

## Piclo Response to Ofgem's Call for Input: Future of Distributed Flexibility

Dear Digitalisation and Decentralisation; Energy Systems Management and Security teams,

We welcome the opportunity to respond to Ofgem's consultation on The Future of Distributed Flexibility. This Call for Input raises some important, valid and well-known issues facing the sector and challenges the sector to think strategically about possible solutions. Energy markets have not been established to accommodate the reality of the energy system now nor the reality of a net zero energy system. More must happen and it must happen at pace to deliver a system where all assets can participate across coordinated and optimised markets.

This challenge is solvable - the enabling technology can be developed and the required regulatory framework can be implemented - but the approach and trajectory set to get there is critical to get right and must be one that delivers the most cost-effective solutions to consumers, at least risk. We appreciate the engagement from Ofgem's team on this topic to date and look forward to continuing to evolve our positions on this alongside Ofgem and the wider industry moving forward.

### Summary of recommendations:

1. **Ensure flexibility market development continues uninterrupted:** many of the problems identified in the Call for Input will not be solved by the development of a digital architecture alone and a hiatus in flexibility market development must be avoided whilst this longer-term vision is determined
2. **Define success, not technological solutions:** work with the industry to first clearly define the principles, success criteria and expected roadmap/timeline, with a process that allows for iteration, learnings in the field and adaptation
3. **Remove market barriers now:** using the success criteria (and issues highlighted in the CfI) Ofgem must focus in the short term on removing the market barriers identified, which in turn will enable the development of technological solutions to achieve the success criteria set out. **Ofgem must work with industry and existing initiatives like Open Networks, albeit reformed, to progress this at pace.**
4. **Value propositions must be enabled through the digital architecture:** Ofgem is framing the solving of market problems as an architectural decision that suggests varying degrees of centralisation and development of new functionality and services. As an independent platform, we see many of these functionalities and services as value propositions that should be competitively and innovatively approached. **The medium and thick archetypes pose risks to the market from unnecessary over-centralisation of some areas of functionality, which increases the risk of a complex scope that goes out of scope quickly and is difficult to deliver, iterate or adapt.**
5. **Alternative proposal - Market Governance Framework:** we suggest an alternative approach and architecture is explored that benefits from coordination, enables innovative value propositions and is based on agreed standards and data protocols. However, importantly it also acts as a gatekeeper to ensure all platforms and markets follow these agreed standards - providing the teeth necessary for the benefits Ofgem outlines without the risks identified above in point 4. This would look something like a "Markets Governance Framework"

We are happy to clarify or discuss any of the discussion points in this response further.

## Detail

### 1. Ensure flexibility market development continues uninterrupted

*Many of the problems identified in the Call for Input will not be solved by the development of a digital architecture alone and a hiatus in flexibility market development must be avoided whilst this longer-term vision is determined*

The UK policy and regulatory environment have positioned the UK as a world leader in flexibility markets<sup>1</sup> at the TSO and DSO levels. Several UK-based companies and organisations have sprung from this positive policy and regulatory environment, and are now driving further advancements in this UK flex ecosystem. Any further policy or regulatory changes must recognise the risk that any hiatus or disruption may cause to this ecosystem, with the potential resulting loss or stalling of UK leadership. This is predominately a software and technology-dominated ecosystem, rather than a utility-type industry, and as such, a hiatus of even 6-12 months would be damaging.

To date, the current UK leadership is due to highlights including the RIIO framework, consistent policy through the smart systems and flexibility plan, and innovation funding that have all contributed significantly to the progress made to date. These conditions have expedited the development and investment in the software solutions that are critical to achieving net zero including network optimisation management systems, flexibility marketplaces and flexibility service providers. There is undoubtedly further progress to be made, many issues are known and the scale of pace and change must accelerate to reach net zero. Yet this acknowledgement must not lose sight of what principles have contributed to our leading position to date, which will be key to a future of accelerated progress moving forward and includes:

- **Innovative solutions:** an environment that has enabled the fast-paced development of innovative solutions that can be quickly scaled and rolled out business as usual.
- **Competition:** a competitive, decentralised landscape that facilitates third-party parties to build and compete to deliver value-adding services
- **Learning and iterating:** not assuming our current understanding or approach to solutions in flexibility markets is the final, perfect or complete vision. Consequently, adaptability and iteration have been core to the successful developments to date and will be critical as we shift towards a truly flex-centred energy system.

**Evolving these areas:** we agree a shift needs to happen to enable the implementation of scaled, business as usual innovative solutions over innovation projects. Key to enabling this is a competitive landscape for innovative developments as well as the right mindset and incentives for key roles such as system operators to adopt these enabling technologies - Ofgem must explore how to align their various workstreams with the price control frameworks. Linked to the competitive landscape, further consideration is required on what services and values are best delivered through centralised in-house developments or decentralised, innovative solutions - something this Cfl considers. Finally, a catalyst is needed to create conditions where successfully collaborative and iterative developments such as the Demand Flexibility Service can become more widespread. Whilst progress is needed across all of these areas, these conditions have driven forward progress at pace to date, and so should be complemented by additional steer from Ofgem, and not put at risk.

This Cfl cannot be viewed without considering all of Ofgem's other current workstreams including the consideration of the future of network price controls, data best practices and the role of future governance. Each of these has considerable implications, especially for the role of System Operators, and Ofgem must ensure that each is fully aligned with the provisions set out within the new RIIO ED2 framework. The time, resources and

<sup>1</sup> LCP Delta and SmartEn, 2022 Market Monitor for Demand Side Flexibility (Feb 2023), available at: <https://smarten.eu/wp-content/uploads/2023/02/DSF-Market-Monitor-2022.pdf>

investment needed in flexibility markets are at risk from the uncertainty caused by these multiple, overlapping and significant workstreams. Investments into scalable, business-as-usual and coordinated flexibility-related systems are a difficult case to make when the roles and activities associated with flexibility are so substantially put under review. Any hiatus would have ramifications across the sector including, investor and market confidence and the pace of technological development. To avoid this hiatus, Ofgem must focus in the short term on defining what success looks like and removing market barriers.

## **2. Define success, not technological solutions**

*Work with the industry to first clearly define the principles, success criteria and expected roadmap/timeline, with a process that allows for iteration, learnings in the field and adaptation*

Substantial improvements to flexibility markets are needed and we agree with many of the issues highlighted in the Cfl, including coordination, high transaction costs, barriers to market entry, a lack of stacking and limited access to information. We also agree with much of the vision set out and that unlocking all assets' ability to participate across coordinated and optimised markets is necessary for a cost-effective transition to net zero. We agree more needs to be done and Ofgem must play a driving role in this. However, there is a distinction between the problems identified and the archetype-based solutions proposed. Many of the issues will not be solved by a platform-based solution such as the archetypes alone.

Part of the process of moving towards the necessary digitalised architecture should involve Ofgem clearly defining the principles that should apply to the agreed vision. This should include an assessment of the principles that have driven success in the UK market to date - such as innovative solutions, competition and collaboration, whether these are fit for purpose or sufficient to deliver a net zero system in the timeframes needed and if not, what needs to change. This process would also push the industry forward in exploring the questions posed in this Cfl about what services, value propositions and functionalities should be centralised or decentralised, outside of the framing of the archetypes.

Beyond this, the process should also involve Ofgem setting the success criteria for the problems identified. For instance, the Cfl highlights a "lack of coordination". To achieve this, Ofgem should establish with the industry what are the key success criteria of coordinated markets - what are the principles and features? When should this be delivered by? What are the steps to get there and when? What are the barriers to remove or drivers to ensure this happens (e.g. licence conditions, incentive frameworks)? How will this be measured and monitored? This approach can identify where market design issues are holding back development (for instance, with the issue of coordination resolving contract exclusivity, primacy rules and unaligned timings) and allow the technology solutions to be developed in accordance with the timelines, success criteria and principles established that can iterate and adapt as understanding and learnings increase.

Regardless of what archetype is moved towards, this approach is necessary to drive forward market design and technology solutions needed.

## **3. Remove market barriers, and drive pace and progress now**

*Using the success criteria (and issues highlighted in the Cfl) Ofgem must focus in the short term on removing the market barriers identified, which in turn will enable the development of technological solutions to achieve the success criteria set out*

Linked to the above, many of the barriers and issues highlighted in the Cfl can be progressed now, in the short term, including

**Mindset and incentives:** at the core of market progress and development are the regulated entities' activities, incentives and penalties. When these are aligned, action and results are delivered. System Operators will only prioritise flexibility market procurement and dispatch, coordination and whatever else is clearly set out in their

regulated activities and appropriately incentivised or penalised. Ofgem must create a coherent and aligned approach to this across their teams. The new price control period has been underway since April 2023, with terms reviewed and agreed upon by Ofgem - it is imperative Ofgem review and understands that the areas where they want to see progress are suitably incorporated into this cornerstone of the energy system. Examples of this could include the following:

**Contract stacking:** primacy rules and the ability to contract stack must be resolved as a high priority for coordination to be meaningful in the energy sector. This market design issue results from exclusivity clauses and contracts, unaligned market timings and processes as well as a lack of established processes and even trust between entities. Ofgem must use the frameworks in place, such as incentives and price controls, to see these resolved quickly. In turn, technology solutions already in development will be able to drive forward at pace. A live example of this includes the Local Constraint Market, which for the first time will see the roll-out of flexibility services to solve constraint issues at both the distribution and transmission levels on Piclo Flex. Consequently, Piclo is developing a technology-based coordination solution that will be iterated and developed on, however, for this to be truly optimised, the contract exclusivity preventing FSP stacking and participation across markets as well as other market design processes also require focus.

If these are resolved and Ofgem set the principles and success criteria they wish to see, the technological solutions (or value-added services) that will enable FSPs to easily participate across multiple markets will more easily develop. Ofgem must prioritise barriers to FSPs, which form the heart of these markets and are often ignored in the TSO-DSO framing of coordination.

**Open and common APIs:** APIs are critical pieces of infrastructure that will form the basis of scalable, integrated and coordinated markets. Piclo has published all of its [API documentation](#) for SOs and Flexibility Service Providers and is committed to evolving these in collaboration with the rest of the industry to prioritise ease of access and participant experience. Piclo's APIs currently include dispatch, asset management, bidding, competition visibility, bid management, competition, dispatch, availability, contracts, and competition results, and have benefited from input from SSEN, NG ESO, Enel E-Distribuzione and various FSPs. Piclo is committed to the continuing development of these open APIs and is exploring alignment with existing standards (such as USEF, OpenADR and IEEE) as well as participating in industry working groups (such as ENA Dispatch API).

**Standardised processes:** More standardisation of what data is collected, in what format, and the process of how and when it is shared across parties would improve access to, participation in, and coordination across markets as well as the availability of market data. This would benefit the end-to-end process in flexibility markets and improve areas such as registration, qualification, bidding timeframes and processes, contracts, market coordination and more.

**Industry agreement on market access and data sharing:** Linked to both of the above, how to market platforms collect and share data could improve in the short term with clear success criteria and facilitate the rise of coordinated and standardised markets.

**We believe significant progress can be made in all these areas in the next 12-24 months, with clear framing, strong signals and added weight from Ofgem. Ofgem must work with industry and existing initiatives like Open Networks to progress this at pace.** Whilst we outline in our response to the Future of Local Governance and Institutions that future governance structures could benefit flexibility markets, we do not see the reason for any pause or wait for this role to be defined, set up and come into existence before these are resolved. Indeed, with the right attention, many of these could be resolved before such an entity comes into effect.

#### **4. Value propositions must be enabled through the digital architecture**

*Ofgem is framing the solving of market problems as an architectural decision that suggests varying degrees of centralisation and development of new functionality and services. As an independent platform, we see many of*

*these functionalities and services as value propositions that should be competitively and innovatively approached. The medium and thick archetypes pose risks to the market from unnecessary over-centralisation of some areas of functionality, which increases the risk of a complex scope that goes out of scope quickly and is difficult to deliver, iterate or adapt.*

At the core of the archetype solutions proposed is the question of what or how much energy market services should be centralised. This is an important topic and worth further industry exploration beyond this CfI.

**Centralisation vs standardisation:** firstly, as noted above, we believe that many of the problems raised could be moved forward by short-term market improvements namely in the areas of greater standardisation, common processes and shared market design principles. None of the archetypes, nor any technological solution, will resolve FSPs needing to stack across multiple markets without these in place - all markets could exist in one platform and still not be able to stack through exclusivity clauses or misaligned procurement and dispatch cycles.

**Value propositions vs architectural decisions:** Ofgem is framing the solving of these problems as an architectural decision to centralise and develop new functionality and services. As an independent platform, we see many of these functionalities and services as value propositions that should be competitively and innovatively approached. Piclo has significant experience in registration, qualification and market operation and is aligned with the vision to enable all assets to participate and provide value across all markets. Our platform (like many others) is scalable and adaptable and well suited to develop, adapt, iterate and integrate with others to develop these value-added services such as coordinated market access to FSPs across multiple markets (i.e. the concept of digital passports), coordination across competitions and dispatch in markets (such as that which has been initiated through the Local Constraint Market) and more. These developments rely on the barriers identified to be resolved (including mindset, incentives and standardisation) for regulated entities to drive forward these solutions so that supporting platforms can develop these services.

Each of the archetypes proposes varying degrees of platform functionalities and services to be centralised, rather than open to the development of value propositions as outlined above. **We see the thick and medium archetypes as being at a higher risk from over-centralisation of functionality where it is not necessary and do not agree they are the right approach to move towards.** This puts at risk the development of innovative value propositions for those areas and could exclude new solutions or developments from being integrated into the ecosystem and result in legacy dinosaur systems - ultimately eroding investment into the sector at this critical time.

Equally, as more services and functionality is centralised, the scope of such an archetype becomes increasingly complex and costly to deliver. In doing so, the risk of deliverability of the initial scope is heightened - as has been the case with many attempts in the energy sector to date and the ability to adapt and iterate is stifled. Long scoping times, long delivery times and failure to keep pace with other developments and conditions will lead to a suboptimal solution being developed and implemented which is no longer fit for purpose. We see it as likely that even the medium archetype will end up moving towards the thick solution, removing innovation and competitive solutions completely.

It is also important to recognise the uncertainty in future roles set out by Ofgem, with it being possible for the market facilitator role and archetype developer to be the same (with the potential to also be a flexibility purchaser) - these new roles and functionalities cannot be considered separately and more clarity is needed to make an informed decision.

Many of the functionalities and services are areas that should be open to competition, the best solution and the best price with the market demanding and driving forward constant improvement, adaptability and iterations as experiences grow, conditions change and learnings are incorporated. However, there needs to be the right drivers in place for this to happen.

## 5. Alternative proposal - Markets Governance Framework:

*We suggest an alternative approach and architecture is explored that benefits from coordination, enables innovative value propositions and is based on agreed standards and data protocols. However, importantly it also acts as a gatekeeper to ensure all platforms and markets follow these agreed standards - providing the teeth necessary for the benefits Ofgem outlines to exist, without the risks identified above. This would look something like a “Markets Governance Framework” (MGF)*

The key solutions that the regulator should be focusing on are the right incentives:

- **For Buyers:** it is critical that the incentives in their license conditions are aligned with them achieving the right outcomes (addressed in the Local Governance consultation)
- **For Marketplaces:** it is critical that they provide the right incentives to encourage the right kind of behaviour (a challenge posed by this Call for Input)

An alternative proposal to consider involves establishing a “**Markets Governance Framework**”. The MGF would establish, implement and qualify markets and platforms based on things including common standards, processes and protocols, SLAs and data sharing. So importantly, the MGF would act as an active gatekeeper to marketplaces and platforms operating in the energy sector. This means that if the MGF set standards are not followed, the platforms do not qualify as an operator on the MGF.

The result of this will see the regulator focusing on developing the right principles, ensuring adherence to these principles and penalising bad practices via disqualification or non-qualification. The Buyer incentives could be aligned to the MGF process also, adding further weight. This approach will incentivise all marketplaces and buyers to work together to drive the market forward iteratively, collaboratively and at pace - with the teeth needed behind it to make this happen.

In the Cfl’s framing, this has similar benefits to the medium and thick approaches however, does so from an evolution of today’s existing, successful architectures, minimising any risks associated with centralised IT projects that will delay market progress, does not prescribe solutions which are likely to be out of date and poorly specified and forms an agile and adaptable process that can start small and grow - meaning it is quickly implementable.

Take the example of coordinated access/registration, the approach here would not involve the regulator specifying the technological solution to how this is delivered and tendering for the solution to be developed such as via the Exchange. A MGF approach would set out the principles of what should happen such as “a FSP should only have to register once to participate across markets”, the markets and platforms across the MGF could then agree on the approach for how this could be delivered and implemented in accordance with the governing framework. There are a number of potential pathways to solving this issue, for example, it ultimately may be necessary for the MGF to provide additional IT infrastructure (if MGF platforms are not able to agree on the data-sharing standards necessary for coordination). Importantly, the MGF does not lock down such potential solutions prematurely and only steps in when necessary. In terms of delivery, our recommendation would be for the MGF to implement a phased approach to specifying requirements, starting with easy-to-implement deliverables and building in more sophistication as time goes on.



## Response to specific questions

### 1. What do you think distributed flexibility could contribute to the energy system?

Distributed flexibility is a fundamental cornerstone to unlocking a transition to net zero in a resilient and cost-effective way. Already, it plays an important role in mitigating constraints arising from the connection of low-carbon technologies, providing resilience and security to the grids (such as through the Demand Flexibility Service this winter) and deferring or avoiding unnecessary network infrastructure upgrades. The contribution could be scaled and expanded to a significant extent as we transition to net zero, with greater automation at a consumer level and optimisation of assets on the grid being necessary.

The UK policy and regulatory environment have positioned the UK as a world leader in flexibility markets at the TSO and DSO levels. However, substantial improvements to flexibility markets are needed and we agree with many of the issues highlighted in the Cfl, including coordination, high transaction costs, barriers to market entry, a lack of stacking and limited access to information. We also agree with the vision set out and that unlocking all assets' ability to participate across coordinated and optimised markets is necessary for a cost-effective transition to net zero.

We must accelerate towards unlocking the full potential of distribution flexibility, which includes the regulatory framework, incentives, market design and structures that will enable this. We agree more needs to be done and Ofgem must play a driving role in this.

### 2. Will a focus on CER flexibility also help enable other forms of flexibility, especially distributed flexibility?

CER has distinct challenges and considerations that need to be addressed. Resolving these challenges at a domestic level is likely to contribute to helping flexibility at a DER level - although potentially not completely. There will always be a wide variety of distribution flexibility and FSPs with a wide range of understanding, experience, motivations and technological capabilities. A focus on CER flexibility will help drive many of these areas forward but all use cases must be understood in full to unlock distribution flexibility.

### 3. Is there a 'case for change' and a need for a common vision for distributed flexibility?

Yes, there is a case for change. We agree with many of the issues highlighted in the Cfl, including coordination, high transaction costs, barriers to market entry, a lack of stacking and limited access to information. We also agree with some of the vision set out and that unlocking all assets' ability to participate across coordinated and optimised markets is necessary for a cost-effective transition to net zero.

We must accelerate towards unlocking the full potential of distribution flexibility, which includes the regulatory framework, incentives, market design and structures that will enable this. We agree more needs to be done and Ofgem must play a driving role in this.

A common vision for a flex-centred energy system is likely to be helpful but must make sure to be adaptable and iterated upon as development moves forward. A vision is not enough, an approach that also identifies the success criteria, barriers and roadmap for getting there is important too.

### 4. What is your vision for how to accelerate the delivery of accessible, coordinated and trusted markets for distributed flexibility?

We must not lose sight of what principles have contributed to our leading position to date, which will be key to a future of accelerated progress moving forward and includes:

- **Innovative solutions:** an environment that has enabled the fast-paced development of innovative solutions that can be quickly scaled and rolled out business as usual.
- **Competition:** a competitive, decentralised landscape that facilitates third-party parties to build and compete to deliver value-adding services
- **Learning and iterating:** not assuming our current understanding or approach to solutions in flexibility markets is the final, perfect or complete vision. Consequently, adaptability and iteration have been core to the successful developments to date and will be critical as we shift towards a truly flex-centred energy system.

We agree a shift needs to happen to enable the implementation of scaled, business as usual innovative solutions over innovation projects. Key to enabling this is a competitive landscape for innovative developments as well as the right mindset and incentives for key roles such as system operators to adopt these enabling technologies - Ofgem must explore how to align their various workstreams with the price control frameworks. Linked to the competitive landscape, further consideration is required on what services and values are best delivered through centralised in-house developments or decentralised, innovative solutions - something this CfI considers. Finally, a catalyst is needed to create conditions where successfully collaborative and iterative developments such as the Demand Flexibility Service can become more widespread. Whilst progress is needed across all of these areas, these conditions have driven forward progress at pace to date, and so should be complemented by additional steer from Ofgem, and not put at risk.

#### 5. Will certainty of an end vision help accelerate enabling work and make it cohesive?

An end vision can be useful but must be a continual and iterative process, that takes learnings and new developments into account. An end vision that identifies success criteria and principles, as well as prioritising the barriers and roadmap for resolving these is important to help the enabling work in market design and standardisation issues.

#### 6. When should a common digital energy infrastructure be in place? And therefore, when should development begin?

Much of the technology and expertise already exists in the energy sector, meaning development can begin sooner rather than later. However, we maintain the market design barriers must be focused on and accelerated. These include areas such as

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**Contract stacking:** primacy rules and the ability to contract stack must be resolved as a high priority for coordination to be meaningful in the energy sector. This market design issue results from exclusivity clauses and contracts, unaligned market timings and processes as well as a lack of established processes and even trust between entities. Ofgem must use the frameworks in place, such as incentives and price controls, to see these resolved quickly. In turn, technology solutions already in development will be able to drive forward at pace. A live example of this includes the Local Constraint Market, which for the first time will see the roll-out of flexibility



services to solve constraint issues at both the distribution and transmission levels on Piclo Flex. Consequently, Piclo is developing a technology-based coordination solution that will be iterated and developed on, however, for this to be truly optimised, the contract exclusivity preventing FSP stacking and participation across markets as well as other market design processes also require focus.

If these are resolved and Ofgem set the principles and success criteria they wish to see, the technological solutions (or value-added services) that will enable FSPs to easily participate across multiple markets will more easily develop. Ofgem must prioritise barriers to FSPs, which form the heart of these markets and are often ignored in the TSO-DSO framing of coordination.

**Open and common APIs:** APIs are critical pieces of infrastructure that will form the basis of scalable, integrated and coordinated markets. Piclo has published all of its [API documentation](#) for SOs and Flexibility Service Providers and is committed to evolving these in collaboration with the rest of the industry to prioritise ease of access and participant experience. Piclo's APIs currently include dispatch, asset management, bidding, competition visibility, bid management, competition, dispatch, availability, contracts, and competition results, and have benefited from input from SSEN, NG ESO, Enel E-Distribuzione and various FSPs. Piclo is committed to the continuing development of these open APIs and is exploring alignment with existing standards (such as USEF, OpenADR and IEEE) as well as participating in industry working groups (such as ENA Dispatch API).

**Standardised processes:** More standardisation of what data is collected, in what format, and the process of how and when it is shared across parties would improve access to, participation in, and coordination across markets as well as the availability of market data. This would benefit the end-to-end process in flexibility markets and improve areas such as registration, qualification, bidding timeframes and processes, contracts, market coordination and more.

**Industry agreement on market access and data sharing:** Linked to both of the above, how to market platforms collect and share data could improve in the short term with clear success criteria and facilitate the rise of coordinated and standardised markets.

**We believe significant progress can be made in all these areas in the next 12-24 months, with clear framing, strong signals and added weight from Ofgem. Ofgem must work with industry and existing initiatives like Open Networks to progress this at pace.** Whilst we outline in our response to the Future of Local Governance and Institutions that future governance structures could benefit flexibility markets, we do not see the reason for any pause or wait for this role to be defined, set up and come into existence before these are resolved. Indeed, with the right attention, many of these could be resolved before such an entity comes into effect.

**7. What should a common energy digital infrastructure look like, and why? Please consider the archetypes or develop your own proposition.**

**Alternative proposal - Markets Governance Platform:** *We suggest an alternative approach and architecture is explored that benefits from coordination, enables innovative value propositions and is based on agreed standards and data protocols. However, importantly it also acts as a gatekeeper to ensure all platforms and markets follow these agreed standards - providing the teeth necessary for the benefits Ofgem outlines to exist, without the risks identified. This would look something like a "Markets Governance Platform" (MGP)*

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The result of this will see the regulator focusing on developing the right principles, ensuring adherence to these principles and penalising bad practices via disqualification or non-qualification. The Buyer incentives could be aligned to the MGF process also, adding further weight. This approach will incentivise all marketplaces and buyers to work together to drive the market forward iteratively, collaboratively and at pace - with the teeth needed behind it to make this happen.

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## **8. What is your view on the desirability and feasibility of the archetypes or your own alternative proposition?**

**Value propositions must be enabled through the digital architecture:** *Ofgem is framing the solving of market problems as an architectural decision that suggests varying degrees of centralisation and development of new functionality and services. As an independent platform, we see many of these functionalities and services as value propositions that should be competitively and innovatively approached. The medium and thick archetypes pose risks to the market from unnecessary over-centralisation of some areas of functionality, which increases the risk of a complex scope that goes out of scope quickly and is difficult to deliver, iterate or adapt.*

At the core of the archetype solutions proposed is the question of what or how much energy market services should be centralised. This is an important topic and worth further industry exploration beyond this Cfl.

**Centralisation vs standardisation:** firstly, as noted above, we believe that many of the problems raised could be moved forward by short-term market improvements namely in the areas of greater standardisation, common processes and shared market design principles. None of the archetypes, nor any technological solution, will resolve FSPs needing to stack across multiple markets without these in place - all markets could exist in one platform and still not be able to stack through exclusivity clauses or misaligned procurement and dispatch cycles.

**Value propositions vs architectural decisions:** Ofgem is framing the solving of these problems as an architectural decision to centralise and develop new functionality and services. As an independent platform, we

see many of these functionalities and services as value propositions that should be competitively and innovatively approached. Piclo has significant experience in registration, qualification and market operation and is aligned with the vision to enable all assets to participate and provide value across all markets. Our platform (like many others) is scalable and adaptable and well suited to develop, adapt, iterate and integrate with others to develop these value-added services such as coordinated market access to FSPs across multiple markets (i.e. the concept of digital passports), coordination across competitions and dispatch in markets (such as that which has been initiated through the Local Constraint Market) and more. These developments rely on the barriers identified to be resolved (including mindset, incentives and standardisation) for regulated entities to drive forward these solutions so that supporting platforms can develop these services.

Each of the archetypes proposes varying degrees of platform functionalities and services to be centralised, rather than open to the development of value propositions as outlined above. **We see the thick and medium archetypes as being at a higher risk from over-centralisation of functionality where it is not necessary and do not agree they are the right approach to move towards.** This puts at risk the development of innovative value propositions for those areas and could exclude new solutions or developments from being integrated into the ecosystem and result in legacy dinosaur systems - ultimately eroding investment into the sector at this critical time.

Equally, as more services and functionality is centralised, the scope of such an archetype becomes increasingly complex and costly to deliver. In doing so, the risk of deliverability of the initial scope is heightened - as has been the case with many attempts in the energy sector to date and the ability to adapt and iterate is stifled. Long scoping times, long delivery times and failure to keep pace with other developments and conditions will lead to a suboptimal solution being developed and implemented which is no longer fit for purpose. We see it as likely that even the medium archetype will end up moving towards the thick solution, removing innovation and competitive solutions completely.

It is also important to recognise the uncertainty in future roles set out by Ofgem, with it being possible for the market facilitator role and archetype developer to be the same (with the potential to also be a flexibility purchaser) - these new roles and functionalities cannot be considered separately and more clarity is needed to make an informed decision.

Many of the functionalities and services are areas that should be open to competition, the best solution and the best price with the market demanding and driving forward constant improvement, adaptability and iterations as experiences grow, conditions change and learnings are incorporated. However, there needs to be the right drivers in place for this to happen.

We believe this is feasible and deliverable at pace through a concept more similar to the MGP.

#### **9. Should a common digital energy infrastructure be new-build, or should it build- out from existing infrastructure?**

Much of the technology and expertise already exists in the energy sector, meaning development can begin sooner rather than later, building on the learnings and development that has occurred so far as well as the money and resources already spent across markets, platforms and innovation projects. Consequently, a common digital infrastructure should be built out from existing infrastructure, with an MGF in place to consider and set out an appropriate pathway for further developments

#### **10. What are the important areas for consideration when designing institutional delivery models for a common digital energy infrastructure?**

- NA
11. What are the important areas for consideration when designing financial delivery models for a common digital energy infrastructure?
- NA