Report

Uisce Éireann Revenue Control 4 Submission

k-Factor for RC4

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1 Executive summary

The Commission for Regulation of Utilities (CRU) regulates Uisce Éireann (UÉ) through a form of revenue cap regulation which allows adjustments relating to one revenue control period to feed through into subsequent periods. This adjustment mechanism is generally referred to as a k-Factor mechanism.

This paper presents the closing position for the previous Revenue Control Period (IRC2 2017-2019), UÉ's forecast closing position for the RC3 period (2020-2024) and the ensuing proposed cost/revenue adjustment, and the methodology used to calculate the k-Factor over these periods.

All monies in this paper are either in 2017 prices (to facilitate direct comparison with the CRU's RC3 determination) or their Net Present Value (NPV) to 1st January 2025 (to reflect the value of allowed monies at the start of the next revenue control period) and rounded to the nearest million, unless otherwise stated.[1] For ease of review, '2017 prices, before index' is used in this paper to indicate that a figure represents its 2017 value without taking inflation or other market factors since then into account. Similarly, '2017 prices, after index' is used in this paper to indicate that 2017 monies are indexed to their NPV on 1st January 2025.

The difference between CRU allowed and outturn for IRC2 and RC3, is €278.8m (2017 prices, after index) as shown in Table 1 below. This represents monies owed to UÉ under the regulatory model. The accompanying k-Factor model quantifies these revenues and costs in detail.

Revenue & Cost K-Factor RC4 Submission €'m 2017 prices		
Indexed at		**Start of 2025**
IRC 2 Refresh (2017-2018)	Cost	3.0
	Revenue	0.9
Total		**3.9**
Roll Over Year Refresh (2019)	Cost	-0.1
	Revenue	17.3
Total		**17.2**
RC3 (2020-2024)	Cost	-186.3
	Revenue	444.0
Total		**257.7**
Total 2017 prices		**278.8**

Table 1: Revenue and Cost k-Factor Summary

[1] Irish HICP rates have been used to calculate to 2017 prices.

The overall net outturn of €278.8m is made up of:

- A net under-recovery for the IRC2 period of €21.12m. Calculations and figures for 2017-2018 remain broadly consistent with those projected, with the exception of non-domestic bad debt for 2019 for the amount of €17.2m (2017 prices, before index), which was not previously included.
- A forecast RC3 net under-recovery of €257.7m comprising actual out-turn data for 2020-2023 and forecast (budget) data for 2024.

While much of the revenue and cost calculations follow CRU's established methodology for calculating the k-Factor, comparing allowed and actual figures, UÉ is proposing the following changes and claims:

- Non-domestic bad debt correction – UÉ proposes updating the current approach to calculating the bad debt revenue correction. The Bad Debt charge will continue to be claimed as per P&L for each given year, with changes to the relevant penalties calculated by referring to revenue billed (as opposed to revenue as per P&L) versus corresponding cash received (as opposed to Bad Debt charge as per P&L).
- Non-domestic bad debt incentive – UÉ proposes excluding mixed use customer bad debt when assessing if a bad debt incentive or penalty applies. This approach is justified on the basis that UÉ cannot fully implement its debt collections process for mixed use customers due to existing legislative and regulatory rules or their interpretation. Specifically, UÉ cannot disconnect or threaten to disconnect mixed use customers for non-payment and, as a result, cannot fully implement its debt collection process for these customers (as compared to other non-domestic customers)[2].
- DBO costs for 2021 and 2022 - the CRU's interim review for 2023 addressed the significant inflationary increases in the Wholesale Price Index (WPI) indexation relative to Harmonised Index of Consumer Prices (HICP), which resulted in significant increases in DBO and energy operating costs. In 2023, the WPI index retreated from the highs experienced in 2022 and UÉ did not require all of the additional funding approved for 2023. As part of the k-Factor calculations, UÉ is returning €89m of the additional DBO allowance provided and €10m of additional Energy allowance provided. For 2021 and 2022, UÉ's

[2] See Section 4 for further detail

effective hedging strategy mitigated the impact of significant increases in the WPI Electricity Index for Energy costs however, due to the legacy contract entitlements, UÉ was unable to mitigate against the inflated WPI electricity index for DBO costs. UÉ proposes, in line with the interim re-openers, claiming for the additional costs of €32.7m and €61.7m respectively for the k-factor DBO calculations for 2021 and 2022 as the inflationary impact was beyond management control.

UÉ is currently undertaking a leakage review project. As such, leakage incentive figures have not been included to date for the k-Factor calculations. UÉ will engage with the CRU on the Leakage incentive when the values are available in September 2024. Moreover (as per the letter issued by CRU on 21 March 2024[3]), UÉ will be allowed an additional year to achieve its RC3 leakage target during 2025.

UÉ has integrated the k-Factor calculations with a notional apportionment between the domestic and non-domestic customer categories directed to support equitable distribution of funding resources between the two categories. In particular, the cost k-Factor has been apportioned in the measure of 80% for domestic/subvention and 20% for non-domestic. The apportionment is based on the expected RC3 outturn percentage split of allowed revenues. The revenue k-factor has been allocated based on the specific nature of the relevant items.

In summary, the detailed k-Factor methodology and financial adjustments will support UÉ in meeting its financial obligations while maintaining service standards. The recommendations and adjustments provided aim to enhance future revenue controls and address the financial complexities encountered during RC3.

The net starting position for the RC4 period on 1 January 2025 will be finalised once agreement is reached based on the IRC2 and RC3 closing positions for 2020-2023, and on the 2024 forecast position. A full review of outturn revenues and costs will be needed as part of the next revenue control period.

[3] CRU Ref: D/24/7926

2 k-Factor Methodology

In the CRU advice paper to the Minister for Environment (CRU/14/076), the CRU recommended that the 'k-Factor' methodology is applied to over or under recoveries from the pre-determined level of UÉ's allowed revenues. The correction-factor, or 'k-Factor', is an adjustment used by regulators that reduces, or increases a utility's maximum allowable revenues for any over-recovers, or under-recovers, over a specified period(s). The adjustment then corrects for these events by applying a correction to the revenue to be collected in subsequent periods.

The k-Factor is calculated by examining the revenues allowed to UÉ under the revenue control decisions, against actual outturn or forecasted figures. Revenues, in the case of UÉ, include domestic sources, non-domestic sources and Government subvention. A similar exercise is undertaken for UÉ costs, where the allowed costs under the revenue control decisions are compared to actual outturn or forecasted figures. An overall net position is then calculated by comparing revenues against costs.

Revenue Calculation

UÉ's k-Factor revenue calculation for outturn IRC2 2017-2019, outturn RC3 2020-2023, and forecasted RC3 2024 were calculated in line with the CRU's methodology used to calculate UÉ's overall k-Factor estimate for IRC2.

The steps in the revenue calculation are as follows:

1. Take the allowed revenue under the regulatory decision (Government subvention, non-domestic revenue and domestic revenue, where relevant);
2. Calculate outturn revenue (Government subvention revenue, non-domestic revenue and domestic revenue, where relevant);
3. Calculate the difference between allowed and outturn/forecasted revenue;
4. Calculate the adjustment for the bad debt provision, which applies only to non-domestic revenue. UÉ has calculated this as prescribed by the CRU's RC3 decision with proposed UÉ updates to the methodology as described in Section 4; and

5. Calculate the Net Present Value (NPV) to the start of the next revenue control period RC4 using Euribor +2%, (i.e., 1 January 2025)[4].

Costs Calculation

Similarly, UÉ's costs analysis for outturn IRC2 2017-2019, outturn RC3 2020-2023 and forecasted RC3 2024 were calculated in line with the CRU's methodology used to calculate UÉ's overall k-Factor estimate for IRC2.

The steps in the cost calculation are as follows:

1. Calculate the NPV of revenue required to reimburse the UÉ RAB, capital expenditure (capex) and operational expenditure (opex) based on the CRU's allowances;
2. Calculate the NPV of revenue required to reimburse the UÉ RAB, capex and opex based on outturn or forecast values;
3. Calculate the difference between steps 1 and 2; and
4. Discount the revenue required to reimburse RAB, capex and opex using the allowed WACC under the relevant revenue control period.

For both the revenue and the cost calculation, positive numbers represent revenue for UÉ (i.e. money owed to UÉ through the k-Factor) while negative numbers represent a 'clawback' for the customer (i.e. money owed by UÉ back to the customer through the k-Factor).

The accompanying spreadsheet model includes specific details and calculations conducted (using the most recent CRU RC3 Revenue model (CRU2023117a) forwarded by the CRU on 20th May 2024) for both the revenue and costs calculations. This model has not yet been published by the CRU.

3 IRC2 2017-2019 Close-Out Position

The methodology outlined above was applied to close out the IRC2 Revenue Period (2017-2019) with the Irish Water Revenue Control 3 submission (K-Factor for IRC1/IRC2).

[4] Euribor rates sourced from European Money Market Institute (EMNI)

As part of the RC3 decision (CRU19148)[5] the CRU carried out an exercise to estimate the IRC2 k-Factor. That exercise used UÉ's RC3 submission data containing full actual data until 2017, a combination of actual and forecast outturn data up to the end of 2018, and budgeted outcome from thereafter to 31 December 2019. For the purposes of this submission, we have replicated the analysis from that IRC2 k-Factor estimate, using actual outturn figures to end of 2019.

Updated outcome up to 2019 remains consistent overall with the RC3 k-Factor submission, with a final true up proximate to nil. However, a non-domestic Bad Debt Claim for the amount of €17.2m (2017 prices, before index) has now been included for 2019 (see section 3 for further detail). This was not submitted during RC3, as at the time it was a fully forecasted figure. Billing incentives across 2018 and 2019 for a total value €0.6m (2017 prices, before index) have also been included for the first time.

4 RC3 2020-2024 Revenue

Table 2 below outlines the revenue components and the corresponding delta between CRU allowed and outturn for the RC3 period, which is €399m. This is monies owed back to UÉ under the regulatory model. All figures in Table 2 are 2017 prices, before index. Government subvention, non-domestic revenue and domestic allowance and forecast revenue figures reflect the full RC3 period (2020-2024) while bad debt, billing correction and efficient billing figures reflect the 2020-2023 outturn position i.e. they exclude any forecast for 2024.

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

[5] In the Update to Irish Water's Revenue Control 3 (RC3.5) (CRU20085), Irish Water's opex, WACC and RC3 k-Factor were not changed from that in the CRU's RC3 Decision (CRU19148)

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

An overview of each revenue component is provided below:

Government Subvention

The main points in relation to the RC3 Government Subvention income are as follows:

- The CRU allowed a Government Subvention allowance of €4,498m;
- This compares to UÉ's forecast outturn of €4,337m; and
- Results in an under-recovery of €161m (i.e. money owed back to UÉ).

Non-Domestic Revenues

The main points in relation to the RC3 non-domestic revenues are as follows:

- The CRU set an allowance of €1,146m;
- Forecasted revenue recovery is €986m;
- Results in an under-recovery of €159m (i.e. money owed to UÉ).

Domestic Revenues

The main points in relation to the RC3 domestic revenues are as follows:

- The CRU set an allowance of €9m;

[6] UÉ's forecast bad debt correction is net of bad debt incentive payments/penalties.

- Forecasted revenue recovery is zero as there are no excess use charges applied during RC3;
- This results in an under-recovery of €9m (i.e. money owed to UÉ).

Financial Incentives

In the RC3 Decision (CRU19148), the CRU decided to continue the three financial incentives relating to the billing of non-domestic customers using the same approach taken in IRC2, to build upon work already undertaken by UÉ on incentives. These three incentives are as follows:

- Collection of non-domestic bad debt;
- Billing correction for bills of non-domestic customers; and
- Efficient billing of non-domestic customers.

At the time of the IRC2 decision, (when the decision to introduce these incentives was made), billing of non-domestic customers was carried out by Local Authorities (Las) on behalf of UÉ. While the non-domestic bad debt incentive came into effect during IRC2, implementation of the two other incentives was dependent upon the transfer of the billing function to UÉ. Therefore, these incentives could not come into effect at the start of IRC2.

Upon review of the customer information migrated from the LAs, UÉ identified issues with using the baseline approach to calculate the billing correction and efficient incentive payments. UÉ requested the CRU to consider a more granular approach to what the CRU had included in its IRC2 decision. The CRU clarified this approach in their RC3 decision paper[7] in September 2021, with a baseline set on 1st January 2018, along with an updated ruleset.

The RC3 financial incentives are summarised in the following areas:

1. Non-Domestic Bad Debt Incentive

The Non-Domestic Bad Debt incentive mechanism is in place to encourage UÉ to actively pursue outstanding debt amongst its non-domestic customers. An incentive payment applies if UÉ can reduce its bad debt to a level lower than 5% of the revenue amount, conversely a penalty applies where UÉ's actual bad debt is higher than 5%. Both the incentive and penalty are capped at €4m per annum. As part of its RC3 decision the CRU allowed a correction

[7] Irish Water Revenue Control 3 – Financial Incentives *(Non-Domestic Billing and Leakage)* (CRU21108)

for IRC2 non-domestic bad debt which was assessed based on 2017 actual and 2018 forecast revenue recovery net of incentive payments/penalties.

In addition to an assessment of non-domestic revenue and bad debt for the RC3 period, UÉ is also providing the CRU with an updated IRC2 position based on actual revenues (rather than a combination of actuals / forecast) over the IRC2 period (1st January 2017 – 31st December 2019). This updated position results in €17.2m (2017 prices, before index) of revenue to recover for the IRC2 period in addition to the €69.3m for the outturn 2020-2023 period.

The CRU's RC3 decision incentivised UÉ to:

(a) Reduce bad debt levels within its non-domestic customer sector in order to achieve or surpass the bad debt provision set by the CRU; and

(b) Investigate specifically how the bad debt correction will be implemented, taking future bad debt collection rates into account, in order to be in a position to request a bad debt revenue correction from the CRU.

Consistent with (b) above, UÉ proposes updating the approach of how the revenue correction is calculated, starting from 2019.

Firstly, while UÉ keeps claiming the Bad Debt charge as per P&L for each given year, relevant penalties are calculated by referring to revenue billed (as opposed to revenue as per P&L) versus corresponding cash received (as opposed to Bad Debt charge as per P&L).

Secondly, UÉ proposes excluding mixed use customer bad debt for the purposes of assessing the level of non-domestic bad debt during IRC2 and RC3. Specifically, UÉ proposes assessing non-domestic billed revenue and cash received net of mixed use customers values for the purpose of calculating the level of bad debt during IR2 and RC3.

This approach is justified on the basis that UÉ cannot fully implement its collections process for mixed use customers, as outlined below.

UÉ's Collections Policy:

Since the centralisation of non-domestic billing for Water Services, UÉ has leveraged economies of scale and core ways of working to grow its revenue stream. The Billing Services function has also matured its collections capability to encompass automated collections processes, site visits (fostering customer engagement), national disconnections capability, legal services escalation and the utilisation of a dedicated debt collection agency to engage with customers in a fair and equitable manner. The Billing Services function will continue to mature its capability over the coming years while seeking to lower costs through its operational activity.

The collections policy described in this section has been efficient in minimising the amount of unrecovered non-domestic debt, but inevitably some bad debt remains, net of the incentive penalties.

All non-domestic customers enter UÉ's automated collections process in the event of non-payment. UÉ applies a Dunning (Collections) process[8] which takes into account the status (how long overdue), age and value of debt outstanding when determining the form of communicating with a customer. Communications progress from SMS reminders to more formal letters, phone calls and site visits as accounts become more overdue. Upon each contact in the Dunning process, UÉ offers those customers in financial difficulty options to enter into a payment plan, to part pay or pay in full.

Disconnection or the threat to disconnect is an important last resort in a utility's collections process. UÉ operates a "Feet on the Street" (FOTS) programme through which our staff carry out site visits to non-domestic properties where there is a build-up of arrears. UÉ has the power to disconnect non-domestic customers for non-payment. The procedures follow the UÉ's Non-Domestic Customer Handbook and UÉ's Disconnection Policy. UÉ will engage with customers, offer payment plans and will only disconnect as a method of last resort if a customer has built up significant arrears and is not engaging in a meaningful way to address these arrears.

For disconnection due to non-payment, it is UÉ's policy not to disconnect on the first site visit (unless the premise is deemed vacant/derelict). This is

[8] Dunning is the process of methodically communicating with customers to ensure the collection of accounts receivable.

equivalent to the UK where a temporary disconnection site visit is often preceded by a site survey visit. UÉ considers the first site visit an effective part of UÉ's Disconnection Policy. In many cases UÉ will resolve the issue on the first site visit, for example often by a customer agreeing to settle their bill and/or enter into a payment plan, without the need for a subsequent disconnection visit. These visits allowed for customer engagement and payment (where applicable) but also for updates to customer information (new customers identified on site), identification of meter asset issues and also leakage identification.

Gaps in applying the full Collections Policy to mixed use customers

One category of non-domestic customer that UÉ cannot disconnect or threaten to disconnect is mixed use customers. While UÉ charges mixed use customers for water services, it does not disconnect mixed use customers for non-payment. UÉ's approach is based on the current interpretation of section 21(8) of the 2013 Water Services (No 2) Act which provides that:

'*UÉ shall not, by reason of a charge in respect of a dwelling being wholly or partly unpaid, discontinue the supply of water to that dwelling either temporarily or permanently'.*

The CRU's Disconnection Policy decision interprets this as meaning that UÉ *'cannot disconnect a domestic property while it is inhabited or used as a place which is periodically inhabited'*[9]. This prohibition extends to mixed use as these premises includes a dwelling which shares a supply of water and/or a shared collection of wastewater with a non-domestic premises. As such, UÉ's Disconnection Policy does not apply to mixed use customers.

The effect is to render UÉ's debt management process incomplete for mixed use customers, thereby undermining its effectiveness for this customer category. UÉ considers that the absence of a threat to disconnect mixed use customers as a last resort (i.e. when there has been no engagement in relation to outstanding debt and all other avenues for debt recovery have been pursued) means that outstanding debt amongst our mixed use customers cannot be fully pursued.

[9] CRU/202234, Section 2.1, page 11

The bad debt incentive is applied to UÉ on a 'symmetrical' basis, in that the incentive for a bad debt level below 5% is the same as the penalty for exceeding the level (i.e. up to €4m). In order for a symmetrical regulatory incentive to be effective, the utility must have control over delivery of the activity which is being incentivised. In a previous revenue control decision for the electricity network companies[10], the CRU acknowledged that a utility:

'…can only be incentivised in a symmetrical fashion for activities it has complete control over'.

Mixed use customer debt is not currently fully within UÉ's control due to the legislative restrictions on disconnecting mixed use customers. This significantly restricts UÉ's ability to reduce bad debt levels below the 5% target that the CRU has set for RC3 and this anomaly undermines the effectiveness of the bad debt incentive.

It is on this basis that UÉ considers it appropriate to exclude mixed use customer bad debt for the purposes of assessing the level of non-domestic bad debt until such time as existing legislative and regulatory rules or their interpretation are revisited to allow UÉ to fully implement its collections policy for mixed use premises.

2. Billing Corrections

The billing correction scheme creates an incentive to encourage UÉ to correctly bill all of its non-domestic customer base. Under this incentive, UÉ identifies eligible non-domestic customers that have been under-billed and starts to bill those customers correctly. UÉ is allowed to keep a portion (42%) of the additional revenue billed to customers that has been billed correctly. The billing corrections scheme can be applied from those accounts to be billed backdated up to 12 months from when the issue was identified.

In order to achieve this, UÉ reviews the Customer Care and Billing (CC&B) database to find addresses of Move-In accounts against those with Move-Out accounts (MIMO). The billing correction scheme was included as a component of the FOTS programme to identify those properties that were not in the billing systems. Through the FOTS programme, site visits were

[10] CER/11/128 Decision on 2011/2012 EirGrid System Transmission Incentives

carried out which highlight where new customers have moved into a premise but not engaged with UÉ. Applicable MIMO accounts are then able to be billed backdated up to 12 months from the date the issue is identified.

The FOTS programme commenced in 2019. For this process, a list of accounts and addresses was identified by CC&B systems for specific site visits. Due to COVID-19, the FOTS programme was suspended partially through 2020 and was also disrupted into 2021 and 2022.

Under this scheme, identified accounts have been billed backdated to 2018. As the scheme progressed during RC3, in conjunction with the FOTS programme, alignment of MIMO accounts has improved, resulting in UÉ correctly billing more of its non-domestic customer base across the period with the highest correction at the start of the scheme.

3. Efficient Billing

The efficient billing scheme is an incentive to identify and correctly bill any non-domestic customers that are connected to the UÉ network that do not receive a bill for the use of water and wastewater services. This scheme identifies the following:

a) those non-domestic customers whose metering information did not transfer over to UÉ's billing system from the Local Authorities at the time of the migration (July 2016 to June 2017); and
b) those non-domestic customers who have meters that do not currently exist on UÉ's CC&B system and identified via surveying while carrying out work programmes (e.g. Leakage Reduction Programme).

UÉ is allowed to keep a portion (42%) of the additional revenue billed to these non-domestic customers who have been identified. The efficient billing scheme can be applied from those accounts to be billed backdated up to 12 months from when the issue was identified.

Surveying of the system began as a pilot project in 2019, but due to COVID-19, the project programme was partially suspended through 2020 and was also disrupted into 2021 and 2022 as with other work programmes. Further surveying work ramped up again later in 2022. As such, the efficient billing scheme did not begin to yield results until then.

4. Leakage Reduction

UÉ's RC3 target for net leakage reduction is 177.5[11] million litres per day (MLD), which is split into 162.5[12] MLD on the public side and 15 MLD on the customer side.

In January 2024, UÉ commenced a project focussed on coordinating all leakage related activities, given the sharp increase in demand for water towards the end of 2023. UÉ expects to be in a position to advise the CRU on the effectiveness of this work and associated corrective actions and the impact on RC3 Leakage target by the end of September 2024.

Additionally, in May 2024 UÉ concluded the technical review of Customer Supply Pipe Leakage (CSP) with the CRU which provides the 2019 baseline and out-turn for 2020 and 2021. UÉ is working to apply the methodology to the years 2022 and 2023.

As such, leakage incentive figures have not been included for the k-Factor calculations, as these values will not be available until September 2024.

As previously stated, the CRU has allowed UÉ an additional year to achieve its RC3 leakage target during 2025[13]. A final determination will be made in 2025, with new leakage targets for the remaining years of RC4 (2026-2029) published by CRU as part of the final RC4 determination in 2025.

5 RC3 2020-2024 Costs

Table 3 below outlines the cost components and the corresponding delta between CRU allowance and forecasted outturn for the RC3 period, which is -€186m (2017 prices, after index). This is monies owed back to the customer from UÉ under the regulatory model. All figures in Table 3 are 2017 prices, before index aside from 'Total cost adjustment (indexed to start 2025)' which is the total cost adjustment value (-€186m) after indexation is applied i.e. they represent 2017 prices updated to reflect their NPV at the start of the next revenue control period, 1st January 2025.

[11] The RC3 target was originally set at 176 MLD, CRU decision (CRU/2022977) increased the public side leakage reduction target by a further 1.5 MLD increasing the total RC3 target to 177.5 MLD
[12] Originally set at 161 MLD which increased to 162.5 MLD following CRU decision (CRU/2022977)
[13] CRU Ref: D/24/7926

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

A summary overview of each cost component is provided below.

Regulated Asset Base

The RC3 forecast UÉ opening RAB value is €10m lower than the CRU allowed forecast UÉ Opening RAB value. The UÉ forecast Closing RAB is -€454m lower than the CRU Allowed Closing RAB value.

Capex

The CRU allowed €4,482m for Network and Non-Network for RC3 against an outturn of €3,937m which results in monies due to customers from UÉ. The CRU's RC3 decision allocated funds totalling €704m for two major projects (specifically €294m for the Water Supply Project – East and Midlands and €410m for the Greater Dublin Drainage). These projects were classified as 'Major Projects' by the CRU and the funding was ringfenced for the duration of RC3. Both projects progressed during RC3, however, at much slower rates than expected. The CRU decision (CRU202297) removed the ringfencing restrictions on 90% (€556m) of the allocated major project funds.

Uncontrollable Opex

The CRU allowed €278m (2017 prices, after index)[14] in RC3 for uncontrollable opex costs relating to:

- Regulatory Levies: For RC3, UÉ submitted a best forecast of costs for both the CRU levy and the EPA licence fees; and

- Commercial Rates: The initial allowance for commercial rates was calculated prior to the completion of the global valuation process by Tailte Éireann.

The outturn for these two uncontrollable opex costs of €206m (2017 prices, after index)[15] is expected to be lower than the allowance, which results in monies due to the customer.

Inflationary impact on DBO & Energy Costs

From 2021, significant global inflationary impacts beyond the Harmonised Index of Consumer Prices (HICP) adversely affected UÉ's DBO and Energy costs, despite intensive cost avoidance measures being adopted. The high and volatile electricity price rises in particular had an adverse impact on UÉ's Energy costs. The increase in Wholesale Price Index (WPI) indexation relative to the HICP resulted in UÉ experiencing significant un-controllable increases in DBO operating costs in 2021, 2022 and 2023.

As a result of this, UÉ requested an interim revenue review for 2023 financial year due to the forecasted WPI levels for that year. Following this process, UÉ secured approval for additional funding to address this forecasted increase in index levels. In 2023, the WPI index retreated from the highs in 2022 and as a result, UÉ did not require all of the additional funding approved. As part of the k-Factor calculations, UÉ is returning €89m of the additional DBO allowance provided and €10m of additional Energy allowance provided.

In relation to 2021 and 2022, UÉ has reviewed the DBO and Energy costs incurred in light of the additional allowance received in the 2023 re-opener.

For Energy costs, the impact of significant increases in the WPI Electricity Index was mitigated for years 2021 and 2022 due to UÉ's effective hedging strategy.

[14] After indexation to 1st January 2025 NPV (€254m in 2017 monies in table 3)
[15] After indexation to 1st January 2025 NPV (€189m in 2017 monies in table 3).

In relation to DBO costs, UÉ has included the uncontrollable cost impact of the WPI Electricity Index versus HICP for 2021 and 2022, which resulted in additional costs of €32.7m and €61.7m respectively being included in the k-Factor calculations. UÉ proposes, in line with the interim re-openers, to claim for the DBO inflationary costs for 2021 and 2022 as the impact was beyond management control.

These costs are further summarised in Appendix 1.

Innovation

The innovation allowance (€4m) for RC3 was not fully spent (up to end of 2023). UÉ requests CRU to allow any underspend to be allocated to the next revenue period. This is the same approach followed for the innovation allowance in IRC2 which was re-allocated to RC3.

6 Proposed Split of Revenue Allowance

UÉ's revenue allowance includes subvention income and non-domestic revenue. Subvention revenue is provided by the Exchequer and assessed in the context of UÉ's cost of providing domestic water and wastewater services, with non-domestic revenue charged to non-domestic customers in line with CRU approved tariffs and usage. Given these revenues are from two distinct and separate customer groups (domestic and non-domestic), UÉ has analysed the over and under-recoveries within its k-Factor process attributable to the domestic and non-domestic groups.

This will facilitate the respective k-Factors to be incorporated within each of the subvention and non-domestic revenue profiles for RC4. This will also provide increased equity, visibility and clarity with respect to the origin of the respective k-Factors and how these should be considered and applied in the context of setting the level of subvention to be funded by Government and the non-domestic tariffs to be incurred by non-domestic customers nationally.

With regards to determining the k-Factor for costs, UÉ has applied a 80% domestic/subvention : 20% non-domestic apportionment based on the RC3 outturn percentage split of allowed revenues (i.e., subvention income as a percentage of total allowed revenue for domestic and non-domestic revenue as a percentage of total allowed revenue for non-domestic) to its cost k-

Factor. The RC3 non-domestic revenue return is expected to be lower than the outturn approved (22.98%[16]) as part of the CRU's Non-Domestic Tariff Framework decision. This is largely because that allocation reflects UÉ's allowed revenues for 2019 which is lower than RC3 allowed revenues resulting in existing non-domestic tariffs under recovering against the approved cost allocation. Transitional arrangements in place to allow non-domestic customers to gradually move from their old tariff rates to the new enduring tariff rates over time has also contributed to the outturn apportionment diverging from the approved cost allocation.

The revenue and incentive components have been applied according to the shares of the domestic and non-domestic parts.

7 Summary

The RC3 Revenue control period (2020-2024) saw some extraordinary challenges which introduced complexities that were both unanticipated and unavoidable. Extreme external macroeconomic events including COVID-19 and the war in Ukraine were key drivers of extraordinary inflationary impacts affecting energy markets in particular and which resulted in higher costs than expected. We note that the opex additional allowances provided by the CRU through the RC3 interim reopener decisions have been instrumental in enabling UÉ to maintain water services to a high standard while accommodating increased demands.

Taking into account the difference between CRU allowed and the outturn for revenue and cost components over the IRC2 period (2017-2018), IRC2 rollover (2019) and forecasted RC3 (2020-2024), results in a figure of €278.8m (in 2017 monies) after indexing. This represents monies owed to UÉ under the regulatory model.

The detailed k-Factor methodology and financial adjustments support UÉ in meeting its financial obligations while maintaining service standards. The recommendations and adjustments proposed aim to enhance future revenue controls and address the financial complexities encountered during RC3.

[16] The CRU's 2019 Non-Domestic Tariff Framework decision provided for 22.98% of total allowed revenue to be recovered from the non-domestic sector.

8 Appendix 1 – DBO and Energy Cost Impacts in RC3 (2020-2024)

In setting allowances for the RC3 period 2020-2024, the CRU decided on allowances in 2017 price base. The impact of inflation was accounted for via a Harmonised Index of Consumer Prices (HICP). UÉ's cost base includes certain elements that are susceptible to price volatility significantly above HICP. These primarily relate to two key areas:

- DBO legacy contracts (DBO)
- Energy costs.

Both of these cost areas are generally related to the CSO WPI Table 4 – Electricity Index. UÉ has previously highlighted the indexation risk to the DBO portfolio.

The DBO portfolio was migrated to UÉ upon its establishment and includes most of the wastewater plants in operation by the utility. All contracts that include the Wholesale Price Index (WPI) indexation clause were migrated as part of the legacy DBO contracts on establishment. The indexation clauses in these contracts use a basket of indices from the overall CSO WPI Index intended to reflect the inflation risk attributable to operating a wastewater plant, including Labour earnings[17], Autodiesel[18], Electricity[19] and Chemicals[20]. The CSO Electricity index has the highest weighting in the WPI Index used (c. 40%) and therefore the WPI DBO portfolio is highly susceptible to changes in this index.

While UÉ has been successful in negotiating some commercially beneficial outcomes in respect of certain suppliers, legacy contract entitlements mean that this inflationary impact is beyond management control. UÉ's ability to change or influence the indexation clauses is restricted given they represent a contractual entitlement for the supplier under these legacy contracts.

Volatile electricity price rises carry a significant impact on the UÉ operating cost base. Table 4 below illustrates the year on year and cumulative

[17] EHQ11 Indices of Average Earnings and Hours Worked excluding Irregular Earnings (Industry B-E)
[18] WPM26 Wholesale Price Index – Autodiesel
[19] WPM26 Wholesale Price Index – Electricity
[20] WPM26 Wholesale Price Index (Chemicals and Chemical Products – 20)

movement since 2017 of this WPI index in comparison to the equivalent movements in HICP:

Index Analysis	2017	2018	2019	2020	2021	2022	2023
WPI Electricity Index	**89**	**117**	**93**	**69**	**250**	**416**	**226**
YOY % Movement	0	32%	-21%	-25%	260%	66%	-46%
Actual Variance (Cuml.)		0	104%	78%	280%	467%	253%
Updated CRU HICP (Cuml.)				104%	106%	108%	110%
Variance vs CRU HICP				**-26%**	**174%**	**359%**	**143%**

Table 4: WPI Electricity Index vs CRU HICP

Quantifying the impact

Table 4 above illustrates that up until 2020, the fluctuations in the CSO Electricity Index did not materially exceed the projected HICP rate included in the RC3 decision.

However, UÉ experienced significant un-controllable increases in DBO operating costs in both 2021 and 2022 due to the inflated WPI electricity index, resulting in additional costs of €32.7m and €61.7m respectively. As a result of this, UÉ requested a revenue control re-opener for 2023 financial year due to the forecasted WPI levels for that year. Following this process, UÉ secured approval for additional funding to address this forecasted increase in index levels. In 2023, the WPI index retreated from the highs in 2022 and as a result, UÉ did not require all of the additional funding approved.

As per Table 5 below, the net DBO impact for years 2021-2023 is €5.9m.

	2021 (€m)	2022 (€m)	2023 (€m)	Total (€m)
DBO Impact	**32.7**	**61.7**	**(88.5)**	**(5.9)**

Table 5: Impact of WPI inflationary impacts on DBO operating costs

The impact of significant increases in the WPI Electricity Index was mitigated for years 2021 & 2022 due to UÉ's effective hedging strategy. As with DBO, UÉ requested a revenue control re-opener for 2023 financial year due to the forecasted WPI levels for that year. Following this process, UÉ secured approval for additional funding to address this forecasted increase in index levels. In 2023, the WPI index retreated from the highs in 2022 and as a result,

UÉ did not require all of the additional funding approved (as per Table 6 below).

	2021 (€m)	2022 (€m)	2023 (€m)	Total (€m)
Energy Impact	**0.0**	**0.0**	**(10.0)**	**(10.0)**

Table 6: Impact of WPI inflationary impacts on Energy operating costs

Table 7 below summarises the impact of WPI inflationary impacts on combined DBO operating and UÉ energy operating costs. The impacts are provided both in nominal or current monies and after indexation is applied to discount their value to 2017 prices, before index (to provide a link back to the 'Inflationary impact DBO & Energy Costs' line item in table 3).

	2021 (€m)	2022 (€m)	2023 (€m)	Total (€m)
Total DBO & Energy Impact (nominal)	**32.7**	**61.7**	**(98.5)**	**(4.1)**
Total DBO & Energy Impact (2017 prices, before index)	**31.0**	**56.5**	**(87.0)**	**0.5**

Table 7: Impact of WPI inflationary impacts on DBO and Energy Operating costs