

Harmonised Ancillary Services 2010/2011

Explanatory Paper

22nd September 2010



1. EXECUTIVE SUMMARY

As regards the Ancillary Services and rates for the upcoming tariff period running from the 1st October 2010 to the 30th September 2011, the TSOs published a consultation paper¹ outlining a number of proposals. The TSOs received comments from eleven respondents on this consultation paper and having reviewed the responses the TSOs then made a number of recommendations to the RAs based on these comments. The RAs subsequently made the following approvals² based on the TSOs recommendations:

1. The TSOs recommend that the exchange rate of €1/£0.82 is used for the 2010/2011 tariff year. **The RAs have approved this exchange rate for the new tariff year;**
2. The TSOs recommend that the AS rates remain unchanged for the 2010/2011 tariff year. The TSOs indicated in the consultation paper that since the rates in Euro are used as the reference rate, as is consistent with the approach used in the Single Electricity Market (SEM), the rates in GBP may need to change due to the finalised exchange rate. **The RAs have approved that the rates in Euro remain unchanged, however the rates in GBP have changed due to the new exchange rate;**
3. The TSOs recommend that the reserve charge design refinement is implemented for the start of the 2010/2011 tariff year. This will allow service providers to contract for their full reserve capabilities. **The reserve charge design refinement has been approved by the RAs;** and
4. The HAS consultation identified a number of topic which need further investigation and these are summarised in this paper. The TSOs recommend that these topics are discussed with the RAs and that a detailed scope is developed for the second annual review³ for HAS.

The finalised rates will be published in the AS Statement of Payments & Charges and this will be available from respective EirGrid and SONI websites⁴.

1 "Harmonised Ancillary Services; Consultation" 9th July 2010, available at

<http://www.eirgrid.com/operations/ancillaryservices/consultationsworkshops/asconsultation/> and

<http://www.soni.ltd.uk/upload/Harmonised%20Other%20System%20Charges%202010-11%20Consultation.pdf>

2 [SEM-10-064] "AS Rates and OSC for 2010-11 tariff year beginning 1 October 2010" 17th September 2010, available at www.allislandproject.org

3 The second annual review covers the tariff period 1st October 2011 to 30th September 2012

4 "2010/2011 Ancillary Services Statement of Payments & Charges", available at www.EirGrid.com and www.SONI.ltd.uk.

2. INTRODUCTION

The aim of this paper is to summarise the Harmonised Ancillary Services (HAS) rates for the 2010/2011 tariff period, any design refinements from the current methodology and to respond to issues identified by respondents to the HAS Consultation paper⁵.

On the 29th June 2010 the RAs in Ireland and Northern Ireland published an information note to service providers on Harmonised Ancillary Services (HAS) and Other System Charges (OSC)⁶. This information note set out the scope for the first annual review for HAS and separately for the OSC.

On the 9th July 2010 the TSOs in Ireland and Northern Ireland published separate consultation papers for HAS and OSC.

Based on the comments received from the consultation paper the TSOs recommended to the RAs to keep the current AS rates for reserve, reactive power and black start unchanged for the 2010/2011 tariff period, which runs from the 1st October 2010 to the 30th September 2011, other than those which resulted from changes in the exchange rate. This proposal was made on the basis that the current arrangements have only recently been implemented, that the current rates are still considered to be valid and that a period of stability is required. Based on correspondence between the TSOs and RAs an updated forward Euro/GBP exchange rate was provided by the TSOs. This recommendation was approved by the RAs in their letter⁷ to the TSOs.

The TSOs recommended that a design refinement should be made to the current HAS arrangements relating to the reserve charge and that this should be implemented from the start of the new tariff period. The TSOs believed that the current design discourages generators from providing more than a minimum amount of reserve. The TSOs would like to see generators contract for their full capabilities, while maintaining an appropriate incentive against the potentially serious impact of a shortfall in reserve provision. This recommendation was approved by the RAs in their letter to the TSOs.

The TSOs also proposed introducing harmonised arrangements to facilitate the provision of 'synchronous compensation' service from capable generators and proposed implementing this for the 2011/2012 tariff period. Based on comments received from the consultation paper the TSOs will, in consultation with the RAs, consider whether it would be beneficial to enter into an interim arrangement for the provision of the service from potential service providers pending implementation of harmonised arrangements in 2011/12.

⁵ "Harmonised Ancillary Services; Consultation" 9th July 2010, available at

<http://www.eirgrid.com/operations/ancillaryservices/consultationsworkshops/asconsultation/> and

<http://www.soni.ltd.uk/upload/Harmonised%20Other%20System%20Charges%202010-11%20Consultation.pdf>

⁶ [SEM-10-42] "Harmonised All-Island Ancillary Services Rates and Other System Charges; Information Note to Service Providers" 29th June 2010, available at www.allislandproject.org

⁷ [SEM-10-064] "AS Rates and OSC for 2010-11 tariff year beginning 1 October 2010" 17th September 2010, available at www.allislandproject.org

3. ANCILLARY SERVICES CONSULTATION

3.1. PROPOSED EXCHANGE RATE

3.1.1. Introduction

The proposed exchange rate used in the HAS consultation paper uses the same methodology as that used in the previous TSOs' HAS & OSC rates consultation paper⁸ and that which is used in the annual SEM Capacity Pot calculation⁹.

The rate proposed in the consultation paper for the 2010/2011 tariff period was €1/£0.86 and the TSOs proposed that this may be amended for the final published rates to reflect the exchange rate calculated at that time. The exchange rate used for the 2009/2010 tariff period was €1/£0.85.

3.1.2. Respondents Comments

Six respondents commented on the proposed exchange rate, with the majority of these supporting the TSOs' proposal. Two respondents commented that a more detailed review should be carried out for the 2011/2012 tariff year. One of these respondents felt that the generators were accepting and suffering in their finances an unnecessary risk with the current methodology and cited the CPM Medium Term Review¹⁰ as an example of this. Finally one respondent commented that the rates should be set as close as possible to the tariff year and consideration should be given to utilising daily rates.

The TSOs note that the majority of respondents were satisfied that the current methodology for calculating the exchange rate remains in place for the 2010/2011 tariff year. One of the generators in Northern Ireland feels that the fixed nature of the exchange rate exposes them to a higher risk, while another generator in Northern Ireland has requested that the TSOs carry out a comprehensive review of the methodology during the HAS review.

3.1.3. TSOs' Recommendation

The TSOs note in the consultation paper that a review of the forward exchange rate would be made closer to the final published rates and that the rates may be amended to reflect any new exchange rate. The exchange rate which was used in the consultation paper was €1 / £0.86 and this was the forward exchange rate for the 2010/2011 tariff year calculated in May 2010. The TSOs reviewed the 12 month forward exchange rate on the 31 August 2010 and this was calculated as €1/£0.82. The TSOs recommended to the RAs that this exchange rate is used for the 2010/2011 tariff year due to its close proximity to the start of the new tariff year. This rate also closely aligned to the rate proposed as part of the CPM Medium Term Review for the 2011 calendar year.

The TSOs will, in consultation with the RAs, consider including a review of the exchange rate methodology in the scope for the 2011/2012 HAS consultation process.

8 [AIP-SEM-09-062] "Harmonised Ancillary Services & Other System Charges; Rates Consultation" 8th June 2009

9 [SEM-09-103] "Trading & Settlement Code Annual Parameters; Decision Paper" 4th November 2009

10 [SEM-10-046] "CPM Medium Term Review" 23rd July 2010

3.1.4. RAs' Decision

The RAs have approved the exchange rate of €1 / £0.82 for the 2010/2011 tariff year for the purposes of HAS.

3.2. PROPOSED HARMONISED AS RATES

3.2.1. Introduction

At the time of writing the consultation paper the harmonised ancillary service arrangements had only been in place for less than five months. The TSOs felt that the current rates were still appropriate and proposed that the harmonised AS rates should remain the same for the 2010/2011 tariff period as those that were used for the 2009/2010 tariff period.

While the proposed AS rates remained unchanged for the 2010/2011 tariff period, the proposed exchange rate changed. The rates in Euro are used as the reference rate, as is consistent with the approach used in the Single Electricity Market (SEM), therefore the rates in GBP changed to reflect this change in the exchange rate.

3.2.2. Respondents Comments

Seven respondents commented on this section. Three respondents felt that a more detailed review of the rates should have been carried out for the 2010/2011 tariff year and two of these cite that the proposed rates are contrary to the Ancillary Services Design Guidelines¹¹ which states that "Service providers should be able to reasonably predict their annual income from providing AS". Three respondents also believed that due to the limited experience of the harmonised arrangements to date that the rates should remain unchanged for the 2010/2011 tariff year. The TSOs believe that given the short period for which the Harmonised Ancillary Service arrangements have been in place that it is not appropriate to review these at this time but that a review of the rates for the 2011/12 period should be considered as part of developing the scope for the review for the 2011/2012 tariff year.

One respondent felt that with the increase in the largest infeed of the system to 445 MW that this should be reflected in the rates for the 2010/2011 tariff year. As stated in the Harmonised Ancillary Services and Other System Charges Information Note to Service Providers¹² there will be an increased level of services required in the 2010/2011 tariff year due to the increase in the largest infeed on the system. This is however reflected in the AS Allowance, or 'Pot', and not the AS rates. The TSOs sought an increased AS Allowance to reflect this increased level of service which was expected.

3.2.3. TSOs' Recommendation

The TSOs recommended to the RAs that the AS rates remain unchanged for the 2010/2011 tariff year. Since the rates in Euro are used as the reference rate, as is consistent with the approach used in the Single Electricity Market (SEM), the rates in GBP may change due to the final exchange rate which was approved by the RAs.

The TSOs will, in consultation with the RAs, consider including a review of the AS rates in the scope for the 2011/2012 HAS consultation process.

¹¹ [SEM-08-1287]

¹² [SEM-10-42] "Harmonised All-Island Ancillary Services Rates and Other System Charges; Information Note to Service Providers" 29th June 2010, available at www.allislandproject.org

3.2.4. RAs' Decision

The RAs have approved that the current HAS rates remain unchanged, apart from those which are effected by the approved exchange rate of €1 / £0.82. The rates in Euro are used as the reference rate, as is consistent with the approach used in the Single Electricity Market (SEM), therefore the rates in GBP will change to reflect the new exchange rate. The final rates for the 2010/2011 tariff year are shown in Table 1.

Service	Categories		
Reserve	Primary Operating Reserve	€ 2.22 / MWh	£ 1.82 / MWh
	Secondary Operating Reserve	€ 2.13 / MWh	£ 1.75 / MWh
	Tertiary Operating Reserve 1	€ 1.76 / MWh	£ 1.44 / MWh
	Tertiary Operating Reserve 2	€ 0.88 / MWh	£ 0.72 / MWh
	Replacement Reserve (Synchronised)	€ 0.20 / MWh	£ 0.16 / MWh
	Replacement Reserve (De-Synchronised)	€ 0.51 / MWh	£ 0.42 / MWh
	Primary Operating Reserve Charge Period	30 days	
	Secondary Operating Reserve Charge Period	30 days	
	Tertiary Operating Reserve 1 Charge Period	30 days	
	Event Frequency Threshold	49.5 Hz	
	Reserve MW Tolerance	1 MW	
	Reserve Percentage Tolerance	10%	
Reactive Power	Reactive Power Lagging	€ 0.13 / MVarh	£ 0.11 / MVarh
	Reactive Power Leading	€ 0.13 / MVarh	£ 0.11 / MVarh
Black Start	Black Start (Aghada)	€ 64.71 / h	n/a
	Black Start (Ardnacrusha)	€ 22.84 / h	
	Black Start (Erne)	€ 22.04 / h	
	Black Start (Lee)	€ 9.82 / h	
	Black Start (Liffey)	€ 8.02 / h	
	Black Start (Turlough Hill)	€ 81.63 / h	
	Black Start Charge Period (Partial Fail)	30 days	
	Black Start Charge Period (Total Fail)	90 days	

Table 1: HAS rates for 2010/2011 tariff year

The final rates in Table 1 are being published in parallel with this explanatory paper in the AS Statement of Payments & Charges¹³.

¹³ The AS Statement of Payments & Charges for the 2010/2011 tariff year can be found on the TSOs website at www.eirgrid.com/operations/ancillaryservices/asothersystemcharges/ and www.soni.ltd.uk/chargingstatements.asp

3.3. RESERVE CHARGES

3.3.1. Introduction

Under HAS, service providers are paid for the provision of six categories of reserve and are exposed to charges for the first three categories of reserve – Primary, Secondary and Tertiary 1 operating reserves. These charges are calculated based on the level of under provision and the hourly payment rate.

Service providers have highlighted a concern with this reserve charge design and the TSOs believe that the current design may have the effect of discouraging generators from providing more than a minimum amount of reserve. The TSOs wish to see generators contract for their full reserve capabilities while maintaining an appropriate incentive against the potentially serious impact of a shortfall in reserve provision. The TSOs are therefore proposing a refinement to the HAS design for the reserve charge whereby, considering each category separately, the maximum reserve charge which a service provider is exposed to is capped at the maximum of its reserve payments each month for that category.

The TSOs proposed that this design refinement is implemented for the 1st October 2010.

3.3.2. Respondents Comments

Seven responses were received on this section. All of these responses were in support of the design refinement. The TSOs note that all respondents were in support of the design refinement to the reserve charge and feel that this will allow generators to contract for their full reserve capabilities.

One respondent sought clarification from the TSOs on whether the HAS Agreement would need to be amended to incorporate this design refinement. The TSOs are currently investigating how this design refinement will be implemented in the HAS Agreement to ensure that it is legally binding between all parties.

One respondent also sought clarification on how they could amend contracted reserve characteristics. The TSOs actively engage with service providers on HAS Agreement values and these can be revised once proof of these capabilities are established. The TSOs have no issues contracting for these higher capabilities as they have the ultimate aim of increasing security of supply and reducing system costs.

3.3.3. TSOs' Recommendation

The TSOs recommended that the reserve charge design refinement is implemented for the start of the 2010/2011 tariff year. This will allow service providers to contract for their full reserve capabilities.

The TSOs are currently investigating how this design refinement will be implemented in the HAS Agreement to ensure that it is legally binding between all parties for the start of the new tariff year.

The TSOs will, in consultation with the RAs, consider including a review of the HAS Agreement in the scope for the 2011/2012 HAS consultation process.

3.3.4. RAs' Decision

The RAs have approved this design refinement. This will be implemented from the 1 October 2010. Service providers wishing to revise contracted values should contact their respective TSO once proof of the capability has been proved. The TSOs will also contact the service providers in relation to any HAS Agreement changes.

3.4. SYNCHRONOUS COMPENSATION

3.4.1. Introduction

The TSOs are proposing to put in place arrangements to allow this Synchronous Compensation service to be open to all potential providers on the island through a new service schedule in the HAS agreement. It is proposed that the design would reimburse the following costs incurred by the service provider based on the current arrangements in Northern Ireland:

1. Energy costs (energy imported to run generator in sync compensation mode); and
2. A payment for reactive power capability range in line with the relevant AS Reactive Power rates.

To carry out a full technical appraisal for the harmonised synchronous compensation design could take some time and this proposal was included to obtain views on extending the existing arrangements and on whether these arrangements appropriately remunerate the service providers. The TSOs proposed that this design refinement should be implemented for the start of the 2011/2012 tariff period, to prevent the introduction of the design refinement intra tariff year.

3.4.2. Respondents Comments

Eight respondents commented on this section. Seven of these were supportive of the design in principle, however they all commented that a more detailed review of the costs need to be carried out. These seven respondents feel that the proposed high level costs, which were included in the paper, would not incentivise generators to provide this service and a number of additional costs should be included. One respondent commented that they would need more information on this new service before they commented in detail. The TSOs note that the respondents are all supportive of the idea in principle. The TSOs will talk to interested parties over the next year and establish what costs are associated with generators providing this service. This should then be included as part of scope for the more detailed review for the 2011/2012 tariff year.

One of the respondents was disappointed that a harmonised arrangement for synchronous compensation would not be implemented by the TSOs for the 2010/2011 tariff year and requested that a form of bilateral arrangement is offered for this tariff year.

3.4.3. TSOs' Recommendation

The TSOs note the support for the introduction of harmonised arrangements for a synchronous compensation service. The TSOs will work with industry to develop the arrangements for this service over the coming year with a view to implementing the arrangements in the 2011/12 tariff year.

The TSOs will, in consultation with the RAs, also consider whether it would be beneficial to enter into an interim arrangement for the provision of the service from potential service where the ability to operate in synchronous compensation mode currently exists but is not contracted for pending implementation of harmonised arrangements in 2011/12.

3.4.4. RAs' Decision

The RAs have approved the approach outlined in this section.

4. GENERAL COMMENTS

In addition to receiving comments on the sections of the paper which the TSOs were consulting on further comments were received on more general issues with HAS. These are summarised in the following sections.

4.1. Further Information

Two respondents requested that the TSOs publish information including the extent of payments for each category of ancillary services, the current HAS pot size in each jurisdiction, how any surplus/deficit is managed and on the levels of reserve and reactive power which has been contracted with each service provider. The TSOs will consider options for reporting on HAS outturn while maintaining the confidentiality associated with the HAS agreements.

4.2. New Services

Two respondents noted that the TSOs should consider procuring short term reserve products to allow changes to contracted reserve. The recommended design refinement to the reserve charge outlined in section 3.3 will incentivise generators to contract to their full capabilities. The TSOs actively engage with service providers on HAS Agreement values and these can be revised once proof of these capabilities are established.

One respondent requested that the TSOs consider providing increased rates to specific plants for the provision of specific AS on a long term basis at the cost of foregoing energy rents from the market. The TSOs do not fully understand the basis of this request, however the TSOs will discuss this with the respondent and in consultation with the RAs, will consider including a review of this issue in the scope for the 2011/2012 HAS consultation process.

A comment was received which stated that new AS should incentivise the introduction of technologies which complement and add to the utilisation of renewables without necessarily increasing the amount of capacity on the system. This would seek to develop a program of increased utilisation and optimisation of non synchronous generation with an optimum amount of synchronous generation to support it and complement other system assets, as opposed to a policy of having an over capacity of synchronous generation on the system to support wind at an increased system cost. The TSOs will, in consultation with the RAs, consider including a review of this new AS, in addition to other new AS, in the scope for the 2011/2012 HAS consultation process.

A comment was received that the TSOs should consider providing a payment for the successful provision of reserve during a frequency event. Currently payments are made to service providers for reserve based on their declared availability. Charges are only levied if there is a shortfall in the expected reserve during a frequency event. The TSOs feel that this is appropriate since payments are already being made for reserve availability and an additional payment should not be made based on whether they achieve this declared availability.

One response suggested that the TSOs should review that there was an appropriate amount of reserve on the system after an event. The TSOs currently carry out analysis after every

frequency event to determine the expected and achieved response of every unit. Based on this charges may be levied on underperforming service providers.

One respondent suggested that the TSO consults on the event frequency threshold and tolerances. The TSOs feel that the current threshold and tolerances are sufficient and adequately incentivise service providers to provide their declared capabilities during frequency events. In addition the TSOs have recommended in section 3.3 a design refinement to the reserve charge which will cap the charges for each category of reserve in the event that they exceed payments. The TSOs will however, in consultation with the RAs, consider including a review of this in the scope for the 2011/2012 HAS consultation process.

One respondent commented that the current AS methodology should be revised so that payments are made when a unit is available to run and not when they are synchronised and they also believed that generators should be made whole with regards to ancillary services. The TSOs will, in consultation with the RAs, consider including a review of this issue in the scope for the 2011/2012 HAS consultation process.

It is worth noting that any new AS which will be developed over the coming years will be consulted on with the industry and will be subject to RA approval.

4.3. Capacity Pot and AS Allowance

One respondent commented that they had significant reservations in relation to any potential movement of value between the capacity pot and AS allowance as potential new AS are introduced in the medium and longer term. Another respondent agreed with the requirement to develop a single all-island pot for AS. The TSOs will, in consultation with the RAs, consider including a review of this in the scope for the 2011/2012 HAS consultation process.

4.4. Incentive Scheme

One respondent noted that in a previous consultation, the TSOs referred to the introduction of an incentive scheme with respect to ancillary service obligations and noted that no further progress has been made on this proposal to-date. They question why no further developments have been made in this area and on whether the TSOs and the RAs will consult on the scope and detail of this incentive scheme in the near future.

While there are currently no such financial incentive mechanisms currently in place for the delivery and management of Ancillary Services, the TSOs are happy to work with the RAs in this regard through their respective revenue determination processes.

4.5. Competitive Ancillary Services Market

Two respondents noted that in order to deliver AS at cost reflective and competitive prices that the TSOs should investigate the possibility of establishing a competitive market and one comment cites that the EU recently suggested that regional markets should be in place by 2014.

The likely form of future AS arrangements (such as market or regulatory based arrangements) should be considered as part of developing the scope for the 2011/2012 HAS review in consultation with the RAs.

4.6. Grid Code

Two respondents noted issues with the Grid Code. One respondent noted issues with discrepancies between the Ireland and Northern Ireland Grid Codes and that replacement reserve is not accounted for in the Northern Ireland Grid Code. The TSOs would like to note that the Ireland Grid Code currently does not have any requirements for replacement reserve but that service providers who can provide this service are offered HAS Agreements for this.

Another respondent was concerned with the length of time it is taking to commence the OC11 Grid Code review. The TSOs would like to note that arrangements are currently underway to start this work in September.

4.7. HAS Agreement

Three respondents commented that windfarms who can offer reactive power should be offered HAS Agreements and that any issues with the HAS Agreement should be resolved to allow windfarms to enter into contracts.

It should be noted that there is a standard HAS Agreement in place that is open to all potential service providers. The TSOs note the issues raised by some potential service providers and the TSOs are actively working to address the validity of the issues identified to date and to resolve any issues in a timely manner to allow eligible service providers to enter into contracts.

4.8. Black Start

Three respondents commented on the existing Black Start arrangements in Northern Ireland. One respondent commented that generators in Northern Ireland are not receiving payments from black start service because the contract between the generators and the TSO required in the paper SEM-10-001 has not been signed. A second respondent stated that despite a decision by the regulators that the generators in Northern Ireland should be entitled to payments for the provision of black start services there has been no development of the contractual arrangements for these services. A third respondent believes that the payments should be back dated to 1st February 2010 and was also seeking clarity on how black start testing costs will be recovered.

With regard to testing SONI is currently carrying out a review of black start arrangements in Northern Ireland. With regard to the elements of black start payments which relate to capital and maintenance costs, generators who believe that these have not already been fully recovered are free to approach SONI with their proposals.

4.9. Reactive Power

Two respondents commented that there are issues with the current methodology for the payment of reactive power. They state that at lower loads more reactive power can be provided, whereas they are only contracted for their output at their maximum load. At their maximum load lower levels of reactive power can be provided.

The TSOs acknowledge that the reactive capability of conventional plant increases at lower output levels. The payment for reactive power at full output does not preclude reactive usage at lower outputs it is merely a payment mechanism. The payment mechanism could have been set at zero, the minimum or the maximum output all of which would set a payment based on the machines complete range of capability. The original rate determination was set

based on the declaration at maximum output. If a lower output value was used implying greater reactive output capability a lower rate would have been set.