

IW Capital Investment Plan – Outcomes and Outputs

IW's RC3 programme of c.€5.2bn capital investment represents the first five-year portfolio developed by IW and aligns with the Strategic Funding Plan (SFP) limits. This investment, across network and non-network assets, is guided by the overall framework provided in the Government's Water Services Policy Statement (WSPS) and IW's Water Services Strategic Plan (WSSP). The delivery of the RC3 Investment portfolio will be a key enabler of national policy objectives for water and wastewater services across the three WSPS themes of Quality, Conservation, and Future Proofing.

As with IRC1 and IRC2, the RC3 investment plan will be a dynamic portfolio of projects and programmes which will be monitored and reviewed by both IW and other stakeholders over the course of the five year period. This will ensure that it:

- continues to reflect the most urgent investment needs;
- captures any required scope changes to projects or programmes;
- responds to any emerging policy requirements; and
- takes account of any scheduling changes and revised scope and costings, as each programme and project moves from conceptual design to detailed planning and construction.

In managing the portfolio, IW will continue to prioritise the delivery of committed outcomes and outputs within the SFP funding constraints.

IW's original RC3 Investment Plan was submitted to the CRU in November 2018. This plan was prepared using a data baseline of Q1 2018, meaning that all assumptions concerning scope, costs and delivery schedule were dated end March 2018. The outcomes and outputs identified in the RC3 submission were also projections based on the March 2018 data.

As projects and programmes progressed in 2018 and into 2019, IW needed to update the portfolio to take account of statutory planning issues, land issues, procurement and supply chain constraints, emerging investment needs, and project scope development. These updates have resulted in changes to the RC3 outcomes and outputs from those submitted to CRU in November 2018.

A further explanation of key change drivers, together with the resulting variance against the planned total network portfolio investment, is outlined below.

Emerging needs and scope additions (+6% variance on total network portfolio investment)

New emerging needs have been identified by IW in the 18 months since the data freeze point of end March 2018. These are principally driven by the requirement to ensure the security of the water supply in the eastern and southern regions of the country to meet evolving growth needs. In addition, there have been significant scope additions to a number of projects arising out of unforeseeable planning consent and environmental requirements.

Accelerated delivery within RC3 period (+2% variance on total network portfolio investment)

A number of projects with projected expenditure that spanned RC3 and into the next investment cycle are now expected to be delivered ahead of schedule, bringing expenditure forward into RC3. This has resulted in an associated increase in RC3 outcomes and outputs from those submitted in November 2018.

Updated delivery durations for early stage projects (-5.2% variance on total network portfolio investment)

A number of projects that are at early stages of the investment lifecycle (i.e. Gates 0 and 1) were originally planned to complete within the latter part of the RC3 period. Since the data freeze point in March 2018, IW has standardised its approach to forecasting early stage projects, taking into account the considerable scale of the portfolio. As a result, project timelines have been updated and some outcomes and outputs are now forecasted to be delivered post RC3.

Increased capital maintenance requirements (+1% variance on total network portfolio investment)

Since March 2018, IW has continued to update its asset condition data based on reports from site investigation works. This process is important to ensure that appropriate capital maintenance and asset replacement practices continue to be implemented. These site investigations have established that original assumptions regarding asset condition were, in some cases, optimistic. As a result, additional works will be required in order to deliver the required outcomes and outputs. The cost impact of these works within the RC3 period must be accommodated within the SFP funding constraint.

Early concept to detailed design progression (+7% variance on total network portfolio investment)

A significant element of the submitted RC3 Capital Investment Plan related to projects at the concept design stage, with only limited information on the full scope required to fulfil the required outcome. Since the data freeze in March 2018, some of these projects have progressed to the detailed design stage with a resulting development of scope. This scope development over the past 18 months has enabled IW to establish trends which can be used to better quantify uncertainty and improve cost estimation processes. This approach has now been applied to the overall portfolio, with updates to individual project scope and cost estimates where required.

Impact of Construction inflation (variance included in above change drivers)

The RC3 submission is priced in 2017 monies. The impact of Real Price Effects (RPE) over HICP inflation is a significant risk for delivery of the outcomes and outputs in the RC3 investment portfolio. IW has been monitoring tender price increases, arising from construction inflation, over the past 18 months and the effect that this is having on project cost estimations. The net effect is an increased funding requirement to meet the established outcomes and outputs. This trend is expected to continue into the RC3 period. In acknowledgment of this impact, the CRU proposed a RPE adjustment in the RC3 consultation. IW has taken this RPE adjustment into account in arriving at the updated outcomes and outputs contained herein.

Note: In addition to the above change drivers, a number of projects previously estimated to have a completion deadline of 2020 onwards will likely now be completed by the end of 2019. As a result, the target outcomes and outputs for 2020-2024 have been revised to take this into account.

The revised RC3 outcomes and outputs as a result of these change drivers are set out in the Tables below.

RC3 Outcomes		
Outcomes	Unit	Revised Target 2020-2024
Leakage Reduction	ML/day	176
Water Supply Zones (WSZ) removed from RAL	No. removed	13.0
Treatment provided at agglomerations previously receiving no treatment	No. removed	33
Agglomerations in the ECJ UWWTD case (Nr Agglomerations)	No. completed	10
Drinking Water Chemical (Nr Properties)	No. removed	209,435
Reduction in risk of THM non-compliance	No. removed	132,122
Reduction in risk of microbiological non-compliance	No. removed	561,915
Number of lead services replaced	No. replaced	13,231
Number of WTPs with Orthophosphate Dosing	No. completed	27
Additional water supply treatment capacity	ML/day	45.5
Number of agglomerations removed from EPA's Priority Urban Area Action List (PAL)	No. removed	41
Additional Wastewater treatment capacity	PE	1,158,984
River Basin Management Plan	No. completed	94
Energy Efficiency Improvement (GWh/yr)	(GWh/yr)	22
RC3 Outputs		

Outputs	Unit	Revised Target 2020-2024
Number of new treatment plants (W&WW)	No. completed	42
Number of upgraded treatment plants (W&WW)	No. completed	73
Water Treatment plant capacity	MI/day	606
Wastewater treatment plant capacity	PE	3,440,034
Number of reservoirs upgraded	No. completed	132
New watermains	Km completed	424
Rehabilitated or relined mains	Km completed	461
Meters installed	No. completed	50,815
New Sewer	Km completed	236
Rehabilitated Sewer	Km completed	333

Note: The revised 2020-2024 targets take into consideration earlier than expected project completions pre 2020, removal of ECJ cases and data corrections to the consultation document.