



Single Electricity  
Market **Operator**

MARKET OPERATOR  
SINGLE ELECTRICITY

## Key Performance Indicator Outturn 2014-2015

This document presents SEMO's performance against the regulatory approved Key Performance Indicators (KPIs) for the 2014-2015 tariff year.

09/06/2016

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### Introduction

SEMO is currently incentivised to manage performance through Key Performance Indicator (KPI) incentives, for achieving outcomes aimed at improving performance, promoting customer service, increasing efficiencies and delivering value to customers.

In August 2013 the *Single Electricity Market Operator (SEMO) Revenue Requirement Price Control Decision Paper commencing 1 October 2013 (SEM-13-054)* was issued. This paper increased the number of KPIs, the weightings and the incentive pot. The decision paper stated,

*'Greater emphasis has been placed on incentivising SEMO to focus on the importance of customer value and service delivery. This is evidenced by an increasing number of Key Performance Indicators (KPIs), which now include System Availability. In addition to this some existing KPIs have been strengthened together with the reward available increasing from 3% of OPEX to 4%.'*

This KPI paper describes SEMO's outturn performance in relation to its seven regulatory approved Key Performance Indicators (KPIs) for year two (2014-2015) of the three year price control period.

### Key Performance Indicators (KPIs)

SEMO is committed to delivering improved quality and performance levels in the processing of crucial Market Operations data. SEMO is currently incentivised against the delivery of seven Key Performance Indicators (KPIs) which incentivise outcomes aimed at improving performance, promoting customer service, increasing efficiencies and delivering value to customers.

The current seven Operational Key Performance Indicators were set out in SEMO's last Price Control (*SEM-13-054 Oct 13-Sept 16*) and monitor SEMO's performance across the following areas:

- Ex-Ante
- Ex-Post Initial
- Invoicing
- Credit Cover Increase Notice (CCINs)
- SEMO related ad hoc Resettlements
- General Queries
- Central Market System Availability

#### Ex-Ante

The Ex-Ante publication targets refer to the percentage of occurrences where the Ex-Ante 1 pricing reports are published on time. Currently the target time for publication is 11:00am every day, seven days a week. The Ex-Ante 1 pricing runs are carried out on D-1 and give the day-ahead forecast of Market Scheduled Quantities (MSQ) and System Marginal Price (SMP) for all units. The Ex-Ante 1 is also important for setting Interconnector Unit Nominations for Interconnector Units who have bought Interconnector Capacity, and calculating the residual Capacity that all other Interconnector Units could avail of in Ex-Ante 2 and Within-Day runs<sup>1</sup>. Unlike prices and quantities, the Interconnector Nominations for day ahead are fixed and cannot be re-set after the Ex-Ante is published.

#### Ex-Post Initial

The Ex-Post Initial publication targets refer to the percentage of occurrences where the Ex-Post Initial pricing reports are published on time. Currently the target time for publication is 17:00 every day, seven days a week. The Ex-Post Initial pricing runs are carried out on D+4 and give the final SMPs and MSQs for all participants. These figures are used for the final settlement of all Market Participants.

#### Invoicing

The Invoicing targets refer to the percentage of occurrences where Invoices to all participants are published on time. Currently for the weekly energy Market and Variable Market Operator Charge (VMOC) invoices the target is 12:00 each Friday. Capacity is invoiced at 12:00 seven working days

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<sup>1</sup> This is in application of the principle of 'use it or lose it' which underpinned the implementation of Intraday Trading

## Key Performance Indicator Outturn 2014-2015

after the end of the month, and the Fixed Market Operator Charge (FMOC) invoices are published on the first Friday after the end of the month at 12:00.

### Credit Cover Increase Notice (CCINs)

The Credit Cover Increase Notice targets refer to the percentage of occurrences where the CCINs (issued as part of the Credit Cover Reports) are published on time. Currently the target time for publications is 17:00 every working day. CCIN reports are used to inform Market participants that their posted collateral cover is less than their required collateral cover. Participants then have two working days in which to rectify this on receipt of the CCIN.

### SEMO related ad hoc Resettlements

If the Market is settled incorrectly, a Market Participant raises a query to ensure the error is rectified. This metric refers to upheld Formal Query from Market Participants which have identified errors attributed to SEMO's operations and processes. Correction of such errors is completed in either the scheduled Resettlement (M+4 and M+13) or in an ad hoc Resettlement. The materiality of a formal query determines whether an ad hoc Resettlement run is required.

Not all Formal Queries are the result of SEMO driven issues; others are driven by external factors outside of SEMO's control. The proposed measure is to reduce the number of SEMO related issues hence the number of SEMO upheld query incidents and Resettlements per Quarter.

### General Queries

The General Queries targets refer to the percentage of occurrences where a General Query is not addressed within 20 Business days. While the Trading and Settlement Code places no obligation on SEMO to respond to general queries, SEMO has endeavored to answer all queries received (2,066 general queries in 2014-15) within set timelines. At times, depending on the complexity, scale, resource issues and operational performance, the time taken to respond to these queries can exceed 20 working days. This target is designed to maintain efficiency and customer focus within SEMO.

### Central Market System Availability

System availability is the ratio of time infrastructure systems are said to be in a functioning condition to the total time it is required or expected to be available. High availability ensures a prearranged level of operational performance will be met during a contractual measurement period (7AM – 5PM Mon - Sun). This target was introduced in the latest Revenue Requirement review, designed to capture Market Operations effectiveness for an IT point of view.

## Key Performance Indicator Outturn 2014-2015

The agreed SEMO Key Performance targets are set on in table 1 below<sup>2</sup>.

Metric	Weighting	Lower Bound Target	Upper Bound Target
1 Ex-Ante Pricing Report	0.15	99%	100%
2 Ex-Post Initial Pricing Report	0.1	99%	100%
3 Invoicing	0.2	97%	100%
4 Credit Cover Increase Notices	0.1	99%	100%
5 SEMO related formal Queries	0.2	9 <sup>3</sup>	5 <sup>4</sup>
6 General Queries	0.15	97% <sup>5</sup>	99% <sup>6</sup>
7 Central Market System Availability (7AM – 5PM Mon - Sun)	0.1	99.5% <sup>7</sup>	99.9% <sup>8</sup>

**Table 1** - Summary of the agreed Key Performance Indicators

### Conditions to be applied to the KPIs

The decision paper also applied the following KPI conditions

*'11.3.3 The following conditions will apply:*

- *The metric is delivered within one hour of the targeted time;*
- *External factors which are demonstrably outside of the Market Operator's direct control are to be excluded e.g. Limited Communication failure by Market Participant, late provision of data by System Operators or the Meter Data Provider, Government policy changes, Regulatory Authorities' policy changes etc.;*
- *In terms of assessing the KPIs, a measure is to be taken at the end of each Quarter using the average value of each KPI over that period;*
- *KPI incentive pot to be set at 4% of the total OPEX revenue for each year. The increase (from 3%) is justified by the fact that the SEM Committee has increased the targets of several KPIs.'*

A number of weighting factors have also been adjusted, as a result of the additional KPI target and for the purpose of increasing emphasis on customer services.

<sup>2</sup> Extract from table 22 in SEMO Revenue Requirement Decision Paper (SEM-13-054)

<sup>3</sup> 9 or less upheld queries incidents per quarter

<sup>4</sup> 5 upheld queries incidents per quarter

<sup>5</sup> 97% of Queries answered within 20 Business days

<sup>6</sup> 99% of Queries answered within 20 Business days

<sup>7</sup> 99.5% System availability between 7am and 5pm Monday - Sunday excluding planned outages

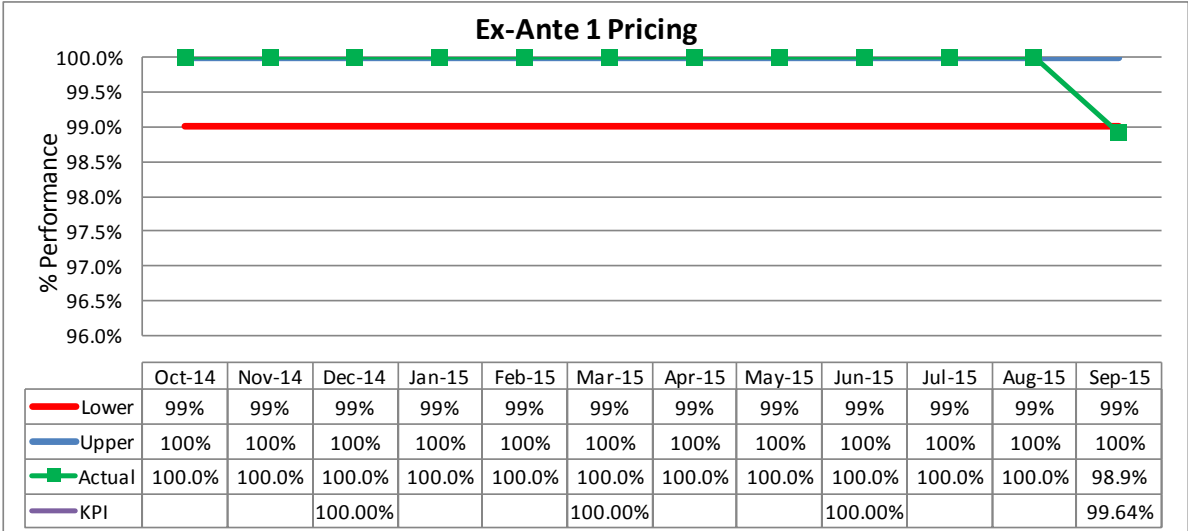
<sup>8</sup> 99.9% System availability between 7am and 5pm Monday - Sunday excluding planned outages

# Outturn Performance 2014-15

The SEMO Revenue Requirement Decision Paper (SEM-13-054), paragraph 11.3.3, states that the 'KPI incentive pot to be set at 4% of the total OPEX revenue for each year'. The approved OPEX revenue for 2014-2015 was €10.145 million<sup>9</sup>. Four per cent of this OPEX amount translates to a KPI pot of €405,824. The following sections detail the actual operational outturn performance against each target set out in the Price Control decision paper.

## Ex-Ante Pricing Report

The target for the Ex-Ante publications is 99% with an upper bound limit of 100%.



Graph 1 - Ex-Ante 1 Pricing Report Performance

Performance has been stable throughout the year, except for a dip at the end in September 2015 when an issue in the Central Market System prevented the generation of the Ex-Ante workflow for Trading Day September 18<sup>th</sup> 2015, causing a delay in the Ex-Ante Pricing publication. The bounds for this target are set very high, and just one delayed publication out of 92 in Quarter four, was enough to prevent SEMO from achieving this objective. The monetary reward realized is illustrated in table 2 below.

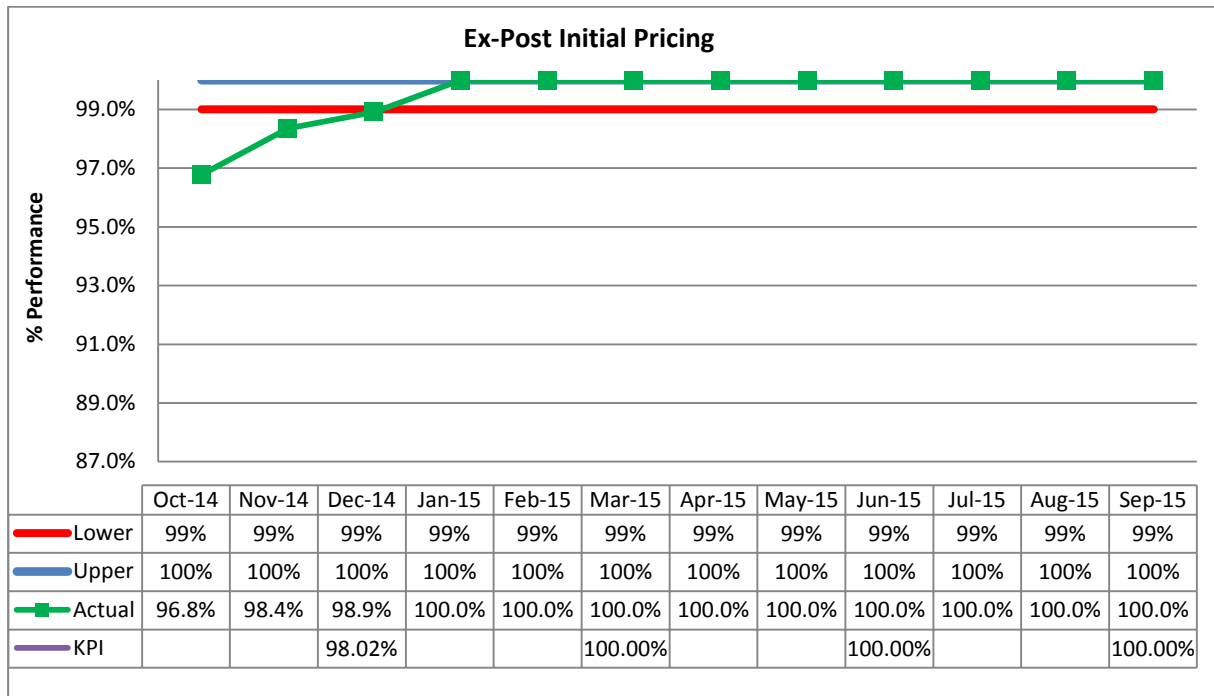
Quarter1	Quarter2	Quarter3	Quarter4	Total Reward
€15,218	€15,218	€15,218	€9,704	€55,360

Table 2 - Ex-Ante Pricing Report outturn

<sup>9</sup> Price Control approved figure for 2014-2015 of 9.999 million with indices applied

## Ex-Post Initial Pricing Report

The target for the Ex-Post Initial KPI is 99% with an upper bound limit of 100%.



**Graph 2 - Ex-Post Initial Pricing Report Performance**

Performance was good throughout Quarters two, three and four, but the Ex-Post Initial KPI was not achieved in Quarter one. This was due to an issue in the Central Market System preventing the generation of the Ex-Post Initial workflow for Trading Day October 15<sup>th</sup> 2014, causing a delay in the Ex-Post pricing publication. The issue affecting Trading Day October 15<sup>th</sup> 2014 is also detailed in the System Availability target. The bounds for the Ex-Post Initial Pricing target are also set very high, and just one delayed publication out of 92 in Quarter one, was enough to prevent SEMO from achieving this objective.

The monetary reward for meeting these targets is illustrated in table 3 below.

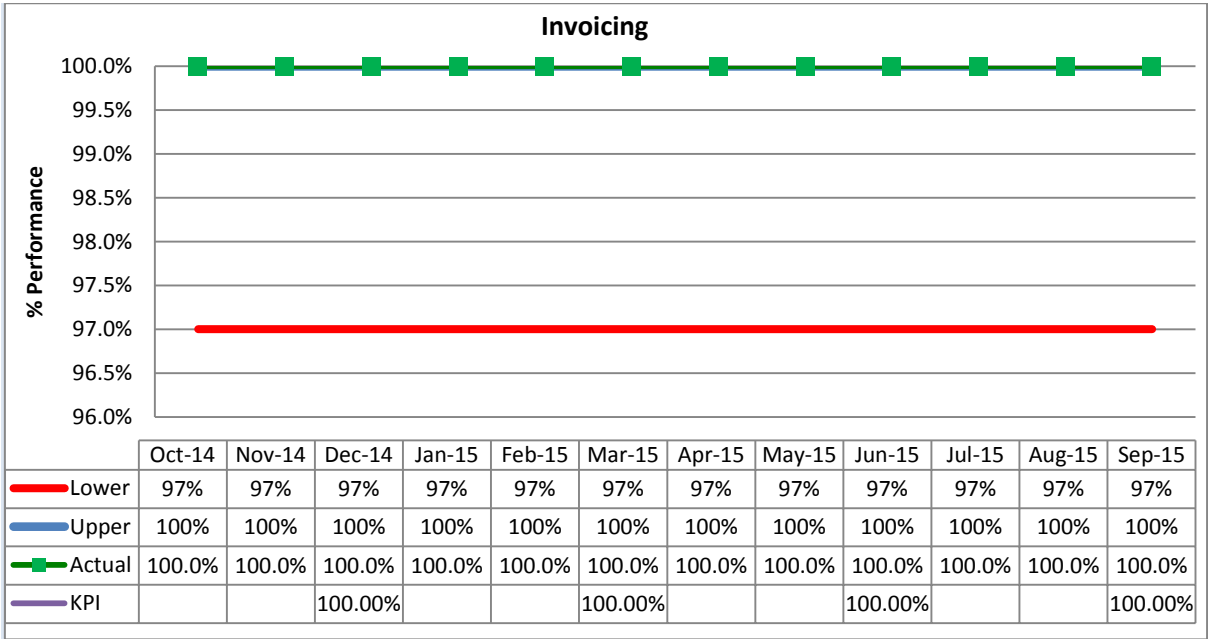
Quarter1	Quarter2	Quarter3	Quarter4	Total Reward
€0	€10,146	€10,146	€10,146	€30,437

**Table 3 - Ex-Post Initial Pricing Report outturn.**



### Invoicing

The target for the Invoicing KPI is 97% (up from 95% in previous years) with an upper bound limit of 100%.



**Graph 3 - Invoicing Performance**

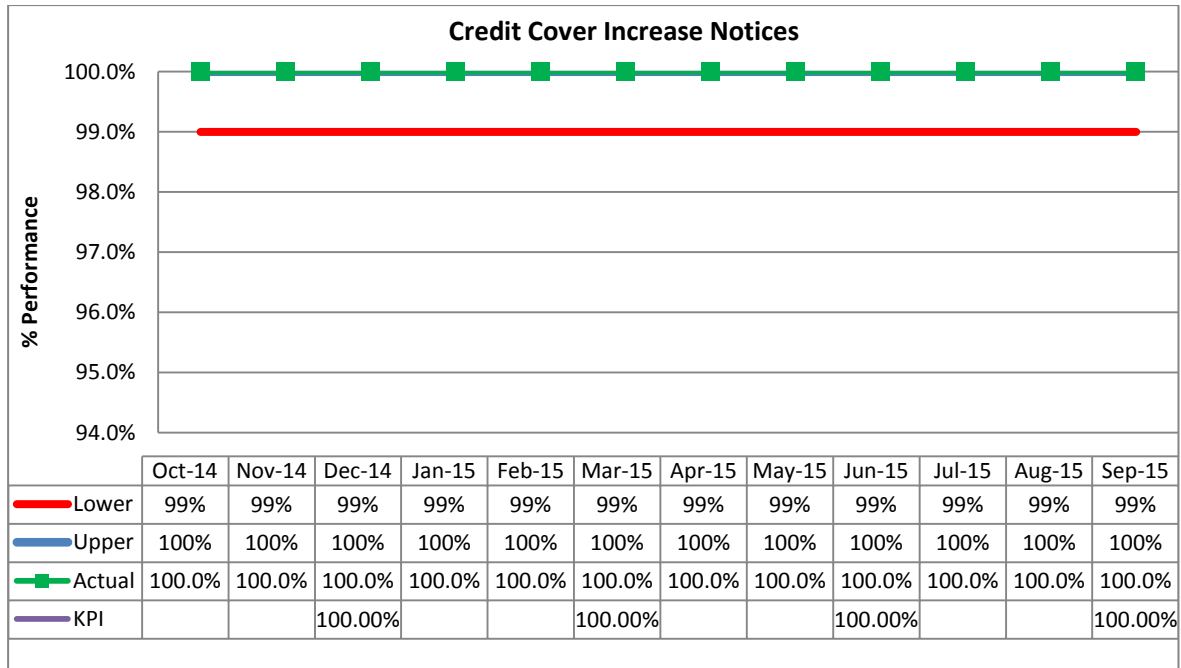
The lower bound target has been achieved in all Quarters of the Financial Year, as shown in Graph 3 above. The monetary reward for meeting these targets is illustrated in table 4 below.

Quarter1	Quarter2	Quarter3	Quarter4	Total Reward
€20,291	€20,291	€20,291	€20,291	€81,165

**Table 4** Invoicing outturn.

## Credit Cover Increase Notices

The CCIN publication is due by 17:00 each Working Day. The target for the Credit Cover Increase Notices (CCIN's) KPI is 99% with an upper bound limit of 100%. This is a very strict range; however, no delays were recorded in this period.



**Graph 4 - Credit Cover Increase Notice Performance**

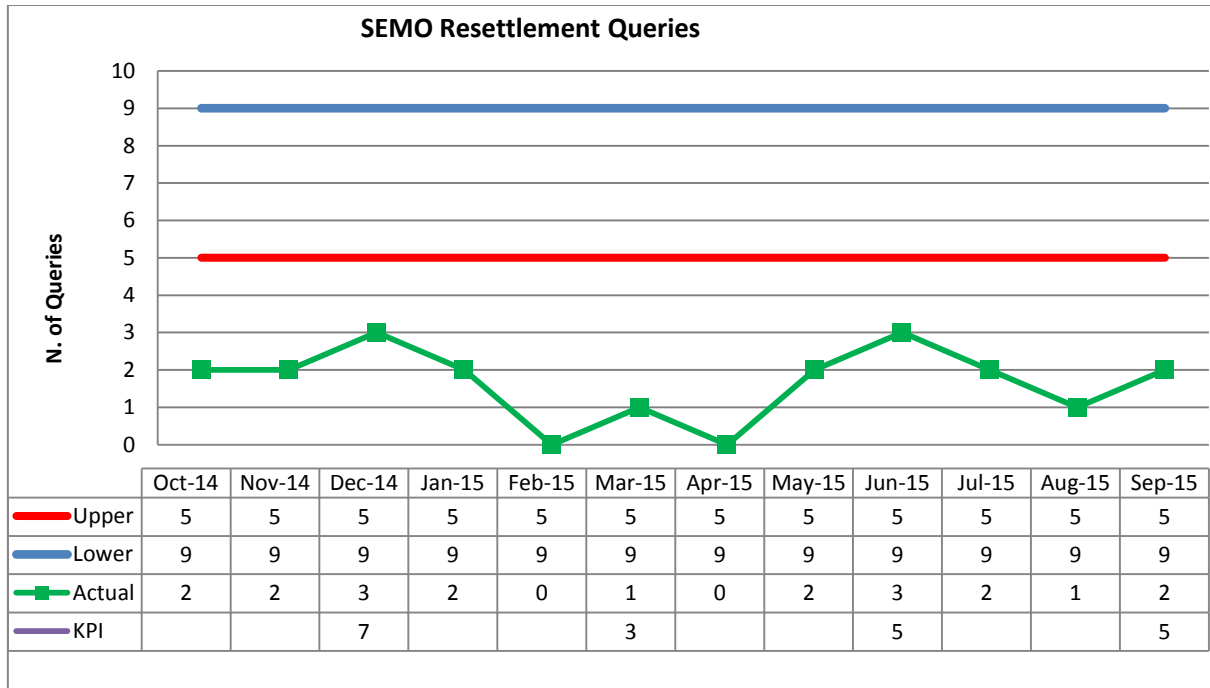
The lower bound target has been achieved in all Quarters of the Financial Year, as shown in Graph 4 above. The monetary reward for meeting these targets is illustrated in table 5 below.

Quarter1	Quarter2	Quarter3	Quarter4	Total Reward
€10,146	€10,146	€10,146	€10,146	€40,582

**Table 5 - Credit Cover Increase Notice outturn**

## SEMO Resettlement Related Queries

Compared to the previous Price Control period, the target for SEMO Resettlement Related Queries has been lowered from 'less than 15' to 'less than 9' upheld queries which require Resettlement per Quarter.



**Graph 5 - SEMO Resettlement Related Queries Performance**

The upper bound of this metric is five per Quarter. This target has been met or exceeded or equaled in three Quarters of the financial year while Quarter one fell short due to a number of Resettlement Queries relating to:

- A defect which caused MIUNs to be incorrectly revised Ex-Post
- A defect which caused Dispatch Shut Down Costs not to be applied to constraints
- An operational error where an incorrect Meter Data Provider was entered in Market System for new unit

This is illustrated in Graph 5 above.

The lower bound of this metric is nine per Quarter. This target has been exceeded or equalled in all four Quarters of the financial year, as shown in Graph 5 above.

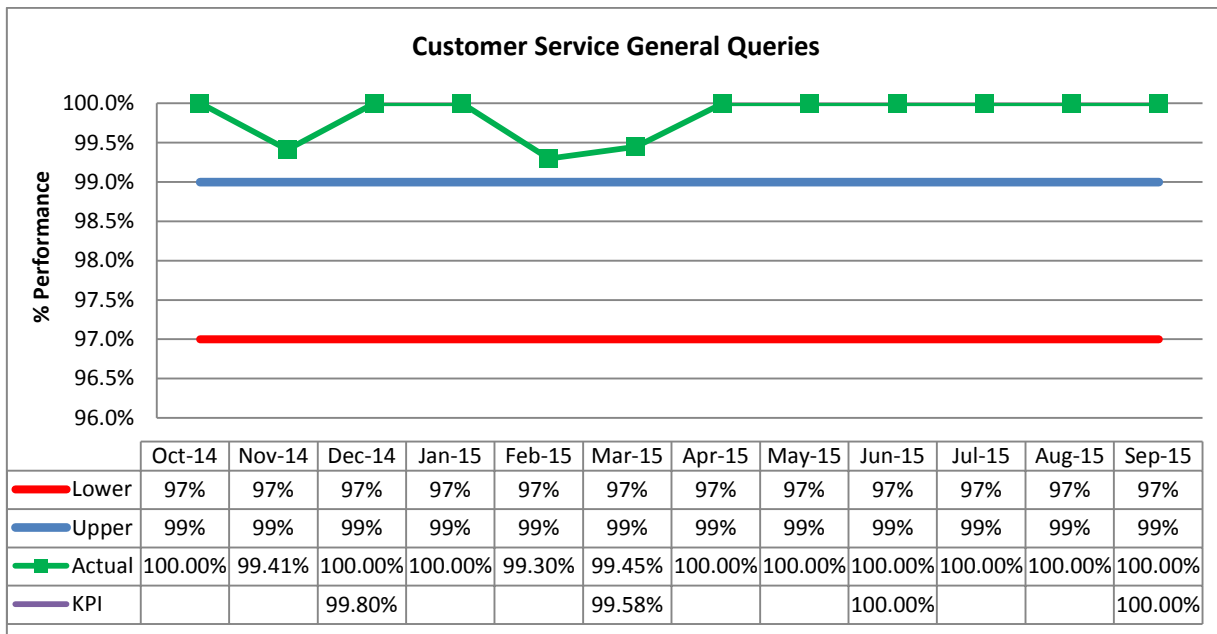
The monetary reward for this target is illustrated in table 6 below.

Quarter1	Quarter2	Quarter3	Quarter4	Total Reward
€10,146	€20,291	€20,291	€20,291	€71,019

**Table 6 - SEMO Related Resettlement Queries outturn**

## General Queries

The target for the General Queries Delivery KPI is 97% with an upper bound limit of 99%. The KPI requires that SEMO resolves 99% of its queries within 20 working days. SEMO in financial year 2014-2015 handled 2,066 helpdesk general queries still improving from previous year achievements. There were 3 instances over the financial year where timelines could not be adhered to. This is due to a number of factors that impact resolution like the complexity and scale of the query received, resources available, priority given to formal and urgent queries, the nature of the request which could require cross functional assistance and operational performance.



**Graph 6 - General Queries Performance**

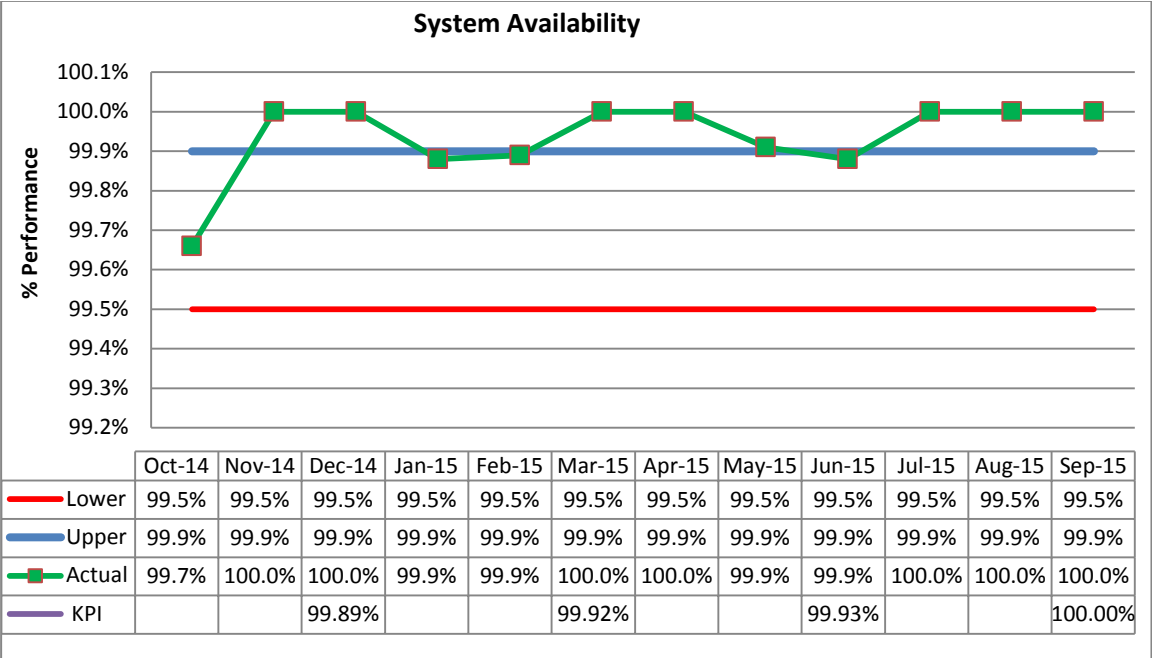
The lower bound targets have been achieved in all four Quarters of the financial year, as shown in Graph 6 above. The monetary reward for achieving these targets is illustrated in table 7 below.

Quarter1	Quarter2	Quarter3	Quarter4	Total Reward
€15,218	€15,218	€15,218	€15,218	€60,874

**Table 7 - General Query's outturn**

### System Availability

The target for the System Availability KPI is 99.5% with an upper bound limit of 99.9%. This is the second time this target has been measured.



**Graph 7 – System Availability Performance**

The lower bound of this metric has been achieved in all four Quarters of the financial year. The upper bound of this metric has been achieved in Quarter two, three and four, while Quarter one fell short as a result of 2.5 hours of an unplanned outage in October 2014. The unplanned outage was required to facilitate the deployment of a patch to the Market Systems to address an error that was encountered in the Ex-Post Initial Market Schedule for Trading Day October 15<sup>th</sup> 2014. The root cause can be summarized as follows: The number of generator operating limits (UUC input generator operating limit display) exceeded the maximum dimension of internal array. The problem also caused the delay of the Ex-Post Initial Pricing publication for Trading Day October 15<sup>th</sup> 2015 which affected the performance for that target in Quarter 1.

The monetary reward for achieving these targets is illustrated in table 8 below.

Quarter1	Quarter2	Quarter3	Quarter4	Total Reward
€9,807	€10,146	€10,146	€10,146	€40,244

**Table 8 – System Availability outturn**

## Performance Summary against KPI Targets

Table 9 below, summarises the overall Regulatory Approved KPI targets and the outturn KPI figures per Quarter. The light grey area indicates the KPI targets agreed in the SEMO Revenue Requirement Decision Paper (SEM-13-054). The darker gray columns show the percentage outturn achieved by SEMO for each KPI per Quarter while the blue column indicates the average performance over the four Quarters. These were challenging for SEMO in Quarters one, two and three, as the metrics were strengthened to focus on the importance of customer value and service delivery, and the System Availability was tracked for the second year.

SEMP KPI Outturn 2014-2015								
SEMO Revenue Requirement Decision Paper (SEM-13-054) paragraph 11.3.2				Performance by Quarter				Overall Performance
Metric	Weighting	Target	Upper Bound	Oct-Dec Q1	Jan-Mar Q2	Apr-June Q3	Jul-Sept Q4	2014-2015
Ex-Ante 1 Pricing	0.15	99%	100%	100.00%	100.00%	100.00%	99.64%	99.91%
Ex-Post Initial Pricing	0.1	99%	100%	98.02%	100.00%	100.00%	100.00%	99.50%
Invoicing	0.2	97%	100%	100.00%	100.00%	100.00%	99.02%	100.00%
Credit Cover Increase Notices	0.1	99%	100%	100.00%	100.00%	100.00%	100.00%	100%
SEMO Resettlement	0.2	<9	<5	7	3	5	5	20 (total)
Customer Service	0.15	97%	99%	99.80%	99.58%	100.00%	100.00%	99.85%
System Availability (7am to 5pm Mon - Sun) <sup>10</sup>	0.1	99.5%	99.9%	99.89%	99.92%	99.93%	100.00%	99.94%

**Table 9** - SEMO Performance 2014-2015

## Incentive earned by SEMO

The SEMO Revenue Requirement Decision Paper (SEM-13-054) paragraph 11.3.1 states that the 'KPI incentive pot to be set at 4% of the total OPEX revenue for each year'. The approved OPEX revenue for 2014-2015 was €10.145 million. Four percent of this OPEX amount translates to a KPI pot of €405,824. The increase in the incentive from 3% in 2012-2013 to 4% in the previous year 2013-2014 was justified by the fact that the SEM Committee increased the targets of several KPIs and added a seventh metric. This incentive remained at 4% for 2014-2015.

Table 10 below illustrates:

- The earned reward per Quarter
- The maximum available reward per Quarter
- The percentage KPI reward achieved per Quarter

<sup>10</sup> New metric first added for 2013-2014 year as per SEMO Revenue Requirement Decision Paper (SEM-13-054).

Incentive earned per Quarter					
Performance Indicator	Oct-Dec	Jan-Mar	Apr-June	Jul-Sept	
	Q1	Q2	Q3	Q4	TOTAL
Ex-Ante 1 Pricing	€15,218	€15,218	€15,218	€9,704	€55,360
Ex-Post Initial Pricing	€0	€10,146	€10,146	€10,146	€30,437
Invoicing	€20,291	€20,291	€20,291	€20,291	€81,165
Credit Cover Increase Notices	€10,146	€10,146	€10,146	€10,146	€40,582
SEMO Resettlement	€10,146	€20,291	€20,291	€20,291	€71,019
Customer Service	€15,218	€15,218	€15,218	€15,218	€60,874
System Availability (7am to 5pm Mon - Sun)	€9,807	€10,146	€10,146	€10,146	€40,244
<b>KPI reward per Quarter</b>	<b>€80,827</b>	<b>€101,456</b>	<b>€101,456</b>	<b>€95,942</b>	<b>€379,681</b>
<b>Maximum Available Reward in Quarter</b>	<b>€101,456</b>	<b>€101,456</b>	<b>€101,456</b>	<b>€101,456</b>	<b>€405,824</b>
<b>Percentage of Total Achieved in Quarter</b>	<b>79.67%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>94.57%</b>	<b>93.56%</b>

**Table 10** – Summary of the KPI monetary reward 2014-2015

Based on a comprehensive set of KPI data SEMO have calculated the KPI reward in Table 10 above to be **€379,681**. This represents an overall percentage reward of 93.56% of the maximum amount available. The percentage is higher than previous year recovery.

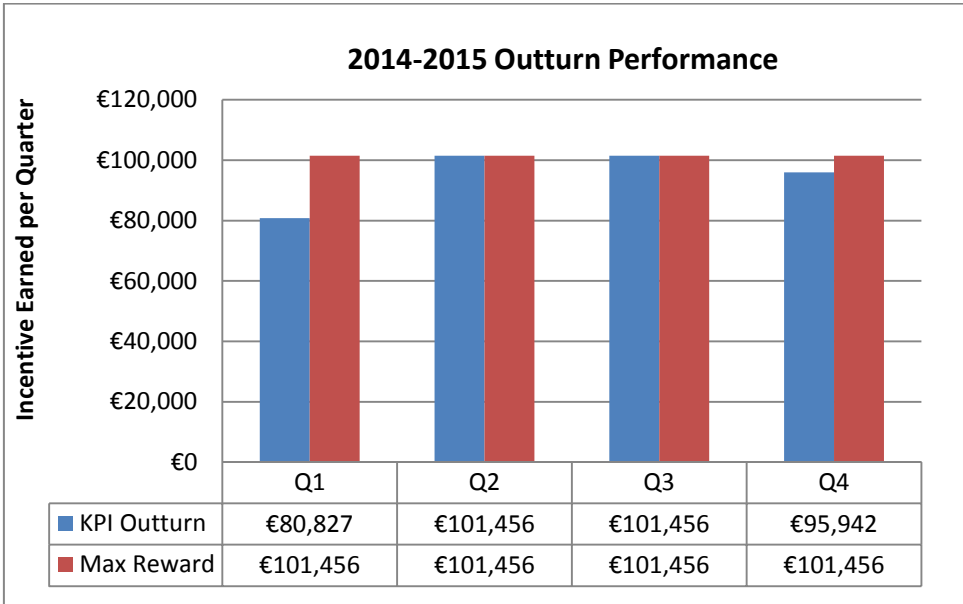
This KPI reward is to be recovered through the adjustment of the K Factor (see paragraph 12.3.4 of the SEMO Revenue and Tariffs Decision Paper).

## Conclusion on SEMO’s Overall performance

The KPIs set by the Regulatory Authorities remained challenging to attain during 2014-2015.

It is in the first Quarter during 2014-2015, that the lowest results were achieved. A system issue negatively affected the Ex-Post Initial Pricing target and a number of Resettlement queries were raised due to system defects and an operational error by SEMO Registration. The operational error is to be expected due to the manual nature of registration data entry in the Market Systems. Very good performances were achieved in the second and third Quarters, while in the fourth Quarter a system issue negatively affected the Ex-Ante Pricing target.

The overall performance is still very high and has improved on previous year signalling that SEMO staff, and in particular Market Operations, continue to improve services and efficiencies for all participants and customers.



Graph 8 – Overall KPI Outturn Performance per Quarter