 60% of respondents were organisations/companies from western Europe, while 30% were organisations active across Europe – a small minority of respondents were from areas outside of this.

This Evaluation of Responses summarises the views expressed by respondents and presents the conclusions CEER draws from them.

CEER's Dynamic Regulation to Enable Digitalisation of the Energy System Conclusions Paper as well as the non-confidential responses to our online consultation are available on the CEER website. In line with our current practice, CEER will continue to provide opportunities for stakeholder's contribution to our work via public consultations and events. All information is available online on www.ceer.eu and is updated on a rolling basis.

2 General comments

In general,

- The overwhelming majority of respondents appreciated the consultation, agreed with CEER's analysis and found that the consultation document provided a relevant and comprehensive summary of the challenges associated with digitalisation.
- Respondents generally felt that CEER had identified the right questions and areas for regulators to work on, albeit with varying priorities. Some areas, such as reviewing network tariffs, received widespread support whereas others, such as improved network data availability were supported strongly by a sub-set of respondents (e.g. those more associated with competitive entrants).
- Many respondents advocated maximising the role of competition and markets, ensuring a level playing field and the role of network companies as neutral market facilitators. In this regard, there was wide support for agile regulation to avoid barriers to innovation. Respondents underlined the importance of applying and enforcing the range of existing EU and national legislation on consumer protection and sectoral provisions (e.g. energy, financial services, privacy), before proposing new regulation.



- Respondents recalled the essential importance to consumers of reliability of supply and urged that this should not be overlooked. Differences between customer types were highlighted and the need to avoid some customers being "left behind".
- Several respondents noted that several of the consultation questions were very broad and difficult to answer, and considered that the answers should therefore be taken as a guide for further work rather than leading to definitive conclusions.

Reflecting these comments, CEER believes it is important that our work on digitalisation brings down cross-border barriers to the use of data in making the energy system more efficient. In doing so, we should cultivate and spread the success of Member States that are further ahead in this process, and ensure that our regulatory work does not inadvertently hold back the most successful through overly burdensome regulation.



3 Detailed comments

The table below provides an overview of the comments received to the questions asked in the public consultation on "Dynamic Regulation to Enable Digitalisation of the Energy System" in March 2019. CEER's reaction and views on this input is included in the right-hand column of the table.

	Public Consultation Question	Summary of Responses	CEER position
1	What impact do you consider that digitalisation will have on the energy system and which are the most important?	into the three categories of new technologies, new	CEER recognises the interactions with decarbonisation and decentralisation, hence digitalisation is a key pillar of CEER's 3D strategy for 2019-2021 alongside decarbonisation and dynamic regulation. We agree that digitalisation has already had an impact on the energy sector, and in future the impacts will vary across the sector. CEER will continue to reflect on changes in the sector and respond accordingly.



	Public Consultation Question	Summary of Responses	CEER position
2	What are your views on the changes for the energy system highlighted in this chapter and are these the most relevant?	Most respondents agreed with CEER's analysis. Of those who responded on which of the three types of changes were most relevant, the most common perspective was that all are very relevant. It was noted that the three are interconnected in any event.	CEER appreciates the responses largely supporting and building upon the analysis in the Consultation Paper. We have taken these points on board in the Conclusions Paper.
	- Increases the productivity of the existing system;	Among the minority who favoured one of the three, views were relatively balanced across the three with slightly more proposing increases in productivity as the most material.	
	- Enables new products and services that alter electricity demand; and	Several respondents, mostly those representing DSOs, noted that flexibility marketplaces and indeed market-based solutions were not the only, or necessarily the best, way to procure flexibility.	We recognise the value of the joint publication.
	- Brings new digital marketplaces that transform the way the sector	Several responses referred to the joint publication by ENTSO-E, Eurelectric, E-DSO, GEODE and CEDEC on "An integrated approach to Active System Management".	We note that the impact of digitalisation is currently uncertain and will vary across different parts of the sector.
	transacts?	A minority view was that digitalisation would have a more mundane impact and not lead to transformational change.	



	Public Consultation Question	Summary of Responses	CEER position
3	What are the most important value propositions for consumers, should be prioritised?	CEER's analysis and the four proposed value propositions, particularly in respect of household customers. Many	In a context of technological transition, preserving the current high level of quality and security of supply is an additional value proposition. CEER recognises that the implications of the different value propositions will vary according to market segments.
		Among responses that identified particular types of value proposition, the most common view was that the most important would be cost. It was noted that there could be indirect benefits reducing costs to all customers and more direct benefits to those participating in new ways. While the absolute value of savings might be lower for those in energy poverty, the value to them from even a smaller saving might be correspondingly greater.	



	Public Consultation Question	Summary of Responses	CEER position
		Others felt that convenience or choice would be most important, or the ability to contribute to decarbonisation and sustainability. Several respondents answered this question by identifying approaches or technologies that they considered would bring most value. Of these, smart meters was most popular, followed by data management and energy efficiency (in particular for business customers), and then electric vehicles.	
4	Will digitalisation lead to more consumer participation in energy markets? Please provide your reasoning.	The most popular view was that digitalisation would lead to consumer participation, with approximately 20 responses being sure that it would and a further 15 saying that it would under certain conditions. The main caveats noted were that, to lead to more consumer participation, digitalisation should have benefits for consumers (in terms of cost reduction), that new services should be convenient, ease to use and not too complex – or perhaps automated so that participation was indirect – and that consumers should be well informed/advised in terms of transparency of their energy consumption and bills and awareness of environmental implications. These developments would potentially depend on new business models coming forward. Some respondents mentioned associated risks (see Q6 below).	CEER notes that the extent to which digitalisation goes hand-in-hand with increased consumer participation will depend on a range of factors, including the need for relevant business models. These issues are addressed further in the Conclusions Paper.



	Public Consultation Question	Summary of Responses	CEER position
		Some respondents noted that the extent of participation would likely vary between types of customer, and some noted that most customers would still be inactive. One respondent did not expect consumer participation to increase. One respondent active in the energy trading sector pointed out that the development of local trading platforms may be detrimental to the liquidity of the European wholesale market affecting the relevance of the price signal.	Development of local trading platforms or alternative models of procurement are necessary to purchase flexibility, which can play a significant role in balancing the network and system.
5	What are the key enablers needed to unlock the benefits of digitalisation for consumers?	There were several proposals for key enablers, with over 15 enablers being mentioned by more than one respondent. The four areas that stood out as receiving the most support were: - Smart meter roll-out and interoperability, mentioned by over 20 respondents; - Innovation friendly regulation, mentioned by over 15 respondents; - Data availability, interoperability and accessibility, mentioned by approximately 15 respondents; and - Market driven and cost-reflective price signals, mentioned by about 10 respondents	CEER agrees that these four areas are essential in driving digitalisation, and for setting the right conditions for the data to be used to unlock consumer value. They can be summarised in the following 'pathway': - generating data, - making data accessible, - give value to using the data through price-signals, and finally - allowing firms to innovate in using the data. These enablers are all necessary to get the best out of digitalisation. CEER also agrees, as mentioned by some



Public Consultation Question	Summary of Responses	CEER position
	Innovation friendly regulation included more reliance on principles than prescriptive rules and, from several responses, explicitly included addressing the capex bias in traditional incentive regulation.	respondents, that although there is a need for common work to prevent cross-border barriers arising, we should be cautious in introducing new regulation at any level that could inhibit rather than promote innovation in the sector.
	Data accessibility was also a common theme, emphasising the need for the data collected to be safely usable across applications with minimal costs, possibly through apply common standards. This is needed for enabling innovation in how data is used. It is also worth noting that in several cases, data availability was explicitly referring to network and system data as well as smart meter data.	
	Other interesting enablers that received slightly fewer responses (approximately 5 each) included:	
	 Customer education Use friendly interfaces for products Customer or stakeholder involvement in product design Automated products Differentiation between customer groups; and Interoperability between systems (in an internet of things environment) 	
	Some respondents emphasised the importance of implementing the Clean Energy Package and others called for full liberalisation and no extension of regulation (for example to intermediaries).	



	Public Consultation Question	Summary of Responses	CEER position
6	What are the main risks for consumers arising from digitalisation of the energy sector?	There was stronger agreement to two of the key risks noted in the CEER consultation paper than to any other answer – namely privacy and cybersecurity – with at least 30 respondents mentioning each of these. Some of these respondents noted that these were not energy sector-specific concerns and the solutions were likely broader than the energy sector. Two other risks stood out to respondents: the risk of complexity and of customers being left behind by digitalisation, particularly vulnerable customers – including but not only if they lack access to digital devices. Each of these were mentioned by more than 15 respondents. Four other areas were mentioned by at least 5 responses: cost, the risk of commercial or technical lock-in, the need for a level playing field with the same rules for all and risks to competition for example from interaction between algorithms. Dynamic tariffs, artificial intelligence and extreme customer segmentation were only mentioned by a few respondents each, perhaps because they are more specific. A couple of respondents mentioned risks to jobs and the risk of existing energy companies going out of business.	The responses underpin CEER's assessment that privacy and cybersecurity comprise two key risks of digitalisation for consumers. As was noted, these risks are not energy specific. Therefore, it will be beneficial and efficient to learn from experiences in other sectors and adapt existing mitigating measures. The same holds true for the risk of customers left behind by digitalisation and the general risk of complexity. The risk of commercial or technical lock-in has been ubiquitous in energy markets for many years. Especially in times of fast-paced and disruptive developments where technological monopolies can arise, CEER emphasises the regulators' guiding principles of technology and business model neutrality.
7	What would a	Responses to this question were rather varied and some	The main take-away from stakeholder responses here



Public Consultation Question	Summary of Responses	CEER position
"whole energy system" approach look like – would this unlock more benefits of the digitalisation of the energy system?	difficult to answer. The following points should therefore be treated with caution. Of those who answered this question, in general it was felt that a whole system approach would be beneficial and this	available to innovators for use, it would be valuable also to assess ways to gather and make accessible data across sectors. This should allow potential innovators to use digitalisation as a 'whole system' optimisation tool.



	Public Consultation Question	Summary of Responses	CEER position
		whole system approach would not be beneficial – for example describing centralised management as a chimera or expressing skepticism that flexible resources would be a realistic substitute for network development.	
8	Do you agree with the analysis presented here on the key areas in which energy regulators should focus?	In general, respondents agreed with CEER's analysis. There was a wide range of further elaboration in answer to this question. Two areas were mentioned by more than 5 respondents: - Flexible or agile regulation - Data availability Others noted by a few respondents each included: DSO incentives, sandboxes and smart meter monitoring. On the latter there was a particular call for regulators to track the benefits of smart meter rollouts. It was noted that energy regulators were not the only relevant regulators in this area and in some cases, greater clarity may be needed on responsibilities. From a consumer perspective, it is also worth noting suggestions around simpler bills, price comparison tools being too focused on price and unable to include more sophisticated products, and the role of behavioural science and testing or piloting of regulatory interventions.	CEER underlines that it is correct to focus on smart metering as the most important enabler of digitalisation in retail markets. At the same time CEER acknowledges that for deep digitalisation and in the longer run, other sources of data will become increasingly relevant and will increasingly become the focus of energy regulators. The public consultation has confirmed a view, long held by CEER, that transparency of energy-related information should not come at the expense of user-friendliness and clarity of billing. CEER maintains its position that information exchange and knowledge sharing within the industry are key to cybersecurity risk mitigation. CEER fully acknowledges the risk of overregulation that could stifle innovation, especially in terms of new product and platform development. CEER also expects digitalisation to allow the streamlining of regulatory data collection. CEER stands ready to deepen our engagement and exchange of knowledge with stakeholders on a



	Public Consultation Question	Summary of Responses	CEER position
			continuous basis to improve our collective knowledge, as a sector, about digitalisation and its implications
9	 Which of the 14 specific draft proposals should regulators pursue (and why)? Which should they not undertake (and why not)? Indicate your top 5 priorities for action by regulators in the near term. 	 The respondents' top 5 priorities are: (Proposal #7) NRAs to review network tariffs to ensure they are fit for the future. All consumer should pay a fair contribution towards the fixed costs of the system. (Proposal #9) Regulators to review network tariff regulation to remove capex bias and encourage the use of flexibility services where economic. (Proposal #10) DSOs to explore market-based procurement for flexibility services, considering use of a flexibility marketplace where efficient and reviewing whether network tariffs send the right signals for network users. (Proposal #1) DSOs to focus on the quality of their network data and data on DER Data must be interoperable Learn from those who move first in this area, e.g. developing digital twins). 	CEER appreciates respondents' views on prioritisation and understands the value in the priorities identified and their consistency with the enablers mentioned above. CEER considers that there is a case to give a higher priority to providing accessible data on networks to allow innovation from new entrants (Proposal #2), noting that the key beneficiaries from such work are not well represented in the sample of respondents yet could provide considerable consumer benefit by increasing competition in the sector.



	Public Consultation Question	Summary of Responses	CEER position
		5. (Proposal #14) Regulators to develop best practice approaches to enable trials of new products and business models ("sandboxes"). CEER to provide a forum for exchange of learning from both EUfunded and national trials and studies and to feed back into the parameters for new trials.	
10	Do you have any other general observations to make on the topic of this consultation paper?	In general, respondents welcomed the consultation and appreciated the comprehensiveness and relevance of the material. Some respondents felt that the next steps were unclear and would prefer a concrete process to follow up. Others noted that some of the questions were perhaps too board and difficult to answer, so should inform further work rather than definitive actions. A couple of respondents felt that a closer link to the consultancy study recently commissioned by the European Commission and undertaken by PwC and Tractebel could be useful, as well as the work of the Smart Grids Task Force Expert Groups. It was suggested that CEER could play a role in coordinating and sharing best practice on CEP implementation.	CEER welcomes the positive feedback on its consultation and acknowledges its broad and widespread scope. Indeed, it will be beneficial to discuss and consult on more specific aspects of digitalisation in the years to come. As was noted by some of the respondents, boundaries between formerly strictly separated sectors are blurring. It will be important for regulators of all kind to adapt and align if not coordinate their respective initiatives. CEER would be a logical candidate for the coordinating party from the energy sector and PEER can take an important role in bringing the relevant parties together. Digitalisation is a topic affecting all stakeholders in the energy sector and knowledge needs to be build up and maintained from regulators as well as the European Commission and market participants. Consequently, it stands to reason that we should intensify mutual knowledge exchange and discuss key technological



Public Consultation Question	Summary of Responses	CEER position
	To the extent that boundaries become blurred between sectors due to digitalisation, the appropriate responses may go beyond energy specific legislation and regulation. Some respondents would like further interaction with CEER.	developments and their potential impact on both traditional and prospective future business models.



4 Conclusions

CEER appreciates and welcomes the valuable feedback and comments received on CEER's public consultation paper on "Dynamic Regulation to Enable Digitalisation of the Energy System".

Generally, respondents showed strong support for CEER's work on digitalisation and provided some helpful suggestions.

Our views on the specific comments received are reflected in the table above, band taken into account in the accompanying Conclusions Paper. Overall, taking on board stakeholders' views, CEER has identified 5 key priorities where CEER, NRAs and DSOs can add the most value over the remaining 2 years of the 3D Strategy:

- P 1. **Ensuring effective price-signals**: CEER recommends that NRAs as part of their regular processes review network tariffs to ensure they are fit for the future given the availability of data from digitalisation. Tariffs should give the right price-signals to actors to effectively use available data, and avoid unduly distorting markets. Active customers who utilise new technology must receive cost-reflective signals reflecting the costs and benefits they bring to the network which requires well-functioning markets. All consumers, including those who are unable or choose not to engage, should pay a fair contribution towards the fixed costs of the system. CEER to review progress on this during 2021, in line with the 3D Strategy.
- P 2. **Promoting DSO use of flexibility:** CEER recommends that NRAs as part of their regular processes review network tariff regulation to **remove capex bias** and encourage the use of flexibility services where economic. CEER to review progress in implementing the recommendations of this paper and collate best practices during 2021, in line with the 3D Strategy.
- P 3. **Enabling market-based flexibility: DSOs** to explore market-based procurement for flexibility services, considering use of a flexibility marketplace where efficient and reviewing whether network tariffs send the right signals for network users. CEER to publish the planned paper on procurement of flexibility by DSOs beginning of 2020 and based on that decide on further actions.
- P 4. **Getting and making the data accessible and useful**: DSOs to focus on the quality of their network data and data on distributed energy resources connected to their networks within the relevant legal framework, to ensure that:
 - they utilise data effectively where this will improve efficiency of their planning, operations and investment;
 - where appropriate ensure relevant network data is available to current and potential market participants in an accessible manner, and
 - the opportunity to improve the interoperability of data and institutional arrangements for holding and sharing the data should be further explored.

DSOs and other data owners should learn from those who move first in this area, for example through developing digital twins. CEER to work with stakeholders to facilitate this work.



P 5. **Fostering innovation:** Regulators develop best practice approaches to enable trials of new products and business models ("sandboxes"), taking into account the whole system approach. CEER to provide a forum for exchange of learning from both EU-funded and national trials and studies and to feed back into the parameters for new trials.



Annex 1 - List of Respondents

The following external stakeholders responded to the CEER public consultation:

Estabanell Energia

Bundesverband Neue Energiewirtschaft e.V. / Association of Energy Market Innovators

ČEPS, a.s.

ENTSO-E

Joint Radio Company

Edison

Finnish Energy

Vorarlberger Energienetze GmbH, Austria

GEODE

E.ON SE

EUTC

Wiener Stadtwerke Group

CEDEC

Centrica plc

Business Integration Partners S.p.A.

T&D Europe

ELIA

Association of Austrian Electricity Companies

Eurelectric

ORGALIM - Europe's Technology Industries

EPEX SPOT

NODES AS

Naturgy

Iberdrola, S.A.

Fortum Oyj, Consumer Solutions

Energy UK

Citizens Advice

Eurogas

EnBW Energie Baden-Württemberg

EDF

Energiföretagen

The Institution of Engineering and Technology

Europex (Association of European Energy Exchanges)

EFET (European Federation of Energy Traders)

European Energy Retailers

Next Kraftwerke GmbH

GRDF

Ovo Energy

E.DSO (European Distribution System Operators)

BEUC (European Consumer Organisation)

Enagas, S.A.

NETZ BURGENLAND

Enel SpA

Energy Web Foundation (EWF)

ARGE-Netz GmbH & Co. KG

KEPKA - Consumers Protection Center

Vattenfall



Annex 2 - About CEER

The Council of European Energy Regulators (CEER) is the voice of Europe's national energy regulators. CEER's members and observers comprise 39 national energy regulatory authorities (NRAs) from across Europe.

CEER is legally established as a not-for-profit association under Belgian law, with a small Secretariat based in Brussels to assist the organisation.

CEER supports its NRA members/observers in their responsibilities, sharing experience and developing regulatory capacity and best practices. It does so by facilitating expert working group meetings, hosting workshops and events, supporting the development and publication of regulatory papers, and through an in-house Training Academy. Through CEER, European NRAs cooperate and develop common position papers, advice and forward-thinking recommendations to improve the electricity and gas markets for the benefit of consumers and businesses.

In terms of policy, CEER actively promotes an investment friendly, harmonised regulatory environment and the consistent application of existing EU legislation. A key objective of CEER is to facilitate the creation of a single, competitive, efficient and sustainable Internal Energy Market in Europe that works in the consumer interest.

Specifically, CEER deals with a range of energy regulatory issues including wholesale and retail markets; consumer issues; distribution networks; smart grids; flexibility; sustainability; and international cooperation.

CEER wishes to thank in particular the CEER Digitalisation Steering Group for their work in preparing this report.

More information is available at www.ceer.eu.