

SINGLE ELECTRICITY MARKET COMMITTEE

DS3 System Services Tariffs and Scalars

SEM Committee Decision

SEM-17-080

24th October 2017

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1 EXECUTIVE SUMMARY

This paper outlines the SEM Committee's decisions on DS3 System Services following the submission of the TSO's recommendations paper on Enduring Tariffs and Scalar Design for the Regulated Arrangements. In March 2017 the SEM Committee published an information paper on the DS3 System Services Future Programme Approach¹ which outlined the SEM Committee's approach to the completion of the delivery and implementation of the new System Services arrangements as originally envisaged as part of the High Level Design (SEM-14-108). The TSOs subsequently designed and consulted upon tariffs and scalar methodologies that aimed to achieve the principles set by the SEM Committee.

The TSOs have presented methodologies that aim to deliver DS3 System Services by focusing expenditure on System services procurement at times of need, from high performing units, and for the DS3 System services products that are most valuable to system security. They have also worked to deliver System Services procurement within the original budget cap of €235m by 2020. Recognising the need to ensure that necessary conditions exist to encourage investment in technologies that can provide DS3 System Services at high levels of non-synchronous generation, the TSOs have proposed some measures to try to provide greater levels of income certainty for new investment. In developing their proposals for the tariff arrangements the TSOs have identified a risk of over expenditure on service procurement arising from high availability technologies (e.g. batteries, DSUs) and have therefore recommended that such providers, for certain services, receive fixed contracts through a separate procurement mechanism.

The SEM Committee is persuaded to approve a number of the TSOs' proposals but has decided on some changes that aim to ensure consumer value and limit consumer risk. This Decision Paper sets out these decisions in detail, and summarises them below.

In relation to the expenditure cap of €235m, the SEM Committee confirms that this will remain in place beyond 2020 (Section 4.1). Any revision of this cap will be preceded by public consultation. The TSOs proposed that the cap could be breached in the event of high wind conditions. However, the SEM Committee has decided that over-expenditure due to high wind conditions should be permitted only to the extent that there are commensurate consumer benefits. Having reviewed the TSOs' analysis in this regard the SEM Committee has decided to limit any flexing of the cap in high wind conditions to the estimated increased consumer benefit, €20m. In order to ensure that the cap is not breached the SEM Committee will only approve on the basis that a number of budgetary control measures can be implemented by the TSOs (Section 8). These include continual monitoring of the expenditure and the arrangements by the TSOs, tariff reviews in the event of expected over-expenditure, and a volume cap applied to the procurement process for a subset of services from high-availability technologies (whose contracts will not be subject to tariff reviews). These contracts for high availability technologies for a subset of reserve related services will have a cap and floor applied to their revenues.

The TSOs have adjusted the tariff and scarcity scalar rates from the consultation in order to reduce revenue volatility for providers, the SEM Committee approves these tariff base rates (Section 5.1) and the proposed scalars (Section 6). In the event that a tariff review is initiated, any proposed revision to the tariff rates will be subject to public consultation.

¹ SEM Committee Information Paper on DS3 System Services Future Programme Approach: <https://www.semcommittee.com/sites/semcommittee.com/files/media-files/SEM-17-017%20DS3%20System%20Services%20Future%20Approach%20Information%20Paper.pdf>

In relation to the contracts and procurement process the SEM Committee approves the TSOs' Recommendation to carry out a separate procurement process, on a competitive basis, for high-availability technologies for a subset of services than to other providers (Section 4.2). The TSOs have proposed applying this different type of contract to the services FFR-TOR2. However, the SEM Committee requires the TSOs to give further consideration to the appropriate subset of services and issue further clarity to industry before 30th November 2017. It is proposed by the SEMC that the appropriate length of these contracts for high-availability technologies should be for a period of six years, with a maximum lead time of two-years, rather than the five years as proposed by the TSOs. In addition the SEM Committee has decided that the procurement process recommended by the TSOs should be amended to improve the flexibility of the arrangements and facilitate new entry (Section 10). In relation to the lengths of the standard contracts the SEM Committee has decided that these should be for a maximum period of five-years, which is consistent with the High Level Design, and not the six years as proposed by the TSOs.

In the High Level Design, the SEM Committee set out its view that the System Services arrangements should be consistent with the energy trading arrangements, and that the level of services provided to the TSOs should be based on market decisions to the extent possible. The SEM Committee remains of this view, and notes that respondents were strongly in favour of this approach. The SEM Committee confirms that a given provider will be paid on the basis of its Final Physical Notification (FPN), and will engage with the TSOs to ensure this decision is implemented as soon as possible (Section 9.4). The SEM Committee notes concerns raised, in terms of aligning market incentives, regarding the application of scarcity scalars to constrained on units. In principle the SEM Committee agrees that the arrangements should ensure that participants are incentivised to bid efficiently into the energy market and will engage with the TSOs to identify and address any practical difficulties in this regard. In order to bid efficiently into the market participants will need to have a view on the likely SNSP level. While the SEM Committee accepts the TSOs' Recommendation that the scarcity scalar should be based on the operational SNSP (which will only be known ex-post), the SEM Committee considers that the TSOs should provide ex-ante forecasts of the operational SNSP to improve the efficiency of the market (Section 9.2).

Taken together the SEM Committee considers that, subject to the amendments set out in this paper, the Regulated Arrangements proposed by the TSOs strike the appropriate balance between protecting the consumer interest by ensuring expenditure does not exceed the expected consumer benefit, and facilitating the investment necessary to deliver this consumer benefit by providing a level of revenue certainty, alignment of revenues with providers' market decisions and focusing revenues at times of high wind. As set out in this paper (Section 11) there are a number of additional decisions to be taken by the Regulatory Authorities and TSOs before the go-live date of the Regulated Arrangements in order to implement this decision. The Regulatory Authorities will continue to engage with the TSOs and industry in order to ensure the go-live date of the 1st May 2017 is achieved.

2 INTRODUCTION

DS3 stands for Delivering a Secure, Sustainable Electricity System. The aim of the DS3 programme is to meet the challenges of operating the electricity system in a secure manner while achieving the 2020 renewable electricity targets. With increasing amounts of variable renewable generation there is a need to ensure that the power system can be operated securely and sustainably. Through the successful completion of the DS3 Programme the operational limit on non-synchronous generation may be increased to 75%.

System Services is a key work stream within the DS3 Programme. The System Services work stream will improve the technical capability of the generation fleet and the system more generally by incentivising generation valuable to the system and by interacting with the energy trading and capacity markets in order to deliver value to consumers and a secure, sustainable power system.

In December 2014, the SEM Committee published a decision paper on the high-level design for the procurement of DS3 System Services (“High Level Design”)². The High Level Design also set out the SEM Committee’s emerging thinking on many aspects of the detailed design and implementation of the new arrangements.

Since the High Level Design was published, the Transmission System Operators (TSOs) and Regulatory Authorities have worked to implement many aspects of the SEM high-level design including the successful development and implementation of DS3 System Services Interim Arrangements in October 2016

In March 2017, the SEM Committee published an information paper on the DS3 System Services Future Programme Approach³ which outlined the SEM Committee’s approach to the completion of the delivery and implementation of the new System Services arrangements as originally envisaged as part of the High Level Design (SEM-14-108). In line with the approach outlined by the SEM Committee in March 2017, the TSOs published consultation papers outlining the proposed tariff methodology, and scalar design that would apply to the DS3 System Services market from April 2018. Twenty-three responses were received and shared with the Regulatory Authorities. An industry forum was held by the TSOs in August 2017 to explain in further detail the proposals held within the paper and also to outline some of the contractual considerations related to the implementation of the DS3 System Service’s Regulated Arrangements.

Following this consultation process, the TSOs have issued the Regulatory Authorities Recommendation Papers on both the DS3 System Services Tariffs for Regulated Arrangements and the DS3 System Services Scalar Design. The Regulatory Authorities have reviewed the TSOs’ consultation papers, responses to the TSOs’ consultations, the TSOs’ recommendations papers, and the output from engagement with the TSOs throughout the process. Following this review, the SEM Committee approves the TSOs recommendations on the tariffs and scalars for the System Services Regulated Arrangements, subject to the amendments set out in this Decision Paper. This Decision Paper outlines the decisions taken by the SEM Committee in response to the TSOs’ recommendations. The TSO Recommendation Papers were published by the TSOs on 23rd October 2017.⁴

² SEM Committee High Level Design Paper: <https://www.semcommittee.com/sites/semcommittee.com/files/media-files/SEM-14-108%20DS3%20System%20Services%20Decision%20Paper.pdf>

³ SEM Committee Information Paper on DS3 System Services Future Programme Approach: <https://www.semcommittee.com/sites/semcommittee.com/files/media-files/SEM-17-017%20DS3%20System%20Services%20Future%20Approach%20Information%20Paper.pdf>

⁴http://www.eirgridgroup.com/how-the-grid-works/ds3-programme/ds3-consultations-and-pub/index.xml#comp_000059799323_0000003b04_05f8

2.1 Related Documents

[SEMC High Level Design Paper](#) (December 2014)

[SEMC Future Programme Approach Paper](#) (March 2017)

[TSOs' Enduring Tariffs Consultation Paper](#) (July 2017)

[TSOs' Enduring Scalar Design Consultation Paper](#) (July 2017)

[TSO's Consultation Paper on System Services Contracts for Regulated Arrangements](#) (September 2017)

[TSOs' Recommendations Paper DS3 System Services Tariffs for Regulated Arrangements](#) (October 2017)

[TSOs' Recommendations Paper DS3 System Services Scalar Design](#) (October 2017)

3 DECISION OVERVIEW

As outlined above, SEM-17-017⁵ outlined the approach to the completion of the delivery and implementation of the new System Services arrangements as originally envisaged as part of the High Level Design (SEM-14-108). The approach set out in the SEM Committee paper takes into account the experience of the interim arrangements, responses to the public consultations on the various elements of the detailed design, developments with the EU Electricity Balancing Guideline and the I-SEM Stocktake.

In the March 2017 paper, the SEM Committee set out its view that:

- The 107 existing Interim Framework Agreements for the 11 services, due to expire in October 2017, will be extended until the end of April 2018 in order to facilitate learnings from the Qualification Trial Process to be integrated into the Regulated Arrangements and to facilitate the introduction of a new panel-based procurement process;
- The TSOs will run a Regulated Tariff procurement process in Q4 2017 for the 11 services to enable new contracts to be executed on 1 May 2018 – these arrangements will be open to a wider range of service providers; and
- The TSOs will run a further Regulated Tariff procurement process for 3 new services with a contract execution date of 1 September 2018⁶; and
- The Regulatory Authorities will review the options for competitive procurement for enduring implementation in the coming years. This initial investigative work on competitive procurement options started in Q1 2017.

In line with the approach outlined by the SEMC in March 2017, the TSOs published a consultation paper outlining the proposed tariff methodology, and scalar design that would apply to the DS3 System Services market from April 2018. Twenty three responses were received and shared with the regulatory authorities. An industry forum was held in August 2017 to explain in further detail the proposals held within the paper and also to outline some of the contractual considerations related to the implementation of the DS3 System Service's Regulated Arrangements.

The Regulatory Authorities have reviewed the TSOs' consultation paper, responses to the TSOs' consultation, the TSOs' Recommendations papers, and the output from engagement with the TSOs throughout the process. In addition the Regulatory Authorities engaged further with industry at a DS3 System Services Industry Forum held on 12th October, 2017. Following this review, the SEM Committee approves the TSOs Recommendations on the tariffs and scalars for the System Services Regulated Arrangements, subject to the amendments set out in this Decision Paper. The amendments set out in this paper are intended to improve the proposed arrangements by providing stronger protection to consumers, in terms of over-expenditure, greater alignment with the energy

⁵ SEM Committee Information Paper on DS3 System Services Future Programme Approach: <https://www.semcommittee.com/sites/semcommittee.com/files/media-files/SEM-17-017%20DS3%20System%20Services%20Future%20Approach%20Information%20Paper.pdf>

⁶ The TSOs informed the SEM Committee of the necessity to stagger the introduction of the three fast-acting services (FFR, FPFAPR and DRR). This longer implementation timeline will allow for learnings from the Qualification Trial Process to be integrated into the arrangements and for the TSOs to develop the appropriate contractual definitions for technical product delivery, product response criteria, and settlement and performance monitoring system requirements for these three services.

market arrangements, and greater revenue certainty for investors. The TSO Recommendation Papers are published alongside this paper.

This Decision Paper sets out these decisions in detail, and summarises them in this section. In relation to the expenditure cap of €235m, the SEM Committee confirms that this will remain in place beyond 2020 (Section 4.1). Any revision of this cap will be based on further analysis and public consultation. The TSOs proposed that the cap could be breached in the event of high wind conditions. However, the SEM Committee has decided that over-expenditure due to high wind conditions should be permitted only to the extent that there are commensurate consumer benefits. Having reviewed the TSOs' analysis in this regard the SEM Committee has decided to limit any flexing of the cap in high wind conditions to the estimated increased consumer benefit of €20m associated with the increased wind. In order to ensure that the cap is not breached the SEM Committee has decided upon a number of budgetary controls as outlined in Section 8 of this paper. These include continual monitoring of the expenditure and the arrangements by the TSOs, tariff reviews in the event of expected over-expenditure, and a volume cap applied to the procurement process for high-availability technologies who will have fixed contracts for a subset of services, which will not be subject to tariff reviews. These fixed contracts for high availability technologies will have a cap and floor applied to their revenues.

The TSOs have adjusted the tariff and scarcity scalar rates from the consultation in order to reduce revenue volatility for providers, the SEM Committee approves these tariff base rates (Section 5.1) and the proposed scalars (Section 6). Notwithstanding the provision for revision of the tariffs, it is the SEM Committee's view based on the scenario analysis provided by the TSOs, that the tariff rates are likely to remain stable for the duration of the arrangements. In the event that a tariff review is initiated, any proposed revision to the tariff rates will be subject to public consultation.

In relation to the contracts and procurement process the SEM Committee approves the TSOs' Recommendation to issue fixed contracts to high-availability technologies for a sub-set of services (Section 4.2). However, in relation to the length of these contracts for high-availability technologies, the SEM Committee considers that a period of six years, with a maximum lead time of two-years, is appropriate. In addition the SEM Committee has decided that the procurement process recommended by the TSOs should be amended to improve the flexibility of the arrangements and facilitate new entry (Section 10). In relation to the lengths of the standard contracts the SEM Committee has decided that these should be for a period of five-years, which is consistent with the High Level Design, notwithstanding possible tariff reviews as outlined in Section 8.

In the High Level Design, the SEM Committee set out its view that the System Services arrangements should be consistent with the energy trading arrangements, and that the level of services provided to the TSOs should be based on market decisions to the extent possible. The SEM Committee remains of this view, and notes that respondents were strongly in favour of this approach. The SEM Committee confirms that a given provider will be paid on the basis of its Final Physical Notification (FPN), and will engage with the TSOs to ensure this decision is implemented as soon as possible (Section 9.4). The SEM Committee notes concerns raised, in terms of aligning market incentives, regarding the application of scarcity scalars to constrained on units. In principle the SEM Committee agrees that the arrangements should ensure that participants are incentivised to bid efficiently into the energy market and will engage with the TSOs to identify and address any practical difficulties in this regard. In order to bid efficiently into the market participants will need to have a view on the likely SNSP level. While the SEM Committee accepts the TSOs' Recommendation that the scarcity scalar should be based on the operational SNSP (which will only be known ex-post), the SEM Committee considers that the TSOs should provide ex-ante forecasts of the operational SNSP to improve the efficiency of the market (Section 9.2).

Taken together the SEM Committee considers that, subject to the amendments set out in this paper, the Regulated Arrangements proposed by the TSOs strike the appropriate balance between protecting the consumer interest by ensuring expenditure does not exceed the expected consumer benefit, and facilitating necessary investment to deliver this consumer benefit by providing a level of revenue certainty, alignment of revenues with providers' market decisions and focusing revenues at times of high wind. As set out in this paper (Section 11) there are a number of additional decisions to be taken by the Regulatory Authorities and TSOs before the go-live date of the Regulated Arrangements in order to implement this decision. The Regulatory Authorities will continue to engage with the TSOs and industry in order to ensure the go-live date of the 1st May 2018 is achieved.

4 DS3 SYSTEM SERVICES EXPENDITURE CAP

4.1 DS3 System Services Expenditure - 2020 and Beyond

In the SEM Committee High Level Design of DS3 System Services⁷ paper of 2014 it was outlined that there should be a glide path to an expenditure cap in 2020 for DS3 systems services of €235m. This expenditure cap was based on anticipated consumer benefits of the introduction of DS3 System Services and the enablement of much greater levels of renewable energy into the All - Island energy markets. The decision on the €235m expenditure cap did not include provision for inflationary adjustment to the €235m.

The SEM Committee in the March 2017 Future Approach paper⁸ outlined the straight line budget glide path out to a maximum expenditure by the TSOs of €235m in 2020 on DS3 System Services procurement. The graph in figure 1 starts from 2015 detailing the expenditure on HAS (Harmonised Ancillary Services) before the initial introduction of the DS3 System Services procurement in 2016.

The proposals contained within the TSOs' recommendations papers on Tariff and Scalars methodologies contain contracting arrangements that extend significantly beyond 2020. By 2020 the TSOs and Regulatory Authorities will have gained operational experience of I-SEM energy, balancing and capacity markets and the DS3 System Services market. In addition, the TSOs and Regulatory Authorities will also have progressed the implementation of the EU Electricity Balancing Guideline by 2020. The SEM Committee wishes to ensure that as much certainty as possible on tariff stability and contractual arrangements on DS3 System Services can be provided to industry in 2017 to allow for the development of efficient bidding strategies in I-SEM markets and to enable investment in DS3 System Services capability.

With the need to incorporate learnings from I-SEM and DS3 System Services in any potential future determination by the SEM Committee on DS3 System Services Expenditure budgets, the SEM Committee confirms that until additional modelling and analysis has been undertaken that demonstrates a need to change the budget allocated to DS3 System Services expenditure, the expenditure cap beyond 2020 will remain at €235m (in nominal terms) annually. The SEM Committee will not instigate any changes to the DS3 System Services budget cap without further industry consultation.

⁷<https://www.semcommittee.com/sites/semcommittee.com/files/media-files/SEM-14-108%20DS3%20System%20Services%20Decision%20Paper.pdf>

⁸ <https://www.semcommittee.com/publication/ds3-system-services-future-programme-approach-information-paper>

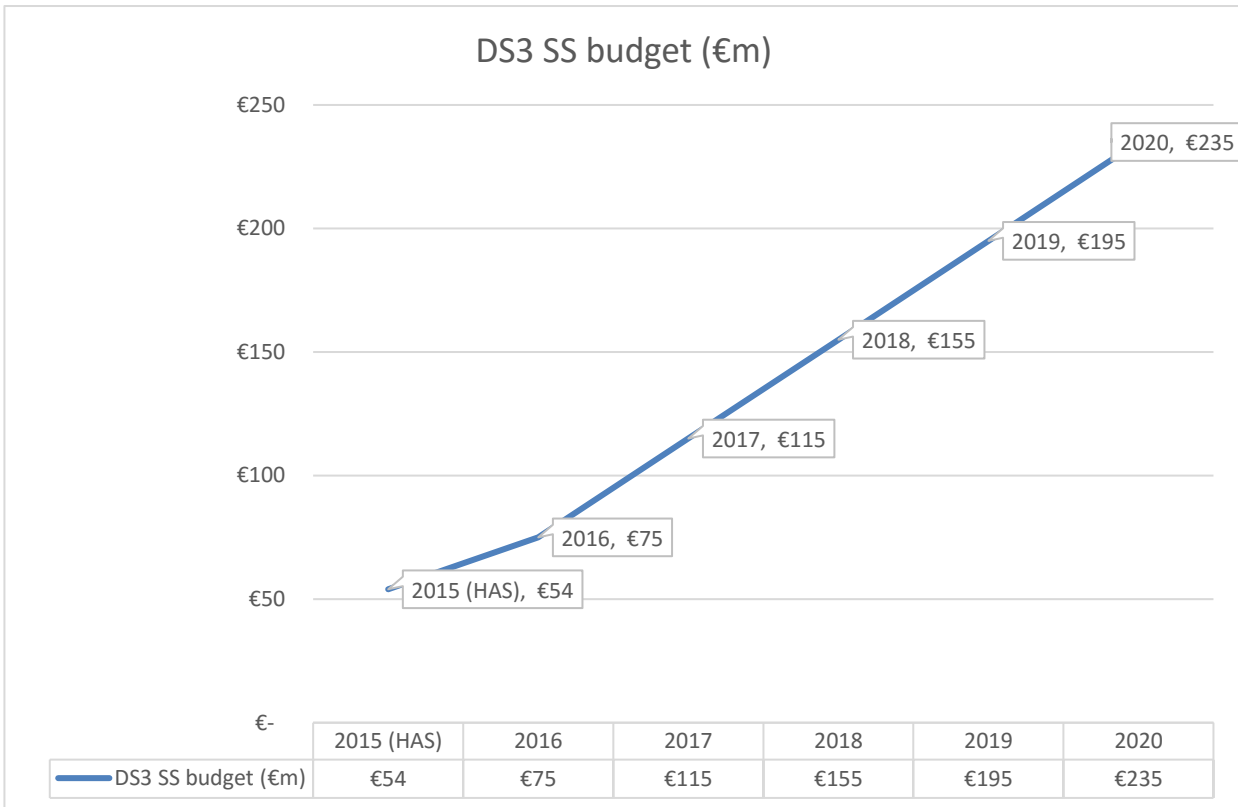


Figure 1: DS3 System Services Glide-Path to 2020

The expenditure cap for DS3 System Services Expenditure will remain at €235m/annum post 2020 until decided otherwise by the SEMC following public consultation

4.2 Separate Procurement Process for High-availability Technologies

The SEM Committee recognises the efforts the TSOs have made try to address the expenditure risk posed by technologies that can provide high levels of availability for a subset of reserve services. The separate procurement process proposed by the TSOs’ attempts to limit the volume of such high availability technologies contracted. This serves to limit the TSOs’ exposure to breaching the expenditure cap.

The SEM Committee agrees with the need to limit the risk of over-expenditure, and confirms that the focus of the proposed competitive procurement process is to enable provision of services from the most cost effective high availability technologies available. The initial proposal by the TSOs is to apply this competitive procurement process to the services FFR-TOR2. The provision of TOR2, in particular, was considered by industry to be a significantly different type of service provision, i.e. it is a manually provided (dispatch instruction dependent) service, which contrasts with the other services FFR- TOR1 which are automatically provided (no dispatch instruction required). Other concerns were raised in terms of the technical capability of some plant that are deemed high availability but who may have difficulties providing TOR2 at the same capacity as their FFR provision. The SEM Committee therefore requires the TSOs to consider the appropriate sub set of services to be covered in the fixed contracts, and the appropriate terms and conditions to facilitate the relevant technologies in the competitive procurement process.

The SEM Committee also requires that the TSOs provide clarity of their future approach to the procurement of this subset of services to industry as soon as possible. TSOs have stated in their Tariffs Recommendations Paper that clarity would be provided on the volume limits to be procured when the tender notice issues on March 30th 2018. In addition, the TSOs have stated that there should be two separate procurement processes for high-availability units, both of which would invite tender submissions requiring competitive bids on service payments by providers. The first process would award contracts based on a fixed contract length of two years from September 2018, and a second that would facilitate a build phase of two years and a subsequent contract of five years.

The SEM Committee considers that the proposals outlined in the TSO Recommendations Paper may be unnecessarily restrictive for providers who wish to begin operation before 2020. The SEM Committee addresses the proposed contract lengths in Section 10 of this paper, so will focus in this section only on the levels of clarity available for providers captured by this categorisation of technologies.

The TSOs have proposed a contracting structure that employs a qualification system approach with opportunities to qualify technically for contracts to provide System Services, and that this would allow more frequent opportunities to contract for service provision and allow those already contracted to change contracted service provision volumes. The SEM Committee agrees that this approach will provide benefits by allowing more frequent opportunities to gain contracts for system services than the previous framework approach.

For energy market linked availability technologies (e.g. CCGT, Interconnectors) there will be no limit to the total volumes contracted subject to meeting the technical criteria demanded in the tendering process. As per the Interim Arrangements the minimum size of unit that can enter a DS3 System Services contract is 1MW, and the maximum per unit volume to be contracted is 100MW. The ability to update contracted volumes (up to the limit of 100MW per unit) or allow new participants to enter the process is made possible by the proposed six monthly windows for qualification and contracting. The risk of over-expenditure or under expenditure through the tariff methodology can be addressed by the expenditure control mechanisms proposed by the TSOs (the SEM Committee considers this in further detail in Section 8 in this paper).

For high-availability technologies (e.g. DSUs, batteries, flywheels etc.) the SEM Committee determines that for the services that are not subject to competitive procurement such technologies should be able (subject to technical qualification) to gain a standard tariff rate based contract for provision of these services. Again the six monthly volume opportunity to gain a contract or change contracted volumes in this procurement process should apply to such technologies.

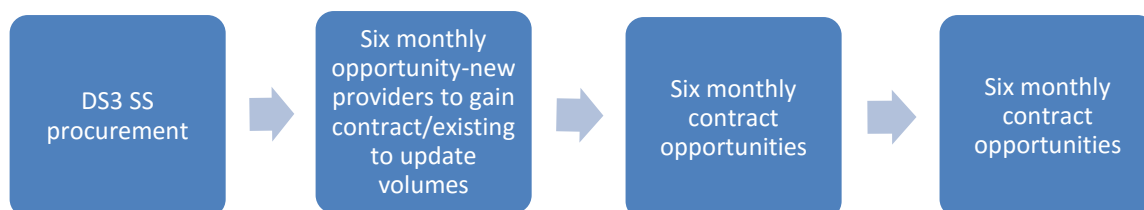


Figure 2: Standard contracting refresh frequency

For high availability technologies wishing to provide the subset of services covered by the fixed contract the TSO has proposed that a volume threshold or limit would be applied to the total capability volume of contracted provision from such providers. In the event that the volume threshold is exceeded by the amount of tendered submissions the TSOs will shortlist providers based on a number of criteria including tendered bid prices. Competitive bid prices will therefore be required as part of a high availability technology provider's proposed offering, with the bid price cap set by the relevant service tariff for the individual service.

The TSOs have not currently specified the proposed maximum contracted volumes, or detailed the specific criteria for bid assessment and the SEM Committee understands that work is still ongoing to finalise these details. The TSOs have indicated in its Recommendations Papers that it will issue clarity on the volume limit at tender advertisement on 30th March 2018. The SEM Committee recognises this creates a level of uncertainty for such technologies and requests the TSOs to publish volume limits earlier than this date. The SEM Committee also wishes to ensure that the six-monthly contracting opportunity is made available through the competitive procurement process until the volume threshold is reached.

The SEM Committee agrees that a separate procurement of a subset of services from high-availability units by the TSOs will reduce the risk of over-expenditure.

The SEM Committee has decided that the contracts awarded to high-availability units will be on the basis of competitive tender where the volume cap has been reached.

The SEM Committee requests that early notification to industry on the proposed volume cap of such a procurement process be made in advance of March 2018.

The SEM Committee requires the TSOs to ensure all high availability units have access to apply for qualification for provision of System services until the volume cap is reached.

4.3 €235m Cap and the Impact of a High Wind Year

The SEM Committee recognises and appreciates the efforts the TSOs have made to design a tariff methodology that targets DS3 System Services expenditure to when services are most needed, via temporal scalars and to facilitate investment in service provision at high levels of SNSP. However, in addition the SEM Committee raised concerns about potential exceedance of the expenditure cap and asked for additional modelling to be undertaken by the TSOs that would look at the risk of over-expenditure against the cap. The TSOs have undertaken modelling on the frequency of high and low wind years (above and below an average 31.8% capacity factor wind year) and this modelling has indicated that there is a risk of exceeding the €235m cap if three independent and distinct situations arise;

- There is a significant level of investment in high availability technologies;
- There is a very high level of performance across the entire portfolio of DS3 plant (existing and new investment plant), i.e. a performance metric of 1.0; and
- There is a wind capacity factor year of 33% or greater

In estimating the additional consumer benefits as a result of such overspend the TSOs submitted further information based on modelling results of production cost savings at high levels of wind on the system. Under the proposals from the TSOs a high wind year could result in exceeding the cap by over €40m, this has not been demonstrated to be commensurate with the consumer benefits and therefore the TSO will be required to put in place measures to ensure that the expenditure does not exceed the consumer benefit (estimated to be approximately €20m) in high wind years.

The SEM Committee agrees with the TSOs assessment that the probability of over-expenditure is low for a given year. However, the TSO analysis clearly shows the possibility of over-expenditure occurring and therefore the SEM Committee considers additional budgetary controls are necessary.

Therefore, the SEM Committee has decided to impose a limit of €20m over-expenditure beyond the annual €235m cap due to high wind and a cap of €235m in all other circumstances. Additional budget controls will be imposed to ensure this limit is not breached; even under high-wind conditions

The SEM Committee has decided to impose a limit of €20m over-expenditure beyond the annual €235m cap due to high wind and a cap of €235m in all other circumstances.

5 TARIFF RATES

5.1 Tariff Rate Increases

As outlined in SEM-17-017 the SEM Committee stated that the Regulated Arrangements should provide revenue clarity for providers and incentivise the provision of services where investment is most needed. The SEM Committee required that the tariff methodology would direct revenues (the expenditure increases) to services in proportion to the TSOs' assessment of system needs and the proportion of additional volume capability needed. In the March 2017 paper the SEM Committee stated that while the expenditure cap limits expenditure to a maximum level it does not guarantee that this level of monies will be spent and that tariff rates should not increase for services where there is no additional system need and where additional investment is not required.

Industry responses to the TSOs' initial tariffs proposal (where no increase to the base rates was envisaged) highlighted the need to increase certainty of income for provision of DS3 System Services in order to enable investment in service provision capability. Following this, the TSOs have now proposed to slightly increase the base rates for System Services tariffs in the following manner;

- An increase of 5% above "rollover" tariffs (published in May 2017)⁹ will be applied to these services in the new DS3 System Services contracts to be procured for go-live in May 2018.
- An increase of 5% above the tariffs originally proposed for FFR, FPFAPR and DRR to be introduced in September 2018, which were included in the original Interim Tariffs decision paper¹⁰.

The SEM Committee has agreed to the TSOs proposals in this regard, given the concerns raised in the responses received from industry and the targeted nature of the tariff methodology. The SEM Committee approves the tariffs rates as set out below to be applied to contracted services from 1st May 2018.

Service Name	Unit of Payment	Final Rate €
Synchronous Inertial Response (SIR)	MWs ² h	0.0050
Primary Operating Reserve (POR)	MWh	3.24
Secondary Operating Reserve (SOR)	MWh	1.96
Tertiary Operating Reserve (TOR1)	MWh	1.55
Tertiary Operating Reserve (TOR2)	MWh	1.24
Replacement Reserve – Synchronised (RRS)	MWh	0.25
Replacement Reserve – Desynchronised (RRD)	MWh	0.56
Ramping Margin 1 (RM1)	MWh	0.12
Ramping Margin 3 (RM3)	MWh	0.18
Ramping Margin 8 (RM8)	MWh	0.16
Steady State Reactive Power (SSRP)	MVArh	0.23
Fast Frequency Response (FFR)	MWh	2.16
Fast Post Fault Active Power Recovery (FPFAPR)	MWh	0.15
Dynamic Reactive Response (DRR)	MWh	0.04

Figure 3: Approved Tariff Rates for Regulated Arrangements

The SEM Committee approves the tariff rates as set out above.

⁹SEM-17-052

¹⁰ [Interim Tariffs Decision paper](#)

6 SCALARS

6.1 Temporal Scarcity Scalars

The SEM Committee approves the introduction and design of the temporal scarcity scalars as outlined in the TSOs' Recommendations Paper on Scalar Design. The temporal scarcity scalars aim to incentivise provision of System Services at times of need, and in so doing target expenditure to when the greatest value is provided to the TSOs. Industry responses to the TSOs' initial Scalars proposals highlighted concerns regarding the volatility of payments due to the high scalar values and the fact that payments would only apply in times of high SNSP. In order to reduce the volatility of payments and to provide a greater degree of income certainty while still managing the expenditure cap the TSOs have now proposed the following:

- That FFR be paid at the base tariff rate for SNSP levels between 50% and 60%
- A reduction in the scarcity scalar values to apply above 60% and 70% SNSP levels to offset the 5% recommended increase to the base tariff rates and the additional expenditure arising from FFR payments applying at the lower 50% SNSP level.

The SEM Committee has approved these values as set out in figure 4.

Service	Scalar	Scalar	Scalar	Scalar
	0% - 50% SNSP	50% - 60% SNSP	60% - 70% SNSP	70% - 75% SNSP
11 Existing Services	1	1	4.7	6.3
FFR	0	1	4.7	6.3
FPFAPR & DRR	0	0	0	6.3

Figure 4. Approved Scalar Values

The SEM Committee approves the introduction and design of the temporal scarcity scalar values as set out above.

6.2 Locational Scarcity Scalars

The TSOs have proposed (following a previous request from the SEM Committee in the Future Approach Paper) inserting a locational scarcity scalar within the contracts, and currently setting the value of that scalar to 1.

The SEM Committee acknowledges the concerns of industry as highlighted in their consultation responses to this proposal. The SEM Committee wishes to ensure that this locational scalar can be implemented such that it can apply to a subset of services as required. Where a technical need has been identified in a given location(s) the

Regulatory Authorities may direct the relevant TSO to adjust the scalar value above 1 for all providers in that location(s). Such analysis may highlight that only a subset of DS3 System Services are need to be prioritised in a particular location. Therefore, the SEM Committee requests that the TSOs facilitate the application of this scalar to a subset of the 14 System Services, and within a certain location in the contractual arrangements.

6.3 Performance Scalar

The TSOs have outlined their proposal to maintain the performance scalar as part of the Protocol Document to ensure ongoing development of performance methodologies as TSO experience of DS3 System Services expands. The SEM Committee agrees with this approach as it affords opportunities to amend performance methodologies as further experience is gained over time with greater numbers of DS3 System service providers.

In relation to the proposal to implement a requirement for a six hour forecast of availability to be submitted by DS3 System Service providing units, the SEM Committee considers that further development of the details of this proposal is required, and further consideration of respondents' concerns. In this regard, the SEM Committee notes the TSOs' recommendation to defer implementation of this forecast requirement and considers that the TSOs should further engage with industry during this period.

The SEM Committee approves the performance scalar as proposed by the TSOs and requests that the TSOs engage further with industry to determine the most appropriate format of the forecast availability requirements

6.4 Product Scalars

The SEM Committee approves the proposals on product scalars as outlined in the TSOs Recommendations paper on the following scalars, with some additional issues noted in the following paragraph.

- Product Scalar for the Faster Response of FFR
- Product Scalar for the Continuous Provision of Reserve from FFR to TOR1.
- Product Scalar for SSRP Provision with Watt-less MVars
- Enhanced delivery of FFR POR, SOR and TOR1
- Product Scalar for enhanced delivery for SSRP with an AVR

In relation to the Product Scalar for enhanced delivery for SSRP with an AVR, the SEM Committee notes that the ability of distribution connected plant to provide this service requires greater clarity from the TSOs, and welcomes the indication from the TSOs that work is ongoing to provide greater certainty to industry on this. The Regulatory Authorities will engage further with the TSOs on the timelines associated with providing clarity of access to SSRP provision with an AVR for DSO connected plant. In relation to the Product Scalar for SSRP provision with Watt-less MVars, The SEM Committee also notes the concerns regarding the energy costs of such provision, and requests the TSOs to work with the Regulatory Authorities to bring proposals on this forward.

The SEM Committee approves the Product Scalars as outlined above.

7 CONTRACT LENGTH

7.1 Contract Length

As outlined in detail in Section 4.2 and Section 10 the SEM Committee approves the separate procurement route for high availability technologies subject to certain additional requirements being met. The TSOs have proposed contract arrangements for non-expenditure risk technologies of six years, and arrangements for five years of service payments plus a two year build phase for high expenditure risk technologies. The SEMC's high level design (SEM-14-108) stated that:

“Enduring tariffs for each service will be set for five years, on one-year contracts issued to all providers. These tariffs will apply to all services where it is determined that there is insufficient competition for a competitive auction.”

In the absence of having full competitive arrangements in place following the decision to proceed with implementation of the Regulated Arrangements in advance of the Auction Design proposals, the SEM Committee considers that providing certainty on tariff based income is important to incentivising investment in DS3 System Service capability. In this regard the SEM Committee is of the view that one year contracts based on tariffs could reduce the level of certainty to industry participants looking to invest in technology upgrades or deliver new installations. Therefore, the SEM Committee agrees that a stable tariff regime would help deliver improvements in service provision.

However, the SEM Committee does not consider that six years of tariff arrangements aligns with the five years provided for in the High Level Design. Therefore the SEM Committee has decided that the maximum length of contract arrangements shall be;

- Contractual arrangements for standard contracts will be set at a maximum of 5 years from May 1st 2018 – i.e. an end date of 30th April 2023 will be imposed on all contracts awarded.
- Contract arrangements for high availability technology units (for a subset of reserve services) will be set at a maximum of 6 years from 1st September 2018, with a flexible operational start date of up to 31st August 2020. The end date of these arrangements will be set for 6 years from the go-live date of each individual providing unit, therefore this will range from 2024-2026. The SEM Committee request the TSOs include provisions in the contractual arrangements to address the eventuality of a delay to a providers planned operational start date.
- Contractual arrangements for high availability technologies for all other services shall be on standard contracts and so in place for a maximum of five years from 1st May 2018 – i.e. with an end date of 30th April 2023.
- The SEM Committee notes that transition arrangements for existing high-availability units is currently under consultation within the Contracts consultation underway by the TSOs (due to close on 24th Oct

2017). Therefore, the SEM Committee will await responses from industry in this regard before issuing a decision on the TSOs' recommended transition approaches.

It is important to recognise that the introduction and implementation of the EU Balancing Network Code and future competitive arrangements may necessitate the termination of tariff based contracts for all or a number of services, and so the SEM Committee requests that the TSO facilitate this in their contractual arrangements for all service providers on standard contracts. This will not apply to contracts for high-availability units on fixed contracts for a sub-set of reserve services.

The SEM Committee however wants to reassure industry that any changes to DS3 System Services procurement processes will not be instigated without industry consultation. Figure 5 in Section 10 details the proposed procurement timelines further.

The SEM Committee has decided that a maximum of 5 years contractual arrangements can be awarded to units qualifying for standard contracts.

The SEM Committee has decided that a maximum of 6 years contractual arrangements can be awarded to high availability technology units qualifying for fixed contracts for a subset of reserve services.

The SEM Committee has decided that high availability units will be eligible for standard contracts for those services not covered by a fixed contract.

The SEM Committee will consider transitional arrangements for high-availability units following the TSOs' consultation on the DS3 System Services Contractual arrangements

8 EXPENDITURE CONTROLS

8.1 Tariff Reviews

The SEM Committee is conscious of the need to ensure that as much clarity and certainty as possible is made available to DS3 System Services providers and so the Regulatory Authorities will review tariffs, including but not limited to, where it has been identified that there is a risk of one of the following;

- the TSO expects the expenditure cap being breached;
- the quantity of service which is procured exceeds that which the TSO requires to operate the system at 75% SNSP;
- the TSO has not procured the level of service necessary to maintain stability of the system at 75% SNSP; or,
- unintended consequences of tariff design emerging post go-live of contracts.

The SEM Committee recognises that it is not possible to definitively examine all such scenarios and therefore considers it necessary that the TSOs ensure that the contractual arrangements can facilitate potential tariff changes for contracts issued to market linked availability units, and to high availability units for services other than a subset of reserve services. The SEM Committee have received confirmation from the TSOs' legal team that such reviews can be implemented throughout the term of the contracts. The TSOs have also provided confirmation that tariff reviews are compatible with the Utilities Directive, the relevant legislation for TSO procurement.

The TSOs have suggested that tariffs could be reviewed on a quarterly basis, however the SEM Committee considers it is inappropriate to suggest such a time-frame as this may not allow for industry consultation on what could constitute a significant change to industry revenues. The SEM Committee has therefore decided that such reviews will be initiated when required.

Therefore it will be necessary that regular monitoring of DS3 System Services expenditure is undertaken to identify any particular trends or scenarios that would warrant potential tariff changes. In this regard the SEM Committee will require that the TSOs submit monthly reports on actual and forecasted DS3 System Services expenditure (in arrears) to the Regulatory Authorities for review. This information will be utilised to identify any potential need to revise tariffs, as per the above conditions, and a review process would then follow to determine and consult upon proposed revised tariff rates. The SEM Committee outlines below, at a high level, the process that would be followed in the event of potential tariff reviews. This process would likely take at least 18 weeks from initial identification of scenarios warranting tariff review to issuing a decision and notification of tariff changes. This process facilitates the thorough investigation and consultation on issues that the Regulatory Authorities may consider is necessary to introduce any changes to tariffs.

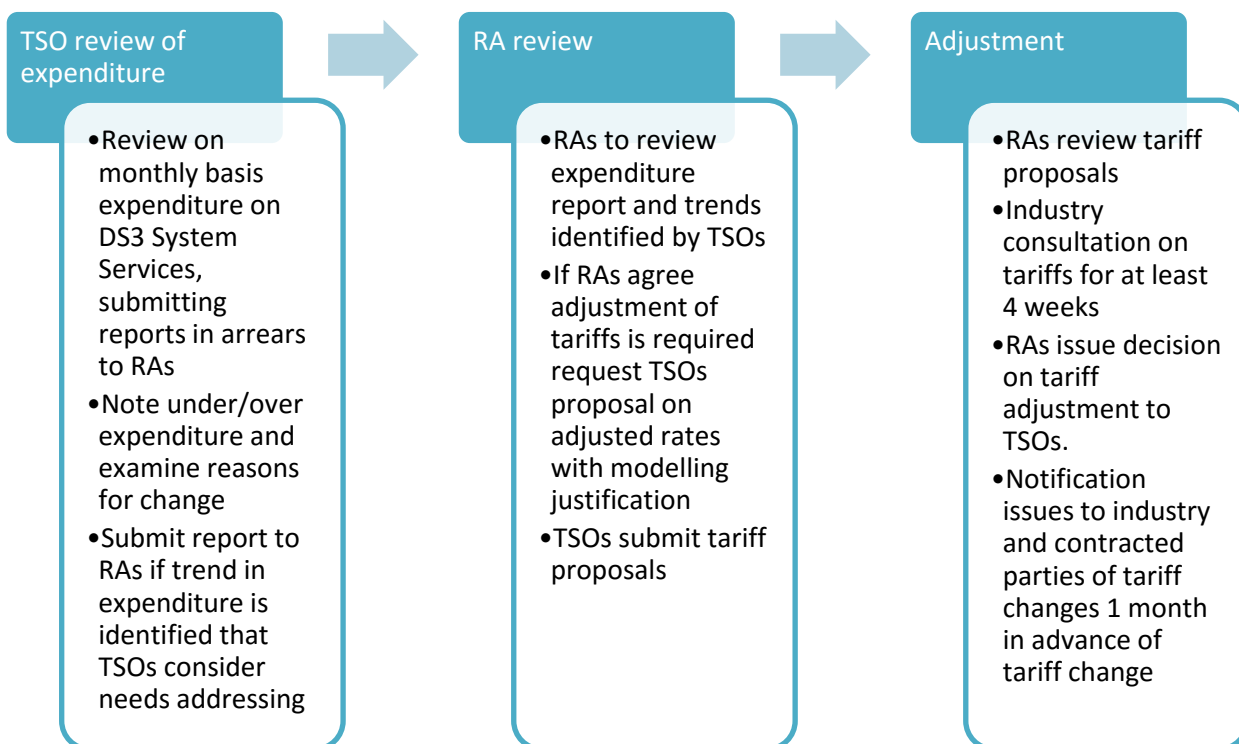


Figure 5: Process in the event of a potential tariff review

All contracts (with the exception of the fixed-high availability contracts for) a subset of reserve services will allow for a tariff review to be initiated by the TSOs subject to RA approval.

The SEM Committee will initiate tariff reviews, including but not limited to, where one of the following conditions is met:

- the TSO expects the expenditure cap being breached;
- the quantity of service which is procured exceeds that which the TSO requires to operate the system at 75% SNSP;
- the TSO has not procured the level of service necessary to maintain stability of the system at 75% SNSP; or,
- unintended consequences of tariff design emerging post go-live of contracts.

The Regulatory Authorities will consult with industry when reviewing tariffs

8.2 Competitive Bidding and Volume Cap on High-availability Technologies

As outlined in section 4.2 there will be a volume cap placed on the high availability technologies in relation to a subset of services. This will mean that if there is an over-application of eligible technology units to deliver the

designated subset of services there would be a need for the TSOs to select winning bidders. To achieve this it is proposed by the TSOs to require competitive pricing of service provision in submitted tenders to enable selection of bidders. Such providers will have to commit to the relevant qualification criteria, which will include commitments in relation to availability. In addition, as the procurement of service provision from high-availability units is also being designed to facilitate new entrants to the DS3 System services market, the build phase will require criteria to be set in order to ensure that projects awarded contracts are realistic and not speculative. In this regard it will be important to ensure that the terms and conditions of such contracts set out methods to ensure there are opportunities for the TSO to review project development progress and identify long-stop dates during the build phase, with penalties (e.g. bonding arrangements) for non-delivery of services. In this regard the SEM Committee commits to working with the TSOs to ensure that the criteria to be utilised in competitive procurement draw upon the learning gained from industry responses to the original DS3 System Services Contract and Qualification paper issued in late 2015¹¹. The volume cap for the procurement is proposed by the TSOs to be published with the tender notice planned for 30th March 2018.

The SEM Committee notes that such proposals warrant further consultation and wish to see the TSOs outline a timetable of consultation and decision making in order to achieve the tender publication date for such service providers 30th March 2018.

The SEM Committee requests the TSOs carry out a consultation on the competitive procurement of high availability technologies that incorporates learning from responses received to the 2015 Consultation on DS3 Qualification Process and Contract Design. The TSOs should outline a timetable for this consultation process as soon as possible.

The SEM Committee approves the proposal for a volume cap on fixed contracts for high-availability technologies and that the contracts awarded to high-availability units will be on the basis of competitive tender.

The SEM Committee also requests that the TSOs carry out a consultation on the competitive procurement of high availability technologies

8.3 Cap/Floor on Revenues

As discussed in section 4.3 there is a risk of over-expenditure in high wind years, due in large part to the high availability of some technologies and the interaction with the temporal scalar rates. Therefore in order to ensure the €20m flex on over expenditure is not breached the SEM Committee has decided to provide for a revenue cap and floor mechanism for the fixed contracts.

The SEM Committee has decided that the revenue cap should be set at a level that puts an upper limit on a providers annual revenue such that the cap is not breached (noting also the scope for tariff reviews in relation to

¹¹<https://www.semcommittee.com/sites/semcommittee.com/files/media-files/SEM-15-091%20DS3%20System%20Services%20Qualification%20Process%20and%20Contract%20Design%20Consultation.pdf>

standard contracts). The SEMC considers this to be necessary given the analysis that shows that in a high wind year there may be an expenditure breach of €40-55m above the cap, but only a €20.5m value of additional consumer benefit. In order to balance this, consistent with the High Level Design, and in response to industry comments the SEM Committee has decided that the revenue floor should be set at a level that ensures annual revenues do not fall below the expected revenues of a low wind year (24% wind capacity factor). The SEM Committee considers that this decision strikes a balance between providing revenue certainty for providers and protecting the consumer from over expenditure.

The SEM Committee has decided to include a revenue cap and floor in the fixed contracts for high availability technology.

The SEM Committee requests that the TSOs consult on the proposed cap and floor as part of the consultation requested by the SEM Committee in section 8.2

The SEM Committee requests the TSOs to outline a timetable for further consultation on the detail of such proposals as soon as possible.

9 MARKET INTERACTION

9.1 Operational SNSP

In principle the SEM Committee wishes to see the close integration of the I-SEM capacity, energy, balancing and DS3 markets, so that market based decisions drive the provision of DS3 System Services. Consultation responses have suggested the merits of using an ex-ante or market determined SNSP to gauge provision of service and application of scalars. The TSOs have acknowledged in their recommendations paper that the day ahead and hour ahead markets in I-SEM will require SNSP estimation to formulate bidding strategies, however their intention is to continue with their proposal to utilise operational SNSP based on the following reasons:

- Stepped scalar allows for uncertainty mitigation
- Operational SNSP allows the best metric to incentive improved provision of services at high levels of SNSP. The TSOs state that the use of ex-ante derived market derived SNSP metrics may allow for a divergence between the estimate and operational actualities. This may provide payments to providers that would not be contributing to system resilience at the time.

The SEM Committee re-iterates its view that linking to market positions is important for the overall efficiency of the market and that ex-ante SNSP positions would allow better integration of all markets, however the SEM Committee notes the TSOs concerns and therefore approves the use of operational SNSP as proposed by the TSOs.

The SEM Committee will review this approach once there is significant operational experience available to the TSOs in terms of I-SEM and DS3 markets and will not instigate changes to the SNSP metric used to determine scalar payments without further industry consultation.

The SEM Committee approves the use of the operational SNSP as proposed by the TSOs.

9.2 Ex-ante SNSP Information Forecast

Notwithstanding the SEM Committee's decision as set out in section 9.1, the SEM Committee is of the view that there is considerable merit to the TSOs providing forecasts of anticipated SNSP earlier than gate closure. Recent investments in control centre technologies under the wider DS3 programme should enable greater visibility of SNSP forecasts. In addition, the SEM Committee considers that in facilitating CACM requirements and I-SEM requirements for future Long Notice Adjustment factors (LNAF) and System Shortfall Imbalance Index (SSII), and in relation to the principles outlined in the Balancing Market Principles Code of Practice Decision Paper¹² that outlines the publication of long term schedules by the TSOs and instigation of the last time to call, there should be as much alignment as possible with the DS3 System services market. In this regard and given the increased requirement for the TSOs' control centres to anticipate in a more detailed manner supply and demand balances

¹² Balancing Market Principles Code of Practice Decision Paper (July 2017):

<https://www.semcommittee.com/sites/semcommittee.com/files/media-files/SEM-17-048%20Balancing%20Market%20Principles%20Code%20of%20Practice%20Decision%20Paper.PDF>

based on day ahead and intraday markets, it is the SEM Committee's view that the TSOs inherently have to make reasonable assumptions of SNSP on an on-going basis. Therefore, the SEM Committee is of the view that the TSOs should ensure that ex-ante SNSP forecasts are provided that would assist market participants to more accurately formulate their bidding strategies.

The SEM Committee therefore directs the TSOs to make publicly available forecasts of anticipated SNSP at least two hours ahead of real time. In addition, the SEM Committee considers there may be merit in providing longer term intra-day and day ahead forecasts in the future and will explore this further with the TSOs.

Reporting on the forecasts of SNSP versus operational SNSP in arrears will be required in the monthly DS3 Expenditure reports submitted to the Regulatory Authorities.

The SEM Committee directs the TSOs to provide forecasts to DS3 System contracted parties on ex-ante SNSP levels, at least two hours ahead of real time. The SEM Committee also commits to exploring the options in terms of providing intra-day and day ahead forecasts of SNSP.

9.3 Market position and physical dispatch position

The SEM Committee appreciates the concerns of industry regarding the TSOs' proposals to delay the implementation of utilising "the higher of the market position or physical dispatch" as required by the High Level Design to determine the available volume provided by a contracted DS3 System Services Unit. The SEM Committee wishes to see this principle embedded in the DS3 System Services settlements, but does recognise there are complexities with this particularly in relation to the development of principles of availability for technology that are not explicitly energy market linked.

Separately a concern has been raised by consultation respondents relating to DS3 System Service payments, and the application of the temporal scarcity scalar, to units that are constrained on by the TSO – i.e. they are predominately out of merit in the energy market, but are constrained on for network reasons and under this principle could receive higher payments for DS3 System Service provision with little incentive to provide an accurate reflection of System Service revenues in their energy market bids. This may lead to over-expenditure on System services and perverse incentives in terms of accurate market bidding. It is important that where possible there is alignment between the I-SEM principles and DS3 System Services processes to ensure the best outcome for consumers. Therefore, the SEM Committee agrees in principle that the temporal scarcity scalar should not apply to units that are constrained on. However, it is noted that there may be practical implications which would need to be considered prior to implementation.

The SEM Committee therefore understands the concerns of market participants and agrees to work with the TSOs to develop the payment rules ahead of I-SEM go-live. The SEM Committee is committed to ensuring that market participants will know the final payment rules ahead of I-SEM go-live and will therefore be in a position to reflect the impact of these rules when formulating their energy bids.

Once the ruleset is finalised, the TSOs recommend that it be applied from 1 June 2018¹³. From this date onwards, the TSOs will seek to track and collate all of the relevant information needed to implement the ruleset. The TSOs will then conduct a re-settlement exercise (accounting for the impact of the market position) that will cover the period back to 1 June 2018 when the settlement system changes have been implemented.

It is recognised that implementing the principle of paying for services based on the higher of a service provider's market position or physical dispatch will drive changes to the TSOs' settlement systems. IT systems will need to be developed and the SEM Committee recognises that this cannot be achieved in a very short timeframe. However, the SEM Committee wishes to ensure that resettlement can be achieved as early as possible, and requests that the TSOs publish frequent updates on the progress of the implementation of resettlement systems once the ruleset has been published. The SEM Committee accepts that a reasonable deadline for the completion of the IT work will be 12 months from June 2018, and encourages the TSOs to explore earlier invoicing dates where this is possible and where information can be robustly verified relating to DS3 System Services provision.

The SEM Committee accepts the TSOs' rationale for the delay of the implementation of the SEM Committee decision on the payment on market position. The SEM Committee wishes to implement this decision as soon as is practical and requests that the Regulatory Authorities work with the TSOs to provide further clarity to industry on the appropriate ruleset that needs to be applied to achieve sensible outcomes in this regard.

¹³ The date chosen is 1 June 2018 as opposed to 23 May 2018 as such a major change to settlement is not feasible to deliver mid-month (settlement is conducted on a calendar month basis).

10 PROCUREMENT TIMELINES

The SEM Committee's Future approach paper issued in March 2017 and the TSOs' DS3 Quarterly update issued in April 2017 ¹⁴ outlined timelines for the procurement of System Services from 2018 onwards. Together with the TSOs recommendations papers the SEM Committee is committing to enabling the procurement of System Services for go-live of tariff based procurement of 11 System service by 1st May 2018, and for the entire 14 system services by 1st September 2018.

As described in Section 4.2 the SEM Committee has not accepted the proposals by the TSOs relating to the two category approach to the contracting of high availability units for a subset of reserve services. Instead the SEM Committee has decided that the TSOs shall instigate a flexible start and end date to such contracts. A diagram outlining the proposed timelines is detailed on the next page.

¹⁴ http://www.eirgridgroup.com/site-files/library/EirGrid/Quarterly_Update_March_2017.pdf

Contract type - SEMC decision	2018								2019	2020	2021	2022	2023	2024	2025	2026
	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Year	Year	Year	Year	Year	Year	Year	Year
Standard Contracts (14 services, non-high-availability technologies)	max 5 year contract starting May 2018 end Apr 2020 - 6 monthly windows for contracting															
Standard Contracts (high-availability technologies, services not covered by fixed contract)	max 5 year contract starting May 2018 ending Apr 2020- 6 monthly windows for contracting															
Fixed Contracts (high-availability technology, subset of services)	Transition period				Flexible go-live					maximum 6 year contract				End date tied to start date of contract		

Contract type - TSO Recommendations	2018								2019	2020	2021	2022	2023	2024	2025	2026	
	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Year	Year	Year	Year	Year	Year	Year	Year	
Non-expenditure risk - 14 services	max 6 year contract starting May 2018 end Apr 2020 - 6 monthly windows for contracting																
Expenditure Risk - existing plant SIR, RRs, RMs, FPFAPR, DRR, SSRP	max 6 year contract starting May 2018 end Apr 2020 - 6 monthly windows for contracting																
Expenditure Risk existing units -FFR, POR, ROR, TOR1&2	Transition period				2 year contracts only Sept 2018-2020- 1 opportunity to contract												
Expenditure Risk - existing and new units FFR, POR,SOR,TOR1&2					Fixed go live					5 year contract							

Figure 6 : SEM Committee and TSOs' Proposed Procurement Timelines

11 NEXT STEPS

The SEM Committee with the publication of this paper, and subject to the requirements outlined within, approves the procurement of DS3 System Services from 2018 onwards. The SEM Committee recognises the importance of ensuring that DS3 System Services procurement is achieved ahead of I-SEM go-live to ensure efficient system operation and the correct market information is available in advance of the introduction of the new energy and balancing market arrangements.

The SEM Committee acknowledges as highlighted throughout this paper that further consultation is required on a number of issues. The Regulatory Authorities will work with the TSOs to finalise timelines surrounding these issues and intends to have further clarity on the timelines of any further consultations made available to industry in the near future.

At a high level the expected next steps are as follows:

- The TSOs will establish the transitional arrangements for high-availability technologies contracting between May –September 2018
- The TSOs will ensure the contract terms and conditions are reflective of this Decision and a future SEM Committee decision on the contractual arrangements in time for the OJEU procurement deadline in November 2017
- The TSOs will consult in early 2018 on the competitive procurement mechanisms for the fixed contracts for high-availability technology, for finalisation by March 2018.
- Competitive procurement contracts and procurement processes are enabled for an OJEU procurement deadline of 30th March 2018
- Market Dispatch ruleset development, consultation and decision to be concluded in advance of I-SEM go live.