

Review of UÉ's RC3 Operating Cost Performance and K-factor Adjustments

Commission for Regulation of Utilities

16 September 2025

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1. Introduction and Summary

This report reviews UÉ's RC3 look-back submission on opex¹ and its overall proposed cost and revenue k-factor for RC3.² In reviewing UÉ's proposed changes for capex, we draw on a report by Arcadis, our technical consultants, review of UÉ's RC3 capex performance.³

We draw the following key conclusions:

- CRU made an opex determination for the RC3 period (2020-25), with the expectation that UÉ would manage risk within the ex ante determination other than for some prescribed reopeners such as delays to the adoption of single public utility (SPU) model. Delays to the SPU as well as cost increases due to unexpectedly high inflation resulted in UÉ requesting a re-determination of cost allowances in 2021, 2022 and 2023.
- Allowing for these within period re-determinations, the CRU's final determination on UÉ's efficient level of operating expenditure for RC3 was €3926m (2017 prices). While UÉ overspent in the earlier years, it underspent the restated allowance by €100.9m of which UÉ underspent its controllable opex by €28.0m, uncontrollable opex by €71.8m and Innovation Funded Projects by €1.1m.⁴
- UÉ provides an explanation of the evolution of its costs, noting that compliance, growth and external costs combined to provide upward pressure on costs over the RC3 period, along with inflation growth, particularly in DBO and energy costs. UÉ identifies a range of efficiencies and cost avoidance, notably around hedging energy prices, that offset these cost increases.

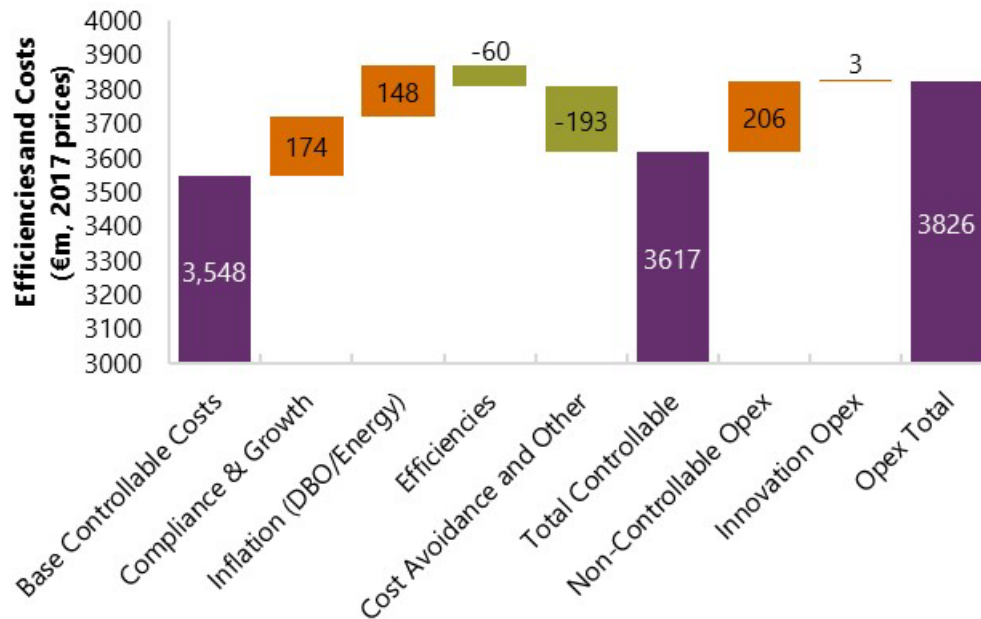
¹ Uisce Éireann, Revenue Control 4 (2025-2029) – Operational Expenditure Lookback 2020-2024

² UÉ (June 2024) Revenue Control 4 (2025-2029), k-factor for RC4

³ Arcadis (June 2024) Irish Water Regulatory Support, Review of Capex (Look back)

⁴ UÉ response to business plan questionnaire and CRU RC3 Decisions (CRU/19/148, CRU/21093, CRU/2022977 and CRU2023117)

Figure 1: UÉ's analysis of the evolution of opex costs over RC3



Source: NERA analysis of UÉ look-back submission, p.16

While UÉ's description of the upward cost pressures and offsetting improvements in efficiency is useful, these estimates are subject to a high degree of uncertainty. By contrast to UÉ's approach, our preferred approach to examining the improvement in UÉ's cost performance is relative to UK water companies for which we have comparable data. We address this issue in a separate report (our assessment of UE's RC4 opex).

K-factor adjustment

As set out in Table 2, overall, we calculate a total k-factor for RC3, the roll-over year (2019) and IRC2 of €222 million under option 1 (where we fund UÉ for higher DBO costs in 2021 and 2022), which is €57 million lower than UÉ's submission. Under option 2, where UÉ is not funded for higher DBO costs in 2021 and 2022, the k-factor is €120 million. Under both options, the implication is that UÉ is owed somewhat less money from customers than UÉ's own submission.

Table 1: Comparison of UÉ and NERA proposed estimate of the total k-factor

<i>2017 prices, PV 2025 terms</i>	UÉ	NERA (Option 1)	NERA (Option 2)
RC3			
Cost	-186.3	-187.2	-289.8
Revenue	444.0	393.0	393.0
Subtotal	257.7	205.8	103.2
Rollover Year (2019)			
Cost	-0.1	-0.1	-0.1
Revenue	17.3	12.6	12.6
Subtotal	17.2	12.5	12.5
IRC2 (2017-2018)			
Cost	3.0	3.0	3.0
Revenue	0.9	0.9	0.9
Subtotal	3.9	3.9	3.9
Total			
Total	278.8	222.3	119.7

Sources: NERA review of UÉ k-factor submission, "K Factor_Summary" tab.

Our approach to the k-factor is as follows:

- In relation to RC3 cost factor, we agree with UÉ's proposal for capex to be recognised as spent. As set in Arcadis' report, UÉ has delivered the set of required outputs and outcomes, once accounting for the (substantive) virement between programmes/projects, and at the UÉ's cost allowance, once we account for the capex real price effect. We also agree with UÉ's approach to adjusting for uncontrollable opex. Both of these factor taken together results in cost reduction, or monies owed to the consumer of €186.3 million as calculated by UÉ.
- We disagree with UÉ's proposed k-factor for controllable opex, where UÉ proposes to: i) to reopen the 2023 energy/DBO reopener to cover higher DBO costs in 2021 and 2022; and ii) retain outperformance of around €30 million based on its forecast of inflation (although the underspend is diminished substantively to around €6 million when using our updated inflation forecast for 2024). We have identified two potential options for opex k-factor:
 - Option 1: Fund UÉ for the additional higher energy costs in 2021 and 2022, and claw-back outperformance on controllable opex. Under option 1, we accept UÉ's proposal to use the monies that were not required as part of the 2023 re-opener to fund higher DBO costs in 2021 and 2022. The justification would be that these are outside of management control, consistent with the CRU's decision under the 2023 reopener.⁵

⁵ UÉ notes that the increase in the wholesale price index (WPI) relative to the HICP resulted in UÉ facing significant DBO cost increases in 2021, 2022 and 2023. The reopener in 2023 granted funding for 2023 and forecast increases that did not materialise, as WPI declined in 2024. In relation to 2021 and 2022, UÉ has reviewed the DBO and energy costs – for energy costs the increase is mitigated because of hedging, whereas UÉ has faced the full increase in DBO costs. Source: UÉ (June 2024) Revenue Control 4 (2025-2029), k-factor for RC4, p. 18

- This option results in a slightly greater RC3 cost k-factor of -€187 million (monies returned to customers) relative to UÉ (-€186 million)
- However, under such an approach, we recommend that controllable opex should also be subject to a k-factor, and that the underspend of €31 million (based on UÉ's inflation assumptions, but €6 million based on our updated inflation for 2024) should be returned to customers. The rationale is that the reopeners have been one-sided in UÉ's favour. Given the one-sided nature of the reopeners, UÉ has not borne risk on operating costs to the extent intended at RC3.
- Option 2: Do not fund UÉ for the additional higher energy costs in 2021 and 2022: Under this option, UÉ returns the additional monies that were not required under the 2023 reopener, and these monies are not used to cover higher energy/DBO costs in 2021 and 2022 which instead is borne by UÉ consistent with an incentive based regime.
 - This option results in a greater RC3 cost k-factor of -€290 million (monies returned to customers) relative to UÉ (-€186 million)
- Our k-factor calculation also reflects the proposal by CRU to disallow the €12 million funding for additional headcount associated with UÉ's transformation to a Single Public Utility (SPU) which was part of the opex re-opener for 2024.⁶
- In relation to revenues, UÉ has proposed a change to the calculation of the non-domestic bad debt allowance for 2019 and RC3 but has not provided any reasons for the change. By contrast, we propose to retain the IRC2 approach to calculating the non-domestic bad debt allowance in the revenue k-factor which involves a higher penalty and lower revenues owed by customers to UÉ. This change mainly affects the roll-over year where UÉ incurs a much higher penalty (albeit capped at €4 million) under our approach than under its preferred approach.
- Our calculation of the revenue k-factor also reflects a €20m penalty under the leakage incentive mechanism, reflecting UÉ's failure to meet leakage reduction targets over RC3.⁷
- Otherwise, as noted in relation to opex, we have updated the inflation forecast for 2024 to align with latest central bank estimates, which affects forecast actual capex, opex and revenues for 2024 in real terms but has a relatively small impact on the k-factor (in the customer favour) because of two offsetting effects – the change increases the cost allowance in UÉ's favour but reduces the revenue correction.

⁶ Under option 1, the net effect of this disallowance is zero, as under this option CRU claws back UÉ's outperformance on controllable opex; with a reduced opex allowance of €12m, the claw-back on opex declines by the same amount. The revenue allowance for 2024 is also re-stated to exclude the €12m, which reduces the revenue k-factor by €12m. The net effect of the change in the cost and revenue k-factors is zero, consistent with the scenario in which UÉ is funded for its actual opex and therefore funding is independent of the allowed opex. By contrast, under option 2 the cost k-factor is unchanged by the disallowance of the €12 million (as there is no claw-back on controllable opex) but there is a revenue adjustment as in the case of option 1, and therefore a lower revenue and overall k-factor.

⁷ The leakage penalty is not reflected in UÉ's own k-factor submission as its leakage performance over RC3 was not yet available at the time of its submission.

1.1. Structure of report

The remainder of this report is structured as follows:

- Section 2 sets out our approach to the look-back review, e.g. identifying the principles for recognising variation in costs and revenues
- Section 3 sets out a review of UÉ's opex performance over RC3
- Section 4 presents our assessment of UÉ's k-factor submission for opex and capex, and our own view

2. Approach to Look-Back Review

2.1. Principles for governing k-factor adjustments

At previous reviews, CRU has set out the principles that it would draw on in assessing UÉ's k-factor submission, and permitting any variation. We summarise these principles as follows:⁸

- Cost items that were explicitly treated as pass-through
- Variations in costs relating to the application or change to specified legal requirements or changes in government policy,
 - For example, changes to government policy regarding billing (as per discontinuation of domestic billing); changes to legislation to the extent it applies to UÉ; changes to discharge consents and abstraction licences.
- Cost items that were explicitly not allowed for in full, or at all, in setting revenues at review.
- Recognition for the costs associated with additional outputs not funded at review where the outputs are in the customer interest (referred to as "logging-up" by UK water regulators)
- A deduction for the costs associated with additional outputs funded at review but no longer required (referred to as "logging-down" by UK water regulators)
- Failure of a company to deliver an output, for which funding was provided (or referred to as "shortfalling")

The CRU has previously noted that that:⁹ *"The CER does not intend to vary allowances for general business risk, consistent with a revenue cap regime. Such an approach provides high-powered incentives for regulated entities to manage risks and costs, and benefits consumers in terms of lower costs."*

We note the following decisions on k-factor adjustments in the water sector:

- **IRC1 K-factor adjustment.** For the IRC1 revenue control period 2014 (Q4) to 2016, the CRU allowed for variations in domestic and non-domestic revenues relative to forecast, and notably in relation to bad debt where CRU did not make an ex ante allowance given the absence of firm data at review¹⁰. It also made variations to allow for changes to the subvention from Government.¹¹ It also allowed for variations for non-controllable costs designated by CRU at IRC1 review, namely, licence and levies and commercial rates whereas it did not allow for variations in other opex lines where the risk was assumed to lie with UÉ.¹²
- **IRC2 k-factor adjustment:** Similar to IRC1, CRU made a variation for uncontrollable opex but did not provide for any variation for other opex cost categories where UÉ had marginally

⁸ See for example, CRU (2019) p. 170

⁹ CER/16/342 (12 December 2016), Irish Water Second Revenue Control, p.146

¹⁰ CER did not make any provision for bad debt costs, as DECLG provided a working capital facility to IW to cover bad debt costs during the interim review period but instead proposed to consider this at the end of the period. NERA (2015) IW Interim Review, p. 59

¹¹ CER/16/342 (12 December 2016), Irish Water Second Revenue Control 2017-2018, p.148.

¹² CER/16/342 (12 December 2016), Irish Water Second Revenue Control 2017-2018, p.38.

overspent (by around 1 per cent). CRU considered that UÉ should bear business risk.¹³ On capex, CRU recognised slightly lower incurred network capex rather than allowed capex, as there was no demonstration that UÉ had delivered its outputs.¹⁴ For non network capex, CRU did not allow for some WIOF costs, given the delay to the programme, nor did CRU allow for the remaining slight overspend as UÉ did not justify any additional output delivery.¹⁵ CRU also provided for variation in revenue recovery and bad debt.¹⁶

2.2. Variations allowed for at RC3

As well as the general principles that apply above, specifically we note the following intended variations at RC3:

- Treat licences and levies and commercial rates as pass-through costs.¹⁷
- The CRU's RC3 decision provided for a reopener in the event of a delay to the implementation of the SPU.^{18,19}
- The CRU also sets out its intention to adjust for outturn inflation, as part of the k-factor process at the end of RC3.²⁰

In view of the additional sums provided in relation to energy and UÉ Transformation (UET) costs in 2024, the CRU requested a status report which would set out: the energy related allowance and the energy hedging update, and the temporary head count allowance to support the UET transition to SPU.²¹

2.3. Conclusions

In broad terms, the intention is that under the revenue cap UÉ bears cost risk other than for those items that are identified at review as subject to uncertainty mechanisms such as within period re-openers (SPU delay) and adjustments at the end of the review (recognition of under or over-delivery of outputs).

We discuss how we apply these principles in our assessment of the k-factor in section 4.

¹³ CRU (2019) Irish Water revenue control, Revenue control 3 2020-24 pp 142-144. Link: <https://cruie-live-96ca64acab2247eca8a850a7e54b-5b34f62.divio-media.com/documents/CRU19148-Irish-Water-Revenue-Control-3-Decision-Paper.pdf>

¹⁴ CRU (2019) Irish Water revenue control, Revenue control 3 2020-24 p. 160

¹⁵ CRU (2019) Irish Water revenue control, Revenue control 3 2020-24 p. 160

¹⁶ CRU (2019) Irish Water revenue control, Revenue control 3 2020-24 pp. 174-175 .

¹⁷ CRU (2019) Irish Water revenue control, Revenue control 3 2020-24 p. 144

¹⁸ CRU (2019) p. 4

¹⁹ CRU (August 2021) Irish Water Revenue Control 3 (RC3) Updated – Controllable operational expenditure (2022-24) , Information Note, (CRU/21093), p. 5

²⁰ CRU (August 2021) Irish Water Revenue Control 3 (RC3) Updated – Controllable operational expenditure (2022-24) , Information Note, (CRU/21093), p. 3

²¹ CRU (November 2023) Uisce Eireann Additional Operational Expenditure 2024 – Information Paper, p.6

3. Review of Operating Expenditure Allowance

This chapter provides an overview of UÉ's outturn operating expenditure performance against the allowances determined by the CRU at RC3, covering the period 2020-2024.²²

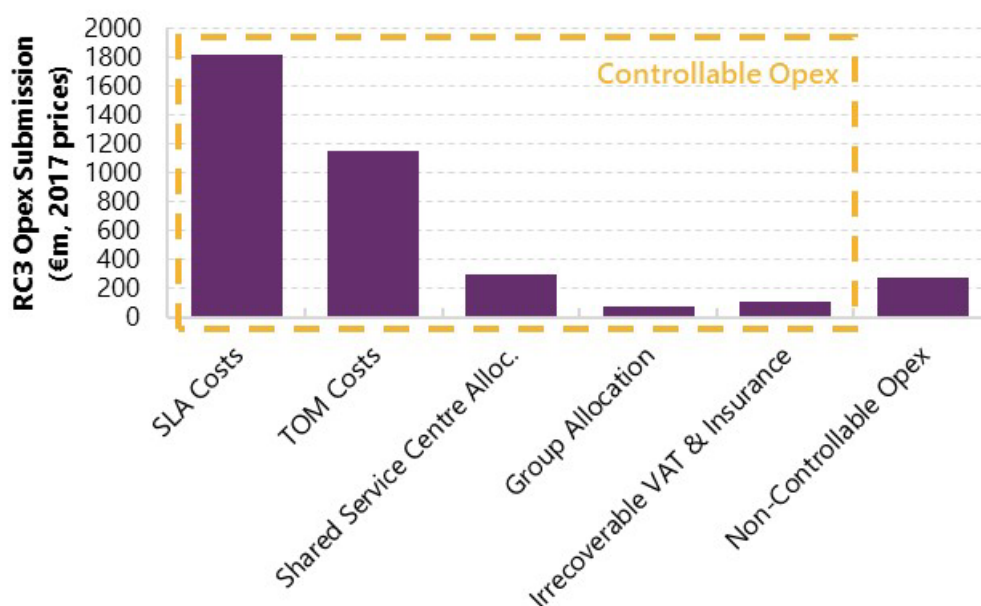
This chapter is structured as follows:

- Section 3.1 provides an overview of IRC3 decision on operating costs
- Section 3.2 provides a review of UÉ's operating cost performance

3.1. Overview of RC3 Decision

In its RC3 business plan submission, UÉ estimated its operating costs requirements for RC3 at €3718.6m. As evidenced in Figure 3.1, the largest proportion of opex was allocated to payments under the service level agreements (SLA) with Local Authorities (ca. 49 per cent), followed by Target Operating Model (TOM) (31 per cent). Non-controllable opex accounts for 7 per cent of the submitted expenditure.²³

Figure 3.1: UÉ Proposed Opex €3718.6m for 2020-2024 (2017 prices)



Source: NERA analysis of UÉ response to 2019 business plan questionnaire; CRU Decisions CRU/19/148, pp. 64, 67.

In its 2019 decision, CRU set an overall RC3 opex allowance of €3546m within which UÉ is expected to manage its expenditure. Within the total allowance, CRU estimated that controllable opex would account for €3263m. This is respectively a reduction of €172.6m and €179.1m compared to UÉ's BP. To derive this opex allowance, the CRU conducted a benchmarking of UÉ's costs with established utilities in the UK and set an efficiency challenge to reduce costs year-on-year by an

²² CRU Decisions CRU/19/148, CRU/21093, CRU/2022977 and CRU2023117.

²³ UÉ response to 2019 business plan questionnaire; CRU Decisions CRU/19/148, pp. 64, 67.

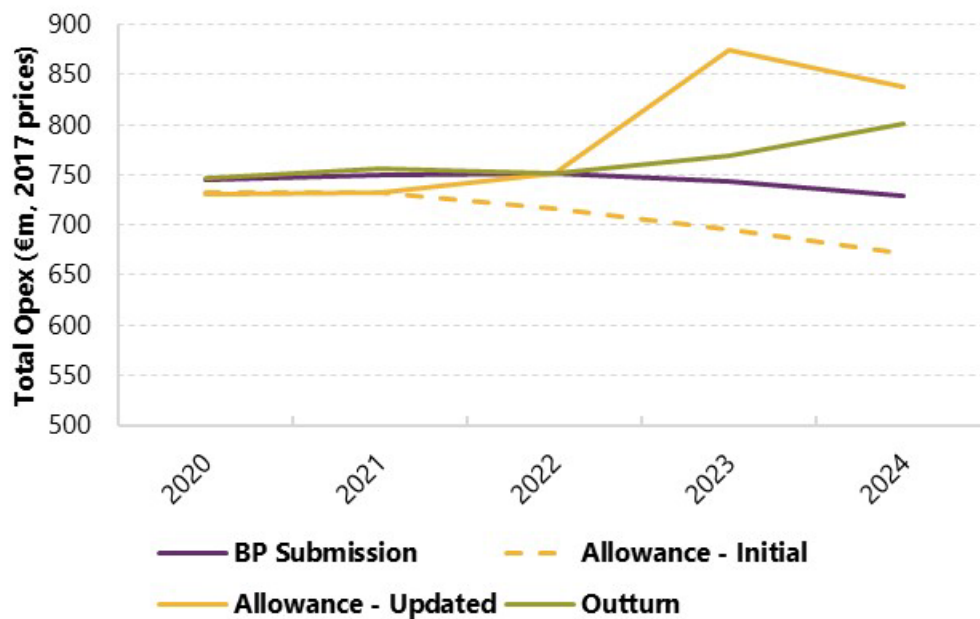
average rate of 4 per cent on average.²⁴ The CRU determined a nominal allowance, as presented before, assuming a 2 per cent p.a. HCIP over RC3.

Delays in the WIOF Programme and cost increases due to unexpected high inflation resulted in UÉ requesting a re-determination of cost allowances in 2021, 2022 and 2023.²⁵ Section 3.1.1 discusses these within-period adjustments in more detail.

Allowing for these within period re-determinations, the CRU's final determination on UÉ's efficient level of operating expenditure for RC3 was €3926m (2017 prices). Within this allowance, the CRU did not determine specific allowances for each item of operating cost, rather, it determined an overall controllable opex allowance reflecting its view of the global achievable efficiency challenge and leaving it to UÉ to optimise its expenditure efficiently within the overall spending limit.²⁶

Figure 3.2 shows that UÉ underperformed on opex during the first two years of RC3 by ca. €41m, but underspent its restated allowance in 2023 and 2024 by €142m. Over the whole RC3 period, UÉ underspent the updated opex allowance by €100.9m of which UÉ underspent its controllable opex by €28.0m, uncontrollable opex by €71.8m and Innovation Funded Projects by €1.1m.²⁷

Figure 3.2: RC3 Total Opex Allowance and Outturn (2020 - 2024)



Source: NERA analysis of UÉ response to business plan questionnaire and CRU RC3 Decisions (CRU/19/148, CRU/21093, CRU/2022977 and CRU2023117).

Note: The Outturn curve shows IUÉ's 2024 estimates/forecast.

²⁴ CRU (December 2019), Irish Water Revenue Control RC3, CRU/19/148, pp.86, 87.

²⁵ CRU Decisions CRU/21093, CRU/2022977 and CRU2023117

²⁶ CRU (December 2019), Irish Water Revenue Control RC3, CRU/19/148, pp.82, 83

²⁷ UÉ response to business plan questionnaire and CRU RC3 Decisions (CRU/19/148, CRU/21093, CRU/2022977 and CRU2023117)

3.1.1. In-period Opex re-determinations

Over RC3, the CRU re-opened its decision on opex in 2021, 2022 and 2023. The first review in 2021 revised the RC3 efficiency challenge to reflect the impact of a one-year delay to the WIOF Programme, consistent with the reopener identified in section 2.2, and assessed the costs associated with UÉ's separation from Ervia. The following two revisions predominantly increased the allowance to reflect the high inflation, including energy price inflation, following the Covid-19 pandemic and the war in Ukraine. These revisions were not provided for explicitly in the prescribed reopeners, as per section 2.2.

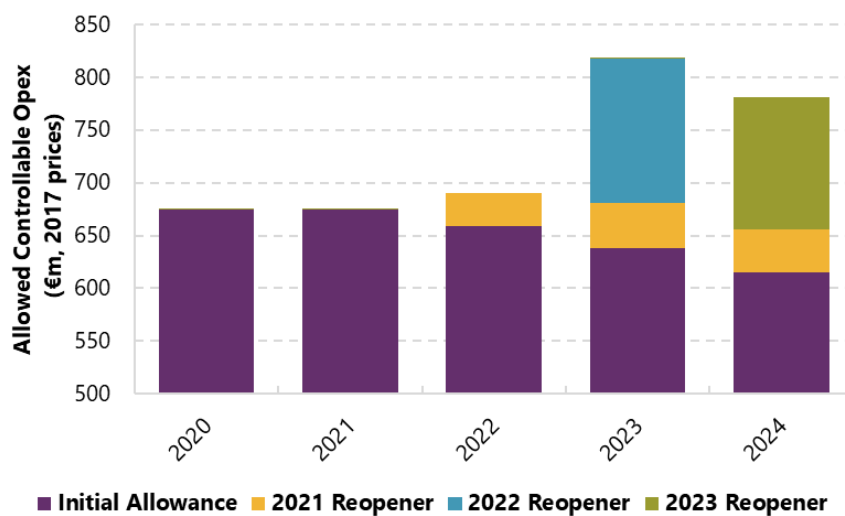
Table 3.1 summarises the key drivers for the interim reviews and their impact on controllable opex allowance.

Table 3.1: RC3 Interim Reviews and Drivers

RC3 Decision	2022 interim review	2023 interim review	2024 interim review
€3.262bn	€3.382bn	€3.519bn	€3.642bn
Key Driver:	Ervia Separation & UÉT Delay	Inflation impact on Energy & DBO costs	Inflation impact on Energy & DBO costs & UÉT delay

Source: Uisce Éireann, Revenue Control 4 (2025-2029) – Operational Expenditure Lookback 2020-2024, Table 1.1
 Note: Allowances are expressed in 2017 prices.

Figure 3.3: Interim Reviews Increased Controllable Opex Allowance by €382m (2017 prices) Between 2022 and 2024



Source: NERA analysis of CRU Decisions CRU/19/148, CRU/21093, CRU/2022977 and CRU2023117

3.1.2. Efficiency Challenge Update & Ervia Separation Costs

As discussed in Section 3.1, the CRU's 2019 decision set an efficiency challenge providing an average cost reduction rate of 4 per cent over RC3. Delays in the integration of Local Authorities (LA's) water services staff led to higher costs for UÉ than anticipated. The CRU agreed to reduce the efficiency challenge targets to reflect this delay but stated that efficiency should also be pursued in parallel, independently of the transformation to a Single Public Utility (SPU).²⁸ Table 3.2 shows the RC3 efficiency challenges set by CRU in 2019, 2021 and 2023.

Table 3.2: Restatement of the Efficiency Challenge in 2021 and 2023

Efficiency Challenge	2020	2021	2022	2023	2024
Initial (2019)	2%	2%	4%	6%	6%
2021 Revision	2%	2%	1%	4%	6%
2023 Revision	2%	2%	1%	4%	4%

Source: CRU (Dec. 2019), Irish Water Revenue Control 3, CRU/19/148, p.86; CRU (Aug. 2021), Irish Water Revenue Control 3 (RC3) Update – Controllable Operational Expenditure, CRU/21093, p.3; CRU (Sept. 2023), Uisce Éireann Additional Operational Expenditure 2024 – Information Paper, p.16.

The CRU also provided for an additional cost allowance for the separation of Ervia. This extra allowance contains two elements:

1. An extra €10.1m in recurring operational costs from 2022 onwards subject to the CRU's efficiency; and
2. A once-off costs allowance of €4.7m (post efficiency challenge) in 2022.²⁹

Finally, the CRU added in 2023 an extra allowance of €12m to finance the additional staff required for the transformation to a SPU.³⁰

3.1.3. Inflation Update

Following UÉ's submissions, the CRU increased the opex allowance for 2023 and 2024 to reflect the impact of high inflation following the Covid-19 and the war in Ukraine on:³¹

- **Energy prices:** according to UÉ, it could hedge only about 60 per cent of all its energy costs and incurred high costs on its exposure. The CRU agreed with UÉ's approach and allowed the requested extra €26m in 2023 and €60m in 2024 to cover these additional energy related costs.

²⁸ CRU (Aug 2021), Irish Water Revenue Control 3 (RC3) Update – Controllable Operational Expenditure, CRU/21093, p.2

²⁹ CRU (Aug 2021), Irish Water Revenue Control 3 (RC3) Update – Controllable Operational Expenditure, CRU/21093, p.2

³⁰ The allowance figures shown in this section include the extra allowance made in 2023, which we understand the CRU will disallow as part of the RC4 k-factor review. The figures in Section 4 which sets out our k-factor calculation therefore exclude the €12m.

³¹ CRU (Nov 2022), Irish Water Revenue Control 3 – Interim Review, CRU/2022977, CRU/2022977, pp. 27, 28, 32.

- **Design Build Operate (DBO) Contracts:** according to UÉ, 34 per cent of its inherited 126 legacy DBO contracts are indexed on a Wholesale Price Index (WPI) rather than HICP, used by the CRU to index cost allowance. The CRU decided to allow an additional €117m in 2023 and €44m in 2024 to compensate for the high weight of electricity costs on the WPI.

Table 3.3 shows the derivation of CRU's final controllable opex allowance for 2022, 2023 and 2024.

Table 3.3: Derivation of Controllable Opex Allowance (2017 prices)

	2022	2023	2024	Calculation
Benchmark Allowance	€675m	€690m	€681m	A =G (the year before)
CRU 2019 Additional Allowance	€12m	€19m	€16m	B
Ervia Separation Allowance & Additional Temp Staff	€10m		€12m	C
Controllable Opex (Pre-Efficiency Challenge)	€697m	€709m	€709m	D =A+B+C
Inflation Adjustments (Pre-Efficiency Challenge)		€143m	€104m	E
Efficiency Challenge New	1%	4%	4%	F
Controllable Opex (Post-Efficiency Challenge)	€690m	€681m	€680m	G =D*(1-F)
Inflation Adjustments (Post-Efficiency Challenge)		€137m	€100m	H =E*(1-F)
Ervia Separation One-off	€5m			I
Final Controllable Opex¹	€695m	€818m	€780m	J =G+H+I

Source: NERA analysis of CRU Decisions CRU/19/148, CRU/21093, CRU/2022977 and CRU2023117.

Note 1: The CRU provided for a controllable opex allowance of €675m in 2020 and 2021. Source: CRU (August 2021) Irish Water Revenue Control 3 (RC3) Updated – Controllable operational expenditure (2022-24), Information Note, (CRU/21093), p. 3

Note 2: All figures are in 2017 prices.

3.1.4. Reconciliation of UÉ Look-back and IRC3 Decision

Table 3.4 shows CRU's allowance for IRC3 and UÉ's look-back financial model submission. As shown, UÉ stated allowance is €1.5m lower than CRU's decision.

As shown, CRU made overall allowances for controllable opex, uncontrollable opex and Innovation Funded Projects leaving UÉ the freedom to operate with the total allowance. UÉ shows in its submission an allocation of the total allowances by functional areas.

Table 3.4: UÉ Operating Expenditure Allowance at IRC2 (2017-2019), (€m, 2017 prices)

	CRU stated allowance (at IRC3)	UÉ stated allowance (as per look-back financial model)
SLA		2017.7
TOM		1624.7
Controllable opex	3644.4	3642.4
Uncontrollable opex	277.5	278.0
Innovation Funded Projects Allowance	4.0	4.0
Total opex	3925.9	3924.4

Source: UÉ, BPQ Lookback 2020-2024 s-sheet, Tab 'Hist_Opex'; UÉ, RC4 k-factor calculation s-sheet, Tab "CRU Allowance"

UÉ has confirmed that the differences between allowance in the look-back financial model and CRU's actual figures are due to rounding errors in their model.

3.2. UÉ's Operating Cost Efficiency Performance

In this section, we provide an overview of UÉ's stated performance, including its own view on improvements in cost performance. We also set out our own analysis of its efficiency improvement, drawing on UÉ's changes in costs over time relative to comparators.

3.2.1. UÉ underspend on opex by ca €100m

Table 3.5 sets out UÉ's opex actual expenditure over RC3 compared to allowances. This is based on UÉ's actual expenditure for 2020-2023, and forecasts for 2024.

Table 3.5: UÉ Expected to Underspend its Opex Allowance by €100m (€m, 2017 prices)

	Total RC3 expenditure	CRU allowance	(Out-)/ Underperformance	Calc.
DBO	736.0	707.2	28.8	A
Energy	358.1	373.1	-15.0	B
Operation & Maintenance (excl. DBO & Energy)	1604.5	937.4	667.1	C
SLA Costs	2698.6	2017.7	680.9	D =A+B+C
TOM Costs	917.7	1624.7	-707.0	E
Controllable Opex	3616.3	3644.4	-28.0	F =D+E
Uncontrollable Opex	205.7	277.5	-71.8	G
Innovation Funded Projects Allowance	2.9	4.0	-1.1	H
Total Opex	3825.0	3925.9	-100.9	I =F+G+H

Source: UÉ submission on outturn expenditure, UÉ, RC4 k-factor calculation s-sheet, Tab "CRU Allowance".

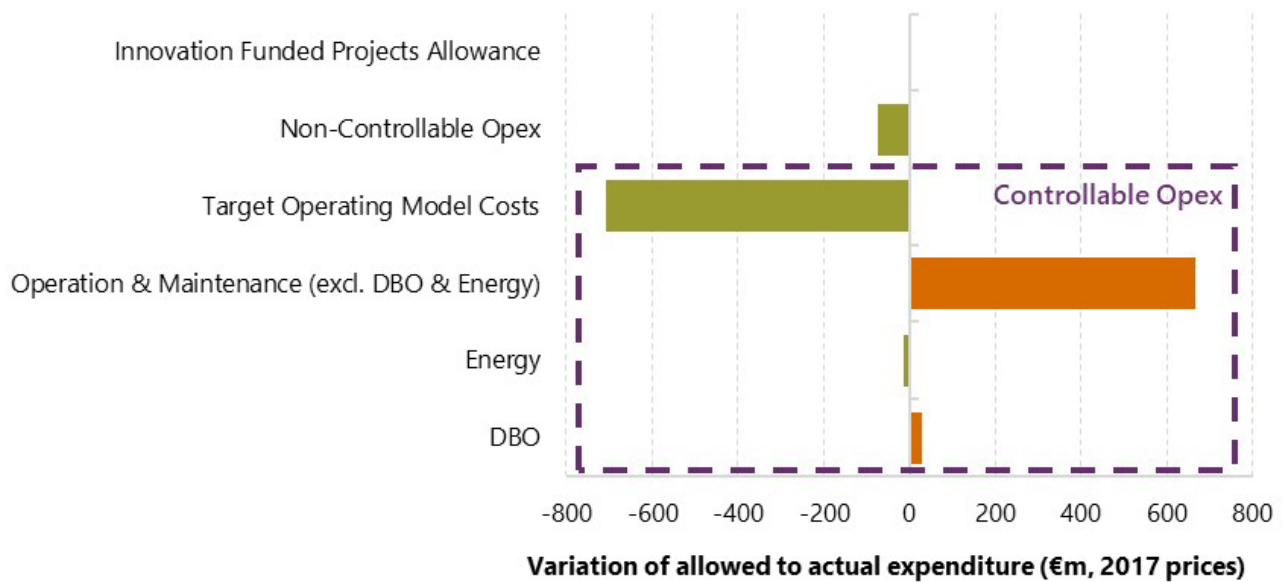
Note: We show allowance after revisions in 2021, 2022 and 2023. Intermediate computations may not provide the exactly aggregate figures due to rounding errors in UÉ submissions.

As shown in Table 3.5, UÉ has underspent its controllable opex by €28million and its uncontrollable by €72 million..

In its RC3 Lookback report, UÉ explains that Operation & Maintenance and TOM costs should be considered together because the large difference from allowance reflect the delays in the implementation of the WIOF Programme.³²

Figure 3.4 and Figure 3.5 identify the variations between outturn expenditure and allowance for each of the main categories.

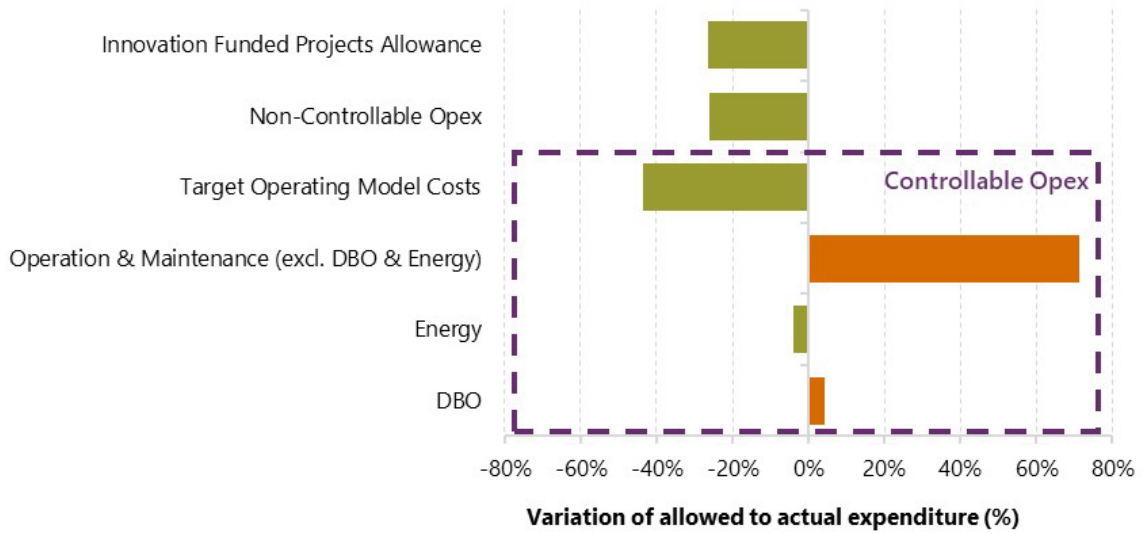
Figure 3.4: Allowed vs Actual Opex: Absolute (Out-)/Underperformances



Source: NERA analysis of UÉ BPQ look-back submission.

³² Uisce Éireann, Revenue Control 4 (2025-2029) – Operational Expenditure Lookback 2020-2024, p.11.

Figure 3.5: Allowed vs Actual Opex: Relative (Out-)/Underperformances

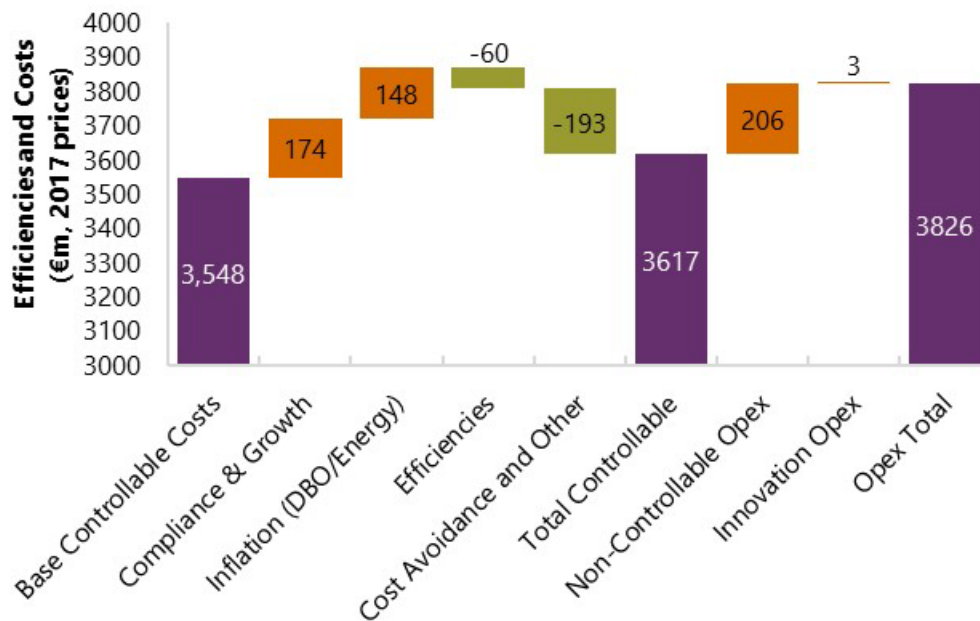


Source: NERA analysis of UÉ BPQ look-back submission.

3.2.2. UÉ's explanation of its cost performance

In this section, we provide an overview of UÉ's lookback opex analysis over RC3. As shown in Figure 3.6, UÉ identifies an increase of €322m from the base controllable costs due to the compliance with regulations, growth in connections, and the impact of inflation on costs. According to UÉ, this deviation from baseline was partially offset by €193m of cost avoided and €60m of operational savings. Overall, controllable opex increased by €69m (i.e.. a 2 per cent increase in real terms) over the period.

Figure 3.6: UÉ's Increase in Costs During RC3 Partially Offset by Operational Saving and Costs Avoided



Source: NERA analysis of UÉ look-back submission, p.16.

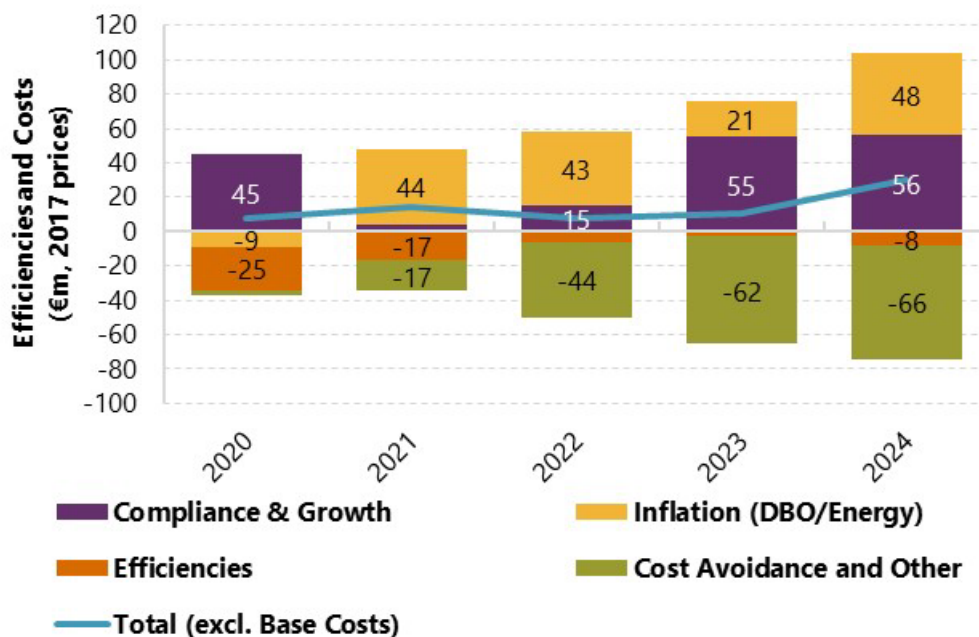
Note: Base Controllable Costs Is equal to the opening 2020 allowance, and then UÉ's year-on-year changes for growth, inflation net of efficiency and cost avoided.

As shown on Figure 3.6, UÉ considers four types for deviations from base cost which are described as follows:

- Compliance, Growth and External Costs combines all the annual cost pressures UÉ has faced over the RC3 period;
- Inflationary Growth DBO/Energy represents the significant inflationary environment beyond HICP during RC3. It had an impact on UÉ's overall cost base, but materially so in DBO and Energy;
- Efficiencies refers to the savings across all of UÉ's efficiency initiatives over the RC3 period;
- Cost Avoidance refers to proactive cost mitigation measures employed by UÉ to avoid the effects of high energy prices on its cost base. It also includes other cost category movements such as LA CMC and capitalisation.

Figure 3.7 shows the year-by-year contributions of each of these components as estimated by UÉ.

Figure 3.7: Growth, Inflation, Efficiency and Cost Avoidance Result in a €69m Net Increase in Controllable Opex



Source: NERA analysis of UÉ look-back submission, p.16.

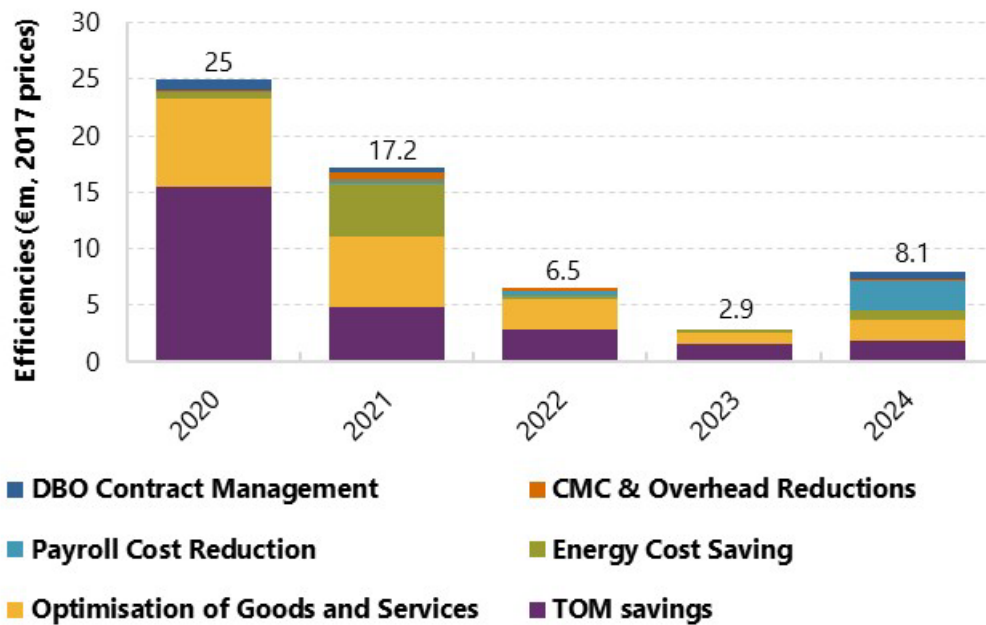
Figure 3.8 shows a split of the efficiencies per categories, with ca. 70 per cent of the efficiencies occurring during the first 2 years of RC3. 45 per cent of the efficiencies came from TOM, making it the main centre of improvements. According to UÉ, TOM savings arose from: ³³

³³ Uisce Éireann, Revenue Control 4 (2025-2029) – Operational Expenditure Lookback 2020-2024, p.31.

- Efficiencies following separation from Ervia;
- Non-domestic metering activities;
- Optimisation of telecoms contracts;
- Development of in-house expertise; and,
- Reduction of insurance claims.

The optimisation of goods and services, e.g. in relation to fleet and plant hire, chemicals, maintenance contracts and sludge managements comprised around one-third of the improvement.³⁴

Figure 3.8: UÉ's Realised 70 Per Cent of its RC3 Savings on TOM and Optimisation of Goods and Services



Source: NERA analysis of UÉ look-back submission, p.28.

While the description of the areas of improved cost efficiency is helpful in understanding UÉ's performance over RC3, there is inherent uncertainty in UÉ's estimates. By UÉ's approach, the implied cost saving must equal the sum of compliance cost increase, inflation and cost avoidance. For example, if UÉ identified an extra €10 million in compliance costs over the period, it would imply a further €10 million improvement in efficiency performance to ensure that the sum of baseline opex, cost and efficiencies is equal to the outturn controllable opex.

As example of the uncertainties in these cost estimates (and therefore uncertainty in the implied "efficiency" saving. For example, we note that:

³⁴ Uisce Éireann, Revenue Control 4 (2025-2029) – Operational Expenditure Lookback 2020-2024, p.29.

- UÉ explains that it estimates investment-driven opex using a 1.5 per cent rate of Expected Total Cost (ETC) on selected investments, but of course this is an estimate and subject to uncertainty.³⁵
- UÉ has identified a substantive "cost avoided and other" of €193 million, of which €72 million was attributed to an energy hedging strategy relative to a "default hedging strategy".³⁶ Although the change to hedging strategy may have avoided costs in RC3 as UÉ states, the switch in strategy may be no more successful when considered over a longer timeframe than RC4 than the default strategy. In other words, this is a timing issue rather an avoided cost per se.

Our preferred approach to examining UÉ's cost efficiency is to examine the trend over time and progress to achieving the efficient cost level of comparable utilities. We set out UÉ's performance over time relative to water companies operating in England and Wales in a separate report (our assessment of UÉ's RC4 opex expenditure).

³⁵ Based on UÉ's Q&A answers.

³⁶ Uisce Éireann, Revenue Control 4 (2025-2029) – Operational Expenditure Lookback 2020-2024, p.7

4. Assessment of k-Factor Adjustments

We first assess UÉ's proposed cost adjustment k-factor, and then the proposed revenue adjustments, including incentives in place at RC3. We finally summarise our view of the required k-factor adjustment relative to UÉ's submission.

4.1. UÉ's RC3 k-factor cost proposals

As set out in Table 4.1, UÉ's k-factor adjustment for capex comprises the following:

- €545 million underspend on *network and non-network* capex. UÉ notes that CRU allowed €4,482million for network and non-network for RC3 against an outturn of €3,937million, which results in monies owed to the customers, principally due to the much slower progress on the Waste Supply Project and Greater Dublin Drainage (or major projects).³⁷
- A lower change in the RAB of €454 million as a consequence of the lower capex. In short, UÉ was compensated for the depreciation (and return) element of the capex that it did not incur. The RAB and capex adjustment taken together ensure that UÉ's revenues are reduced by the depreciation and return element associated with the capex underspend.
 - *The adjustment to the RAB is implied by the reduction in capex, and does not have to be separately assessed other than checking for the absence of computational error.*

For opex, UÉ proposes the following:

- An adjustment for uncontrollable opex of €65 million
- A minor adjustment of €0.5 million for the CRU's compensation for "inflationary impact DBO and energy costs"
- No adjustment for the underspend in controllable opex

³⁷ UÉ (June 2024) Revenue Control 4 (2025-2029), k-factor for RC4, p. 17

Table 4.1: UÉ's estimate of the RC3 k-factor for costs

Cost Component (2017 Monies)	Allowance €'m	UÉ Forecast €'m	Delta €'m
Change in RAB	-2,957	-2,503	-454
Capex	4,482	3,937	545
Uncontrollable Opex	254	189	65
Inflationary impact DBO & Energy Costs			0.5
Total cost adjustment in 2017 monies			-156
Total Cost Adjustment (Indexed to start 2025)			-186

Table 3: RC3 Cost Components

4.2. Our assessment

4.2.1. Capex

For network capex, CRU determined an allowance of €4,523 million and UÉ has spent €3,940 million.³⁸ For non-network capex, UÉ has spent in line with the CRU allowance of €377 million.³⁹

Arcadis has reviewed whether UÉ has delivered the required outputs and outcomes, and concludes that progress towards the outputs and outcomes set by CRU at RC3 has been good, and the rebalancing of the programme (and subsequent outputs and outcomes) is justified. Arcadis also concludes that UÉ has delivered the capex in line with the agreed costs, once we take into account higher outturn capital input price inflation.⁴⁰

In the absence of either a shortfall or over-delivery on outputs, and consistency of spend with the CRU view of efficiency costs once we allow for the capital real price effect (RPE), we therefore recommend that the capex variation is recognised in full, with the exception of any computational/

³⁸ Source: NERA review of UÉ k-factor submission, "Cost_Kfactor" tab. Source: UÉ (2024) Revenue Control 4 (2022-2029) Network Capital Expenditure. These figures are in 2017 monies and undiscounted and therefore do not correspond to those in Table 4.1 which are in 2017 monies and discounted.

³⁹ Source: NERA review of UÉ k-factor submission, "Cost_Kfactor" tab. Source: UÉ (2024) Revenue Control 4 (2022-2029) Network Capital Expenditure.

⁴⁰ The expenditure figure differs very marginally from €3,943 reported in UÉ look-back report. Source: Arcadis (June 2024) Irish Water Regulatory Support, Review of Capex (Look back), p. 6.

modelling issues. In this regard, we recommend updating the HICP inflation assumption for 2024 in the UÉ k-factor calculation, to reflect the latest forecast from the Central Bank of Ireland (1.7 per cent instead of the UÉ assumption of 3.2 per cent).⁴¹ This results in two offsetting effects and a relatively net change on the k-factor in the customer favour: somewhat higher expenditure forecasts for 2024 in real terms and therefore higher expenditure allowances, offset by somewhat higher revenue forecast for 2024 in real terms, and therefore a lower revenue under-recovery.⁴²

4.2.2. Uncontrollable Opex

On opex, we agree with UÉ's proposed adjustment for uncontrollable costs. The uncontrollable costs relate to regulatory levies and commercial rates⁴³, and should be treated as pass-through consistent with the intended RC3 framework, as explained in section 2.

4.2.3. Controllable Opex

UÉ proposes to make a minor adjustment of €0.5 million (returned to the consumer) for the additional energy cost allowances provided at review, but otherwise no adjustment for outperformance on controllable operating costs.

As a general principle, we would expect UÉ to bear risk on controllable opex, i.e. that it would not be subject to a k-factor adjustment, as explained in section 2. Such an approach provides incentives for UÉ to meet the operational efficiency targets set by CRU at review.

However, over RC3, there have been a number of external events, namely the delay to the introduction of the SPU and energy and wider inflation shocks which have led UÉ to ask for a number of re-adjustments to the opex allowance. Only the delay to the reform of the sector was explicitly provided for in the RC3 rules.⁴⁴

As explained in section 2.2, in view of the additional sums provided in relation to energy and UÉ Transformation (UET) costs in 2024, the CRU requested a status report which would set out the energy related allowance and the energy hedging update, and the temporary head count allowance to support the UET transition to SPU.⁴⁵

On the energy cost allowance, UÉ considers that the 2023 reopener (which provided for increased costs in 2023 and 2024) provided greater compensation than required given that wholesale energy prices declined relative to expectations in 2024 but UÉ notes that higher DBO costs in 2021 and 2022 should be recognised as outside of management control, consistent with the CRU's decision under the 2023 reopener.⁴⁶ In effect, a reopener on the reopener. Overall, UÉ provides evidence

⁴¹ See Central Bank of Ireland, Quarterly Bulletin Q2 2024, Table 3: Inflation Projections, p.35.

⁴² For example, capex increases by €12 million and opex by €10 million in 2017 real terms.

⁴³ UÉ (June 2024) Revenue Control 4 (2025-2029), k-factor for RC4, p. 18

⁴⁴ See section 2.2.

⁴⁵ CRU (November 2023) Uisce Eireann Additional Operational Expenditure 2024 – Information Paper, p.6

⁴⁶ UÉ notes that the increase in the wholesale price index (WPI) relative to the HICP resulted in UÉ facing significant DBO cost increases in 2021, 2022 and 2023. The reopener in 2023 granted funding for 2023 and forecast increases that did not materialise, as WPI declined in 2024. In relation to 2021 and 2022, UÉ has reviewed the DBO and energy costs – for energy costs the increase is mitigated because of hedging, whereas UÉ has faced the full increase in DBO costs. Source: UÉ (June 2024) Revenue Control 4 (2025-2029), k-factor for RC4, p. 18

that the CRU additional allowance is almost precisely matched by the increase in UÉ's DBO and energy costs relative to the initial allowance over the RC3 period, with only a €0.5 million variation (money owed to the customer).

We have developed two options to address UÉ's claims:

Option 1: Fund UÉ for the additional higher energy/DBO costs in 2021 and 2022, and claw-back outperformance on controllable opex

Under option 1, we accept UÉ's proposal to use the monies that were not required as part of the 2023 re-opener to fund higher DBO costs in 2021 and 2022. The justification would be that these are outside of management control, consistent with the CRU's decision under the 2023 reopener.⁴⁷

However, under such an approach, we recommend that controllable opex should also be subject to a k-factor, and that the underspend of €31 million (based on UÉ's inflation assumptions, but €6 million based on our updated inflation for 2024) should be returned to customers. The rationale is that the reopeners have been one-sided in UÉ's favour. UÉ has not during the course of the review period identified any (or any material) offsetting costs to the increase in DBO and energy inflation costs or delays with the SPU. In short, UÉ has made claims for increases in costs but has not identified offsetting cost reductions. Given the one-sided nature of the reopeners, UÉ has not borne risk on operating costs to the extent intended at RC3.

At RC4, we would expect reopeners to be limited to any factors that are identified at review, and for UÉ to bear all risk on controllable costs.

Option 2: Do not fund UÉ for the additional higher energy/DBO costs in 2021 and 2022

Under this option, UÉ returns the additional monies that were not required under the 2023 reopener to fund higher energy costs given the lower outturn energy costs in 2024, and these monies are not used to cover higher energy/DBO costs in 2021 and 2022 which instead are borne by UÉ consistent with an incentive based regime.

4.2.4. Conclusion on cost k-factor for RC3

The implication of our recommendations is that the k-factor for RC3 costs is increased from €186 million to €199 million in absolute terms, as shown in Table 4.2, i.e. a greater negative adjustment to revenues and therefore slightly more money returned to customers. This is explained as follows:

- The adjustments for capex and change in RAB are practically equal and offsetting and the changes reflect our update to the inflation assumption for 2024.
- We propose two options for opex:
 - **Option 1:** accept UÉ's proposal to use the monies that were not required as part of the 2023 re-opener to fund higher DBO costs in 2021 and 2022. As a consequence, we propose to adjust for the underspend of €31 million (or €6 million based on our inflation

⁴⁷ UÉ notes that the increase in the wholesale price index (WPI) relative to the HICP resulted in UÉ facing significant DBO cost increases in 2021, 2022 and 2023. The reopener in 2023 granted funding for 2023 and forecast increases that did not materialise, as WPI declined in 2024. In relation to 2021 and 2022, UÉ has reviewed the DBO and energy costs – for energy costs the increase is mitigated because of hedging, whereas UÉ has faced the full increase in DBO costs. Source: UÉ (June 2024) Revenue Control 4 (2025-2029), k-factor for RC4, p. 18

assumptions) on controllable opex, and which in PV terms results in a €11 million adjustment.

- This adjustment almost entirely explains our variation in the cost k-factor for RC3 relative to UÉ.
- **Option 2:** Under this option, UÉ returns the additional monies that were not required under the 2023 reopener, and these monies are not used to cover higher energy/DBO costs in 2021 and 2022.

As set out in Table below, option 1 provides a k-factor adjustment of -€187 million compared to UÉ's -€186 million (monies returned to customers).

Our option 1 returns somewhat more money to customers given that we take-back UÉ's slight outperformance on controllable opex in return for the additional funding on energy costs, whilst also reflecting CRU's disallowance of €12 million of the 2023 controllable opex re-opener for 2024. We consider that the CRU's proposed disallowance is reasonable given that UÉ filled only 32 roles with fixed-term contracts, compared to its forecast of 450 temporary positions and the substantive delay in submitting the requested reports.⁴⁸

Under Option 2, our k-factor estimate is -€290 million, which is largely explained by not funding UÉ for the additional DBO costs in 2021 and 2022.

Table 4.2: Comparison of UÉ and NERA proposed estimate of the RC3 cost k-factor

Cost Component (2017 Monies)	RC3 Cost K-Factor - UÉ			RC3 Cost K-Factor - NERA Option 1			RC3 Cost K-Factor - NERA Option 1		
	Allowance €'m	UÉ Forecast €'m	Delta €'m	Allowance €'m	UÉ Forecast €'m	Delta €'m	Allowance €'m	UÉ Forecast €'m	Delta €'m
Change in RAB	-2,957	-2,503	-454	-2,957	-2,515	-442	-2,957	-2,515	-442
Capex	4,482	3,937	545	4,482	3,949	533	4,482	3,949	533
Uncontrollable Opex	254	189	65	254	189	65	254	189	65
Controllable Opex			0	3,318	3,316	1			0
Inflationary impact DBO & Energy Costs			0.5			0		-87	87
Total cost adjustment in 2017 monies			-156			-157			-243
Total Cost Adjustment (Indexed to start 2025)			-186			-187			-290

Sources: NERA review of UÉ k-factor submission, "Tables_Breakdown" tab.

4.3. UÉ's RC3 k-factor revenue proposals

Table 4.3 provides a summary of UÉ's RC3 revenue factor claim which amounts to €399 million owed to UÉ. This comprises under-recovery of government subvention of €161 million; under-recovery of non- non-domestic and domestic revenues of €159 million and €9 million respectively; and payments owned under the RC3 financial incentives.

⁴⁸ UE (August 2025) UÉ RC3 Reopener Status Report to Comply with CRU decision ref: CRU/ 2023117

Table 4.3: Summary of UÉ's RC3 revenue k-factor

Revenue Component (2017 Monies)	Allowance €'m	UÉ Forecast €'m	Delta €'m
Government Subvention	4,498	4,337	161
Non-Domestic Revenue	1,146	986	159
Domestic Revenues	9	0	9
RC3 Financial Incentives			
Net ⁶ Non-Domestic Bad Debt	-	69.33	69.33
Billing Correction	-	0.42	0.42
Efficient Billing	-	0.45	0.45
Leakage	Under review		
Total Revenue Adjustment			399

Table 2: RC3 Revenue Components

Source: UÉ Revenue Control 4 Submission, k-factor for RC4, Table 2.

Note 6: UÉ's forecast bad debt correction is net of the incentive penalty.

4.3.1. Our assessment

We have reviewed and accept UÉ's proposed adjustments for revenue under-recovery as these are mechanistic bar changes as a result of the change to the 2024 inflation assumption.⁴⁹ For the RC3 financial incentives, UÉ propose some variations to the rules set out at RC3 and we examine the proposed changes.

⁴⁹ As mentioned above, we propose to update the inflation forecast for 2024 which results in marginally higher outturn revenues in real terms and therefore a lower amount owed by customers relative to UÉ's inflation assumption.

Non-domestic bad debt

As UÉ explains, the non-domestic bad debt provision incentivises UÉ to actively pursue bad debt among its non-domestic customers. UÉ receives a reward where bad debt declines below 5 per cent and a penalty where it increases above (subject to a cap of €4 million p.a.).

UÉ proposes two adjustments to the mechanism as implemented at IRC2 (i.e. changes applied to the roll-over year and RC3):⁵⁰

- To claim the bad debt charge as per P&L for each given year, but to calculate relevant penalties based on revenue billed less the corresponding cash received
- Exclude mixed-use customer bad for the purposes of assessing non-domestic bad debt.

In terms of the first proposed change, UÉ has not provided a rationale and it is not clear to us that it improves the incentive properties of the mechanism. It seems that UÉ proposes the underlying compensation to be based on bad debt charges to the P&L, an accounting term, yet determine the penalty on a cash basis, i.e. where the penalty is set based on cash billed less cash received. This seems to complicate the mechanism without a clear improvement to its incentive properties.

Our indicative proposal is to retain the mechanism as per the intended approach at IRC2, which would involve a maximum penalty of €4.0 million in most years, bar 2021 where there is no penalty but a positive adjustment of €0.8 million and 2023 where the penalty is €3.8 million.

UÉ proposes to exclude mixed-use customers from the incentive arrangements as it cannot disconnect such customers and therefore bad debt levels are not fully within UÉ's control.⁵¹ The implication is that it is more difficult to recover monies from mixed-use customers. However, if we do not accept UÉ's first proposed change, then the second change has limited implication as UÉ incurs the maximum penalty in most years bar 2021 and 2023.

UÉ is claiming for the P&L bad debt in full, as opposed to the incremental performance relative to the assumed efficient level of 5 per cent. The implication is that CRU made no ex ante allowance; at RC4, we would propose an ex ante allowance such that we have a true-up relative to the assumed efficient level.

Billing Corrections

Under a revenue cap approach, UÉ is not highly incentivised to bill customers correctly as corrections to billing do not increase its revenues. To address this issue, under the billing incentives scheme, if UÉ identifies properties being charged less than they should be charged and subsequently corrects the billing amount, UÉ retains a portion of the additional revenue it collected (set equal to 42 per cent). The objective of this scheme is to incentivise UÉ to correctly bill all of its non-domestic customers.

The CRU consulted on this mechanism and recommended an approach for the identification of incorrectly billed customers, using UÉ's "feet on the street" programme. Under this programme, UÉ identifies incorrectly billed customers through its move-in-move-out process (MIMO), and where the new customer is incorrectly billed, the incentive payment applies to backdated bills for

⁵⁰ UÉ (June 2024) Revenue Control 4 (2025-2029), k-factor for RC4, p. 11

⁵¹ UÉ (June 2024) Revenue Control 4 (2025-2029), k-factor for RC4, p. 14

12 months from identification of the issue.⁵² The approach outlined by UÉ in its k-factor submission appears to be consistent with CRU's rules.⁵³

The proposed incentive payment is €0.42 million (see Table 4.3).

Efficient billing

Under a revenue cap, UÉ does not face strong incentives to maximise number of properties billed. This is because, under a revenue cap approach, UÉ does not receive higher revenues from billing a higher number of properties relative to those assumed in the tariff model. Therefore, CRU introduced an incentive for UÉ to bill all eligible properties ("efficient billing incentive").

There is a parallel mechanism in E&W where Ofwat included a financial incentive scheme to encourage companies to bill all eligible properties.⁵⁴ In short, the company shared any rewards (penalty) from billing more (less) properties than expected. This was calculated by multiplying:

- The difference between the number of properties Ofwat assumed the company would bill and how many the company actually billed
- An "efficient billing factor" of 42% of the average bill.

In terms of the design of the mechanism, the first is to: i) require UÉ to identify the specific additional revenue billed as a result of billing customers connected to the network, but who were not previously receiving a bill; then, ii) this value would then be multiplied by the factor of 42 per cent of the additional revenue associated with these customers.

In terms of identifying the additional number of customers, UÉ identifies the following:⁵⁵

- Those non-domestic customers that were not transferred as part of LA migration
- Those non-domestic customers that do not currently appear on UÉ's CC&B system but identified while surveying.

This appears consistent with CRU's proposed approach as per its RC3 consultation.⁵⁶

The proposed incentive payment is €0.45 million (see Table 4.3).

Leakage

We understand from CRU that UÉ did not meet the leakage reduction targets under the leakage incentive mechanism, and that the maximum penalty of €20 million (in nominal terms) applies (i.e., the maximum annual penalty of €4 million p.a.). UÉ's own k-factor submission does not reflect its performance under the leakage incentive as relevant information on leakage performance was not available at the time of its submission.

⁵² UÉ (June 2024) Revenue Control 4 (2025-2029), k-factor for RC4, p. 15

⁵³ CRU (2021) Irish Water Revenue Control – financial incentives (Non-domestic billing and leakage), section 2.3

⁵⁴ http://www.ofwat.gov.uk/wp-content/uploads/2015/11/prs_in1004rcmsupp.pdf

⁵⁵ UÉ (June 2024) Revenue Control 4 (2025-2029), k-factor for RC4, p. 15

⁵⁶ CRU (2021) Irish Water Revenue Control – financial incentives (Non-domestic billing and leakage), section 2.3

4.3.2. Conclusion on k-factor for RC3 revenues

The implication of our recommendations is that the k-factor for RC3 revenues is decreased from €444 million to €393 million, i.e. less money is owed to UÉ by customers, as shown in Table 4.4. This is explained as follows:

- Slightly higher forecast revenues expected from customers in 2017 prices, as a result of using a lower updated inflation assumption, and therefore lower revenues owed to UÉ by customers;
- A marginally lower allowance for non-domestic bad debt because of a slightly higher penalty for exceeding the bad debt threshold of 5 per cent. (However, as we show in Table 4.5, the greatest adjustment here is for 2019, the roll-over year.)
- Reflecting the penalty under the leakage incentive mechanism (€18 million in 2017 terms), which was not yet included in UÉ's submission;
- Reflecting a €12m lower revenue allowance due to the disallowance of parts of the additional funding provided at the 2023 opex re-opener for 2024.

Table 4.4: Comparison of UÉ and NERA proposed estimate of the RC3 k-factor for revenues

Revenue Component (2017 Monies)	RC3 Revenue K-Factor - UÉ			RC3 Revenue K-Factor - NERA		
	Allowance €'m	UÉ Forecast €'m	Delta €'m	Allowance €'m	UÉ Forecast €'m	Delta €'m
Government Subvention	4,498	4,337	161	4,486*	4,350	136
Non-Domestic Revenue	1,146	986	159	1,146	990	156
Domestic Revenues	9	0	9	9	0	9
RC3 Financial Incentives						
Net Non-Dom Bad Debt		69.33	69.33		69.18	69.18
Billing Correction		0.42	0.42		0.42	0.42
Efficient Billing		0.45	0.45		0.45	0.45
Leakage		0	0		-18.1	-18.1
Delta Due			399			353
Total Revenue Adjustment (Indexed to 2025)			444			393

Note: Figure reflects CRU €12 million disallowance of 2024 opex re-opener.

Sources: NERA review of UÉ k-factor submission, "Tables_Breakdown" tab.

4.4. Overall k-factor recommendation

Overall, we calculate a total k-factor for RC3, the roll-over year (2019) and IRC2 of €222 million under option 1 (where we fund UÉ for higher DBO costs in 2021 and 2022), which is €57 million lower than UÉ's submission, as shown in Table 4.5. Under option 2, the k-factor is €120 million.

Under both options, the implication is that UÉ is owed somewhat less money from customers than UÉ's own submission.

Table 4.5: Comparison of UÉ and NERA proposed estimate of the total k-factor

<i>2017 prices, PV 2025 terms</i>	UÉ	NERA (Option 1)	NERA (Option 2)
RC3			
Cost	-186.3	-187.2	-289.8
Revenue	444.0	393.0	393.0
Subtotal	257.7	205.8	103.2
Rollover Year (2019)			
Cost	-0.1	-0.1	-0.1
Revenue	17.3	12.6	12.6
Subtotal	17.2	12.5	12.5
IRC2 (2017-2018)			
Cost	3.0	3.0	3.0
Revenue	0.9	0.9	0.9
Subtotal	3.9	3.9	3.9
Total			
Total	278.8	222.3	119.7

Sources: NERA review of UÉ k-factor submission, "K Factor_Summary" tab.

As described above, the reduction reflects the following changes to UÉ's submission:

- Retention of the IRC2 approach to calculating the non-domestic bad debt allowance in the revenue k-factor which implies higher penalties and lower revenues owed by customers to UÉ. This change mainly affects the roll-over year where under our approach UÉ incurs a higher penalty, albeit capped at €4 million p.a, than under its preferred approach.
- Reflecting the €20m penalty under the leakage incentive mechanism in the revenue k-factor.
- Reflecting the decision by the CRU to disallow €12 million of funding for additional staff from the opex re-opener for 2024.
- An update of the inflation forecast for 2024, which affects forecast actual capex, opex and revenues for 2024 in real terms, but the overall net effect is relatively small.
- For opex:
 - Under option 1: Accepting UÉ's proposed funding of DBO costs, in return for inclusion of controllable opex in the calculation of the cost k-factor for RC3 (i.e. returning controllable opex underspend to customers)
 - Under option 2: Rejecting UÉ's proposed use of 2023 energy reopener to fund earlier higher DBO costs, and instead returning these monies to customers



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