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Responses to the ERO's Consultation Report on the Weighted Average Cost of Capital (WACC)

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Introduction

KEDS as a license holder of the Distribution System Operator has received on 04.07.2017 the ERO's Consultation Report regarding the estimation of the Weighted Average Cost of Capital (WACC) for the second regulatory period 2018-20022.

KEDS has carefully analyzed the ERO's consultative report and assessments set out in this report. ERO's assessment seriously jeopardizes the financial stability of the company. Estimated WACC parameters do not provide free cash for shareholders after servicing liabilities, in a view of mismatching amortization and maturity of loans. The following table presents the company's financial position based on the parameters evaluated by ERO for WACC and the allowed level of losses.

Cash flow from operating activities mil euro	**2018**	**2019**	**2020**	**2021**	**2022**
EBITDA	23.2	22.6	24.0	25.4	26.9
Adjust for changes in net working capital:	4.7	4.7	4.6	4.5	4.5
increase in current assets	-3.1	-3.1	-3.1	-3.0	-3.0
increase in current liabilities	7.8	7.8	7.7	7.6	7.5
Tax	-1.1	-0.6	-1.0	-1.0	-1.0
interest	-1.3	-5.1	-1.6	-1.9	-2.0
Net cash from operating activities	**25.4**	**21.5**	**26.0**	**27.0**	**28.3**
Cash flow from investing activities					
Acquisitions of fixed assets-capital expenditures	-26	-28	-31	-28	-27
Proceeds from sales of fix assets					
Net cash used in investing activities	**-26**	**-28**	**-31**	**-28**	**-27**
Cash flow from financing activities					
Loan payments	-6	-8	-7.4	-7	-9
Borrowing	10	10	10	10	10
Dividends paid					
Net cash from financing activities	**4**	**2**	**2.6**	**3**	**1**
Open balance	6	9.06	4.69	2.30	4.57
Net changes	3.1	-4.4	-2.4	2.3	2.3
closing balance	**9.06**	**4.69**	**2.30**	**4.57**	**6.83**

Even though in the above calculations was not considered the reality of the excess costs of losses, the company in the second regulatory period cannot generate free cash and needs a continuous financing, which only for the second regulatory period is accounted as 50 -97 million euros, depending on the additional cost of losses.

Respectively, KEDS disagrees strongly with the ERO assessment and would like to present the following arguments.

It should be noted that the WACC is the main potential profit component for the company and as such has a significant influence on the financial stability of the company. The WACC calculation is done based on the following formula:

*WACC = (1 – g) * (rE) / (1 – t) + gi * (rD)*

Where are:

WACC (pre-tax)	*("is the Weighted Average Cost of Capita pre-taxl")*
g	*("gearing (debt:debt+equity ratio)")*
rE	*("real cost of equity (expressed as a %)")*
rD	*("real cost debt (expressed as a %)")*
t	("Kosovo corporate income tax rate")

Estimation of the cost of debt is calculated as follows:

$$Rd_i = Rf + DRP_i$$

Rf	(Risk free norm)
DRP_i	(Debt risk premium for the firm i, representing the additional risk of that firm in relation to the risk-free rate)

To estimate the cost of equity, ERO uses the Capital Asset Assessment Model (CAPM). Formula for calculating CAPM is:

*rEi = rf + βi * ERPm*

Where are:

rf	*'risk-free rate")*
ERPm	*("equity risk premium applicable to the market as a whole")*
βi	*("the equity beta for the firm")*

Risk free Rate and Real Debt Cost

ERO in the consulting report has evaluated the risk-free rate between values 1.1% and 3%, by arguing the fall in interest rates in developed European countries, and the internal debt rates of the Government of Kosovo realized from government securities (treasury bills and government bonds).

As the most risky rate, it has accepted the return on Government bonds with 10-year maturity of Hungary[1].

However, it should be carefully evaluated and considering that the Government of Kosovo has issued only a 5 year government bond, that are not in circulation since the whole emission was purchased by the banks to cover their obligations towards Central Bank of Kosovo. Respectively, using examples from Kosovo are misleading and endangering the stability of the system.

Determining a risk free rate for a country without historical data should be done by comparing government bonds of another country with similar economic and political conditions, comparison to Hungary, which is a European Union state, with a stable banking system and direct investments, and where access to capital resources is easier and less costly.

In the "Doing Business" report for 2017, Kosovo is ranked in 60th place, while Hungary is ranked on 41st[2]. Comparison with Hungary is not adequate.

The average rate on loans achieved by Kosovo banks for 2016 is 6.8%, without considering 10% withholding tax on loans up to 5 years. It should be emphasized that the interest rate will depend on the level of liquid collateral that can be provided, in the case of KEDS it could be the guarantee of shareholders that normally has an additional cost of 1% per annum (bank guarantees are at the range of 1.5% p.a). Administrative buildings of KEDS, as part of the Regulated Asset Base (RAB) and are not considered as liquid collateral. In addition, it should be taken into consideration that the time for depreciation is always longer than the 5-year repayment period, respectively with an average of 18 years. So the company must always re-finance the loan with new loans in order to be able to pay the current loans. Given these additional risks, the real cost of debt should be valued at 7.5% -8% for 5-year loans.

If we consider the assessment report issued by ERO one year ago for renewable sources[3], the cost of debt is estimated at 6.5%, not forgetting the short return on investment and the energy purchase guarantee

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[1] http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=teimf050&plugin=1

[2] https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=0ahUKEwiY4OTGwJLVAhVJLhoKHd7JBecQFgguMAE&url=http%3A%2F%2Fwww.doingbusiness.org%2F~%2Fmedia%2FWBG%2FDoingBusiness%2FDocuments%2FAnnual-Reports%2FEnglish%2FDB17-Full-Report.pdf&usg=AFQjCNHtZldUHZle0CTs6casUNtRUMAIcA

with feed-in tariffs, which eliminate the financial risks. Therefore, we are repeating once again that the real cost of debt for the Distribution Operator should be estimated at 7.5% -8%.

Real cost of Equity

ERO in the consultation report has evaluated the market risk premium by arguing and taking into account the decisions of regulators of the European Union countries. With this assessment, ERO assumes that Kosovo has the same systemic risk with the developed countries of the European Union. In other words, the ERO assumes that Kosovo shares the same Capital Market Line (CML) and Security Market Line (SML). The concepts of CML and SML are fundamental concepts of modern finance and the CAPM model that reflect investor behavior towards risk. If equity returns will be the same in mutually exclusive investments, rational investors will invest in countries where the risk is lower, as is the case with CAPM assumptions that investors dislike taking risk (are risk-averse). In addition, the estimate of the cost of equity is almost the same as the 5 years USD deposit rates in Turkey that do not have a significant risk.

For this reason, the developing countries are obliged to provide a higher return on investment in order to attract direct investment and that investors invest by being protecting from the systematic risk that cannot be avoided.

The following table presents assessments by Professor Aswath Damodaran at Stern School of Business at New York University for 2017, which have been updated in January 2017[4]

Country	*Equity Risk Premium*	*Country Risk Premium*
Albania	12.09%	6.40%
Bosnia and Herzegovina	14.94%	9.25%
Macedonia	10.81%	5.12%
Moldova	14.94%	9.25%
Montenegro	12.09%	6.40%
Serbia	12.09%	6.40%
Turkey	9.24%	3.55%
Ukraine	19.90%	14.21%

Meanwhile, the work and analysis in 2016 of the professors Pablo Fernandez, Alberto Ortiz, and Isabel F. Acin, who are professors at the Navarre University Business School, provide close evaluation with Aswath Damodaran[5]. It should be taken into consideration that works and studies of Professor Damodaran's are widely used elsewhere, and the same ones are used by most of the large investment banks and large corporations to assess equity risk.

[3] http://www.ero-ks.org/2016/Tarifat/RAPORT_per_FIT_te_eres_dhe_hidrocentraleve_te_vogla_eng.pdf
[4] http://pages.stern.nyu.edu/~adamodar/
[5] http://didattica.unibocconi.it/mypage/dwload.php?nomefile=MRP2016_Fernandez20170213193256.pdf.

KEDS proposes that the risk premium of equity to be in valued at 15%, equal to Bosnia and Hercegovina, a neighboring country that is similar to Kosovo. This value is a real value which represents the investor's expectation of investing in Kosovo against the systemic risk of the country. Considering the fact that Kosovo is still not fully recognized, also does not have a credit rating,the total risk premium on equity should be higher than Bosna and Herzegovina, respectively, KEDS proposal is the total equity risk premium (i.e. Rf + ERPm) to be set at 15.9% , to avoid the lack of investor's interest.

It is worth mentuioning that the proposal and the investor's request with the support of the IFI for the risk premium of equity for the only big project "Kosova e Re", which has a similar return to KEDS (approximately 20 years), and which is still under discussion, is 21% and from the liquidity perspective minimizes the risk of the investor. Electricity Distribution business is the most risky business, which is exposed to financial and liquid risks. Thus, the equity risk premium cannot be determined with drastic changes. Again, it is worth mentioning that the ERO for Renewable Resource Projects, even though they are businesses with lower risk compared to KEDS, has determined the risk premium of equity at 12% in its 2016 study[6].

Gearing

Per gearing KEDS agrees with proposal of ERO in value of 40%.

Beta

Since there is no any specific study for calculation of beta, KEDS proposes that beta is determined as 1, because KEDS has the same risk as Kosovo market.

The table below presents KEDS's proposal for the second regulatory period 2018-2022..

[6] http://www.ero-ks.org/2016/Tarifat/RAPORT_per_FIT_te_eres_dhe_hidrocentraleve_te_vogla_eng.pdf

Description	PR1 ERO	Explanation	RES ERO	KEDS Proposal	Description
Norm / Rate without risk (real)	6.5%	ERO Evaluation of Market Conditions	3.5%	3.5%	Similar to RES
Premium of debt	2.8%	ERO Decision for 2016	3.0%	4.0%	Debt premium higher than RES
Cost of debt (real)	9.3%	Calculation	6.5%	7.5%	Liquidity costs and tax at source are added
Premium for risk in equity	6.7%	ERO Decision for 2016	8.5%	12.4%	Bosnia +1% country's risk
Beta of equity	1	ERO Decision for 2016	1	1	Similar to Market in Kosovo
Cost of equity (after taxes, real)	13.2%	Calculation	12.0%	15.9%	Calculation
Norm / rate of taxes in corporation	10.0%	Tax rates in Kosovo	10.0%	10.0%	Tax rates in Kosovo
Cost of equity (before taxes, real)	14.7%	Calculation	13.3%	17.7%	Calculation
Gearing	50.0%	ERO Decision for 2016	50.0%	40.0%	ERO Proposal
WACC (before taxes, real)	**12.0%**	**Calculation**	**9.9%**	**13.6%**	**Calculation**
Eurozone HICP	3.0%	ERO Decision for 2016	1.9%	1.9%	ERO Proposal
WACC (before taxes, nominal)	15.0%	Calculation	11.8%	15.5%	Calculation

Conclusion

KEDS proposes that WACC before tax is set at 13.6%. This value is real and ensures the continuity and financial sustainability of the Distribution System Operator. The values proposed by ERO not taking into account the country's risk and additional financing costs, would put the company in a very difficult financial position, by seriously endangering and risking the firm's sustainability and continuity. KEDS strongly urges ERO to consider the comments and arguments of KEDS, and to assess the risks imposed to the company that performs public services, risks which affect the entire energy sector.