3.2 Cost assessment: developer services

1.1 Cost assessment representation

Summary

We are very supportive of Ofwat's revised assessment of developer services / growth expenditure. It has moved, from a separate enhancement model used at the IAP, to inclusion in an expanded set of botex econometric models (termed botex+). Given our concerns with the IAP approach, we think that this is a positive and pragmatic development.

However, it seems there is a possibility that a new specific growth model could be introduced using the supplementary data submission that has been requested alongside the slow track draft determinations. We believe that such an approach runs a major risk of producing results that are not robust, with surprising changes at a very late stage in the process:

- Developer services cost assessment data does not appear to be currently fit for purpose for the assessment of discrete developer services costs. It is unlikely that the new data request will iron out all of these issues sufficiently.

- A late model change would also lack transparency, particularly where data comparability is known to be challenging. There would be no opportunity to test and challenge model robustness, and the modelling work will not have benefitted from the extensive engagement and review given to the botex models, a process that has worked very well.

Ofwat has rightly explored a number of different options throughout the PR19 process before landing at the current approach. Given these circumstances, we think the botex+ approach used in slow track draft determinations is a sensible and pragmatic approach to apply at FD. Given the data and modelling difficulties that have arisen in this area, there looks to be a strong case for initiating collaborative work following PR19 in order to develop a more robust basis for assessing developer services costs and revenues in future reviews.
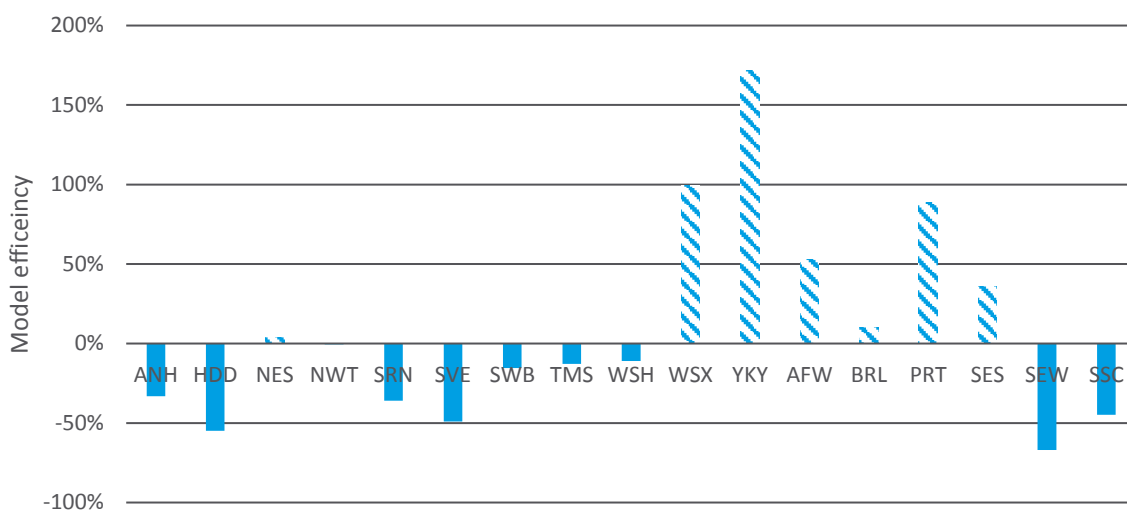
1.1.1 Previous representations

In our IAP and DD representations, we set out in detail that the IAP growth model was not accurately reflecting efficiently incurred developer services expenditure. The issues with the approach can be summarised as being largely related to:

- material inconsistencies in the growth data used to populate the unit cost models (examples of which are provided in Annex A);

- consistency and coherence issues regarding the accounting treatment of contestable activity;

- complexity and lumpiness affecting the relationship between off-site network reinforcement requirements and short term new development volumes.

These issues resulted in dramatic disparities between company developer services business plan costs and disproportionately large inferred efficiency challenges despite the model only holding companies to a median historic unit cost. In our opinion, these values should not be interpreted as showing efficiency of company business plans. It is not logical to assume that companies can outperform or underperform an efficiency benchmark for a material and relatively consistent activity by the amount assumed. Rather, we consider major limitations with both input data and the predictive power of the model that was used to have been significant drivers of the observed deviations.

Figure: Assumed efficiency from the IAP water growth model. Ofwat used company costs where the model was showing the companies costs to be efficient (hatched bars)

We are pleased that Ofwat has reconsidered the way in which efficient Developer Services costs are to be estimated. Ofwat has clearly sought to improve the quality of its growth models as shown by the specific query on developer services costs and volume in May 2019. This information has not been used in the slow track DDs, indicating that further work is still required to arrive at robust estimates of efficient expenditure. Communications with Ofwat and other companies with respect to the subsequent data request (presented alongside this submission) clearly suggest that the scope and interpretation of various aspects of developer services remain subject to material uncertainty (for example, through the assumptions different companies have applied when seeking to apportion contestable activity retrospectively). It is very much our view that this should be now focused on making improvements at future price reviews rather than attempting to arrive at an untested fix in this late stage of PR19.

Given this context, we consider that the botex+ approach used in slow track DD's (expanding the botex models to include growth expenditure), is a pragmatic one that should now be retained for the Final Determinations.

1.1.2 Estimating growth costs in botex+ models is pragmatic

Given the data and time constraints facing the development of a new robust developer services model, the assessment of these growth costs through expanded botex+ models is appropriate and pragmatic.
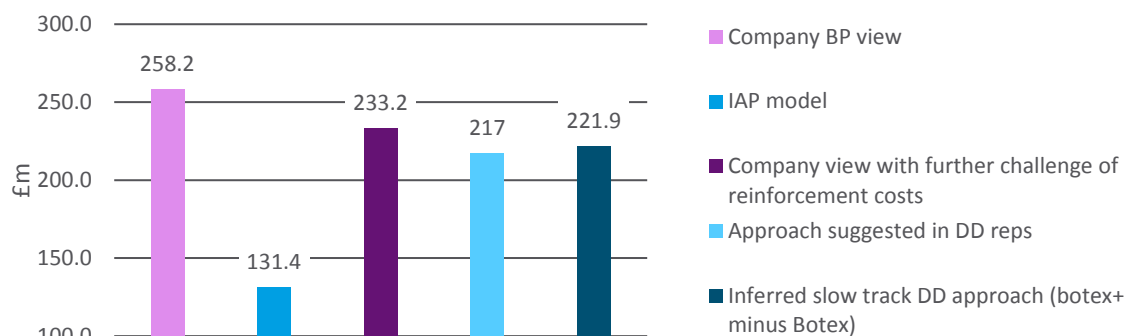
Assessing developer services expenditure alongside other base expenditure removes the need to make sure that the costs are accurately interpreted and consistently allocated. This is one of the most material barriers to a robust stand-alone developer services cost model and we do not believe that data confidence will improve sufficiently for it to be effectively used in PR19.

In its Cost Assessment Q&A session, Ofwat has stated that it has tested and satisfied itself that the expenditure has similar characteristics to base expenditure which can be explained by similar cost drivers, and that the expanded botex+ models remain robust. In broad terms, and for the purposes of arriving at an approach for PR19, we consider this a reasonable position to adopt. For example, it is reasonable to assume that new development will affect all companies and that on-site activity (new connection and requisitions expenditure) can be considered as broadly scalable – essentially the more connections a company serves, the more new development it can expect. Similarly, increasing costs that may be expected from working on sites in more urban areas should, in part, be accounted for through the density cost drivers.

If the impact of the change from botex to botex+ models is isolated (i.e. by running the slow track DD econometric models but using historic botex rather than botex+ to derive the model coefficients), the implied

allowances for developer services look to be more logical. For Severn Trent, the developer services efficiency challenge changes from 49% at the IAP to 14% at slow track DD. While we consider the extent of this deviation still to be significantly higher than would be expected from a more fully developed approach to modelling developer services costs, it nevertheless looks much more realistic than the output of the IAP growth model. Additionally, we note that the slow track DD inferred allowance of £222m converges closely with the alternative approach that we set out in our fast track DD response (£217m, using disaggregated unit costs and separate consideration of AVP transition and strategic network reinforcement schemes - Appendix 1, Section 3.5.2).

Figure: Company forecast Developer services costs and associated modelled approaches

This is also reflected across the sector. The industry wide efficiency challenge derived from the IAP unit cost models moves from 19% to a more logical outperformance of 1.9% when inferred from Botex+. This is also more in line with the Ofwat casework benchmarking that we set out in our DD response (Appendix 1, Developer services annex 2).

1.1.3 It would not be appropriate to make further changes to cost assessment at this stage

We do not consider it would be appropriate to make further changes to the approach taken to developer services cost assessment at this late stage in the price review process. Given the extent of the data and modelling issues associated with the IAP growth model, we consider there to be significant risks associated with developing a new approach to modelling costs. These risks make the transparency of the model development process – in order to allow appropriate challenge and testing – particularly important (and we note that the adoption of a transparent and consultative approach has been key to the effective development of Botex models). We do not think it would be appropriate to introduce new and untested cost models at FD, in what is clearly a challenging assessment area both because of data quality at model design.

We would also urge caution in the consideration of further modifications to Botex modelling at FD in order to seek to better capture developer services costs. The approach adopted in the slow track DDs is clearly a very approximate one, and a number of options could be considered for its improvement. For example, as we highlighted in our IAP submissions and DD representations, there are material differences between companies in terms of the ways in which Asset Value Payments have been accounted for, with this raising significant cost comparability issues (particularly for cost forecasts). Effort could be devoted to seeking to correct for this and such inconsistencies in order to arrive at a refined Botex+ assessment, and in principle this would seem desirable. We would emphasise, however, that identifying an appropriate means of correcting for such issues can itself raise further significant complexities and thus assessment risks. Again, it does not seem appropriate to introducing such changes at the FD stage without there having been adequate opportunities for challenge and testing in what is a difficult area for cost assessment.
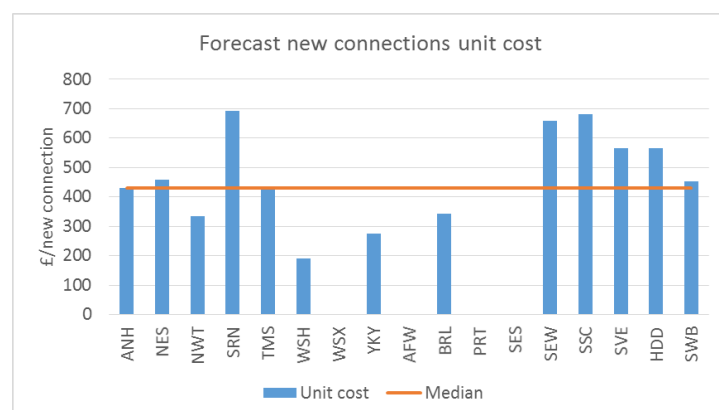
Given the data and modelling difficulties that have been faced, we consider there to be a strong case for collaborative work to be progressed following PR19 with the aim of developing a robust basis for modelling developer services costs for future reviews. Such work might be appropriate for collaborative agencies such as WaterUK.

Annex A: Examples of data issues highlighted in our IAP and fast-track DD responses

Inconsistent treatment of new development costs and volumes

We identified that some companies did not include any new connections capital expenditure in their business plan table (WS2 line 12). We do not consider that it is plausible for a company to forecast no new connections expenditure. Therefore, this suggests that either: costs were presented net of G&C (effectively removing gross costs), categorised as opex, or categorised in another data line.

Figure: New connections expenditure as set out in company business plans

Ofwat has issued several all company queries regarding the treatment of diversions expenditure. As per our responses, diversions are not considered to be part of new development enhancement expenditure. Instead they relate to the movement of existing assets due to the activity of a wide range of stakeholders. This is separate to the connection, growth or expansion of the network as a result of new development. Diversions are considered to be base rather than enhancement expenditure (either: opex – renewals expensed in year, or capex MNI). Therefore, we do not consider that they should be included in developer services enhancement modelling. However, it is not clear if other companies have also followed this approach.

With regards to new connections activity, it is apparent that the classification of new connections also varies. Analysis of new connections, new properties connected, new billed properties, change in total billed properties and change in voids suggests that there is inconsistency in the way in which volumes are reported.
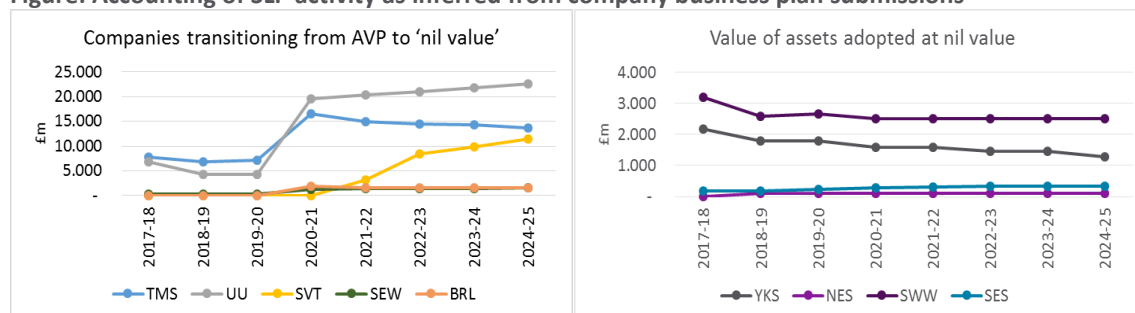
Inconsistent cost and activity data will distort the development of models and any resultant efficiency interpretations that may be derived.

Accounting for Self-lay activity

Identifying self-lay expenditure is both complex and its regulatory treatment has been subject to change. Whilst self-lay penetration will almost certainly vary between companies and over time, it is hard to isolate as companies will continue to provide non-contestable aspects and a component of contestable activity in most cases.

Irrespective of the actual activity incurred, there is variance in the way in which the customer contribution to self-lay activity can be accounted for. We currently make this contribution through the payment of an asset value payment to developer/self-lay providers. Asset value payments are a cost to the company and therefore increase developer services expenditure. However, an alternative is to adopt SLP constructed assets at nil value and instead reimburse developers through an equivalent income offset. Whilst this has no impact on the net customer contribution, it will materially reduce the expenditure companies incur. Given that we anticipate making £44m of asset value payments in AMP6, this has a material impact on developer services expenditure (more than 18% of our developer services costs).

Figure: Accounting of SLP activity as inferred from company business plan submissions

Ofwat's charging rules for English companies stipulate that, for English companies, in AMP7 asset value payments should be phased out in preference for the income offset approach. Reviewing APP28 data across the AMP6/AMP7 transition identifies likely variance in historic and future approaches. As shown in the figures above, companies on the left graph appear to show a step change or transition to adopting assets at net nil value (inferred as moving from AVPs to income offset). Whereas, on the right, this suggests a consistent approach between AMPs (inferred as companies historically using income offset). A further subset of six English companies show no assets adopted at net nil value (inferring either no SLP activity, or a continuation of AVPs from AMP6 into AMP7). This analysis illustrates both the potential for historic developer services expenditure to be materially affected by accounting policies between companies and for future expenditure to be on a different basis to the past. Both issues will affect the predictive capability of any model and the ability to interpret any variance as true inefficiency.

1.2   Revenue treatment representation

Summary

We consider that developers are already well protected from being incorrectly charged through a wide range of mechanisms:

- Existing market power - if we set out charges too high we will simply lose market share to SLPs;

- Charging rules – we must maintain the balance of charges between customer and developers;

- Casework challenges (developers can refer us to Ofwat – they will then determine whether or not the charges are appropriate. Note that Ofwat's casework rates do suggest that our DS costs are efficient); and

- The proposed DS volume adjustment mechanism – using an average unit cost – if revenues change solely due to a change in activity any penalty/ windfall will be neutralised.

However, Ofwat is proposing to provide further revenue protections. We are concerned that these proposals will lead to unintended adverse impacts. Our concerns are focused on the way in which developer services revenues are treated in the RFI and cost sharing mechanisms. In our earlier representations, we suggested that differences in developer service revenues should be resolved through an adjustment to the RCV. Our preference remains for an end-of-period adjustment which would minimise the volatility in bills for other customers, but we think that part of the difference could be adjusted through revenue and the remainder through the RCV. We suggest a mechanism for this in section 1.2.3.

1.2.1   Ofwat's approach

Ofwat set out three reasons for removing the separate developer services forecasting incentive mechanism it had proposed, and for including developer services revenue within the scope of the RFI:

1. The move from relying on companies' forecasts of growth for cost assessment to using its own forecasts (drawn from independent sources) has reduced the need for a forecasting incentive for developer services.

2. Including developer services revenue within the scope of the RFI would "create an incentive on companies to continue to engage with developers and forecast developer services demand during 2020-25".

3. "Including developer services in the RFI would address concerns around any potential adverse interaction with the RFI penalty". Some companies, including ourselves, raised concerns that variations in developer services revenues could lead to penalties under the RFI.

Ofwat's developer services forecasting incentive mechanism appeared complex, so some simplification is welcome. However, we do not think it addresses the concerns that we raised and may simply create different adverse interactions from the one it has replaced.

If developer charges must be cost-reflective, they cannot be adjusted because of past over or under-recovery. Charges below cost will be anti-competitive, and charges above cost will distort the market by removing the incumbent as an effective option. Companies will only be able to adjust wholesale charges to regular customers if there is a variance in developer services contributions. This creates undesirable volatility in customer bills and a risk of perverse incentives to avoid charging developers for costs that they should reasonably bear. We identify a simple solution to reducing this risk.

Separately, we also have concerns about the way that developer services income may feature in calculations to implement the totex cost-sharing mechanism.   These concerns apply whether or not our suggested RFI refinement is adopted. We discuss this issue further in a separate section.

1.2.2 Concerns with the proposed use of the RFI

We are concerned that Ofwat's proposed RFI arrangements could distort the fair balance of charges to different types of customers, including between current and future customers. It also has the potential to create unnecessary volatility in charges over time. We briefly summarise our concerns before setting out a targeted way to tackle these risks.

Balance of charges between customers – current, future and developers

A key risk with the approach now proposed by Ofwat for DD is that it could lead to an unfair balance of charges between current and future customers, whilst also altering the balance between households and developers.

Under the DD approach to over- and under-recovery correction, if developer services income is higher than the forecast of developer services income used to set the wholesale revenue control, then the company may need to (temporarily) reduce wholesale tariffs or developer charges by a corresponding amount in two years' time. Similarly, if developer services income is lower than the forecast used to set price control, then the company may need to (temporarily) increase wholesale tariffs or developer charges by a corresponding amount in two years' time.

Developer charges are governed by Ofwat's charging rules, which restrict the freedom of companies to apply discretion in setting its charges to developers. In particular, companies are required to set infrastructure charges such that they cover the cost of network reinforcement (on a five-year rolling basis). Competition law acts as a further constraint, limiting the ability of companies to reduce charges below cost to account for past over-recovery.

These constraints on developer charges mean that, in practice, the company could be left with little choice but to correct for past *or predicted* under- or over-recoveries in developer services revenue by adjusting wholesale tariffs on a temporary basis. In some sense, this is the essence of a single till approach, and reflects the much tighter constraints on the level of companies' developer charges than on the levels of wholesale tariffs (within the overall single till).

However, such adjustments and interactions between developer charges and wholesale tariffs do not make sense from the perspective of a fair balance of wholesale charges between current and future customers.

Developer charges are primarily a contribution to the costs of long-lived infrastructure assets. If developers require more mains, companies will spend more and recover more of this cost from developers. For the company, this is neutral. It seems odd for any instances of developer income in a specific year being higher (lower) than forecast at the price control review to lead to one-off reductions (increases) to wholesale charges two years later. Crucially, the DD revenue control build up already recognises the principle that developer income should only partially offset wholesale tariffs in the 2020-25 period (with the rest acting to reduce the RCV and hence wholesale charges in the future).

It does not appear appropriate for current wholesale tariff customers to benefit from a "windfall" as a consequence of additional developer contributions that are intended to cover the cost of long-life assets (in the context of a price control system that seeks to fund long-life investment through the RCV). Similarly, it does not appear appropriate for current wholesale tariff customers to be required to pay extra in the short term to make up the shortfall in the event of developer contributions being less than forecast.

We do not consider that Ofwat's latest proposals allow for a fair balance of charges between current and future customers, and between developer services customers and wholesale tariff customers.

Excessive volatility in charges

The combination of the single till approach and the combined RFI could also lead to excessive volatility in wholesale charges under Ofwat's DD approach.

If developer services income is higher or lower than the forecast used to set the revenue control, the company may have to adjust wholesale charges to correct for the under- or -over-recovery. Developer services activities

have tended to show large year-on-year variations in expenditure and income. Connections-related expenditure and income can be lumpy and the timing of recovery can be difficult to predict. Moreover, company forecasts of developer services income made at the time of business plan submission (and used to set Ofwat's revenue controls) could become out-of-date and be significantly different from out-turn revenues (particularly in later years of the price control period).

This means that wholesale charges can go up or down by significant amounts each year. It seems odd for variations (compared to forecasts) in expenditure (and revenue) that is mainly related to expenditure on long-life infrastructure to be wholly reflected through changes in wholesale tariffs in one year.

We consider that that Ofwat's latest proposals will lead to unnecessary volatility in charges to customers.

1.2.3 A simple remedy – Refining the RFI treatment of developer services.

The concerns we have identified would provide support for considering a move away from a "single till" control to "dual till" control. However, we recognise that at this late stage, such a shift in policy would be difficult to implement well, and that Ofwat's PR19 final methodology was built on a clear preference to apply a single till approach.

We have developed an alternative solution that draws upon the primary features of the Draft Determination, including the policy of a single till, but with a small but important amendment to enable some of the RFI adjustments (relating to developer services) to occur through the RCV. We consider that this amendment is entirely logical and natural, given the way that Ofwat takes account of forecast developer services income in its wholesale revenue control build-up. Retaining the existing approach would maintain an unjustified inconsistency in the way that Ofwat's revenue controls work.

Background: treatment of forecast developer services income in revenue control build-up

Ofwat's broad policy is for wholesale tariff income and income from developer services to form part of a single wholesale control: a single till approach. However, Ofwat's build-up of revenue allowances for wholesale controls for the draft determinations has the effect that forecast developer services income acts partly to reduce the RCV and partly to reduce charges in the same year (through the PAYG element). We believe that this has implications for, and helps guide, the appropriate treatment of developer services income as part of revenue control adjustments for over- and under-recovery.

Ofwat's build-up of wholesale revenue allowances has a feature which seems, at first, rather curious. In its slow-track draft determinations, Ofwat deducts each companies' forecast of income from developer services from gross totex to calculate net totex (part of which is to be recovered in the 2020-25 controls with rest added to the RCV) and subsequently adds back the same forecast of income from developer services to calculate the 2020-25 revenue controls (which cover both income from wholesale tariffs and income from developer services). This has an important effect, compared to a hypothetical counterfactual where the build-up of wholesale revenue controls is based on gross totex estimates and does not make any use of forecast developer services income (an approach which is a simpler way to set a single till control). Ofwat's approach has the effect that a large chunk of forecast developer services income over the 2020-25 period acts to reduce the value of the RCV (with the rest acting to reduce PAYG revenue in-year).

Under Ofwat's wholesale revenue control build up, the proportion of the forecast developer services income for the 2020-25 period acts to reduce the RCV is determined by the PAYG ratio. While we are not persuaded that the PAYG is necessarily the most appropriate way to determine this proportion, the general principle that developer services income should act to offset (or partly offset) the RCV seems sound and highly important. This recognises, for instance, that income from developer charges represent contributions to the costs of long-life infrastructure assets. Ofwat's price control framework seeks to finance the efficient costs of long-life infrastructure through additions to the RCV, and it is entirely logical that developer contributions in respect of those costs should act to reduce the RCV (e.g. by offsetting those additions).

Proposed refinement of the RFI for developer services

As explained above, Ofwat's approach to the build-up of wholesale revenue controls establishes the principle that, under PR19, the forecast of developer services income for the 2020-25 period acts partly to reduce the RCV (which in turn reduces wholesale controls from 2025 onwards).

Our view is that this principle should be recognised, and applied, as part of the approach to the RFI and the treatment of under- and over-recovery of the wholesale revenue controls during each year of the 2020-25 period. This is not the case in Ofwat's non-fast track draft determinations and this issue does not seem to have been recognised in the options considered and assessed as part of the draft determination approach to the treatment of developer services in the RFI.

We outline a potential approach below, which recognises and applies the important principle above. It assumes that the wholesale revenue control build-up is as for the non-fast track draft determinations, including the use of forecast income from developer services (which is deducted from gross totex to calculate net totex and then added back to calculate wholesale revenue allowances).

Potential approach to reconciling variances in developer services revenues	
1.	For each year of the control period, the difference between outturn developer services income and the forecast income should be calculated.
2.	Any difference identified should feed into an adjustment to revenue controls in two years' time, under the RFI. But adjustment for over- and under-recovery should not be applied 100% to the wholesale revenue allowance. Instead, in line with the principle above, only part of the adjustment should be made, to the wholesale revenue allowance and the remainder should adjust the RCV. For instance, if a company's developer services income is higher than the forecast used by Ofwat to calculate the wholesale controls, there should be a deduction to the wholesale revenue control in two years' time and also a deduction to the RCV.
3.	The proportion of income for variations in developer services that affects the RCV (rather than the revenue allowance) could be based on the proportion of developer service income underpinning the wholesale revenue control build up – currently the PAYG rate. However, instead of the broader PAYG figure, we also see an argument for a figure that is more tailored to the treatment of developer services income, (e.g. reflecting the proportion of developer services income that, under the developer charges rules, covers capex versus opex, which might suggest a higher proportion of the difference affecting the RCV).
Implementation	It would be pragmatic to first calculate the full value of over- or under-recovery against the wholesale control (which covers wholesale tariff income and developer services income) using the RFI. Then deduct from this, the amount of any variation in developer services income that is intended to feed through the RCV – calculated as the absolute value of the variation identified in step 1 multiplied by the proportion from step 3. The identified RCV component could instead be applied as midnight adjustments as part of the PR24 price control implementation, in line with Ofwat's broader approach to RCV adjustments arising from PR19 reconciliation.

Key benefits

This is an outline approach, but seems entirely feasible and brings several benefits:

- It addresses the inconsistency between the treatment of developer services income in the wholesale control build up and in the RFI.

- It provides for a fairer balance of charges between current and future customers.

- The wholesale control in the 2020-25 period would be less sensitive to variations in developer services income. This should, in turn, reduce scope for volatility in developer charges, wholesale tariffs or both.

This approach concerns the element of the RFI that makes adjustments for over- and under-recovery against revenue controls, leaving aside whether any penalties apply. We briefly comment on penalties further below.

Exemptions from RFI penalties for variations in developer services income

It is not desirable for aspects of developer charges, such as infrastructure charges (and the income offsets applied to these) to be volatile and unpredictable. This is especially so given that individual developers are not necessarily repeat customers buying the same service in the same amount each year – higher charges to a customer in one year will not necessarily be offset by lower charges in subsequent years.

The potential variation in developer charges is largely constrained by developer charging rules but - to the extent that companies have discretion - the price control framework should not encourage volatility in infrastructure charges. However, the position Ofwat sets out in the non-fast track draft determinations could encourage volatility. The refinement of the RFI we suggest above reduces, but does not fully address, this issue.

In these circumstances, we recommend an explicit exemption from any penalty under the RFI if the company can provide assurance that the deviation between allowed wholesale revenue and actual wholesale revenue (covering tariff income and developer charges) was due to measures taken by the company to avoid undue volatility in developer charges. This would add clarity to Ofwat's stated position in the non-fast track draft determinations that: "if there was a significant difference between actual and allowed developer services revenue then, potentially, we could apply discretion in applying a penalty under the RFI".

1.2.4 Impact of developer services revenues on the totex cost-sharing mechanism

Ofwat has not yet specified exactly how the PR19 totex cost-sharing mechanism will be implemented. This is complex, especially due to interactions with the Developer Services volume true-up mechanism.

We are concerned about an approach in which the cost-sharing mechanism will be dependent on the outturn level of developer services income. We see two material problems:

- Differences in developer services income versus FD forecast/assumption would be adjusted for twice as part of the price control framework, once through the RFI and once through the totex cost-sharing mechanism. We see no logical basis for this, and it acts to undermine the intended role of the RFI.

- Risks of perverse financial incentives on companies' charges: if a company under-charges developers it would be expected to recover the full amount through the RFI adjustments and then be entitled to recover c. 50% of this through the totex cost-sharing reconciliation adjustments at PR24. The incentives on companies to under-charge would be especially acute because the company would face a significant financial downside if its outturn developer services income is higher than its forecast. We do not consider these effects reasonable or consistent with Ofwat's intended policy.

These issues apply regardless of whether the amendment we propose to the RFI is implemented. They could be mitigated if the totex cost-sharing mechanism was applied on the basis of gross totex (i.e. outturn gross totex versus FD gross totex assumption), or if the mechanism otherwise excludes the use of outturn developer services income in the calculation.