



ZYRA E RREGULLATORIT PËR ENERGJI  
ENERGY REGULATORY OFFICE  
REGULATORNI URED ZA ENERGIJU

# Consultation Paper

The Seventh Electricity Tariff Review

ETR7 (2013-2017)

Provisional Evaluation – Transmission System and Market Operator Detail

## DISCLAIMER

This Consultation Paper has been prepared by ERO for the purpose of receiving eventual comments from stakeholders. It does not represent a decision by the ERO.

**8 January 2013**



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## 1 Introduction

In a letter dated 8 June 2012 ERO announced the commencement of Electricity Tariff Review 7 (ETR7) which, for the first time, will enable the setting of licensee maximum allowable revenues over multi year periods. Those maximum allowable revenues must, by law, be adequate to cover the reasonable operating and capital costs of performing the licensed activities. Calculation of maximum allowable revenues does not take account of any adjustments required under the Pricing Rules for differences between actual and allowed revenues in preceding years.

In line with its published Pricing Rules, ERO must set out and consult upon its proposals on the Maximum Allowed Revenues to be recovered by the licensee during the regulatory period, and the justification for these. The Rules allow for the ERO to amend, remove or replace any part of the licensee's proposals where such action is justifiable.

In order to determine adequacy of revenues, ERO must therefore carefully assess the licensees' forecast costs and satisfy itself that their proposals are reasonable and appropriate. It should be noted that, by law, the licensees are obliged to provide all the data that ERO requires for this analysis. KOSTT was asked to present its submission to ERO and the public on 3<sup>rd</sup> September. Since that date, ERO has worked closely with the company to clarify initial submissions. KOSTT has since submitted substantial additional data and justification.

This document forms part of that Provisional Evaluation and should be read in conjunction with the "Provisional Evaluation – Overview" published concurrently with this document and its annexes. It is structured as follows:

Section 2 – Provisional Evaluation of KOSTT's proposed Capital Expenditures

Section 3 – Provisional Evaluation of KOSTT's proposed Operating Expenditures

Section 4 – Provisional MARs 2013-2017

Section 5 – Other Regulatory Parameters

Annex – Technical Assessment Report from Sinclair Knight Merz

## 2 Provisional Evaluation of KOSTT's proposed Capital Expenditures

### 2.1 KOSTT's CAPEX Proposals

On 19<sup>th</sup> October 2012 ERO issued a consultation document (the "October Consultation") setting out its understanding of KOSTT's submission to date and asking for additional clarification and justification. In particular, ERO asked KOSTT to reconcile the apparent disparity between its latest approved 10 Year Network Development Plan (2011) and the capital projects described in its August submission.



In response to the October Consultation, KOSTT submitted considerable additional information to ERO. KOSTT explained that the current Network Development Plan had been prepared prior to a Government decision to transfer a number of 110kV assets and related materials and operational staff from KEK to KOSTT. This transfer became effective on 1<sup>st</sup> April 2012. KOSTT stated that the transferred assets require substantial remedial works to bring them up to the condition of the rest of the transmission network, and into line with existing operating standards for the system. KOSTT's MYT submission therefore represented a substantial re-working of the earlier business plan to reprioritise capital expenditure over the five-year period of the coming control, a re-working that will be reflected in their next proposed Development Plan. The capital projects planned in the period are described in Annex A, together with a technical assessment of KOSTT's justification for the projects carried out on ERO's behalf by consulting engineers Sinclair Knight Merz.

*Table a*

<b>KOSTT's proposed capital projects for Transmission</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>Total</b>
	€ m	€ m	€ m	€ m	€ m	€ m
<b>Capital Expenditure Projects included in the approved NDP</b>						
Kosovo-Albania Interconnector						
Load-related capital expenditure	12.2	-	-	-	-	12.2
Non load-related capital expenditure	7.7	2.0	-	-	-	9.7
<b>Total approved capital projects</b>	<b>24.9</b>	<b>11.0</b>	<b>8.5</b>	<b>8.0</b>	<b>-</b>	<b>52.4</b>
<b>Capital Expenditure Projects not included in the approved NDP</b>						
Kosovo-Albania Interconnector						
Load-related capital expenditure	1.1	14.4	18.7	7.1	12.6	53.9
Non load-related capital expenditure	0.4	0.2	0.2	0.2	0.2	1.1
<b>Total Capital Expenditure Projects not included in the approved NDP</b>	<b>2.5</b>	<b>15.5</b>	<b>18.9</b>	<b>7.3</b>	<b>12.8</b>	<b>56.9</b>
<b>Total Capital Expenditure</b>	<b>27.5</b>	<b>26.4</b>	<b>27.3</b>	<b>15.2</b>	<b>12.8</b>	<b>109.3</b>

## 2.2 KOSTT's Unit Costs

SKM noted that KOSTT's claimed unit costs are generally lower than seen in similar markets and in the case of switchgear are 20-25% lower than might be expected. KOSTT have however demonstrated to ERO's satisfaction that the company's stated values represent purchase costs obtainable in the market. ERO has therefore accepted the KOSTT unit costs in the costing for the proposed capex programme and acknowledges that there is only a low risk in these being under-estimates.

KOSTT have provided the phasing of the expenditure over the 2013-2017 period. Project expenditure is only added to the regulatory assets base when the project is commissioned. KOSTT stated that some of the projects should have elements that are commissioned in stages but they could not provide details at this stage therefore all the projects are assumed to be commissioned at the end of their expenditure period.

### **2.3 ERO's Provisional Evaluation of KOSTT's Capex Proposals**

KOSTT's revised submission has linked each of the projects described above to specific system benefits, and have provided material explaining their planning process. On 8<sup>th</sup> November KOSTT presented the detail of their capital expenditure forecasts, particularly for the 2013 to 2017 period. This indicated four main classes of expenditure and provided justification for the planned projects and their prioritisation in terms of benefits to the system and customers in terms of increased reliability, availability and security. The projects have been examined by ERO and its engineering consultants.

SKM consider that KOSTT's planning process should lead to a reasonable and efficient capital expenditure programme. It is clear that KOSTT consider operational alternatives to capital expenditure solutions and where KOSTT feel they can improve the network through operational procedures they have also provided details in the NDP and deferred the associated capital expenditure to a later date. Nevertheless, KOSTT's asset management practices could be improved, and this aspect is addressed in Section 3 (Opex) below.

KOSTT have identified a number of capital projects, the vast majority in the transmission operations business with a small number of projects for system operations, primarily related to extending the SCADA-EMS to control the 110kV assets transferred from KEK's DSO business. The market operations business has no capital requirements for the coming control period.

Although KOSTT's capex programme is significantly higher than that in the most recent NDP this is primarily driven by additional costs related to refurbishment and enhancement of 110kV assets recently transferred to KOSTT from KEK, 40% of which is some 30-40 years old with widespread earthing problems.

KOSTT's revised submission requires some €117 million of capital expenditure over a five year period. In its technical evaluation, SKM have stated that KOSTT has built its capital programme on a sound engineering basis, but that a review of its asset age profile indicates that the company is proposing a constrained asset replacement programme.

ERO notes that SKM have some reservations that the non-project expenditure under "other infrastructure" is based on a set of budget costs rather than quotation-based estimates, and that they have recommended that this line item is reduced by 10%. This has only a minor effect on the recommended capex.

In the light of this assessment, and noting that KOSTT's unit costs are reasonable with the exception just noted, ERO proposes to allow KOSTT's proposed capital programme in full. The sums which will be funded through the MAR are shown in the table below.

*Table b*

<b>KOSTT's proposed capital expenditure requirement (including grants)</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>Total</b>
	<b>€ 000's</b>	<b>€ 000's</b>	<b>€ 000's</b>	<b>€ 000's</b>	<b>€ 000's</b>	<b>€ 000's</b>
KOSTT Transmission Operator Project Capex	27,594	27,490	26,368	15,313	12,846	109,611
KOSTT Transmission Operator non-Project Capex	2,316	669	103	138	216	3,442
KOSTT System Operator	3,744	3,024	431	-	-	7,199
<b>Total</b>	<b>33,654</b>	<b>31,183</b>	<b>26,902</b>	<b>15,451</b>	<b>13,062</b>	<b>120,252</b>

The profile of proposed capital expenditure through the MYT period suggests that capital expenditure levels will fall in later years, although in practice slippages may result in a smoothing of the profile of spending from that shown above.

In terms of deliverability, that part of the capital expenditure programme to be engineered by KOSTT is of the same order (about €100M) as KOSTT has achieved in the last six years. The overall programme includes significant expenditure (about €15.5M) on 110kV assets that will be engineered and funded by KEK. Most of the remaining grant-funded projects will be engineered by others. It therefore appears feasible for KOSTT to deliver its intended capex programme.

### **3 Provisional Evaluation of KOSTT's proposed Operating Expenditures**

#### **3.1 KOSTT's Opex Proposals**

In its submissions, KOSTT put forward its proposed central or headquarters operating costs separately, which ERO will allocate across the licensed businesses in the proportion: Transmission Operator – 80%; System Operator – 17%; Market Operator – 3%. The effect of these reallocations is shown in Tables 12, 13 and 14 of Annex 1.

Some of the costs put forward are non-controllable, such as taxes. Others are controllable. ERO has reviewed KOSTT's controllable cost forecasts with the support of consulting engineers. In the case of the following costs, ERO does not find KOSTT's forecast cost levels fully justified.

##### **3.1.1 Staffing Levels**

ERO has reviewed KOSTT's proposed staffing levels for headquarters and for the transmission operation, system operation and market operation activities. ERO's engineering consultants have also assessed KOSTT's staffing levels by comparison with other international TMSO businesses as described in section 5.2 of the report in Annex A. The staff benchmarking shows that KOSTT do not have significantly higher staffing than would be expected. However, it is clear from the data

provided that the company has all their substations manned 24/hr on a shift rota. This situation should be reduced with the completion and extension of the SCADA systems.

The company has not demonstrated the ability to provide clear information on the overall condition of its assets nor to undertake investment analysis that looks at replacement need based on asset age and condition, information which would be expected from an electricity utility following good international practice. From this, SKM have suggested that staff resources should be re-focused in future to increase attention in asset management rather than shift substation manning. Clearly these will be different skill sets and staff may need to be retrained in these, or new skilled staff recruited. SKM have noted that 20 transmission operations staff are due to retire over the period 2013-2017. They have suggested that retaining the allowance for these staff will allow KOSTT to recruit additional, but more highly qualified staff to carry out these more skilled tasks. ERO therefore has not reduced the allowance to take account of retirees.

For **headquarters** (HQ) staff, KOSTT is forecasting an increase of 6 staff to manage the increased capital programme to supplement the 40 HQ staff currently engaged in these activities, which represents a 15% increase. The capital programme 2008-2012 was €83.473m and the forecast for the 5 years 2013-2017 is €109.61m this is a 31% increase in the capital programme. ERO concurs that this staffing increase is justified.

For **transmission operations**, KOSTT have further proposed an increase in staff of 14 over the period to 2017 in recognition of the growing network. Although introduction of SCADA-EMS across all the transmission substations should allow remote operations of the 110/35kV substations KOSTT is not planning to reduce the 24 hour manning regime. The company accepts this is possible (indeed this is a major justification for this technology), but are planning to introduce it gradually in the future. The company says that demanning has social and financial implications in terms of severance that make it difficult to make staff redundant even when technological advances have rendered them so. In the light of this the company's proposal to recruit 14 additional staff today who may not be required in a few years' time seems questionable. ERO can only include the costs of obligations relating to maintenance of staff levels where there is an explicit duty on the company to retain staff who would otherwise be redundant. As a result, ERO considers that it is appropriate to assume that transmission operations staff levels remain at the 2012 level throughout the forecast period. It will be for KOSTT to consider how best to utilise its existing staff. ERO notes that KOSTT has requested an additional allowance for security guards, and expects them to be used to manage security risks at de-manned substations.

For **system operations** KOSTT is proposing an addition of 6 staff over the period to operate the expanded SCADA controlled network. ERO considers these increases reasonable given that savings are made in the staffing in transmission operations.

For **market operations**, KOSTT is proposing no increase in staff from 2012 levels for the future control period and ERO concurs that this is reasonable.

Staffing levels are reviewed by ERO as they impact staff costs and it is the staff costs that ERO are primarily concerned with. The absolute level of staffing is not being set by ERO and it is up to KOSTT to determine the appropriate structure within the opex allowance. ERO's allowance for staff levels is summarised in the table below.

Table c

KOSTT's proposed staffing levels compared with ERO's allowed staffing levels	2012	2013	2014	2015	2016	2017
KOSTT HQ	77	83	83	83	83	83
ERO HQ	77	83	83	83	83	83
KOSTT Transmission Operations	239	242	247	253	253	253
ERO Transmission Operations	239	239	239	239	239	239
KOSTT System Operations	43	44	47	49	49	49
ERO System Operations	43	44	47	49	49	49
KOSTT Market Operations	10	10	10	10	10	10
ERO Market Operations	10	10	10	10	10	10
KOSTT total staff	369	379	387	395	395	395
ERO total staff	369	376	379	381	381	381

ERO is of the view that these staffing levels may well be capable of further reduction. In setting the Efficiency Factor for KOSTT it intends to incentivise the company to seek improvements in productivity.

### **3.1.2 Salary and related costs**

ERO's reporting formats required companies to make all forecasts in real terms, that is in 2012 prices as inflation will be applied in future to the allowed revenues at annual adjustments. In making its forecasts of salary levels, KOSTT stated that the influx of lower paid 110kV operational and maintenance staff from KEK had depressed average salaries. Their forecast therefore applied a 2.5% uplift over and above inflation to bring average salaries back to 2011 levels. ERO does not accept this rationale: the influx of operational staff has changed the proportion of KOSTT staff with higher qualifications reduced from 53% in 2011 to 40% from 2013 onward. The change has turned KOSTT from an organisation with predominantly professional staff to one with predominantly operational staff.

Table d





KOSTT's proposed salary levels*	2012	2013	2014	2015	2016	2017
	€ 000's	€ 000's	€ 000's	€ 000's	€ 000's	€ 000's
*(including pension contributions and contract employee wages)						
KOSTT's forecast salaries	3,800	4,021	4,213	4,403	4,506	4,615
ERO proposed allowable salaries	3,800	3,901	3,941	3,968	3,968	3,968
Difference (euros 000's)	0	-120	-272	-435	-538	-647
% Difference	-	-3%	-6%	-10%	-12%	-14%

KOSTT confirmed that the 2.5% increase may not in fact happen but argued that the company intended to review its organisational structure to bring the company more into line with international models for TSMO businesses. ERO considers that this is a matter for KOSTT's management but presumes that such changes would be made in the interests of improving efficiency, rather than lowering it. In the calculation of the allowed salary ERO has used the 2012 average salary of the specific licence activity to develop the allowance based on the staff level above.

### **3.1.3 Repairs and Maintenance**

KOSTT has provided a detailed Maintenance plan and budget and this has been carefully reviewed by ERO and its consultants. The main area of increase is to overhaul the 110kV assets that have been transferred from KEK. KEK also transferred system spares with the assets and KOSTT have confirmed that the cost of these transferred spares is not included in the maintenance submission. ERO would expect the combined impact of the maintenance programme and the planned capex programme to be sufficient to allow KOSTT to manage aging assets and achieve a measure of asset life enhancement beyond KOSTT's existing asset life assumptions.

### **3.1.4 Other operating expenses**

KOSTT have proposed a number of expenses under the heading "other operating expenses". ERO have examined these proposed costs, and find that the majority are reasonable taking into account a company of KOSTT's size and the nature of its activities. The value of this line item is proposed by KOSTT to increase from €1,621,000 in 2012 to €2,795,000 in 2017. In certain cases, however, ERO is not satisfied that future costs are reasonable or have been adequately justified by the company, and these are described in sections 3.1.5 and 3.1.6 below.

### **3.1.5 Insurance Costs**

KOSTT states in its submission that this is a new requirement but that to date they have been unable to find an insurer in Kosovo who will provide cover. KOSTT have, however, €400,000 per year in TO and €100,000 per year in SO, a total of €2.5m over the period. ERO proposes removal of these estimated costs until KOSTT can demonstrate that they can secure

appropriate insurance, to avoid giving a windfall gain to the company. ERO will keep the issue of insurance under annual review, and notes that in the event of an uninsurable loss outside KOSTT's control, the company could apply for a MAR adjustment.

### 3.1.6 Official Trips Expenses

KOSTT have forecast an increase in the cost of official trips in the forthcoming review period. The historic path of expenses under this line item shown no very clear path. ERO believes that, without additional justification for future expenditure increases, it is appropriate to hold expenditure at 2012 levels.

### 3.1.7 Secondary Regulation

KOSTT has included Opex forecasts for Secondary regulation totalling €8.4m. ERO has provisionally included this in the MAR allowance but KOSTT will need to provide evidence of signed agreements with providers of such services before any costs can be confirmed in the final MAR calculation.

### 3.1.8 Trade Receivables

KOSTT have forecast an expected cost to the business of some €9,446,000 arising from anticipated non-payment by KEK of KOSTT invoices. ERO does not accept this cost as it should not arise in a well-functioning market. In the event that there is a future non-payment issue by a third party, it should be raised with ERO for regulatory action. This proposed cost is therefore disallowed in entirety.

### 3.1.9 ERO's Provisional Evaluation of KOSTT's Opex Proposals

ERO's provisional evaluation of KOSTT's Opex (excluding losses and depreciation) is summarised in the following table. It represents a reduction over KOSTT's proposal of some €23 million over the five year control period, a reduction of some 37%.

Table e

ERO provisional evaluation of KOSTT's opex	2013 € 000's	2014 € 000's	2015 € 000's	2016 € 000's	2017 € 000's	Total € 000's
KOSTT's proposed opex	13,627	11,518	11,685	12,283	12,485	<b>61,599</b>
ERO's proposed opex	7,563	7,674	7,774	7,839	7,919	<b>38,768</b>
Difference (€ 000's)	-6,064	-3,844	-3,912	-4,445	-4,567	<b>-22,831</b>
Difference %	-44.50%	-33.38%	-33.47%	-36.19%	-36.58%	<b>-37.06%</b>

The items that contributed most significantly in ERO's proposal is the removal of the provision for trade receivables and ancillary services expenditure as per the explanations given in Sections 3.1.7 and 3.1.8 of this Document.

## 4 Other Regulatory Parameters

### 4.1 Loss Allowance and Sharing Factor

ERO considers that the additional investments in the network will contribute to a further reduction in losses however it expects the marginal reduction in losses to gradually diminish. ERO therefore considers it appropriate to set the allowed level of losses for KOSTT at 1.8% along with a loss-sharing factor of 50%.

### 4.2 Efficiency Factor

ERO is required by the Pricing Rule to set an efficiency factor that will apply to KOSTT's operating and maintenance costs. A single factor will be set for the whole MYT period at a level that reflects the gains that might be expected during the period by an efficient licensee. In setting the level of the efficiency factor, ERO has considered the costs and quality of service provided by KOSTT, and taken account of productivity levels in international comparator companies. It has also considered the levels of efficiency factor that have been successfully applied in regulatory regimes elsewhere.

ERO concludes that there is scope for significant efficiency gains in KOSTT's activities, particularly as this will be the first time that an efficiency factor has been applied to the company and experience shows that companies are able to demonstrate higher efficiency gains at this early stage of incentive regulation. ERO considers that a value of 4% per annum is an appropriate efficiency factor in the MYT period, representing both a challenging incentive for KOSTT to reduce its costs and achieve gains if it out-performs this level of improvement, while at the same time giving benefits to customers through downward pressure on tariffs.

### 4.3 WACC

ERO has set the Weighted Average Cost of Capital for KOSTT based on previous evaluations of required Return on Equity, actual cost of debt financing and actual gearing level (subject to gearing restrictions given in ERO's ETR6 WACC Discussion).

ERO initially assumed a commercial return on equity for all regulated companies in the sector. ERO further sought guidance from the government as to the level of return on equity that the government might require as the sole owner of publicly owned companies. The government has indicated that they will consider a lower return from operators in the public ownership compared to a return that might be expected by a private owner. ERO's provisional evaluation therefore is that a level of 8.0% post-tax return on equity is appropriate for publicly owned companies. ERO has therefore used this return on equity in evaluating KOSTT's WACC.

The resulting WACC for KOSTT is set at 6.73% (real, pre-tax).



## 5 Provisional MARs 2013-2017

Following its assessment of KOSTT's capital and operating cost proposals, the provisional evaluations described above, and its proposed regulatory parameters, ERO has calculated the MARs for KOSTT's licensed activities in line with the TSO Pricing Rule. These are set out in the following table.

*Table G*

Provisional Evaluation of MAR for KOSTT	2013	2014	2015	2016	2017	Total
	€ m	€ m	€ m	€ m	€ m	€ m
Total	18.6	19.2	20.1	20.8	21.8	100.6