Harmonised Ancillary Services Consultation

Tariff Year
1st October 2011 to 30th September 2012

18th April 2011

EXECUTIVE SUMMARY

EirGrid in Ireland and SONI in Northern Ireland, are charged under their respective TSO licenses, with providing a secure, reliable and efficient electricity system and, in that context, for ensuring the availability of all necessary Ancillary Services (AS). Ancillary Services are required to ensure the secure operation of the transmission system.

The TSOs, according to their licence conditions[1] must procure Ancillary Services. These services have been harmonised between Ireland and Northern Ireland since Ancillary Service Harmonisation "Go-live" on the 1st February 2010. These payments & charges are specified annually in the Ancillary Services Statement of Payments and Charges. The arrangements are defined in both jurisdictions through the Regulatory Authority (RA) decision papers, the Statements of Payments and Charges and TSO license conditions. These arrangements are secured through direct contracts between the TSOs and the service providers, through the Harmonised Ancillary Service agreements.

For the upcoming tariff period running from the 1st October 2011 to the 30th September 2012, the TSOs are proposing to maintain the current appoved schedule of services and to introduce a number of new AS services which are deemed required given the significant increase in Dispatch Balancing Costs incurred during this existing tariff year. These new services cannot be provided by all units currently connected and rather they are specific to certain generating units. These new services include a reduced time to synchronisation, flexible multimode operation, lower minimum generation and synchronous compensation.

The harmonised rates for the 2011/2012 tariff year for the existing services are also provided in this paper. The movement to a single AS allowance has been addressed in this paper and also options for changing the mechanism for the setting of the exchange rate for the next tariff year. Finally the TSOs are proposing that a report is published on a monthly basis which decribes the outturn for each category of reserve, reactive power and black start for a particular month.

Following on from the Facilitation of Renewables Studies in November 2010 the SEM Committee formally requested the TSOs to provide a considered position on the implications that this study had on the secure and efficient operation of the power system in the coming years. This position is currently being formulated and will contain an objective anlaysis of the current and future performance needs of the systems as well as a comprehensive plan of actions to systematically address the challenges involved. An industry presentation is expected to be made in April 2011.

1 On June 20th 2001, the Commission for Energy Regulation (CER) issued a Transmission System Operator (TSO) Licence to EirGrid plc pursuant to Section 14 (1) (e) of the Electricity Regulation Act, 1999, as inserted by Regulation 32 of Statutory Instrument (SI) No. 445 of 2000 - European Communities (Internal Market in Electricity) Regulations 2001

On July 3rd 2007, The Department of Enterprise, Trade and Investment, in exercise of the powers conferred by Article 10(1)(b) of the Electricity (Northern Ireland) Order 1992 granted SONI Limited a TSO licence.

ABBREVIATIONS

ASP	Ancillary Service Provider
AS	Ancillary Service
HAS	Harmonised Ancillary Services
TSO	Transmission System Operator
SONI	System Operator Northern Ireland
RA	Regulatory Authority
SEM	Single Electicity Market
TOD	Technical Offer Data

Contents

1. INTRODUCTION

The purpose of this consultation paper is to obtain views on the TSOs proposed new harmonised all-island Ancillary Services (AS) and the associated rates for both new and existing services for the tariff year 1st October 2011 to 30th September 2012. The RAs' January 2010 Decision paper[2] requires that the TSOs consult annually on any future AS or rates.

In managing the transmission systems, the TSOs must be able to deal with unexpected changes of generation capacity, interconnector flows or system demand. This is accomplished by maintaining a prudent level of operating margin. The operating margin is the amount of reserve available (provided by additional generation, interconnectors or demand reduction measures) above that required to meet the expected power system demand.

The level of operating margin required for the island is set jointly by the TSOs. Critical factors used to determine the required reserve quantitiies include the largest in-feed on the island, variability in load and generation in the operational timeframe, generation reliability and the reliability of provision by service providers of reserve. Service providers are contracted to provide reserve through the AS agreements and are paid for the different categories of reserve (Primary Operating Reserve, Secondary Operating Reserve, Tertiary Operating Reserve 1, Tertiary Operating Reserve 2, Synchronised Replacement Reserve and De-synchronised Replacement Reserve) based on their declared availability when they are generating over a certain MW value. If during a frequency event the service provider does not provide the expected level of Primary Operating Reserve, Secondary Operating Reserve or Tertiary 1 Operating Reserve the TSOs levy a charge on the service provider for the reserve shortfall.

Similarly for reactive power, the TSOs must maintain a voltage balance across the transmission systems in order to maintain a secure and stable power system and to avoid damage to connected equipment. To maintain the balance, the appropriate level of reactive power (leading and lagging) is required at appropriate locations in the transmission system. The required level of reactive power varies in the operational timeframe. Reactive power is mainly provided by generator units and transmission assets. Generally, reactive power must be provided close to the location where it is needed. Overall, therefore, the requirement is for the flexible provision of reactive power at appropriate points across the transmission systems. Service providers are contracted to provide reactive power through the AS Agreement and are paid for leading and lagging reactive power based on their declared reactive power availability when they are synchronised to the transmission system.

Black start is the ability of a generating unit to start up and provide electricity to the transmission system without an external power supply. Certain service providers are contracted to provide black start services through the AS Agreements in Ireland and Connection Agreements in Northern Ireland. Depending on the station they are paid an hourly availability rate to recover costs associated with capital, maintenance, TSO-initiated testing and usage costs for the provision of this service. In the event that a station fails a

2 [SEM-10-001]; Harmonised All-Island Ancillary Services Rates and Other System Charges; Decision Paper; 4 Jan 2010

TSO-initiated black start test, then the service provider will receive a charge. In late 2010 EirGrid identified a need for a new Black Start source in Ireland due to the long term outage of an existing black start service provider. EirGrid tendered[3] for the short term provision of this service and a 12 month contract was awarded to Cushaling Power Ltd for ED3 and ED5 in March 2011.

The Harmonised Ancillary Services (HAS) went live on the 1st February 2010. Details on previous consultations and on the RA decision papers can be found on the TSOs[4] and All-Island Project[5] websites.

1.1 AS DEVELOPMENTS

Following on from the Facilitation of Renewables Studies in November 2010 the SEM Committee formally requested the TSOs to provide a considered position on the implications that this study had on the secure and efficient operation of the power system in the coming years. This response is currently being formulated and will contain an objective anlaysis of the current and future performance needs of the systems as well as a comprehensive plan of actions to systematically address the challenges involved. In particular the needs of the power system will change in the coming years which will drive the need for a more specific set of performance requirements. The identification of these system needs leading to the the setting of appropriate performance standards and incentives will be a key outcome of this response. This position will recommend an industry review of these needs and the appropriate way to incentivise. This will have significant implications for the scale, design and importance of Ancillary Service payments in the medium to long term. The reponse is expected to be with the regulatory authorities in April and the TSOs will present the key findings of this to the industry shortly after this date.

3 ENQEIR237 – Black Start Provision in the Eastern Region

4 www.eirgrid.com and www.soni.ltd.uk

5 www.allislandproject.org

1.2 INSTRUCTION FOR RESPONSE

Respondents to this consultation paper are kindly requested to provide responses, views and comments on the following sections:

Section #	Proposal
2.2	New Services
2.2.1	Reduced Time To Synchronise
2.2.2	Flexible Multimode Operation
2.2.3	Lower Minimum Generation
2.2.4	Synchronous Compensation
3.2	Proposed Exchange Rate
3.3	Proposed Harmonised Rates
4.1	Single AS Allowance
4.2	AS Reporting

Responses should be sent to:

David.Carroll@EirGrid.com and Vivienne.Price@SONI.ltd.uk by Friday, 27th May 2011.

It would be helpful if comments were aligned with the sections and sub-sections of this consultation document. It would also be helpful if responses were not confidential. If confidentiality is required, this should be made clear in the response. Please note that, in any event, all responses will be shared with the RAs.

2 AS SERVICES

This section describes the existing AS arrangements and also describes some new services which are intended to introduce additional operational flexibility and overall system benefits.

2.1 EXISTING AS SERVICES

The TSOs, taking into account our respective statutory obligations and licence conditions[6], are continuously reviewing system services to ensure that they deliver efficiency, reliability and value for money to the end user. The TSOs are proposing to continue the AS services which have been in place.

6 On June 20th 2001, the Commission for Energy Regulation (CER) issued a Transmission System Operator (TSO) Licence to EirGrid plc pursuant to Section 14 (1) (e) of the Electricity Regulation Act, 1999, as inserted by Regulation 32 of Statutory Instrument (SI) No. 445 of 2000 - European Communities (Internal Market in Electricity) Regulations 2001

On July 3rd 2007, The Department of Enterprise, Trade and Investment, in exercise of the powers conferred by Article 10(1)(b) of the Electricity (Northern Ireland) Order 1992 granted SONI Limited a TSO licence.

2.2 NEW AS SERVICES

In the 2010/2011 HAS consultation paper[7] the TSOs previously identified potential future AS services that would be needed to ensure the secure, reliable and efficient operation of the transmission system. The TSOs are currently working on the future vision and development of AS taking into account the changing portfolio of generation on the island and the increase in variable generation. A number of additional services which have been raised in previous consulations and/or by participants would form part of this review both in terms of the appropriateness of the service and the cost to the end consumer. An industry presentation is expected to be made in the next few months.

In late 2010, a number of events accelerated the need for these new services identified by the TSOs in previous consultation papers. These events led to an significant increase in Dispatch Balancing or 'Constraint' costs. The TSOs' reviewed this situation and in consultation with the RAs, it was decided to explore a number of short term AS services which would be implemented for the 2010/2011 tariff year. It was hoped that the new services would offer improvements to the operational flexibility of the power system and mitigate high constraint costs. The TSOs also endeavoured to include these services in the 2011/2012 tariff year consultation paper, with a view to implementing them as harmonised services for the 2011/2012 tariff year.

In November 2010, the TSOs invited all existing AS Service Providers to discuss their plant capabilities with regards to the following services:

1. Reduced Time to Synchronisation from Instruction (also referred to as 'warming');
2. Flexible multimode operation of CCGTs; and
3. Lower minimum generation with/with-out services.

The AS service providers were also invited to provide a description of other services which their plant were capable of providing. In these discussions the TSOs informed the service providers of a number of important criteria surrounding the contracting of these services as follows:

- The services would be contracted on a unit specific basis i.e. not all units which provide existing AS services will qualify;
- The services must provide an overall system benefit;
- The services must be value for money for the consumer;
- The services must be delivered immediately or within a few months;
- The services will be paid for based on their utilisation and will not be availability based payments; and
- The TSOs will refine the services after experienced gained from operating these services. This will be presented in the 2012/2013 consultation paper.

These discussions with the service providers were used to form the basis of the initial design and remuneration of these services for the 2011/2012 tariff year. These services are still in

7 Harmonised Ancillary Service 2010/2011; Consultation Paper; 9th July 2010

discussion stage with service providers. The TSOs are committed to developing these services as part of the HAS arrangements for the 2011/2012 tariff year albeit these services will only apply in practice to certain qualified units and only if there is a proven cost/benefit to the end consumer.

2.2.1 REDUCED TIME TO SYNCHRONISE

Time to Synchronise (from instruction) sets out the minimum notification times which the TSOs must give a generating unit to synchronise to the transmission system, depending on its warmth state. Typical Time to Synchronise (from instruction) values are as follows:

- Hot: 3 hours
- Warm: 8 hours
- Cold: 12 hours

Operationally it would be beneficial to reduce this timeframe as much as technically possible in order to have greater flexibility, to reduce the potential of carrying unnecessary generation and in order to reduce costs. Currently certain units have long notification times and thus must be dispatched in advance of real time in ancipation of wind, demand and interconnector changes. This leads to higher costs on the system. As forecasting errors reduce closer to real time the shorter notification time allows a more accurate unit committient with the a resulting decrease in constraints costs.

Many generating units have the technical capability to have a lower Time to Synchronise than required by the Grid Code; however this is currently not incentivised. The TSOs propose that the incentive to reduce the Time to Synchronisation should be based on an improvement from the generating units Grid Code minimum requirement. Examples of reducing the Time to Synchronise may include maintaining vacuum, maintaining auxilaries or keeping the boiler warm.

The following are the key principles behind the service:

- The AS Agreement will include the following generating unit specific values:
  - Time to Synchronise (from Instruction) improvement from Grid Code minimum requirement;
  - Whether the unit can reduce its Time to Synchronisation when off load, only when coming off load or both;
  - Notification required before reduced Time to Synchronise is available after receipt of dispatch instruction; and,
  - Maximum duration the unit can deliver this service before synchronisation is required.
- The service will be paid only when utilised and will not be based on the availability of the service; and
- The service is called by issuing a dispatch instruction to the service provider.

The TSOs propose that the remuneration for this service is on a unit specific basis This rate would be included in the AS Agreement and it would be intended that this would cover the incremental costs incurred by the generating unit in providing this service. In addition to the incremental cost the TSOs would propose an incentive payment in the form of a percentage of the final payment or as a fixed cost, depending on the final technical details and costs contracted with the generating unit.

The TSOs propose that after having gained experience with the service that a harmonised design and rate will be developed and that this would be consultated on as part of the 2012/2013 consultation process.

In the event that a unit is dispatched to provide this service, is requested to synchronise and subsequenctly fails to synchronise payment will not be made for the generating unit offering the reduced time to synchrionise for this event. The generating unit will additionally be issued a failure to synchronise dispatch instruction and will not be paid a start up cost.

2.2.2 FLEXIBLE MULTIMODE OPERATION

There are a number of Combined Cycle Gas Turbine (CCGT) generating units on the island which have the technical capability of operating in Open Cycle Gas Turbine (OCGT) mode. Operating in CCGT mode is much more efficient compared with operating in OCGT mode as the waste heat from the gas turbine is passed through a heat exchanger and used to produce steam, which in turn is used to generate additional energy. However, CCGTs typically offer less operational flexibility than an OCGT, especially when required to respond quickly to changes in system events at short notice. The TSOs consider it prudent to have the flexibility to request a unit to switch mode where there is a system benefit to do so.

Service providers whose units can offer this multimode operation typically bid the unit into the market as a CCGT due to the better efficiencies of the unit in this mode, however in the operational (i.e. within day) timeframe it may be more beneficial to operate the unit in OCGT mode, in order to help ensure security and reliability of supply. In SEM the generating unit also has the ability to submit multiple Technical Offer Data (TOD) sets to reflect their different modes of operation.

The TSOs propose that, where applicable to a generating unit, CCGTs can be contracted to operate in OCGT mode within day. The key principles of the service are as follows:

- Generating units contract with the TSOs the notice time required to change configuration from CCGT to OCGT and vice-versa;
- Generating units must contract with the TSOs a TOD set to reflect their operating characteristics in OCGT mode;
- Generating units submit their COD for operation in OCGT mode to the TSOs on D-1 for Trading Day D, in line with the principles of the Bidding Code of Practice;
- As part of the OCGT COD submission the generating unit must also submit any additional maintenance costs which they will incur whilst operating in OCGT mode; and
- The TSOs may dispatch generating unit to operate in OCGT mode.

The TSOs will then, through this new AS service remunerate the provider for the incremental costs such as fuel costs and associated maintenance costs incurred by the generating unit through operating in OCGT mode.

An incentive payment will be made by the TSOs in addition to the generating units incremental costs. There are two options for this incentive which are in the form of a percentage of the final payment or as a fixed cost each time this service is dispatched, , depending on the final technical details and costs contracted with the generating unit.

The TSOs propose that after having gained experience with the service that a harmonised design and rate will be developed and that this would be consultated on as part of the 2012/2013 consultation process.

In the event that a unit is dispatched to provide this service and subsequenctly fails to respond as expected then payment will not be made for the generating unit.

It should also be noted that this service is a within day arrangement and does not affect market schedule.

2.2.3 LOWER MINIMUM GENERATION

The Grid Codes define minimum generation as the minimum MW output which a generating unit can generate continuously. The TSOs can allow a generating unit to declare below the Grid Code requirement subject to a successful test of the unit operating at this level and the continued provision of operating reserve where possible. Subject to these tests, a revision to the AS agreement would then be made to reflect this improved capability. The unit would also be allowed to declare this improvement in capability.

The TSOs consider that an improvement to the lower declared minimum generation has the following benefits to the system:

- Allows the TSO to dispatch to the lower value rather than de-synchronise the unit;
- Mitigates the risk of the unit failing to synchronise when it is required at a later date; and,
- Keeps the unit in a hot state which allows it ramp up quicker than if it was to be synchronised in a cold or warm state.

Overall there is an expected reduction in Dispatch Balancing Costs by not having to pay for extra start costs or the additional cost of re-dispatching units due to a failure to synchronise. In the demand scenario of night valleys with high wind, it is likely that units will be de-synchronised rather than kept on load. The flexibility of units to reduce to lower level than its Grid Code requirement may reduce the need to ‘two-shift’ units.

Currently 38 units have a declared minimum generation which is lower than their Grid Code requirement of which 26 provide reserve at these levels. Units which have a declared minimum generation lower than their Grid Code compliant figure can have a more advantageous market position as the units are more likely to be scheduled to this lower level than be scheduled off. In addition, if the unit provides reserve at this lower level, the TSOs will contract down to this level rather than de-synchronise the unit which means the unit will receive payments for reserve, reactive power as well as energy.

The TSOs are considering whether an incentive arrangement is appropriate given the expected level of wind penetration on the system and or changes in system demand. The question arises as to whether there is a sufficient incentive for existing units to improve on their Grid Code requirement. The options are as follows:

- Status quo – no need for an incentive as there is sufficient incentive to reduce minimum generation for market reasons and also there are reserve payments if dispatched to this level;
- Unit specific payment – certain units will incur costs toimprove upon their Grid Code requirement while other units can achieve this without incurring additional costs. This option would reimburse the generating unit for the incremental costs of providing this service;

The TSOs propose that after having gained experience with the service that a harmonised design and rate will be developed and that this would be consultated on as part of the 2012/2013 consultation process.

The TSOs preference would be for a harmonised rate in line with the HAS principles. The TSOs are thus requesting respondents to comment as to their view of this service in terms of their unit, the benefit to the power system and the appropriate remuneration for providing this service.

2.2.4 SYNCHRONOUS COMPENSATION

In the TSOs' Explanatory paper[8] the introduction of a Synchronous Compensation service was identified for the 2011/2012 tariff year. Synchronous Compensation is a service whereby a generating unit can declare themselves available to provide reactive power (MVAr) and Automatic Voltage Regulation[9] (AVR) services to the TSOs while not generating active power (MW). The generating unit will need to import power from the transmission system in order to provide this service. This service offers the TSOs increased operational flexibility as in many instances a generating unit may be dispatched on to provide this service to provide local voltage support, whilst not necessarily requiring the active power, which results in increased constraints costs.

This proposed design is as follows:

- If after successful testing the generating unit it is established that they can provide this service then the generating can contract to provide this service through the AS Agreement;
- The TSOs can dispatch a unit to synchronise, to generate 0 MW and to a MVAr leading or MVAr lagging setpoint;
- The unit will be synchronised with the transmission system, will be paid a start cost through the market and will import active power to provide this service from the transmission system;
- If dispatched to provide this service the generating unit will be remunerated for the imported energy used to provide this service, will be paid the harmonised reactive power rate and will be paid twice the harmonised reactive power rate if the unit provides AVR.

The TSOs will then, through this new AS service remunerate the provider for the incremental costs such as imported energy and additional maintenance costs incurred by the generating unit through providing this service, in addition to the generating unit receiving the harmonised reactive power payments.

8 Harmonised Ancillary Services 2010/2011; Explanatory Paper; 22nd September 2010.

9 Automatic maintenance of a **Generation Unit's** terminal voltage at a desired setpoint. See relevant Grid Codes for further information. Grid Codes are available at www.eirgrid.com and www.soni.ltd.uk.

3 ANCILLARY SERVICE RATES

The following sections describes proposals which affect the calculation or determination of the AS rates.

3.1 AS ALLOWANCE

The AS Allowance for the Tariff Year 2011-2012 will include the existing AS services and a provision for the new AS services which are described in Section 2. These services increase the operation flexibility of the existing plant portfolio on the island and should be remunerated accordingly for both existing generating units and to send the correct signals to potential generating units which may connect to the system.

3.2 PROPOSED EXCHANGE RATE

The current exchange rate methodology used for the HAS rates is that the Euro (EUR) to Pound (GBP) exchange rate is fixed for the tariff year based on the forward FX rates. The EUR is used as the reference rate, as is consistent with the approach used in the Single Electricity Market (SEM), therefore the rates in GBP are changed in line with the fixed exchange rate at the beginning of each tariff year.

The TSOs noted in the 2010/2011 HAS Explanatory Paper[10] that a review of the exchange rate would be considered for the 2011/2012 tariff year. The TSOs have developed a number of options for the exchange rate methodology and invite comments from interested parties on these. These options are described as follows:

3.2.1 Option 1 – Exchange Rate based on the Forward FX rate

The approach currently used for the harmonised Ancillary Service rates is that the EUR to GBP exchange rate is fixed for the tariff year. The derivation of the currency exchange rate was the same methodology as that was used in the annual SEM Capacity Pot calculation when this methodology was adapted in 2009[11]. This methodology provided for an exchange rate based on the 12 monthly forward FX rates for the period in question.

The forward FX rate is simply the rate at which one currency can be exchanged for another currency, at any given date in the future, as at/agreed today. It is calculated using the current spot FX rate (current market price for delivery in 2 business days), and then adding or subtracting the 12 monthly forward points that may apply to that rate. Forward points are a measure of the difference in the underlying interest rates for both currencies, expressed as a proportion of the underlying exchange rate price. Forward points are used to account for any benefit/disadvantage from the difference in these underlying interest rates. Generally the spot rate is far more volatile than the forward points, and as such is the key driver/ determinant of the overall forward rate.

10 Harmonised Ancillary Services 2010/2011; Explanatory Paper; 22nd September 2010.

11 Harmonised Ancillary Services & Other System Charges; Rates Consultation; 8 June 2009

If this option is chosen then it is proposed that the exchange rate for the new tariff year based on the forward exchange rate at the time of the consultation.

This option is to continue to use the methodology currently used by the TSOs in determining the exchange rate for HAS. The TSOs believe that this option provides certainty of the rate to the AS Providers, however this methodology may be susceptible to volatility in the EUR to GBP exchange rate during the year.

3.2.2 Option 2 - Exchange Rate based on the 5 day Average

The Single Electricity Market Operator (SEMO) consults annually on the Annual Capacity Exchange Rate. Based on comments received from the 2011 consultation[12], the SEM Committee revised their original proposal for how this rate is calculated due to the large volatility in the EUR to GBP rate in recent years. The revisions to how the rate was calculated are as follows:

- The rate is determined closer to the beginning of the period to which it applies while also giving certainty to the market of what exchange rate will apply for this period. The SEM use a calendar year for settlement purposes and a rate up to the end of November was deemed appropriate i.e. one month before the start of the period; and,
- Based on the volatility of the EUR to GBP exchange rate the rate is calculated as an average of the rate over a 5-day period.

This option is a variant of Option 1 by continuing to use the forward FX rate, however the Annual Capacity Exchange Rate revisions will be adapted in determining the rate. The TSOs believe that this option provides certainty of the rate to the service providers, however this methodology may be susceptible to volatility in the EUR to GBP exchange rate during the year. By using the 5-day average to calculate the forward FX rate this option would be less vulnerable to exchange rate fluctuations within the timeframe at which the rate is set when compared to option 1.

If this option is the chosen then the final exchange rate used for the Harmonised Ancillary Service Statement of Payments and Charges will be based on the 5- day average rate for the period 25 August 2011 to 31 August 2011 i.e. one month before the start of the 2011/2012 tariff year.

3.2.3 Option 3 - Exchange rate based on daily, weekly or monthly rates

Due to the volatility in the EUR to GBP exchange rate during recent years it may be more appropriate to use an exchange rate to reflect the actual exchange rate during a defined period such as a daily, weekly or monthly rate. This rate would be set ex-post based on the actual exchange rate during the defined period. The relevant exchange rate would be obtained from the European Central Bank.

12 Harmonised Ancillary Service 2010/2011; Consultation Paper; 9th July 2010 and Harmonised Ancillary Service 2010/2011; Explanatory Paper; 22nd September 2010

3.3 PROPOSED HARMONISED AS RATES

The TSOs have carried out analysis on the level of services which will be required and available for the 2011/2012 tariff year. This was based on an analysis of the actual output and availability of all generating units for the period February 2010 to February 2011, as an assumption was made that the demand and running regime of units would be broadly in line with that expected for the new tariff year. Allowance was also made for a number of smaller units which will be connecting to the system for the 2011/2012 tariff year.

Based on this analysis the level of services available is in line with what is currently available on the system, therefore the TSOs propose not to revise the rates for the 2011/2012 tariff year. The current and proposed rates for the new tariff year are detailed in Table 3.1.

Service	**Categories**	
Reserve	Primary Operating Reserve	€ 2.22 / MWh
	Secondary Operating Reserve	€ 2.13 / MWh
	Tertiary Operating Reserve 1	€ 1.76 / MWh
	Tertiary Operating Reserve 2	€ 0.88 / MWh
	Replacement Reserve (Synchronised)	€ 0.20 / MWh
	Replacement Reserve (De-Synchronised)	€ 0.51 / MWh
Reactive Power	Reactive Power Lagging	€ 0.13 / MVArh
	Reactive Power Leading	€ 0.13 / MVArh

Table 3. 1: Proposed Harmonised Ancillary Service Rates for 2011/2012 tariff year

4 AS ALLOWANCE AND REPORTING

4.1 SINGLE AS ALLOWANCE

In the RAs Decision Paper in 2010[13] and the Information Note to Service Providers[14] they noted that the current arrangement of two independently capped and managed AS allowances for EirGrid and SONI would be reviewed and that these would be eventually transitioned to a single all-island allowance which is in line with the Capacity Payment Mechanism (CPM) used in the SEM. This Single Allowance was initially not developed as part of HAS since both jurisdictions currently have separate operational requirements, particularly for reactive power which is a local service and also for reserve to some extent, mainly due to limitations with interconnection between both jurisdictions and other local issues.

The current arrangement is that there are two separately managed AS allowances. EirGrid obtains approval for their allowance from the CER as part of the TUoS submission for the relevant tariff year while SONI obtains approval from NIAUR through the System Suppoort Services (SSS) Tariff. These separate allowances for reserve and reactive power are then combined in order to determine the HAS rates for reserve and reactive power, however the allowances and outturn are then managed separately depending on the level of services required in each jurisdiction.

In regard to the Single AS Allowance, there are the two proposals are set out as follows:

4.1.1 Option 1 – Status Quo

Option 1 proposes that the TSOs continue with the current approach. This involves each jurisdication managing the outturn separately depending on the level of services provided in that jurisdiction.

4.1.2 Option 2 – Optimising Single Allowance

Option 2 is similar to Option 1 where a single allowance is derived on a 3:1 basis, however the TSOs would carry out an ongoing review of the reserve outturn between both jurisdictions to determine if they are in line with the ratio between the jurisdictional AS allowances. This option removes the risk of any potential disproportional outturn between the AS Allowances in both jurisdictions. Where one TSO is expected to exceed its allowance and the other TSO is not then this will be balanced with an offset arrangement. Sample figures are used in Table 4.1 to show an example of the re-balancing required.

13 [SEM-10-001]; Harmonised All-Island Ancillary Services Rates and Other System Charges; Decision Paper; 4 Jan 2010

14 [SEM-10-42]; Harmonised All-Island Ancillary Services Rates and Other System Charges; Information Note to Service Providers; 29 June 2010

Example Figures	EirGrid [€m]	SONI [€m]	EirGrid : SONI Ratio
Actual Reserve Outturn	20	8	2.5 : 1
Rebalanced Outturn	21	7	3 : 1

Table 4. 1: Optimising Single Allowance Example

The example shown in Table 4.1. shows that a transfer of €1 million from EirGrid to SONI would be required to balance the reserve spend between both jurisdictions.

The TSOs preference is for Option 2 as it will optimise the allowance across the island thereby benefiting the consumers in both jurisdictions.

4.2 AS REPORTING

As part of the 2010/2011 HAS consultation process[15] a number of interested parties requested that the TSOs improve transparency around information such as the extent of payments for each category of the harmonised Ancillary Services (AS), the current AS allowance 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 made a commitment in the 2010/2011 Explanatory Paper[16] to consider how to report on these parameters.

In order to improve reporting on HAS outturn the TSOs are proposing to publish the HAS expenditure on a monthly basis in line with the HAS settlement process[17]. This monthly reporting will cover the following aspects:

1 Reserve expenditure for each category of reserve (Primary Operating Reserve, Secondary Operating Reserve, Tertiary 1 Operating Reserve, Tertiary 2 Operating Reserve, Replacement Reserve Synchronised and Replacement Reserve De-Synchronised). This is reported on an all-island basis and the total outturn for the 2009/2010 tariff year can be seen in Table 4.2;
2 Reactive power expenditure for each category of reactive power against the budget allowance. This is reported on an all-island basis and the total outturn for the 2009/2010 tariff year can be seen in Table 4.3;
3 Black Start expenditure against the budget allowance. This is reported on an all-island basis and the total outturn for the 2009/2010 tariff year can be seen in Table 4.4; and
4 Reserve charges for each chargeable category (Primary Operating Reserve, Secondary Operating Reserve and Tertiary 1 Operating Reserve). This is reported on an all-island basis and the total outturn for the 2009/2010 tariff year can be seen in Table 4.5.

These monthly reports will also be made available on the TSOs website which can be accessed at www.EirGrid.com or www.SONI.ltd.uk.

The TSOs have reviewed the possibility of reporting on the level of services contracted with each AS Service Provider however there are confidentially issues associated with this process surrounding the AS agreement.

15 Harmonised Ancillary Service 2010/2011; Consultation Paper; 9th July 2010 and Harmonised Ancillary Service 2010/2011; Explanatory Paper; 22nd September 2010

16 Harmonised Ancillary Service 2010/2011; Explanatory Paper; 22nd September 2010

17 EirGrid settlement timeslines are typically 25 working days after the end of each month

	Feb 10 [€]	Mar 10 [€]	Apr 10 [€]	May 10 [€]	Jun 10 [€]	Jul 10 [€]	Aug 10 [€]	Sep 10 [€]	Total Outturn [€]
POR	496,808	503,045	445,831	450,895	505,139	429,911	417,494	434,904	**3,535,258**
SOR	694,420	703,743	628,599	621,239	669,110	524,910	494,154	556,514	**4,718,149**
TOR1	692,565	672,379	604,798	605,795	648,550	520,891	500,652	598,338	**4,698,275**
TOR2	395,625	393,707	357,001	353,453	378,938	282,144	268,086	325,454	**2,679,014**
RR Sync	424,040	448,298	381,005	408,428	450,936	412,000	411,128	398,826	**3,302,924**
RR De-Sync									

Table 4. 2: Reserve Outturn

	Feb 10 [€]	Mar 10 [€]	Apr 10 [€]	May 10 [€]	Jun 10 [€]	Jul 10 [€]	Aug 10 [€]	Sep 10 [€]	Total Outturn [€]
RP Lagging	602,157	614,245	557,463	528,845	549,258	524,088	508,624	553,426	**4,438,106**
RP Leading	291,660	298,759	264,848	250,926	265,124	250,501	245,134	279,801	**2,146,753**

Table 4. 3: Reactive Power Outturn

Note: These outturn figures are settlement figures and may vary based on final figures used. The outturn in GBP was converted to EUR using the 2009/2010 exchange rate of €1/£0.85.

	Feb 10 [€]	Mar 10 [€]	Apr 10 [€]	May 10 [€]	Jun 10 [€]	Jul 10 [€]	Aug 10 [€]	Sep 10 [€]	Total Outturn [€]
Black Start Availability	140,488	151,357	150,420	133,798	141,862	101,355	94,506	91,522	**1,005,307**

Table 4. 4: Blackstart Outturn

	Feb 10 [€]	Mar 10 [€]	Apr 10 [€]	May 10 [€]	Jun 10 [€]	Jul 10 [€]	Aug 10 [€]	Sep 10 [€]	Total Outturn [€]
POR	0	84,089	73,445	28,994	119,147	50,950	90,460	205,918	**653,004**
SOR	0	107,918	63,111	54,907	65,999	49,126	90,428	157,895	**589,384**
TOR1	0	0	91,241	20,968	36,477	104,585	32,333	76,715	**362,318**

Table 4. 5: Reserve Charges

Note: These outturn figures are settlement figures and may vary based on final figures used. The outturn in GBP was converted to EUR using the 2009/2010 exchange rate of €1/£0.85.

5 SUMMARY AND NEXT STEPS

Comments are invited from interested parties on this consultation paper and should be aligned with the sections and sub-sections of this document. If confidentiality is required, this should be made clear in the response as the comments will be published on the TSOs' websites[18]. Please note that, in any event, all responses will be shared with the RAs. The closing dates for comments is Friday, 27th May 2011 and should be addressed to David.Carroll@EirGrid.com and Vivienne.Price@soni.ltd.uk.

18 www.eirgrid.com and www.soni.ltd.uk