

Irish Water Revenue Control 3 – Financial Incentives Consultation Paper

On 4 December 2020 you published the above consultation paper and invited feedback. Kennedy Analysis has reviewed the consultation paper and welcomes the opportunity to comment.

For ease of reference, the following abbreviations are used in this submission:

UFW = unaccounted for water

Mld = million litres per day

LMS = leakage management system

FFS = First Fix Scheme

CSL = Customer Side Leakage

ISV = Internal Stop Valve

General

The consultation paper details your proposal in relation to, among other things, a new incentive payment that would be payable to Irish Water if it meets the leakage reduction target that was set during RC3. We are happy that the CRU is focused on encouraging accelerated leakage reduction. Incentives for doing so are, in our opinion, a good idea – but we have some concerns about certain aspects of the consultation paper, as set out below.

(1) Appropriateness of the nature of the leakage reduction incentive payment/penalty

The consultation paper proposes that if, by the end of 2024, Irish Water has met its 176Mld leakage reduction target for 2020-2024 (as set during the course of the recent RC3 process and published by the CRU in its 2019/2020 Decisions), it would receive a financial payment (additional revenue) of EUR20million and that if it reaches less than 80% of the target it will be subject to a financial penalty of EUR20million. However, the consultation paper provides no more detail than this.

Naturally, the difficulty with a financial incentive payment/penalty when you are dealing with a state-owned, publicly-funded and public-serving organisation like Irish Water is this: if Irish Water fails to meet its target and is punished by receiving fewer funds then the primary set of people who will suffer is the public as there will be less funding available in the future to try to address the failings of the water supply system.

The situation is, of course, quite different for private water supply companies (for example the privatised water suppliers in the UK): if a private water supplier were to fail to meet its leakage targets, and had a financial penalty imposed as a result, the regulator would be able to ensure that the only group of people who would suffer the consequences of that penalty would be the shareholders (not the customers).

In the case of a state-owned water supplier like Irish Water, **an appropriate financial incentive/penalty might therefore be one that links the satisfaction (or not) of leakage targets to the level of executive pay/bonuses.** This approach, as you will know, is used in the UK and goes down well with the public. It naturally helps the public to believe that the senior executives of those water suppliers are keenly incentivised to reduce leakage (and thereby improve security of supply and sustainability).

It is not clear from the consultation paper itself whether this is in fact your intention – the consultation paper does not spell out how the proposed incentive/penalty payment would be applied. Is the intention that the EUR20million payment/penalty would be linked to a particular part of the Irish Water business/its operations? For example, is it proposed that it would relate only to the fund of money that goes towards financial remuneration/bonuses of Irish Water management? Such an approach would, in our view, make sense in the context of an organisation of the nature of Irish Water and would be significantly more appealing to the public in terms of accountability than a generalised incentive payment/penalty that is not ring-fenced for a specific purpose.

It is important that the precise terms of the incentive payment/penalty are agreed and drafted very clearly and to an appropriate level of detail. The current definition is unclear and too high-level.

(2) This consultation paper uses language that, if allowed to stand, would entirely change the nature of the leakage reduction target set by the CRU in the RC3 process (making it much easier to meet) – we assume that this is an accidental oversight, but it is vital that it is addressed

The 176Mld leakage reduction target (as proposed by Irish Water in 2018, publicly consulted upon in 2019 and set out in the CRU’s RC3 Decisions in 2019 and 2020) related only to reductions in “leakage” (i.e. unaccounted for water, UFW). The leakage reduction target did *not* include reductions in leakage as a result of the First Fix Free scheme (the FFS) which targets customer side leakage (CSL). This was very clear from the RC3 documents (see below).

The 176Mld leakage reduction target was an appropriately ambitious one (amounting to a target reduction in UFW of 25% over 5 years – in line with targets that have been set by OFWAT for the under-performing water suppliers in the UK for the upcoming 5 years). When we reviewed the RC3 public consultation paper in July 2019 we were satisfied with the proposed leakage reduction target. It was a clearly defined, appropriately challenging target and was reported as such in the press at the time.

However, unexpectedly (and, we assume, unintentionally), this consultation paper suggests that, in order to determine whether the 176Mld leakage reduction target has been satisfied for the purposes of the proposed financial incentive payment, reductions in CSL (i.e. savings made through the First Fix Free scheme) should be *aggregated with* reductions in UFW. Such a change would be inconsistent with what was agreed in the RC3 process, would fundamentally alter the nature of the leakage target (making it far easier for Irish Water to meet the target) and would be unacceptable.

Background

The RC3 process, as you are aware, involved the proposal by Irish Water of outputs and outcomes (including a leakage reduction target), a public consultation paper setting out those proposed outputs and outcomes (published by the CRU in July 2019), a consultation response paper, a Decision (CRU/19/148, published 5 December 2019), and a subsequent updated Decision (CRU20085, published 4 August 2020). All of these documents contemplated a leakage reduction target (which related only to reductions in UFW) of 176Mld.

- The consultation paper stated that Irish Water had proposed “**a reduction in leakage of 176ML/day (net water savings in the water supply network) by the end of RC3**”
- The consultation response paper stated that: “**at a minimum the CRU expects Irish Water to achieve its stated target of leakage reduction of 176ML/day by the end of the RC3 period**”
- The Decision (05/12/19) stated: “**Irish Water has proposed an outcome of a reduction in leakage of 176ML/day (net water savings in the water supply network) by the end of RC3 as part of its submission to the CRU. Irish Water is currently in the process of implementing its new Leakage Management System (LMS) and will report to the CRU on its level of leakage following this implementation at the end of 2019. This will be the baseline, against which the CRU will monitor Irish Water during RC3**”
- In the updated Decision (04/08/20) the CRU stated: “**Irish Water has proposed an outcome of a reduction in leakage of 176ML/day (net water savings in the water supply network) by the end of RC3**”

(emphasis in bold is ours).

Anyone with knowledge of Irish water supply knows that, in Ireland, the terms “leakage”, “network leakage”, and “unaccounted for water” relate *exclusively* to distribution side leakage (i.e. leakage on the *public* side): it does not include any element of private side leakage (which is known as customer side leakage or CSL). We could provide countless examples to show that this is the case, but it is unnecessary and uncontroversial: the term “leakage”, in the Irish water supply context, does *not* include any private side leakage.

If, in the context of Irish water supply, it were intended that a reference to the word “leakage” should *include* private side leakage then it would be necessary to make very explicit reference to that fact as it is entirely contrary to the normal usage of the term. This was not done in any of the documents during the course of the RC3 process leading up to the Decisions. Every one of the documents published in relation to the RC3 process leading up to the Decisions stated that the 176Mld reduction target related to “leakage”. In some cases it elaborated by stating “(net water savings in the water supply network)” and, in the Decisions, it was expressed in the same context as the proposed setting of the “baseline” level of “leakage” once the LMS was up and running – this is important (see below). Nowhere was it stated that, for the purposes of the leakage reduction target, CSL savings would be aggregated with UFW savings.

The media, when reporting on the RC3 process, made clear that the 176ML/d leakage reduction target related to reductions in UFW alone: on 19/10/2020 Michael Brennan at the Business Post published a report that stated: “Some 712 million litres are lost each day and the Commission for the Regulation of Utilities says this should be reduced to 536 million litres a day by 2024” under the headline “Irish Water urged to cut leakage loss by 176 million litres a day”. The 536Mld figure cited in the article was clearly derived from deducting 176Mld (the leakage reduction target) from the base level of UFW (712Mld), to come to a resultant target UFW level of 536Mld (as calculated by the author of the article on the basis that both the *baseline* and the *reduction target* related solely to UFW).

However, this consultation paper (which was published in December 2020 i.e. *after* the RC3 process had culminated in the Decisions which confirmed the 176Mld leakage reduction

target) proposes to introduce language that (unintentionally, we assume) would make the 176Mld leakage reduction target far easier to meet.

It does so by introducing new words (that were not included in either of the RC3 Decisions) as follows: “*Irish Water proposes... to reduce water lost on its network by 176Ml/day by the end of 2020 (on both public and private networks)*”.

This new language would mean that reductions in *both* (i) UFW (i.e. network leakage) and (ii) CSL (i.e. leakage on the private side) would be aggregated and counted *together* to determine whether 176Mld of water has been saved. This is *not* in line with the leakage reduction target set by the CRU in the RC3 process – under the terms of which reductions in UFW *alone* contributed to the 176Mld reduction target.

There was *no* mention of the words “*on both public and private networks*” – or any other words to this effect - in the CRU’s RC3 Decisions (or, indeed, in *any* of the documents published in the RC3 process leading up to the Decisions).

The inclusion of CSL savings for the purposes of the leakage reduction target would render the original UFW target virtually meaningless

As you know, customer side/private side leakage (CSL) in Ireland is addressed through the First Fix Free scheme (the FFS), operated by Irish Water. The FFS has been unexpectedly successful in reducing CSL and has done so at a fraction of the anticipated cost.

When the FFS was launched in 2015 Irish Water predicted that, within its first 18 months of operation (i.e. by Q4 2016), the scheme would have cost EUR50,101,362 and that **37Mld** of water would have been saved (plus the possibility of additional water savings from self-instigated customer repairs, the anticipated volume of which Irish Water did not estimate). In fact, by Q4 2016, almost *three times* that volume of water had been saved, and *only 40%* of the budget had been spent. The scheme has proven to be a huge (and unexpected) success in terms of water recovery.

The FFS has had its limitations, however. For example, customer interaction with the scheme has been much lower than anticipated and the terms of the scheme were quite narrow, such that the majority of the leaks that were identified by the scheme did not actually qualify for a free repair (for example, because the property did not have a functioning internal stop valve or ISV). As a result, of the 174,782 major leaks that have been identified by the scheme so far, 114,267 have not yet been repaired. In addition, the FFS in its current format only covers householders with a functioning water meter (meaning 43% of households in the country were excluded from the scheme altogether).

These limitations notwithstanding, by the end of Q4 2019 (the most recent published report), the total volume of CSL saved as a result of the FFS was **155Mld** (note: this 155Mld was saved in under 5 years).

The rate of reduction of CSL through the FFS has declined in recent years and, as a result, Irish Water has recently proposed significant changes to the scheme. It proposes (i) to expand it to cover unmetered properties, (ii) to remove various limitations that rendered many leaks outside the terms of the scheme (for example, the ISV limitation), and (iii) to take steps to improve customer interaction with the scheme. These proposals are expected to significantly

increase uptake of the scheme and, as such, CSL savings through the FFS in the coming years can be expected to be high.

It is, of course, difficult to predict what volume of CSL will be saved in the next 5 years. If one assumes that CSL recovery in the period 2020-2024 will be *half* of that achieved in the period 2015-2019 (which would arguably be a conservative assumption, given the proposed expansion of the First Fix scheme) and if, for the purposes of determining whether the 2020-2024 leakage reduction target of 176Mld is met, that CSL reduction were to be *aggregated with* UFW reductions, then the UFW element of the leakage reduction target would be reduced to just **98Mld** (i.e. 176Mld minus 78Mld).

As you can see, aggregating CSL reductions with UFW reductions for the purposes of determining whether the 176Mld leakage reduction target has been met would render the leakage target virtually meaningless.

To add to the confusion (and to compound our assumption that this error was, in all likelihood, simply an oversight) the language within this consultation document itself is inconsistent

Some parts of the consultation paper are consistent with the RC3 documents/Decisions (and make it clear that the leakage reduction target relates to UFW savings alone), while other parts state that CSL savings are *aggregated with* UFW savings for the purposes of the reduction target.

For example: at page 26 of the consultation paper it is states: “*Leakage, or Real Water Losses, is the loss of drinking water on the public side of the water supply network*”.

As another example: As mentioned above, the RC3 Decisions both pointed out that Irish Water was in the process of implementing a new leakage management system (LMS) and that this would set the “baseline” against which the CRU would measure whether the leakage reduction target had been met. This consultation paper states (see section 3.1 “Background”): “*At the time of the RC3 decision, Irish Water was in the process of implementing a new Leakage Management System. The CRU requested Irish Water to report to the CRU on its level of leakage following the implementation of this system such that a **baseline**, against which the CRU will monitor Irish Water during RC3, could be established. **Irish Water reported its leakage level (‘Unaccounted-for-water’) at 712 million litres a day in 2019. As part of its RC3 capital investment plan, Irish Water intends to reduce net leakage by 176 million litres a day by the end of 2024***”. This section of the consultation paper could not be clearer: it spells out explicitly that the **baseline** level of “leakage” and the “leakage” **reduction target** both relate to UFW alone. This was also the interpretation of the press coverage of the RC3 process, which used these two figures – **712Mld** (the baseline leakage level) and **176Mld** (the target leakage reduction) – in the same paragraph, on the clear understanding that they both related to UFW alone.

Yet, in a few parts of the consultation paper, new language has been introduced that has a very different implication. The words “*from both public and private network*” (and other similar words that refer to the inclusion of CSL) have been introduced. For example, at page 29, the consultation paper states: “*The CRU proposes to set Irish Water a leakage reduction incentive target of 176 million litres of water a day by the end of 2024 (both public and private network) [sic]*”.

Our assumption is that the inclusion of this new language in some parts of this consultation paper is simply an oversight on the parts of those drafting the consultation paper. Indeed, one gets the impression that the notion of including CSL savings was introduced after the bulk of the consultation paper had been drafted. For example, one sentence reads (and please note, the grammatical errors and omitted words reflect exactly the wording in the consultation paper itself): “*The proposed target of 176 million litres of water a day by the end of 2024 relates “real water losses”, and customer side leakage only*” [sic]. The absence of the word “to” after “relates” and the unnecessary comma after “real water losses” suggest that this sentence may have been reworked.

These newly introduced words must be removed. Failure to do so would

- (i) be inconsistent with the leakage reduction target publicly consulted upon and confirmed by the CRU in the RC3 Decisions,
- (ii) make satisfying the leakage reduction target for the purposes of the proposed financial incentive payment much easier to achieve, and
- (iii) lead to uncertainty in the future when determining whether or not this target has been met for the purposes of the financial incentive payment.

It would also raise serious concerns as to whether the 176Mld leakage reduction target *per se* (and not just for the purposes of assessment of the financial incentive payment) is being “walked back” after the event.

It would be entirely appropriate (and would do nothing to improve Irish Water’s reputation for a lack of transparency) if, for the purposes of determining whether the leakage reduction target is satisfied and the proposed financial incentive payment payable, Irish Water was permitted to aggregate CSL savings (through the First Fix scheme) with UFW savings, contrary to the target as set by the CRU in the RC3 Decisions. The fact that the 176Mld leakage reduction target relates *only* to reductions in UFW must be made very clear within the CRU’s finalised document, with all relevant definitions clearly set out, so as to avoid any ambiguity when it comes to determining whether the target has been met in the future for the purposes of the financial incentive.

(3) As an observation: Kennedy Analysis would be supportive of the results of the First Fix scheme (FFS) scheme being linked to an incentive mechanism

We made this point in our recent submission to the CRU on the proposed changes to the FFS. As set out in that submission we would propose that, rather than setting targets for the FFS by reference to *absolute* figures, it may be more appropriate to set target “conversion rates”, e.g. a conversion of “notification letters” to “leak investigations” of X%, and a conversion rate of “leak investigations” to “leak repairs” of Y%. The absolute number of leaks found (through constant flow alarms and the equivalent) is something that Irish Water has no control over. Conversion rates, however, are something that Irish Water *does* have some control over and should be incentivised to improve.

We would also propose that Irish Water is set a target in relation to the cost per 1Mld of water saved. Contractors themselves should also, in our view, be remunerated (in part) on the basis of the *volume of water saved*, not purely on the basis of the number of leak investigations/repairs undertaken. This gives them a strong incentive to “convert” the identification of large leaks into actual water savings, prioritising their attention on larger leaks as appropriate. (Note: it is possible that this is already the case – we are, of course, not privy to the terms of those contracts.)

If you would like more detail, please let us know.

(4) Irish Water Performance Assessment 2020 to 2024

As a result of work that we have done for the purposes of this submission we have discovered that, in October 2020 (i.e. *after* the RC3 Decisions had been published and Irish Water’s leakage target for the 2020-2024 period had been finalised) you made a reference in your “*Irish Water Performance Assessment 2020 to 2024 Metric Review and Target Setting*” document to the notion of splitting the 176Mld leakage reduction target into two parts (15Mld for CSL savings and 161Mld for UFW savings). We have serious concerns about this.

First, this was not the appropriate forum for the contemplation of such a significant proposal: any such proposal should have been tabled during the extensive (and publicly consulted upon) RC3 process leading up to the Decisions, which had been published just 2 months previously. No such proposal of “split” targets was tabled (or even contemplated) during that process. It is not appropriate for such a proposal to be made (a) outside of the formal RC3 target-setting process, and (b) after the event.

Second, a 15Mld “target” for CSL reductions is nonsensical in the context of the anticipated results of the First Fix Free scheme. Any reasonable observer can see that, particularly given the proposed expansion of the scheme, 15Mld will be saved through the scheme with ease over the 2020-2024 period (remember: the scheme saved **155Mld** from 2015-2019). A 15Mld reduction in CSL from 2020-2024 could not possibly be considered a “target” – it is a level which will almost certainly be exceeded many times. The effect, therefore, of retrospectively splitting the 176Mld leakage reduction target into 15Mld for CSL and 161Mld for UFW (as suggested in the October 2010 document) would have no meaningful effect other than to *reduce* the UFW target by 15Mld.

The 176Mld leakage reduction target for the RC3 period 2020-2024 was set, at the culmination of an extensive (and publicly consulted upon) RC3 process, in the August 2020 Decision. The target related to UFW *alone*. The outputs and outcomes of the RC3 process (including the leakage reduction target) as set out in the Decisions were definitive – they provide clarity and certainty as to what is expected of Irish Water in the 2020-2024 period. To retrospectively suggest that reductions in CSL should be aggregated with reductions in UFW for the purposes of the leakage target would be a walk-back of the target and unacceptable.

Please contact us if needed at Emma.Kennedy@KennedyAnalysis.com