



Making a positive difference  
for energy consumers

Electricity supply licence holders,  
electricity distribution licence  
holders, code panels, code  
administrators, industry bodies,  
metering agents, consumers and  
their representatives, and other  
interested parties

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Date: 8 January 2018

Dear Colleague,

### **Electricity Settlement Reform Significant Code Review: Ofgem response to stakeholder feedback**

On 24 July 2017 we launched the Electricity Settlement Reform Significant Code Review (SCR). Through this SCR, we aim to develop and then (subject to a Business Case assessment) implement an enduring process to enable half-hourly settlement (HHS) of domestic and smaller non-domestic consumers' electricity usage. This aims to deliver benefits for consumers by maximising the opportunities smart metering provides in enabling a smart, flexible energy system.

The SCR Launch Statement set out:

- how we intend to progress with the SCR, including the preferred option for the SCR process to use;
- the proposed governance arrangements, including the establishment of the Design Working Group and Design Advisory Board, for the design of the Target Operating Model (TOM), which outlines how the settlement arrangements and supporting institutions will deliver market-wide HHS; and
- the proposed Design Principles setting out the strategic objectives and detailed design requirements to guide the TOM design work.

As part of the SCR Launch Statement we asked for stakeholders to provide feedback on the three issues listed above by 1 September 2017.

The attached appendix summarises the responses we received on the three questions in the feedback form, the key themes we identified from responses, and our final position on the three issues which we consulted on. In summary, following consideration of the stakeholder feedback we have decided to:

- proceed with an Ofgem led end-to-end SCR process to take forward this SCR;
- proceed with the governance arrangements (as proposed) for the design of the TOM; and
- make changes to the Design Principles (as proposed) as set out in the appendix.

## *Smart meters bill*

On 18 October 2017, the Smart Meters Bill was introduced into Parliament.<sup>1</sup> The Smart Meters Bill includes provisions that would give Ofgem the means to progress market-wide HHS reforms more effectively than through an SCR.

### **Next steps**

We will continue to progress with the SCR in line with the positions set out in this document. We have reviewed our proposed changes to the Design Principles with the Design Advisory Board and have published an updated version of the Design Principles alongside this document.

If the new powers highlighted above are introduced, we would expect to transition from the SCR to the new powers following our decision on if, when and how to implement market-wide HHS expected in the second half of 2019. That is, rather than present the modification proposal(s) to implement market-wide HHS to the relevant Code Panel(s) at the end of the SCR phase under an Ofgem led end-to-end SCR process, we would use the new powers to make the code modifications directly.

If you have any questions or comments on this letter please contact [George.Huang@ofgem.gov.uk](mailto:George.Huang@ofgem.gov.uk) or [Anna.Stacey@ofgem.gov.uk](mailto:Anna.Stacey@ofgem.gov.uk), or contact the team mailbox at [Half-HourlySettlement@ofgem.gov.uk](mailto:Half-HourlySettlement@ofgem.gov.uk).

Yours sincerely,

**Cathryn Scott**  
**Partner, Energy Systems**

Appendix - Stakeholder feedback from SCR Launch Statement

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<sup>1</sup> The purpose of the Bill is to extend the period for the Secretary of State to exercise powers relating to smart metering and to provide for a special administration regime for a smart meter communication licensee. For more information about the Smart Meters Bill, see <https://services.parliament.uk/bills/2017-19/smartmeters.html>.

## **Appendix: Stakeholder feedback from SCR Launch Statement**

In July 2017 we sought stakeholder views on our Electricity Settlement Reform Significant Code Review Launch Statement that sets out our plan to develop and implement a Target Operating Model to enable market-wide HHS.

We received 20 responses to the Electricity Settlement Reform Significant Code Review Launch Statement and have published, alongside this document, the 17 non-confidential responses on our website. We are grateful for the range of stakeholders that provided responses, including: consumer representatives, suppliers, data collectors, data management companies, distribution network operators, power transmission networks and metering services.

The following section summarises the responses we received to our consultation questions, the key themes we identified from responses and details our final approach for the areas on which we consulted. We further explain how we propose to address issues and suggestions made, and explain how and why we arrived at our final position. Given the importance of the Design Principles to the development of the TOM, we have provided detailed responses on stakeholder comments on the Design Principles, and subsequent comments received from the Design Advisory Board.

### **Question 1**

**Do you agree with our proposal to opt for SCR option 3: Ofgem leads an end-to-end SCR process, as outlined on pages 5-6 of the Launch Statement?**

The three options for the SCR process are:<sup>2</sup>

- Ofgem directs a relevant licensee(s) to raise modification proposal(s) following the end of the SCR phase (Option 1);
- Ofgem raises a modification proposal(s) following the end of the SCR phase to be developed using standard industry processes (Option 2); or
- Ofgem to lead an end-to-end SCR process concluding with our decisions on code modification(s) developed towards the end of that process (Option 3).

In our SCR Launch Statement<sup>3</sup>, we stated that our preferred way forward for the SCR was for us to lead an end-to-end process, Option 3, and asked stakeholders whether they agreed with this approach.

The majority of stakeholders were highly supportive of Ofgem leading an end-to-end SCR process. Responses noted that the proposed method of Option 3 was appropriate for this SCR and would drive timely development, engagement, consultation, decisions and implementation plans for industry codes and believed this would mitigate co-ordination risks. Many of these responses noted that, for these reasons, Option 3 would be preferable to Options 1 or 2 for this SCR.

Only one respondent preferred another option, Option 2, on the basis that it was consistent with current industry change yet would still allow Ofgem scope to raise modifications and have the element of governance as the proposer. Furthermore, they also considered that as industry consistently oversees change and has a greater understanding of cross-code relationships, they are best placed to manage cross-code implications.

We have decided to proceed with Option 3. We agree with the view of the majority of stakeholders that Option 3 is more suited to manage this complex industry-wide change and the potential cross-code implications.

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<sup>2</sup> More information about the Ofgem SCR process options is available at [https://www.ofgem.gov.uk/system/files/docs/2016/06/scr\\_guidance.pdf](https://www.ofgem.gov.uk/system/files/docs/2016/06/scr_guidance.pdf).

<sup>3</sup> see pages 5-6.

In addition to the strong support for Option 3, some of the key themes in stakeholders' responses to question 1 were:

- some stakeholder responses that supported an end-to-end Ofgem led process noted that while Option 3 would better manage cross-code changes, Options 1 or 2 provided better opportunities for detailed industry development and assessment of code changes via the code modification process. We note these comments and will seek to ensure that the TOM governance model and broader stakeholder engagement framework set out in the Launch Statement allow for the detailed consideration of proposed changes during the SCR;
- the need for adequate communication and co-ordination between the key stakeholders involved in the SCR for Option 3 to be successful; and
- the importance of stakeholder engagement to provide transparency and enable stakeholders to understand the changes being proposed by Ofgem. We recognise the importance of stakeholder engagement and as set out in the Launch Statement, we will be providing frequent stakeholder engagement opportunities throughout the SCR, including regular updates, teleconferences with stakeholders, face-to-face meetings, and stakeholder forums.

## **Question 2**

**Do you agree with our proposed governance model for the Target Operating Model, outlined on pages 6-8 of the Launch Statement and detailed in Appendix 2A? This includes the Terms of Reference for the DWG and DAB in Appendices 2C and 2D.**

In the Launch Statement we set out our proposed governance model for the TOM. Under these arrangements, ELEXON would lead a Design Working Group (DWG), comprised of industry members with technical expertise to develop TOM options and recommendations to Ofgem. In addition to the DWG we proposed that Ofgem lead a Design Advisory Board (DAB). The purpose of the DAB would be to provide strategic advice on the products delivered by the DWG to the Ofgem Senior Responsible Owner, who is the decision maker on the final TOM. Draft terms of reference for both the DWG and DAB were provided as part of the Launch Statement. We asked stakeholders in the Launch Statement whether they agreed with this proposed governance model.

The majority of respondents agreed with our proposed governance model for the TOM. Respondents largely supported the proposal for ELEXON to lead the DWG because of their technical expertise and experience and agreed that the overall governance model proposed provided a robust framework for the development of the TOM. As such, we have decided to proceed with the proposed governance model and both the Terms of Reference (ToRs) for the DWG and DAB have been finalised by the respective groups.

Key themes of stakeholder responses were:

- the need for both the DWG and DAB to have a clear ToRs. Based on the feedback provided by stakeholders, we consider that the DAB and DWG ToRs clearly outline the functions and objectives of the DWG and DAB and set out the roles and responsibilities required of group members;
- many stakeholders, similar to the response in Question 1, stressed the importance of stakeholder engagement to provide transparency and enable stakeholders to understand the changes being proposed by Ofgem. We recognise the importance of stakeholder engagement and, as set out in our Launch Statement, we have committed to providing frequent stakeholder engagement opportunities throughout the SCR as the TOM design work progresses. Feedback provided by stakeholders to Ofgem will be provided to the DWG or DAB, as appropriate, for consideration. Both DWG and DAB meeting materials and minutes, summarising key decisions and discussions, will be made available on ELEXON's and Ofgem's respective websites shortly after the conclusion of each meeting;

- while stakeholders considered that ELEXON had the technical expertise to lead the DWG, concerns were raised about ELEXON's ability to develop innovative approaches and consider competition and consumer issues. We consider that the DWG and DAB members<sup>4</sup> we have appointed have sufficient expertise to ensure the development of a TOM which meets our objectives;
- the need for co-ordination between the TOM design work and Ofgem policy decisions considered as part of the SCR. Given the interdependencies between the TOM design work and policy decisions, it will be necessary to develop the workstreams alongside each other iteratively rather than prioritise a policy decision or the TOM design work. We are closely coordinating between the work streams to ensure that they can all be progressed in a timely and efficient manner that does not create unnecessary complexity, duplication or delay; and
- some stakeholders requested that stakeholders be allowed to attend meetings of the DWG. We do not consider this would be appropriate given the nature of the meetings. However, as stated above, both Ofgem and ELEXON will publish meeting materials and minutes on their websites. Individual stakeholders may also be invited to attend specific DWG or DAB meetings as subject-matter experts during the course of the TOM design work.

### **Question 3**

#### **Do you agree with the Target Operating Model Design Principles, set out in Appendix 2B?**

Appendix 2B of our SCR Launch Statement set out the TOM Design Principles, which include: settlement timetable, data retrieval and processing, data estimation, treatment of non half-hourly settled customers, Change of Measurement Class (CoMC), settlement of export, unmetered supplies, network charging and transition. We asked stakeholders if they agreed with the Design Principles that we published.

The feedback was generally positive, with the majority of respondents broadly supportive of the TOM Design Principles. Accordingly, we have decided to accept the TOM Design Principles, subject to the amendments outlined below and in table 1. A copy of changes was reviewed and approved by the DAB prior to publication by Ofgem. The DAB also recommended some further changes, detailed below and in table 1, which we have accepted.

Only one respondent had serious concerns with the Design Principles, considering that they had the potential to create unintended consequences for consumers, lock out significant gains from innovation for decarbonisation and not enable fair competition. The respondent stated that it did not take into account how alternative business models can thrive as a fundamental part of the future energy mix.

The purpose of the HHS SCR is to implement an enduring process for market-wide HHS that delivers benefits for consumers by maximising the opportunities smart metering provides in enabling a smart, flexible, energy system. Thus, we want the Design Principles and the TOM to support innovation and competition. This includes alternative business models. Accordingly, we have amended the strategic objectives, detailed Design Principles and specific measures of success to make clear that the TOM should facilitate, and not impede, new technologies and alternative business models.

The DAB agreed to this change and also suggested that the innovation detailed Design Principle includes specific consideration of how TOM arrangements should be monitored and adapted in response to future innovation. We have accepted this proposal.

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<sup>4</sup> DWG and DAB member lists are available on the Ofgem website at: <https://www.ofgem.gov.uk/electricity/retail-market/market-review-and-reform/smarter-markets-programme/electricity-settlement>.

We note that Ofgem has recently commenced work looking at whether the existing 'supplier hub' model of energy supply should be re-evaluated in light of new technologies and business models for the provision of energy services (Future of supply market arrangements).<sup>5</sup> The TOM design work will input into, and monitor, the progress of the Future of supply market arrangements project as it develops. We will seek to ensure that the TOM is consistent with the direction of the Future of supply market arrangements project.

A common theme raised by many respondents was the dependency of the progress of the TOM design work on policy decisions, similar to concerns raised in the previous questions. Some stakeholders considered that policy decisions should be made as early as possible to allow the TOM to develop efficiently. We would like to reiterate that as the HHS workstreams are interdependent, it is necessary to develop the TOM, business case and policy workstreams iteratively to ensure each work stream can be appropriately considered. We will coordinate within the HHS project team to ensure that the workstreams are progressed in a timely manner together.

One stakeholder raised concerns about the operational risk to small suppliers of transitioning to market-wide HHS. We will consider this as part of the development of transitional arrangements. We note that both the DWG and DAB include representatives with a small supplier background.

Many of the responses raised detailed issues relating to a specific Design Principle or TOM objective. These issues, our response to them and subsequent DAB comments are summarised in table 1 below.

The DAB also suggested the following changes to the Design Principles, which we have accepted:

- minor changes to the TOM strategic objectives set out in section 1.6 of the Design Principles, including adding a reference to settlement arrangements supporting reliability;
- specifying that the TOM should take account of relevant Government policy decisions;
- amending the data estimation detailed Design Principle to clarify that contingency for catastrophic failure of settlement arrangements will need to be updated as contingency measures are already in place for current settlement arrangements, and amending the point on limiting manual intervention in the estimation process to clarify it applies not just to smart meters; and
- including, in the specific measures of success, the benefits to consumers which are likely to arise from the development of a TOM which enables market-wide HHS.

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<sup>5</sup> See Future of supply market arrangements – call for evidence on the Ofgem website at <https://www.ofgem.gov.uk/publications-and-updates/future-supply-market-arrangements-call-evidence>.

**Table 1 – Stakeholder comments on TOM Design Principles**

Stakeholder comments	Ofgem response	DAB Comments
<i>Purpose of Design Principles (1.1 – 1.7 Appendix 2B)</i>		
<p>Important strategic objectives such as “promoting competition in metering and data services” and “promoting consumer freedom of choice” are missing. In the absence of a clear policy direction, this could prejudice the design work towards a centralised agent.</p>	<p>We consider that promoting competition in metering and data services and promoting consumer freedom of choice would be captured in both the TOM strategic objective (and specific measure of success) as ‘promote effective competition in the generation and supply of electricity’. For clarity, we have amended this to ‘promote effective competition in energy markets’.</p> <p>We note that competition in metering and data services will depend on the policy decision on whether or not to centralise functions currently performed by supplier agents. This is being considered separately to the TOM design work.</p>	
<p>The TOM strategic objective ‘be mindful of potential customer impacts and experience’ should be extended to:</p> <ol style="list-style-type: none"> <li>1. communicating impacts to customers following the Ofgem decision on HHS. This should be done centrally by an independent body in a similar way to Smart Energy GB</li> <li>2. considering whether suitable billing arrangements for suppliers can exist.</li> </ol>	<p>The communication of impacts to customers, while important, falls outside the scope of the TOM design work and hence the Design Principles.</p> <p>Customer billing arrangements is not a settlement issue and so while the TOM design work can take into account the potential impact of proposed settlement arrangements on billing, it is not a subject which can be addressed directly in this SCR.</p>	<p>The DAB considered this strategic objective should include specific reference to the promotion of the interests of customers.</p> <p>We have amended this strategic objective accordingly.</p>
<p>In paragraph 1.6 of the Design Principles there should be an objective to promote efficiency and competition within the supply chain of the suppliers and retailers.</p>	<p>We do not consider that an additional strategic objective is necessary. Many of the strategic objectives set out in the Design Principles already capture the promotion of efficiency and competition. For example, within the TOM objectives we state the settlement arrangements</p>	

	should be designed to 'promote effective competition' and 'reduce barriers to entry'.	
While we can see the logic of the Design Principles and what they are attempting to achieve, it may be better to redraft some of them to provide greater clarity as to what benefit the principle would have for the electricity consumer.  Three specific changes were proposed to the TOM Design Principles and strategic objectives.	We acknowledge the importance of ensuring that the TOM Design Principles provide clarity to stakeholders, particularly consumers, about the potential benefits of the project. However, we will not be adopting the proposed changes as we consider the current drafting is sufficiently clear.	We further note that as detailed in appendix 1, we have included the desired consumer outcomes of enabling market-wide HHS in the 'specific measures of success' section of the Design Principles following comments from a DAB member.
<i>Detailed Design Principles (2.1-2.11 Appendix 2B)</i>		
Performance Assurance and Supplier Charges should be a separate Design Principle rather than forming part of the settlement timetable work stream.	The performance assurance framework and supplier charges are being considered in the context of the potential impact of a reduction in the settlement timetable. Giving broader consideration to these issues would be going beyond the intended scope of this SCR.	
The Change of Measurement Class is not needed as a Design Principle as smart change of measurement class processes were already introduced to support elective HHS.	We recognise that a new Change of Measurement Class procedure was introduced as part of the elective HHS arrangements to migrate customers into HHS. The purpose of this design principle is to consider whether an additional transitional change of measurement class process is needed to migrate the increased number of customers to HHS as a result of the introduction of market-wide HHS and making any further refinements in light of lessons learned from the elective HHS process.	
There is no reference to the treatment of advanced metering in Profile Class 1-4 in the detailed Design Principles. There are an estimated 1 million such meters installed by the advanced meter exception and they will require their own approach.	We have included a reference to advanced metering in the strategic objectives to ensure that HHS arrangements include processes for profile class 1-4 customers on advanced metering.	One DAB member proposed the strategic objective should be amended to clarify that HH arrangements should be in place for all profile class 1-4 customers with either smart or advanced metering.



		We have amended this strategic objective to include both smart and advanced metering.
There is no clear reference to SMETS1 transition in the Design Principles. This is a key dependency which should be completed prior to the commencement of market-wide HHS.	We understand that SMETS1 meters will become DCC compatible prior to the introduction of market-wide HHS. As such, they will not need to be considered separately to SMETS2 meters.	
The Data Retrieval and Processing Design Principle will not lead to the best answer, as it does not promote wider thinking on the optimal solution to deliver the TOM strategic objectives.	We have amended paragraph 2.3 to emphasise that the data validation and processing introduced under elective HHS can be used as a starting point but should not constrain the TOM design work on data retrieval, processing and validation.	
It would be useful to add to data retrieval and processing that a policy decision on whether or not, and how, to centralise supplier agents will be supported by quantified cost-benefit analysis taking into account any non-quantifiable criteria.	We do not think it is appropriate to include the proposed addition as part of a detailed Design Principle as it relates to the decision on whether or not to centralise functions currently performed by supplier agents. This is being considered by Ofgem separate to the TOM design work.	
The settlement of export Design Principle that 'at a minimum, improvements to the process for settlement of export should provide solutions for elective take-up' is not a workable solution. All export energy should be settled accurately and spending time on an elective solution which might not be used will be wasting the time of industry experts and Ofgem.	<p>We agree in principle that all export energy should be settled as accurately as possible and note that this is reflected in the settlement of export detailed Design Principle. For example, the settlement of export detailed Design Principle goes on to state that 'settlement arrangements including export should facilitate accurate measurement and allocation'. However we consider it is appropriate that a variety of options for settlement of export be considered by the DWG and DAB as part of the TOM design work, including elective options.</p> <p>We also note that the settlement of export in the TOM will likely be influenced by any policy decisions made by BEIS.</p>	

Concerned that the Settlement Reform SCR may introduce changes which are inconsistent, or act as barriers to implementation of code changes resulting from the Targeted Charging Review.	The Settlement Reform team will work closely with the Targeted Charging Review team to ensure changes made in one SCR do not inhibit or conflict with changes made in another. In particular, this includes ensuring that meter data collected via the settlement system which is used for network charges is still appropriate.	
In order for DWG and DAB to meet the TOM strategic objective of creating conditions that incentivise suppliers to encourage customers to shift their load, there needs to be a further assessment of what conditions, outside of settlement arrangements, will be needed to equitably manage the distributional impacts. There should be a joined-up approach between the Design Principles and the wider retail market to ensure market-wide HHS delivers on Ofgem's policy ambition and delivers value to the market.	<p>Alongside the SCR Launch Statement, we published a CEPA study of the distributional impacts of time of use tariffs. As part of the SCR, we will build on this study and engage with stakeholders to identify the risks to consumers and barriers to realising the benefits of HHS. This will be used to assess whether additional protections are required for vulnerable consumers and what steps can be taken to reduce or remove barriers to realising the benefits of HHS for all consumers.</p> <p>This consumer impacts work will be undertaken together alongside the TOM design work and we will ensure that there is a joined-up approach to ensure the HHS project objectives can be realised.</p>	
The Data Retrieval and Processing detailed Design Principle needs to be clear on the benefits of a competitive metering market. It's expected that Ofgem will provide robust research and analysis on this.	The benefits of competition in services provided by supplier agents will be explored as part of the policy decision on whether or not to centralise functions currently performed by supplier agents. As this is separate to the TOM design work it would not be appropriate to include it as a Design Principle.	
<p>The Data Retrieval and Processing detailed Design Principle should include:</p> <ul style="list-style-type: none"> <li>• use of existing infrastructure, where possible, to mitigate the cost and time</li> </ul>	We do not consider the proposed additions should be included as:	

<p>implications associated with new infrastructure delivery</p> <ul style="list-style-type: none"> <li>• limiting the extent of concurrent disruption to existing systems of all relevant stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>• the consideration of whether to use new or existing infrastructure will be considered as part of the TOM design work and the business case. If there are clear benefits to building new infrastructure over retaining existing infrastructure then this will be carefully considered.</li> <li>• the consideration of concurrent disruption to existing systems is already captured under the transition detailed Design Principle in paragraph 2.11 of the Design Principles.</li> </ul>	
<p>The project objectives do not include any reference to timeliness of implementing settlement reform.</p>	<p>As part of the business case, we will develop an approach to the implementation of the HHS arrangements developed from this SCR. This work on the transitional arrangements will consider issues of timeliness and ensure changes are implemented in a cost-efficient timescale. While not in the TOM strategic objectives, this is captured in the transition Design Principle set out in paragraph 2.11 of the Design Principles.</p>	
<p>It's unclear how the project objectives and the strategic objectives fit into one another.</p>	<p>The Ofgem HHS project objectives, summarised in 1.1-1.2 of the Design Principles, set out the overall objectives for the HHS project. The TOM strategic objectives set out in paragraph 1.6 of the Design Principles have been developed from the HHS project objectives and set out the specific objectives which we have set for the design of the TOM. The detailed Design Principles and the specific measures of success sit below the TOM strategic objectives and set out the detailed requirements which we consider the TOM should meet.</p>	

Neither the project or the strategic objectives refer to aligning this project with wider industry change programmes.	We have amended the TOM strategic objectives to include reference to the need for the TOM design work to take account of other relevant change programmes.	
Data validation should be clearly listed in the Data Retrieval and Processing area.	We have amended the section title to 'Data Retrieval, Processing and Validation' to clarify that data validation is included in the Design Principle.	
<i>Specific measures of success</i>		
Recommend the addition of the specific measures of success to emphasise consumer benefits and benefits of a competitive market: arrangements should avoid the diminution of competition in the market generally, avoid the creation of "winner-takes-all" market structures and to limit the creation or extension of existing monopolies.	<p>As one of Ofgem's key regulatory stances is to promote effective competition to deliver for consumers, we have written our Design Principles to reflect this by including it in both the TOM strategic objectives and the specific measure of success as 'to promote effective competition in supply and generation'. As outlined at the start of this table, to clarify we are referring to competition in all energy markets will have amended this to 'promote effective competition in energy markets'.</p> <p>As noted in the above sections, competition in some sectors of the market will be dependent on Ofgem policy decisions which are being considered separately outside of the TOM design work.</p>	
<i>Other comments</i>		
There could be conflicts between the need for simplicity and effective competition and there appears to be no identification of the direction to be taken when this conflict arises.	<p>We do not consider that the need for simplicity would necessarily conflict with the objective of promoting effective competition. However, if this occurs, we would consider it on a case-by-case basis, weighing up the relative costs and benefits associated with each objective.</p> <p>We note that the specific TOM strategic objective that settlement arrangements be as simple and</p>	

	cost-effective as possible has been removed from the Design Principles. This is because the concept is already incorporated in other TOM strategic objectives (for example, 'maintain and operate efficient, economic and coordinated settlement processes').	
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