# Summary of revised methodology for setting the allowed revenue for electricity transmission

## Introduction

This document provides a brief summary of the revised methodology proposed by RAE to apply for an interim period to set the allowed revenues of the Transmission System Operator (TSO, namely ADMIE), which are in turn used to determine Transmission Use of System (TUOS) tariffs.

The form of regulation being applied in this revised methodology is revenue cap incentive regulation.

The first regulatory period will be three years, from 2015 to 2017.

## Determining allowed revenues

Allowed revenues will be determined such that the TSO recovers the reasonable and efficient costs of providing use of system services in a reliable, safe, and secure manner.

These costs comprise:

- Operating costs (opex)
- Depreciation
- Return on capital.

Projected revenues to the TSO, other than revenue from TUOS charges, that is earned by incurring the above costs will be deducted from allowed revenues, unless the costs of other TSO activities are separately identifiable and verifiable and if any costs that are shared between use of system services and other activities are allocated to each on the basis of a reasonable, non-discriminatory and transparent cost allocation methodology approved by RAE, in which case such costs would be deducted before determining allowed revenues.

At regulatory reviews, the costs and deductible revenue (if any) will be forecast for the forthcoming regulatory period in real terms. The determination of these costs and deductible revenues are detailed below.

### Opex

Opex will include, but is not limited to, the following costs:

- Payroll costs.
- Contracting costs.
- Utility expenses.

- Materials and consumables.
- Third party costs.
- Administration costs, including corporate overheads.

Forecasts of opex will have regard to:

- The trade-off between opex and capital expenditure (capex).
- Service quality standards defined by RAE.
- The TSO's business plans.
- Network development plans approved by RAE.

Forecasts will be developed based on the following high-level approach:

- Forecast opex will be compared to out-turn opex in the previous regulatory period/s, as well as proposed and allowed forecasts in the previous regulatory period/s.
- Engineering consultants may be hired to conduct technical studies on opex requirements.
- Benchmarking may be used, recognising that it will be inherently challenging to draw meaningful comparisons with other TSOs in Europe.
- Various analytical tools may be applied to investigate specific issues relating to significant opex categories.

## Depreciation

Depreciation on capex will be calculated, by asset class, on a straight line basis as a function of the Regulatory Asset Value (RAV) and economic asset lives. Depreciation will be calculated from the date in which the associated capex is incurred. For the purposes of calculating depreciation, all capex is assumed to occur in the middle of the regulatory year.

Depreciation on the opening RAV at the start of the first regulatory period will be calculated on a straight line basis as a function of the opening RAV and its remaining economic asset life as defined by RAE.

## Return on capital

Return on capital will be calculated as the average of the start of year and end of year RAV, multiplied by the approved Rate of Return (RoR).

The RoR will be a pre-tax real value. It will be determined at regulatory reviews based on a set of principles defined by RAE.

In exceptional cases, for investments of national significance or where there are demonstrated benefits for the overall electricity system or market, RAE may allow the TSO to earn an additional premium on the RoR. The criteria under which projects can qualify for the premium and the manner in which the premium is calculated will be defined by RAE as part of the approval process for the transmission network development plan.

### Deductible revenue

Deductible revenue will include, but is not limited to, the following:

- Interconnection revenue, including revenue from interconnector capacity auctions (subject to a maximum cap defined by RAE) and net revenue (after associated costs are subtracted) earned under the Inter-TSO Compensation Mechanism.
- Revenue from unregulated activities, including but not limited to optical fibre leases, sale of scrap metals, and external contracting works, to the extent that the costs of providing these activities are included in forecast costs.

## Adjustments to allowed revenues

The allowed revenues of the TSO will be adjusted:

- Annually,
- At regulatory reviews, and
- For extraordinary events.

### Annual adjustments

Allowed revenues, which have been forecast in real terms, will be adjusted for inflation each year based on the consumer price index published by the Hellenic Statistical Authority or any other price index deemed more appropriate by RAE. The price index must reflect the approximate changes in the TSO's costs, be broad-based, free of interpretation, and entirely outside of the control of the TSO and RAE.

Allowed revenues may also be adjusted annually for pass-through costs each year as defined by RAE. Pass-through costs will comprise a share of opex and/or deductible revenue that is deemed to be uncertain, significant, and outside of the control of the TSO.

### Adjustments at regulatory reviews

A regulatory review will be conducted prior to the commencement of each new regulatory period.

Allowed revenues will be adjusted at the regulatory review based on updated forecasts of costs and deductible revenue, as well as the following adjustments:

- Volume adjustment – Allowed revenues for the forthcoming regulatory period will be adjusted based on the difference between forecast and actual allowed revenues earned by the TSO in the previous regulatory period. Adjustments will be made in a Net Present Value (NPV) neutral manner, using the RoR.

- Deductible revenue adjustment – Allowed revenues for the forthcoming regulatory period will be adjusted based on the difference between forecast and actual deductible revenues earned by the TSO in the previous regulatory period, subject to any maximum cap required by legislation and defined by RAE. Adjustments will be made in a Net Present Value (NPV) neutral manner, using the RoR.

- Ex-post review of capex – Allowed revenues for the forthcoming regulatory period may be adjusted following a review of capex in the previous regulatory period. The revenue adjustment will correct for depreciation and return on capital earned on capex (or a portion thereof) that is disallowed because it was deemed to be inefficient, incurred due to inflated 'related party' margins, recovered twice due to a change in capitalisation policy, was deferred without adequate justification, or as otherwise defined by RAE.

- Revenue smoothing – Allowed revenues for the forthcoming regulatory period may be adjusted such that either (as determined by RAE) forecast allowed revenues or the forecast weighted average of TUOS charges are constant in each year of the regulatory period. The NPV of allowed revenues after smoothing must equal the NPV of allowed revenues before smoothing, using the RoR. The change in allowed revenues from one regulatory period to the next may also be smoothed to minimise the impact of tariff increases on consumers or, exceptionally, to improve the financeability of large investments. Allowed revenues will not be smoothed beyond one regulatory period and smoothing will only occur after considering the cash flow impacts on the TSO (for example, to ensure that smoothing does not cause a breach of the TSO's loan covenants).

RAE may also adjust allowed revenues based on opex and capex sharing mechanisms that it defines prior to the commencement of the applicable regulatory period. Any such sharing mechanisms will provide the TSO with incentives to improve the efficiency of opex/capex and share a percentage of the benefits or costs of changes in opex/capex in the previous regulatory period with consumers.

For the avoidance of doubt, in the absence of sharing mechanisms (and for the regulatory period from 2015 to 2017), allowed revenues will not be adjusted for the difference between forecast and actual opex and capex during the previous regulatory period, with the exception of the ex-post review of capex described above.

### Extraordinary adjustments

Allowed revenues may also be adjusted within the regulatory period due to the occurrence of extraordinary events as defined by RAE. Extraordinary events will be outside of the control of the TSO and have a material impact on its financial position. Any such adjustment of allowed revenues will not account for any factors that are not directly affected by the extraordinary event.

## Regulatory asset value

The regulatory asset value (RAV) will be a regulatory value of the TSO's used and useful fixed assets that are necessary for providing TUOS services. It will be kept as a separate asset register and will bear no relationship to the accounting value of fixed assets.

As described above, depreciation and return on capital will be calculated based on the RAV.

### Opening asset value in the first regulatory period

The opening RAV at the start of the first regulatory period will equal an amount defined by RAE.

### Rolling forward the regulatory asset value

The RAV at the commencement of a regulatory review will be determined by:

- Adjusting the opening RAV from the previous regulatory period by inflation (based on the same price index used to adjust allowed revenues), except in the first regulatory period when the opening RAV will be an amount defined by RAE.
- Adding actual capex incurred during the previous regulatory period, in the year in which it is incurred.
- Subtracting actual depreciation, based on actual capex incurred during the previous regulatory period, from the year in which that capex was incurred.
- Subtracting actual asset disposals during the previous regulatory period at their disposal value determined as the higher of proceeds arising from the sale or transfer of the assets to other parties and the fair value of any assets sold or transferred to other parties.
- Subtracting actual capex funded by third parties (including consumer contributions and government grants) during the previous regulatory period, i.e. exclude such capex from the RAV.

### Forecasting the regulatory asset value

To forecast depreciation and return on capital allowances for the forthcoming regulatory period, the RAV will be forecast based on forecasts of capex, depreciation, disposals, and third party funded capex.

Forecasts of capex will have regard to:

- The trade-off between opex and capex.
- Service quality standards defined by RAE.
- The TSO’s business plans.
- Network development plans approved by RAE.

Forecasts will be developed based on the following high-level approach:

- Forecast capex will be compared to out-turn capex in the previous regulatory period/s, as well as proposed and allowed forecasts in the previous regulatory period/s.
- Engineering consultants may be hired to conduct technical studies on capex requirements.

- Benchmarking may be used, recognising that it will be inherently challenging to draw meaningful comparisons with other TSO's in Europe.

- Various analytical tools may be applied to investigate specific issues relating to capex.

Capex forecasts will be adjusted to ensure that deferred capex is not funded twice.

## Service standards

RAE will define service quality standards and an associated compensation and incentive mechanism, addressing indicators such as Energy Not Served (ENS).

## Information reporting

RAE will define a separate process for collecting regulatory information from the TSO during regulatory periods. The process will require the TSO to frequently submit regulatory information in a format and level of detail that is specified in advance by RAE.

## Future directions

This revenue methodology has been established as an interim regime in an evolving framework of more incentive-based arrangements. RAE aims to further develop and refine this methodology in line with its statutory duties and international best practice regulation. Below RAE sets out some key issues and directions that will be considered in setting revenues for the post-2017 period.

### Duration of revenue control period

The revenue control period has been proposed to increase from one year to three years in this interim methodology, as part of a gradual move by RAE to more incentive-based regulatory arrangements. Prior to the next revenue control review RAE, will examine the merits of extending the regulatory period further, e.g. five years. A longer regulatory period has the potential to strengthen the TSO's incentives to outperform ex-ante assumptions for costs and service quality. However, such a move will be contingent upon having established robust mechanisms for forecasting and assessing the costs of the TSO.

### Incentive mechanisms

As part of the next regulatory review, RAE intends to further develop the incentive mechanisms of the regulatory regime to provide rewards for outperformance of ex-ante expectations across a balanced range of measures covering costs, outputs and service levels (including customer standards). RAE would particularly be looking to ensure that such mechanisms provide consistent incentives for improvement over time.

### Cost reporting

In the future, RAE intends to introduce a more robust cost reporting framework that will enable RAE to have a better insight into the operating and capital costs of the electricity transmission network. RAE expects to have such a system in place so that it provides information for the post-2017 regulatory review. This will be developed in consultation with the TSO and other stakeholders.