Consultation Report

Input Values and Operating Expenses of the Universal Service Supplier

Review of Input Values (2022-2024)

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| **DISCLAIMER****This Consultation Report has been prepared by ERO for the purpose of informing stakeholders. It does not represent a decision by the ERO and should not be interpreted as such.** |

25 November 2021

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# Introduction

The Energy Regulatory Office (ERO) is currently undergoing the process of determining the Input Values and Operating Expenses for the Universal Service Supplier - USS, for the period 1 April 2022 - 31 March 2025.

During the Review of Input Values, ERO determines the values of some parameters which directly affect the determination of USS Allowed Revenues. Such parameters include Operating Expenses, Efficiency Factor, Asset Lifespan, Bad Debt, Retail Margin, Export Sharing Factor and Imbalance Sharing Factor. This Consultation Report presents ERO's initial proposals on Input Values and Operating Expenses for the upcoming period 2022-2024 and is published for the purpose of informing stakeholders as well as providing the opportunity to comment and present stakeholders' views on the proposed values.

ERO believes that public consultation is at the heart of effective regulatory policy. Therefore, ERO publishes this Consultation Report, which contains initial proposals for input values, providing to all stakeholders the opportunity to analyse and comment by submitting new evidence, presenting counter-arguments or providing new data so that the final evaluation is accurate.

The parties who want to express their views on ERO's proposal are invited to submit their written comments at ero.pricing-tariffs@ero-ks.org by 8 December 2021 at the latest. Comments can also be sent via post at ERO’s address:

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Following the review of the received comments, ERO will publish the ***Final Report with responses to comments***. The comments received on this consultation paper will be published along with the Final Report.

**Related documents**

|  |  |
| --- | --- |
| Law on Energy Regulator | <http://ero-ks.org/2016/Ligjet/LIGJI_PER_RREGULLATORIN_E_ENERGJISEang.pdf> |
| Rule on USS Revenues | <http://ero-ks.org/2017/Rregullat/USS%20Pricing%20Rule.pdf>  |
| KESCO’s application on input values | <https://www.ero-ks.org/zrre/sites/default/files/Publikimet/Pjesemarresit%20ne%20Treg/Furnizim/Propozimi%20per%20Vlerat%20Hyrese%202022-2024%20per%20FSHU_KESCO.PDF>  |

# Input Values

The Rule on Determination of Revenues for Universal Service Supplier (USS) sets out the manner of calculation and adjustment of Maximum Allowed Revenues of the Universal Service Supplier that cover the costs of providing regulated service to customers supplied with electricity under the universal service criteria. This rule defines Regulated Revenues in a manner that enables the Universal Service Supplier to cover retail costs, the cost of energy purchase required to supply USS customers and pass-through costs (TSO and DSO costs). Adjustments are then made in accordance with the USS Pricing Rule to ensure that USS has sufficient financial liquidity, and that regulated revenues realized through the application of tariffs are properly calculated.

USS Regulated Revenues depend on the Input Values that are determined during their reviews. In order to promote revenue predictability, the input values are set for a regulatory period of 3 years. Changes in input values can only be made to the extent that these changes are *‘reasonable, justified and carefully verif*ied’ (Article 9.1 of the Rule on Determination of Revenues for Universal Service Supplier).

The Rule on Determination of Revenues for Universal Service Supplier (USS Pricing Rule) defines that input values are determined during the Input Values Review process, which according to Article 12, paragraph 3 are:

* Retail margin
* Bad debt
* Operating costs
* Efficiency factor
* Imbalance Sharing Factor
* Economic Lifespan of Assets
* Any other input parameter that the Regulator may consider necessary. \*

\* During this process, the Regulator considers it necessary to predetermine the efficiency factor in the controllable OPEX as another input parameter. The setting of the efficiency factor is in principle the same as for other regulated operators, but during its determination the specific characteristics of supply were taken into account.

## Retail margin

Retail margin is the fixed percentage that USS is allowed to apply to wholesale purchase costs in order to compensate for the risk it undertakes in provision of the regulated service.

Given that the Universal Service Supplier is a regulated activity in the energy sector, consequently operating costs and other cost factors related to the provision of customer service are predetermined. It implies that the company is not mandated to determine its profit on competitive basis, but the Regulator sets a margin level, as a reasonable profit, taking into account the risks that the supplier undertakes during the provision of service to regulated customers. During its determination, the Regulator, in addition to evaluating the exposure of USS to the risk it undertakes to provide the service, takes into account the comparability with the margin of suppliers of other European countries, in particular of the countries with similar characteristics to the Kosovo market.

### KESCO’s application

In its application, KESCO proposes to maintain the current retail margin of 3.0%, as ensuring an adequate balance between risk compensation and to avoid harming potential new competing suppliers.

KESCO states that retail margins for predetermined suppliers, when applied in the European Union and the Energy Community, are set by the regulator or through auctions. It further states that, among neighbouring countries, Albania implements a regulated margin set at 3% as in Kosovo, whereas in Macedonia the margin was set in the most recent auction, in 2019, which resulted in a margin of 11.5% (including all parameters of retail cost, bad debt and profit).

### ERO’s review and proposal on USS Retail Margin

During the evaluation of retail margin, ERO has analysed the approaches used by regulators in various countries in Europe and in the Balkan region, the factors that are analysed during its determination as well as market conditions and circumstances. It should be emphasized that there are few European countries that continue to regulate prices for retail supply, consequently setting the margin for suppliers. The following describes the experiences of different countries that apply margins predetermined by national regulators:

* The Energy Regulatory Entity of Albania has set the retail margin through the regulatory framework, at a level not higher than 3%.[[1]](#footnote-1) This enables the Regulator to set margins at lower levels, but not higher than 3%.
* North Macedonia –The retail margin for the regulated universal service supplier and the last resort supplier is determined through a competitive process. The margin which resulted from the auction of 2019, is at the level of 11.5%. This margin level includes all universal supplier costs, such as operating costs, outstanding debts and profit. So, North Macedonia has used another model for determination of margin, by following the competitive process for "retail costs, bad debt and profit" which differs as a model from other countries.
* In Ireland, the Commission for Regulation of Utilities (CRU) has evaluated the average retail margin earned by suppliers at 2% respectively 1.3%, which is considered an appropriate margin for supply under regulation criteria.[[2]](#footnote-2) At the time of these margins, CRU considered that this was an appropriate margin, taking into account that there was no volume risk for regulated services, moreover if the company would not recover its full costs within a year then it would recover them in future periods.
* The Regulatory Authority of Turkey, within the review of parameters of the regulated supplier for the fourth regulatory period 2021-2025, in 2020, through ERRA, required from member countries as well as observing ones to provide information regarding their practices in determining the margin for regulated suppliers. Upon completion of the review process, EMRA decided that the supply margin would be 2.38% for the period 2021-2025.[[3]](#footnote-3)
* From the information provided and the research of the methodologies, it is seen that Georgian National Energy and Water Supply Regulatory Commission (GNERC), in the Methodology for Calculating Tariffs for Universal Services has set the rate of 1.5% as a reasonable profit rate applied to the settlement price in the difference between the Universal Service Supplier and the Wholesale Public Service Operator.[[4]](#footnote-4)
* The National Energy Regulatory Agency of Moldova (ANRE), in the methodology for calculating the regulated prices for the Universal Service Supplier and the Last Resort Supplier has set as a margin "rate of return" the rate in the amount of 1%, a rate applicable to total costs (Energy + TSO + DSO + Supply).[[5]](#footnote-5)

Taking into consideration that:

* KESCO-USS is not exposed to the risk of energy volumes, moreover energy from KEK is provided with priority to USS;
* Purchases made by traders are transferred at USS costs;
* Full USS costs are recognized and adjusted during tariff reviews;
* Analysis of historical data, regulatory experiences, conditions and circumstances of operation of the Universal Service Supplier

ERO considers it reasonable to set the retail margin at 2.54% for the period 2022-2024. The methodology for its calculation is provided below:

Table 1 Retail margin costs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | Unit |  Margin costs | Wholesale gross costs | Wholesale net costs |
| 2017 | €000 | 3,724 | 127,844 | 124,133 |
| 2018 | €000 | 3,471 | 119,160 | 115,700 |
| 2019 | €000 | 3,521 | 120,899 | 117,367 |
| 2020 | €000 | 3,795 | 130,298 | 126,500 |
| 2021 | €000 | 4,730 | 162,396 | 157,667 |

Table 2 Retail margin

|  |  |  |
| --- | --- | --- |
| Calculation | Unit | Amount |
| a) Average costs of margin 2017-2021 | €000 | 3,848 |
| b) Margin trend in 2022 | €000 | 151,663 |
| c= a/b Margin | % | 2.54% |

ERO proposes that the retail margin of 2.54% to be applied for the period 2022-2024.

## Bad debt

In the USS Pricing Rule, it is stated that the allowed bad debt costs will be set by the Regulator during the determination of input values and will be calculated by applying the allowed level of bad debt in the initial calculation of MAR. The difference between the final MAR (which includes the calculation of bad debt) and the initial MAR represents the bad debt costs allowed for the respective year.

### KESCO’s application

The allowance of bad debt represents the share of billed revenues which KESCO, as a USS, is unable to collect due to non-payment, customer bankruptcy, etc. The current allowance is set at 4% of allowed revenues, a level which has not changed since 2015.

KESCO claims an increase in this compensation for the period 2022-2024 due to the following reasons:

* According to KESCO - the historical collection rate used by ERO underestimates KESCO's current bad debts. According to KESCO, the error made during the calculation of the level of current bad debts is the consideration of all supplier revenues. It is important to note that KESCO as a licensed supplier also receives payments that are not related to the billed energy, whereas the level allowed for bad debts is allowed on the basis of the initial MAR and as such should be calculated only in the amount of electricity billed for the respective year. According to KESCO’s calculations, the average bad debt during the period 2017-2021 turns out to be 5.2%.
* KESCO, in its evaluation, has removed from calculation the 35kV and 10kV customers, who are expected to be supplied at unregulated tariffs from April 2022. As a result, KESCO claims that the impact of their exit to the market will affect in increasing the level of bad debt of USS, therefore not providing a concrete evaluation of this impact.
* Even though KESCO has not taken them into account during the evaluation of bad debt, it points out that there are several other factors that could affect the increase of the level of bad debt for USS, such as: the eventual increase of prices for final customers due to the increased prices in wholesale markets, overhauls of TPP Kosova B, eventual deregulation of customers connected at the 0.4kV level and the possibility of supplier switching and return to USS, which could be misused by customers as in the countries which have undergone this process before.

The proposal which results from KESCO on allowing bad debt for the three-year tariff period 2022 -2024 is shown below.

Table 3 Request of USS on allowed level of bad debts

| Request on allowed level of bad debts  | 2022 | 2023 | 2024 |
| --- | --- | --- | --- |
| Proposal for bad debt | 5.2% | 4.8% | 4.6% |

Source: KESCO

### ERO’s review and proposal on allowing the bad debt

KESCO's argument that the allowance of bad debt should be calculated by referring only to energy billing is correct insofar as utility bills should be excluded from the calculation as transferred revenues, but not also for collections realized from the bailiff process. The following are the factors that ERO has taken into account during the evaluation of the reasonable level of bad debt.

#### Impact of the accounts receivable discounted

Initially, when handling the level of bad debt, it should be clarified that non-collection cannot be completely considered as a bad debt, given that there may be delays in collection, but not all this non-collection turns out to remain bad debt. For this purpose, ERO has requested data from KESCO related to Accounts Receivable Discounted (ARD), and has analysed the financial statements of KESCO, which also reflects the lines related to the accounts receivable discounted.

During the last two years, due to the COVID 19 pandemic, the economic crisis has affected the whole world, and consequently Kosovo as well. As a result, this crisis has also affected families and businesses which during this period have had difficulty fulfilling their obligations to public services and payment of loans.

From the analysis of historical data provided by KESCO, and financial statements for the period 2017-2021, the Accounts Receivable Discounted on average for the whole period is 1.7%. In addition, ERO during its analysis has taken into account the unknown circumstances regarding the future situation of COVID-19 in Kosovo and the world, as its eventual deterioration may have a negative impact in collection. Therefore, ERO during the evaluation of bad debt for 2022 as an opening value, has taken into account the critical years of Accounts Receivable Discounted, respectively 2020 and 2021.

In assuming the expectations for Accounts Receivable Discounted for 2021, ERO has taken into account the realized level for eight (8) months and then has converted it to an annual value (3.3 \* 12/8), while for 2020 has used the realized value. The average of ARD for 2020-2021 has turned out to be 2.21%. This level enables the avoidance of any eventual unpredictability on the one hand, and is a preventive measure for the stability and liquidity of USS on the other hand.

#### The impact of deregulation

ERO has also taken into account the impact of the deregulation of customers, of 0.15%, during the evaluation of bad debt. ERO's final proposal on allowing the level of bad debt for the base year 2022 of the regulatory period is 2.4%, while it proposes that this rate shall be reduced to 2.0% in 2024. This target of ERO has as a reference the average level realized by KESCO-USS during the period 2017-2021, which was 1.7%. The target of 0.4% is divided into two years; for 2023 the bad debt is proposed to be 2.2%, whereas in 2024 it is proposed to be 2.0%. The regulatory objective is to provide an incentive for further improvement of accounts receivable. This incentive is also based on the fact that through the bailiff process in the past USS has had an improvement in the level of accounts receivable.

The regulatory mechanism for managing the bad debt enables the financing of the deficit in revenues that cannot be collected from billing customers at the lowest possible cost, taking into account the acceptable level of exposure to financial risks and the liquidity of USS.

The following table below presents the data used and the calculations related to aspects of non-collection for allowing bad debt.

Table 4 Historical rates of non-collection

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Billing** | **Unit** | **2017** | **2018** | **2019** | **2020** | **2021\*** | **Total** |
| 1. Billing of energy
 | mil€ | 270.4 | 263.5 | 278.2 | 289.7 | 326.1 | 1,428 |
| Billing of services | mil€ | 2.24 | 2.20 | 2.04 | 1.77 | 2.08 | 10 |
| Total billing | mil€ | 273 | 266 | 280 | 291 | 328 | 1,438 |
|  |  |  |  |  |  |  |  |
| **Collection** | **Unit** | **2017** | **2018** | **2019** | **2020** | **2021\*** | **Total** |
| b) Collection for billed energy | mil€ | 256.2 | 249.9 | 266.9 | 264.1 | 315.8 | 1,353 |
| Prepayments\*\* | mil€ | 3.51 | 4.22 | 2.68 | 8.37 | 5.63 | 24 |
| c) Bailiff | mil€ | 0.65 | 2.67 | 3.90 | 2.02 | 2.77 | 12 |
| Services | mil€ | 2.14 | 2.27 | 2.14 | 1.31 | 2.17 | 10 |
| Revenues from collection of debts-KEK | mil€ | 0.49 | 0.15 | 0.00 | 0.00 | 0.04 | 1 |
| KEK – Agreement | mil€ | 3.81 | 1.29 | 1.09 | 0.39 | 0.40 | 7 |
| Total | mil€ | 267 | 260 | 277 | 276 | 327 | 1,407 |
| Non-collection rate (b+c)/a | % | 5.0 | 4.1 | 2.7 | 8.1 | 2.3 | 4.4 |
| d) Discounted A/R | mil€ | 4.0 | 5.4 | 2.3 | 8.6 | 3.3 | 23.7 |
| Discounted A/R d/a | % | 1.5 | 2.1 | 0.8 | 3.0 | 1.0 | 1.7 |

*\*The data is for the period January-August 2021*

#### Analysis of the evaluation of deregulation

It is reasonable to expect that the exit of larger and regular paying customers to the open market will lead to an increase in the rate of bad debts for USS, as the composition of customer categories changes. However, it is difficult to ascertain the magnitude of this impact. The calculations provided by KESCO do not explain the fundamental assumptions therefore cannot be verified. They also show that the impact of deregulation decreases over time, whereas the increase of the level of customers switching would intuitively lead to an increasing impact on bad debt levels.

In an effort to approximate the effect of customer deregulation, in line with ERO's latest Guideline on Liberalization of Electricity Market, ERO required from KESCO to provide data on billing and collection rates for voltage levels (35 kV, 10 kV and 0.4 kV).

An accurate calculation of the impact of deregulation on collection rate of USS would require, among others, an identification of the number of customers connected to the 35 kV and 10 kV networks which qualify for the criteria referred to in Article 37.2 of the Law on Electricity. Due to the lack of such data, for the purposes of this review, ERO has assumed that none of the customers at the 35 kV and 10 kV levels fulfil these criteria and - therefore – are all subject to deregulation. The calculation of the resulting collection rates and the changes in percentage points from the 2019 levels are presented in Table 4, below.

Table 5 Effects of deregulation on collection rates

|  |  |  |
| --- | --- | --- |
| The effect of deregulation (Data of 2019) | Collection Rate | Difference in % points |
|
| Average 35, 10 and 0.4 kV | 98.31% |  |
| Average 10 and 0.4 kV | 98.30% | 0.01% |
| Average 0.4 kV | 98.16% | 0.15% |

Source: Calculation of ERO based on KESCO’s revenues

The actual average collection rate, including all customers of universal supply, in 2019 was 98.3%. The weighted average collection rate for 10kV and 0.4 kV customers decreases by 0.01% pp after 35 kV customers are deregulated. The collection rate is reduced by 0.15% pp with the deregulation of 35kV and 10kV customers. These calculations suggest that KESCO’s forecasts of 0.5% for the first year seem to overestimate the impact that the deregulation will have on customers.

The following table presents ERO's proposals on allowing bad debt for USS, on annual basis, for the next tariff period (2022-2024):

Table 6 Calculation of bad debt

|  |  |  |
| --- | --- | --- |
| **Bad debt components** | **Analysis** | **ERO’s Proposal** |
| **2022** | **2023** | **2024** |
|  a. A/R Discounted for the years 2020-2021  | 2.21% |  |  |  |
| b. Impact of customer deregulation (35kV and 10kV) | 0.15% |  |  |  |
| **c=(a+b) Proposal on allowance of bad debt** | **2.36 %** | **2.4%** | **2.2%** | **2.0%** |

## Imbalance sharing factor

The imbalance sharing factor represents the part of balancing costs that USS can pass on to regulated customers. Balancing costs are those costs incurred by the USS for differences between its actual purchases to meet customer demand and forecast levels. In a large and liquid electricity market, suppliers are expected to manage these discrepancies through accurate forecasting and through the buying and selling of energy in the liquid markets (forward market) in order to minimize any remaining imbalances.

### KESCO’s application

In the application, KESCO has presented its position regarding the imbalance sharing factor and the proposal for its level applied for regulated customers (USS). KESCO emphasizes that there is always uncertainty in forecasting customer demand, respectively in purchasing the exact amount of energy for this demand. Customer demand varies throughout the year, month and day. If suppliers have purchased less energy than customer demand, they incur additional costs, in addition to the direct costs of purchasing wholesale energy. If suppliers have purchased more energy than customer demand, they may receive payments but that may be different and lower than their wholesale sale. In this regard, there is a risk of loss and/or gain for suppliers, depending on market conditions. In order to avoid suppliers' exposure to a higher risk, through which suppliers would find it impossible to recover their operating costs, Regulators support the supplier by introducing the imbalance sharing factor. By creating a historical trend over the years, suppliers can better forecast and manage these costs, and the Regulator may decide to change the fixed percentage that applies to net imbalance costs (the imbalance sharing factor), as it is assumed that allowing a sharing factor between the supplier and the customers will increase the incentives for the supplier to manage its balancing more accurately.

In its proposal for the imbalance sharing factor, KESCO emphasizes that the limited access to the number and variety of generation sources, and dependence on generating units which are old and inflexible, limits the ability of the system to be balanced and have minimal costs.

Therefore, taking into account market developments (prosumers, market opening and the possibility of switching suppliers), KESCO believes that the imbalance sharing factor should continue to be applied as 100% at least until the next periodic review.

### ERO’s proposal

Given that no significant change is expected in KESCO's ability to manage imbalances before 2023, no change in the imbalance sharing factor is justified. A reduction after 2023, exposing KESCO to a greater risk of imbalance costs, could be justified if ALPEX is fully operational.

On 5 October 2020, the respective TSOs of Kosovo and Albania signed the shareholders agreement and the statute to establish a joint energy exchange operator, ALPEX, which will operate a day-ahead market and intra-day electricity market, covering Kosovo and Albania. The establishment of ALPEX is expected to address many of the constraints faced by the electricity market in Kosovo, enabling it to enter a much larger market with a more flexible supply capacity.

However, it may take some time for ALPEX to become operational and currently its launch remains unknown, also liquidity and market rates are currently unknown. Taking this into account, it is unrealistic to expect KESCO or other market participants to be able to rely on ALPEX to manage low-cost imbalances for the period up to 2023.

However, the electricity market in Kosovo is small and illiquid. Only a small number of generators participate, which are largely inflexible and cannot easily accommodate production, and import contracts continue to face limitations. Given this, the imbalance sharing factor is currently set at 100%, which means that all balancing costs are passed on to customers (whether positive or negative), given that KESCO has little opportunity to regulate energy purchases ahead of time in order to meet the demand.

Based on the explanation related to the current circumstances and expectations for integration in the ALPEX joint market, ERO agrees with KESCO's proposal that the same 100% sharing factor should be maintained for the period 2022-2024 given that these circumstances will continue to dominate the domestic energy market.

# Operating and maintenance costs

Allowed retail costs of the Universal Service Supplier include operating and maintenance costs, corporate costs, depreciation costs, and other costs beyond the control of the licensee. This part of the report presents the Application of KESCO-USS and ERO's proposals for allowed retail costs, as set in the definition given in Article 14 of the USS Pricing Rule.

## KESCO’s application

Since the functional and legal unbundling of the distribution activity in 2015, the average operating and maintenance costs allowed for the Universal Service Supplier have been € 5.6 million in average, which are in line with the actual average costs incurred by the Universal Service Supplier, as shown in the table below:

Table 7 Actual operating and maintenance costs (2016-2019)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|   | 2017 | 2018 | 2019 | 2020 | 2021 | Average |
| Approved expenses | 5.79 | 5.96 | 6.06 | 4.59 | 4.61 | 5.40 |
| Actual expenses | 5.60 | 6.14 | 5.56 | 5.37 | 5.33 | 5.60 |
| **Difference** | **0.18** | **(0.19)** | **0.50** | **(0.77)** | **(0.73)** | **(0.20)** |

KESCO claims that the reduction of 25% in allowance of operating costs, puts it in an unfavourable financial position, given that USS closed the 2019 fiscal year with losses, in addition to the challenges posed by the spread of the COVID-19 pandemic, which affected on the payments and liabilities of KESCO to other operators. KESCO further argues that the number of customers is constantly increasing, which is increasing the cost of the service.

Table 8 Average OPEX costs for customers

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Analysed components per unit | 2017 | 2018 | 2019 | 2020 | 2021 |
| **Allowed Opex (000s)** | **5,787** | **5,957** | **6,060** | **4,594** | **4,606** |
| Number of active customers | 561,827 | 579,963 | 605,694 | 630,454 | 646,385\* |
| Allowed Opex per customer | 10.30 | 10.27 | 10.01 | 7.29 | 7.13 |
| Difference in average cost of allowed Opex per customer (%) |  | -0.3% | -2.5% | -27.2% | 2.2% |
| **Actual OPEX (000s)** | **5,603** | **6,143** | **5,556** | **5,368** | **5,333** |
| Actual Opex per customer | 9.97 | 10.59 | 9.17 | 8.53 | 8.25 |
| Difference in average cost of actual Opex 2018-2021 per customer (%) |  |  |  |  | 22% |

\* Actual number of customers until September 2021Source: KESCO

In its application KESCO states that if we compare the actual operating costs from 2018 to 2021 there is a difference of 23%, which proves that USS has reached the maximum optimization, for which losses USS is not compensated through the given OPEX and which will be problematic to be achieved in the future if ERO does not take into consideration the requirements of the USS.

KESCO claims that Operating and Maintenance costs need to be increased in order to (i) ensure additional training on the new billing system to supplier employees; (ii) safety, maintenance and fuel supply for the purchase of additional vehicles; (iii) additional insurance costs which have increased due to the COVID-19 pandemic; (iv) bank guarantees and financing costs; and (v) the changing environment in the electricity market that requires additional internal counselling and better information regarding the changes in the provided services. Therefore, KESCO has requested from ERO to allow the proposed Opex as in Table 8, below.

Table 9 Opex requested from KESCO (2022-2024)

|  |  |  |  |
| --- | --- | --- | --- |
|  Regulatory period  | 2022 | 2023 | 2024 |
| Request for OPEX (€’000) | 6,807 | 6,867 | 6,889 |

Source: KESCO’s application

## Review of the application and ERO’s proposal on Operating Costs

The allowed retail costs of USS include allowance for operating and maintenance costs, corporate costs and other costs beyond the control of the licensee.

KESCO's application for retail costs is mostly focused on allowed operating and maintenance costs as these comprise the majority of allowed retail costs.

ERO emphasizes that it did not use to divide Opex into different categories before, in order to allow to USS flexibility in efficient management of operating and maintenance costs. However, for the purpose of clarifying ERO's positions on proposed allowances of Opex for the period 2022-2024, it is important to have a more detailed discussion on the main components of operating and maintenance costs.

The data presented by KESCO demonstrate significant instability between categories of costs and total costs incurred for the provision of the regulated service.

Figure 1 Actual operating and maintenance costs (2016-2020)

Figure 1 shows that actual operating and maintenance costs in 2016 have fluctuated from € 4.9 million to € 5.4 million in 2020, where most of these changes are attributed to Other Operating Costs which appear to have increased from € 0.7 million in 2016 to €1.9 million in 2018.

Operating and maintenance costs, which the Regulator recognizes as reasonable for USS/KESCO consist of two main categories:

1. **Controllable costs** (which the operator can control and have an impact on through managerial and operational actions) which include:
	1. Staff expenses
	2. Maintenance, Inventory and Supplies
	3. Insurance
	4. Other operating costs
	5. Financial expenses
2. **Non-controllable costs** (which depend on market prices and KESCO cannot have a significant impact on them) which include:
	1. Costs for joint services and rent

The non-controllable Opex of USS is directly related to joint services related to corporate services, such as: human resources, finances, procurement, legal services, IT, auditing, transport and logistics, and archives.

During the evaluation of operating costs for the period 2022-2024 ERO has used the following approach:

* ERO has analysed the realized data of operating expenses for each item for the period 2016-2020, based on the audited Financial Statements and the forms completed by KESCO-USS.
* The estimated OPEX for the period 2022-2024 is divided into two categories, controllable and non-controllable. The efficiency factor has been applied only to controllable OPEX starting from 2023, whereas non-controllable OPEX is assumed to be unchanged given that it is subject to annual updates based on invoices between parties.
* The evaluation of controllable OPEX is carried out by taking into account the average level realized for the period 2016-2020 for the following lines: personnel costs, materials & maintenance and inventory, insurance, other operating costs and financial costs. Considering that in 2018 other operating expenses are at levels outside the spending trend of the period 2016-2020, ERO has not found reasonableness regarding these expenses, of which 1.13 million euros are expenses for management support, therefore this line of expenses is excluded from the calculation of the average for this period. The average level of realized OPEX is treated as the base value for calculation of controllable OPEX for the period 2022-2024.
* Within the evaluation of OPEX, ERO has reviewed staff costs by applying the composite inflation rate for the entire period 2016-2020, in order to reflect the timely value of the forecast of these costs, while other costs are taken as factual as they are realized, because they have reflected the circumstances that have dominated the market. This has resulted in an increase of about 51 thousand euros in the category of staff costs. It is worth mentioning that in order for the staff costs of KEDS and KESCO to be comparable with the staff costs of other licensees in the energy sector, ERO within the periodic review for the regulatory period 2018-2022 has adjusted the staff costs of KESCO in an amount of 251 thousand euros, and for KEDS and KESCO in total in an amount of about 2.3 million euros.

In the forecast of non-controllable OPEX are included the costs of joint services: finance and accounting services, procurement, legal services, IT, human resources, public relations, transport and logistics, as well as archive and document management. In addition to these, KEDS also offers rental facilities for KESCO, which are handled on the same principle as other joint expenses. The forecast of non-controllable OPEX that includes expenses for joint services is based on the average of these expenses for the period 2016-2020. It is worth emphasizing that the costs for joint services have been converted into real terms by dividing the average of these costs by the “cost plus” rate of 5.5% billed between the parties. This was done in order to avoid unnecessary transactions, because in case of inclusion of interest, those revenues would be deducted from the DSO. The average value of these expenses, as explained above, is the base value for calculation of non-controllable OPEX for the period 2022-2024.

The final proposal for OPEX, taking into account the efficiency factor applicable to the controllable OPEX is provided below, while the determination of the efficiency factor is described in section 3.2.1.

Table 10 Actual operating and maintenance costs

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Components (€000)** | **2016** | **2017** | **2018** | **2019** | **2020** |
| **Controllable OPEX** |  |  |  |  |  |
| HICP | 0.20% | 1.40% | 1.70% | 1.19% | 0.26% |
| Staff costs\* | 1,784 | 2,036 | 1,670 | 1,953 | 1,939 |
|  Maintenance, Inventory and Supplies | 90 | 80 | 81 | 88 | 66 |
| Insurance | 377 | 364 | 340 | 312 | 307 |
| Other operating costs | 747 | 1,157 | 1,930\*\* | 999 | 900 |
| Financial expenses | 430 | 207 | 451 | 501 | 524 |
| **Controllable OPEX** | **3,428** | **3,844** | **451** | **3,853** | **3,736** |
| Costs for joint services  | 1,063 | 991 | 1,044 | 1,147 | 1,165 |
| Rent | 473 | 473 | 473 | 473 | 473 |
| **Total actual O&M costs** | **4,964** | **5,308** | **5,989** | **5,473** | **5,374** |

*\* These expenses are calculated by applying the composite inflation rate*

*\*\* This category of expenses is excluded from the calculation of the average for the period*

From the table above are calculated the average costs of controllable and non-controllable OPEX, from which result the allowances of OPEX for the next three-year period. The results are presented in the table below.

Table 11 Total OPEX after the application of efficiency

|  |  |  |  |
| --- | --- | --- | --- |
| Description | 2022 | 2023 | 2024 |
| Efficiency | - | -0.47% | -0.47% |
| Controllable Opex | 3,671 | 3,688 | 3,705 |
| Non-controllable Opex | 1,499 | 1,499 | 1,499 |
| **Total** | **5,169** | **5,187** | **5,204** |

The justification and approach used by ERO in determining the efficiency factor is described below.

### Efficiency factor

In order to encourage savings in operating costs, according to regulatory practices it is recommended to apply efficiency factors to regulated activities. This enables benefits for both customers and regulated operators. Within these incentives, ERO anticipates to apply efficiency factors for the Universal Service Supplier for the period 2022-2024, taking into account the potential of USS for the efficiency that can be achieved during this period.

#### KESCO’s proposal

In its application, KESCO did not describe any specific section related to the efficiency factor, but within the handling of OPEX, KESCO-USS has emphasized that it operates within the allowed budget, creating efficiency whenever possible in certain lines in order to be able to cover the increased costs in other lines.

#### ERO’s proposal

The opening value of OPEX for 2022 is adjusted on annual basis to reflect the expected annual efficiency rate of USS. The expected level of improvements of USS OPEX is based on the incentives of productivity improvements.

In line with the evaluations made in the study of the efficiency factor of network operators and studies based on literature, it is found that there are three main incentives of efficiency:

**Expected improvements of efficiency** during the period 2022-2024, leading to a reduction in the costs of the licensee unit and, consequently, a decrease in the base Opex in real terms, during the period 2022-2024.

**Real effects of price (REP)**, where the price of inputs is expected to rise or fall faster than overall inflation of consumption prices (to which the base Opex allowances are indexed). This leads to an increase or decrease in base Opex in real terms, during the period 2022-2024.

**Effects of volume (EV)**, when the increase in network size leads to an increase in input requirements and, consequently, higher base Opex in real terms, during the PRR2 period.

ERO's position is for REP and EV to be zero and that the approach based on the expected efficiency improvements should be applied. In relation to the activity of USS, such improvements would mean that the efficiency will be maximal when a maximum number of customers are served at minimum costs.

Regarding REP: The impact of changes in real costs depends on the relative addition of different cost items to the total costs of licensees and the Consumer Price Index (CPI) in the entire economy. For example, if copper costs generate 1% of CPI but 10% of X-Company costs, then a 10% drop in the price of copper would reduce CPI by 0.1% but reduce X-Company costs for 1%. The real effect of price in this case would be -0.9%. Whereas with respect to EV, the position of ERO is based as follows: There are economizations of scale in the provision of services in the electricity industry and, as a result, given the ratio of operating costs and the number of customers, there is little reason to assume that base Opex costs increase due to the increase of the number of customers.

Studies regarding the levels of expectations of efficiency improvements for this area of the electricity industry are difficult to be found, and such comparisons are challenging given the different characteristics of parameters in determining the allowed revenues. Such ascertainment was also evidenced in the 2013 study of the Energy Community Secretariat[[6]](#footnote-6)

In the evaluation of efficiency, ERO has taken into account the operating expenses portfolio of USS and has evaluated that only controllable OPEX should be subject to efficiency improvements, according to the approach described below:

* In evaluating the efficiency factor, the expected level of controllable OPEX in 2021 was initially projected based on the linear trend methodology for the period 2016-2020. The projected year 2021 is the basis for comparison with the average OPEX realized for the period 2016-2020.
* Only controllable OPEX lines for which efficiency improvements are expected are taken into account in calculating the absolute value of efficiency.
* The efficiency index/factor is calculated as the efficiency quotient in absolute terms to OPEX before efficiency as well as taking into account the time period of 4 years. In mathematical form this calculation is described as follows:

[(OPEXwithout-efficiency/ OPEXwith-efficiency)^(1/4)]-1); where

OPEXwith-efficiency=OPEXaverage

OPEXwithout-efficiency=OPEXaverage +Efficiencyabsolute

The calculation of efficiency factor is presented in the table below:

Table 12 Efficiency factor

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Description | Trend | Average | Difference | Efficiency | Efficiency factor | Extrapolation |
| Staff costs | 1,945 | 1,877 | 68 | - |  | - | 3,740 |
| Maintenance, Inventory and Supplies | 69 | 81 | (12) | 12 |  | 2017 | 3,723 |
| Insurance | 282 | 340 | (58) | 58 |  | 2018 | 3,705 |
| Other operating costs | 1,191 | 951 | 240 | - |  | 2019 | 3,688 |
| Financial expenses | 567 | 422 | 147 | - | -0.47% | 2020 | 3,671 |
| **Total** | **4,054** | **3,671** | **191** | **70** | **-0.47%** | **2021** | **3,671** |

Efficiency factor = [(3671)/(3671+70)]^(1/4)-1 = -0.5%

ERO emphasizes that the impact of the increased number of customers on operating costs is not significant, therefore the number of customers is not considered as a meritorious driver of the increase of operating costs. This means that most of the operating costs of USS are fixed, moreover from the analysis of the data presented by USS it is seen that there is an inverse relationship between the realized OPEX and the number of customers, which means that USS has been able to provide services for the customer growth trend while being efficient. In addition, reading and billing services are DSO activities, and the automation of payment processes means a reduction of operating costs. The efficiency factor is presented in the figure below.

Figure 2 Efficiency factor

ERO's final determination of the efficiency expectations of regulated enterprises operating in the Kosovo market was undertaken during the last Periodic Review of the Transmission System Operator and Distribution System Operator. The efficiency factor established during this determination, applicable to operating and maintenance costs was 1.5%. There is no obvious evidence that would suggest that the improvement of USS performance is the same as in DSO and TSO/MO. Based on the achieved efficiency of USS according to historical data, ERO proposes that an efficiency factor of 0.5% shall be applied to USS for the years 2023-2024. The efficiency factor will only apply to the controllable Opex.

## Categorization and lifespan of assets

In line with the USS Pricing Rule, depreciation of RAB is calculated on a linear basis, using the Economic Lifespan of Assets, defined for different asset categories. The economic lifespan of the asset for each asset category is considered to represent the asset’s technical life expectancy (i.e., the period before replacement is required due to consumption) unless there is sufficient reason to consider that the asset has become redundant before that date.

### KESCO’s application

Given the current asset lifespan and developments in the IT sector, we believe that ERO should set the lifespan of office equipment to 5 years, similar to distribution and transmission operators. However, in terms of IT equipment and software, KESCO proposes that the lifespan shall be set at 3 years, to meet the contemporary requirements of power systems. The following table shows the average of years that various international companies use for the depreciation of software:

Table 13 Average lifespan of assets for calculation of depreciation

|  |
| --- |
| **The average of software programmes depreciation** |
| **Company** | **Lifespan of assets** |
| Apple | 3-5 years |
| Microsoft | 3- years |
| Facebook | 2-5 years |
| Johnson&Johnson | 3-8 years |
| Proctor and Gamble | 3-5 years |
| NVIDIA | 3-5 years |
| Home Depot | 3-6 years |
| Source: Data from the companies, according to the study of Andrew SatherLink: [https://einvestingforbeginners.com/computer-softëare-depreciation-accounting/](https://einvestingforbeginners.com/computer-software-depreciation-accounting/)  |

In its application, KESCO required from ERO to review the division of the lifespan of USS assets in two categories, as presented in the following table:

Table 14 Categorization and lifespan of assets

|  |  |
| --- | --- |
| **Deprecation groups**  | **Lifespan of assets** |
| Office equipment | 5 years |
| Computer programmes | 3 years |

### ERO’s review and proposal

ERO's latest decision on the lifespan of assets related to office equipment and IT infrastructure was taken in the periodic review process of the TSO and DSO for the Regulatory Period 2018-2022.[[7]](#footnote-7) The weighted average asset lifespan of IT equipment, software, licenses and patents was set at 5 years, while that of office furniture and equipment was set at 7 years.

ERO's decision during the Periodic Review was taken based on the Report on Investment Conditions of the Council of European Energy Regulators (CEER) in 2016 including the study of ERRA in 2019 on Revenue Determinants of TSO and DSO[[8]](#footnote-8) as well as the publication of CEER Report on Regulatory Frameworks for European Energy Networks[[9]](#footnote-9) published in the same year. While ERO understands the claim that the effect of technological advancement affects asset lifespan, no convincing evidence has been found in the regulatory examples mentioned above that regulators have reduced the life of IT assets to reflect this development.

With regards to the evaluation for categorization of assets and proposal for their lifespan, there is little comparable information for this branch of industry (universal service of supply). Therefore, as the main source for classifying assets into groups and proposing their lifespan, ERO has considered the recent review related to the categorization and lifespan of assets of Transmission System Operator and Distribution System Operator. During this review, ERO has considered assets that have analogies to the asset categories of the Supplier. Based on what was said above, ERO proposes the categorization and lifespan as in the following table:

Table 15 ERO’s proposal for categorization and lifespan of assets

|  |  |  |
| --- | --- | --- |
|  | Assets | Lifespan of assets (years) |
| I | Furniture, office equipment | 7 |
| II | Work equipment, reading devices, cars, computers, IT equipment and software | 5 |

# Proposal for Input Values and Operating Expenses

The following table presents the summarized proposal of ERO for Input Values and Operating expenses.

Table 16 ERO’s proposal for Input Values and Operating Expenses

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***ERO’s proposal for Input Values and Operating Expenses of USS*** | **Unit** | **2022** | **2023** | **2024** |
|
| Retail Margin | % | 2.54 | 2.54 | 2.54 |
| Bad Debt | % | 2.4 | 2.2 | 2.0 |
| Imbalance Sharing Factor | % | 100 | 100 | 100 |
| Operating Expenses with Efficiency € | €000 | 5,169 | 5,187 | 5,204 |
| Efficiency Factor | % | 0 | 0.5 | 0.5 |
| Categorization and lifespan of assets1. Furniture, office equipment;
2. Work equipment, reading devices, cars, computers, IT equipment and software
 | Years | 7 | 7 | 7 |
| 5 | 5 | 5 |

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2. Commission for Regulation of Utilises. 2017. [Energy Supply Costs: Information Paper](https://www.cru.ie/wp-content/uploads/2017/10/CRU17291-RFI-Information-paper.pdf) [↑](#footnote-ref-2)
3. [EPDK | Enerji Piyasası Düzenleme Kurumu](https://www.epdk.gov.tr/Detay/SiteSearch?st=2021-2025); <https://www.epdk.gov.tr/Detay/SiteSearch?st=2021-2025> [↑](#footnote-ref-3)
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6. [https://www.energy-community.org/dam/jcr:f0feeb6e-96c9-48fd-b72e-d6cc7d8b0ef1/ECRB\_revenue\_determination.pdf](https://www.energy-community.org/dam/jcr%3Af0feeb6e-96c9-48fd-b72e-d6cc7d8b0ef1/ECRB_revenue_determination.pdf) [↑](#footnote-ref-6)
7. <http://ero-ks.org/2017/Tarifat/Raport_Konsultativ_per_jetegjatesine_e_aseteve_04072017.pdf> [↑](#footnote-ref-7)
8. [https://erranet.org/electricity-tso-dso-revenue-study-published/#](https://erranet.org/electricity-tso-dso-revenue-study-published/) [↑](#footnote-ref-8)
9. <https://www.ceer.eu/documents/104400/-/-/9665e39a-3d8b-25dd-7545-09a247f9c2ff> [↑](#footnote-ref-9)