



NAV CHARGING ARRANGEMENTS

2023/24

PUBLICATIONS

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V1	27/01/2023	
V2	05/04/2023	Appendix 4 added to provide a checklist of avoided costs

CHAPTER I: INTRODUCTION

1. Context

The NAV¹ regime in England and Wales provides a mechanism to facilitate new entry into the sector and to allow those water companies already present to expand into other geographic areas. The introduction of this form of competition is intended to challenge incumbent water companies, drive efficiencies and stimulate innovation. We support the development of markets where they deliver long term benefits to customers.

Under the existing legislation, Ofwat can appoint a new water company for a site (for water services, wastewater services or both), if one of three qualifying criteria is met:

- (i) unserved - the site is not connected to the water and/or sewerage infrastructure of the existing water company;
- (ii) consent - the existing water company consents to the application; or
- (iii) large user - the premises comprising the site use at least 50MI in any year (or 250MI for end-customers of Welsh water companies) and the customer consents.

2. Bulk services from an incumbent water company to a NAV

Typically, NAV water appointees will require a bulk supply of water from the network of the incumbent, and NAV sewerage appointees will usually require bulk sewerage services from the incumbent. The terms upon which these services are supplied will be set out in a "bulk agreement", either a "bulk supply agreement" for water supply or a "bulk discharge agreement" for sewerage services.

3. Bulk charges

Bulk charges are a critical part of a bulk agreement. This is because bulk charges influence the on-going margin and, therefore, whether a NAV can compete to offer water and wastewater services to a site. From the incumbent's point of view, they provide the basis upon which it recovers the costs of supplying the service.

4. Aims of these NAV charging arrangements

The aims of this document are to:

- (i) set out clearly how we will formulate our charges in the bulk supply agreement or bulk discharge agreement, setting clear expectations in varying circumstances;
- (ii) to provide transparency on the calculation of relevant charges for the charging year 2023/24; and
- (iii) thereby enable NAVs to formulate their own strategies as to where and how to compete in the market.

5. Nature of these NAV charging arrangements

The principles set out in these arrangements are incorporated by way of the charging clauses in the industry-standard bulk agreements applying from 1 April 2023 but note should be taken of the dynamic application of each year's NAV charging arrangements.

¹ "NAV" is shorthand for a company that was not one of the original water companies on privatisation, but which becomes appointed as a water and/or sewerage undertaker. The term derives from the New Appointment that it is given, and the Variation of the incumbent's appointed area.

6. Relevant legal and regulatory considerations

6.1. Statutory basis

The Water Industry Act 1991 (“the Act”) sets out a framework for bulk water supplies in sections 40 and 40A of that Act. In essence, if a NAV has approached a water undertaker for a bulk supply and the two parties have been unable to reach an agreement, the NAV may apply to Ofwat to make an order setting out the rights and obligations of the parties to each other. In addition, even where an agreement has been reached, Ofwat is empowered to alter the terms of that agreement, or even to terminate it. The Act sets out various criteria for the exercise of these powers and a number of mandatory considerations. Sections 110A and 110B of the Act work in a very similar way with respect to bulk sewerage services.

6.2. NAV charging rules

Ofwat has a statutory power under section 40E of the Act to issue rules about charges for the supply of water in bulk. It also has power under section 110F to issue rules about charges for bulk discharges. No such rules have been issued (in either case).

6.3. Competition Act 1998

Section 18 of the Competition Act 1998 prohibits any conduct on the part of one or more undertakings which amounts to the abuse of a dominant position in a market if it may affect trade within the United Kingdom. A particular form of abuse that can potentially arise in situations such as the NAV market is “margin squeeze”. Anglian Water takes this, and indeed all, legal duties seriously. Accordingly, the development of these charging arrangements set out in this document has been guided and informed at all stages by the paramount importance of complying with these duties as well as wider legal obligations.

6.4. Ofwat guidance

In May 2018, following a consultation process, Ofwat issued new Guidance for bulk charges to NAVs. Ofwat has subsequently published updated guidance in January 2021. The central requirement of the Guidance is that bulk charges should be set in line with a “wholesale minus” methodology; starting with the relevant wholesale tariff(s) and deducting costs that the incumbent will not have incurred given a NAV supplies the new development.

The “minus” calculation methodology comprises the following elements:

Components of the Wholesale Minus Methodology
Relevant Wholesale Tariffs (allowing for on-site leakage)
Minus
Avoided on-site ongoing costs including capital replacement
Minus
Avoided WACC
Minus
Avoided depreciation
Equals
Bulk supply charge

In calculating the avoided on-site ongoing costs including capital replacement we have made reference to the list of relevant activities formulated by the industry working group established by Ofwat.

6.4.1. Operating margin reflecting the operational risk experienced by NAVs

Our approach to calculating deductible costs has been designed to facilitate an adequate margin is available for NAVs. In addition to the minus elements set out above, we have also provided an additional minus-element (incorporated in the avoided on-site costs) to provide an overall margin of 4.37% on the operating costs we would expect to have incurred for the site (the “operating risk margin”). This is recognition of the fact that where there is no upfront investment in on-site assets, there can be no avoided WACC on those assets (as incumbent companies receive no “regulatory” return for spend that is expensed rather than capitalized) and therefore reflects compensation for the operational risk experienced by new appointees that the incumbent has avoided.

6.4.2. Avoided WACC

The 2018 Guidance set out an adjusted-WACC to be used in calculating the minus related to the reasonable return on the on-site assets. This is relevant for both the minus relating to initial on-site investment that the incumbent would have taken into its RCV (see Chapter II section 3) and the minus relating to capital replacement.

The figure in the 2018 Guidance was specific to AMP6 and following the revision to the incumbent WACC as a consequence of PR19, has been recalculated for AMP7 reflecting the allowed return set out in the Competition and Markets Authority Price Determinations published on 17 March 2021. In recalculating the adjusted-WACC of 4.37% we have followed the methodology set out in Annex 2 of the 2018 Guidance.

6.4.3. Annuity calculation in relation to capital replacement costs

The Guidance sets out that capital replacement costs avoided over the long term in not serving a site are reflected in the bulk supply charge by way of an annuity calculation. From the perspective of the NAV, this has the net effect of bringing forward or advancing the cash needed in the future to finance capital maintenance of the on-site assets.

As a consequence, for NAVs serving relatively new sites that initially require minimal capital replacement compared to more mature sites, there is a prospect of a build-up of the cash in the short-term that should be notionally earmarked to pay for future capital replacement in the longer term.

Our Bulk Supply Charges set out below are consistent with the approach set out above and the accounting treatment in the Annual Performance Report. All new bulk supply agreements will be based on this approach.

CHAPTER II: CHARGES FOR WATER SUPPLY & SEWERAGE SERVICES

1. Relevant Wholesale Charges

The Relevant Wholesale Tariff is calculated by applying our relevant wholesale charges to the customer characteristics of the site supplied by the NAV. We will assume that all connected premises will be charged per our standard household tariff unless the NAV advises us as to the number of NHH connections and their usage. We will then apply the relevant non-household tariff in relation to those premises and associated usage.

Table 1 below summarises the 2023-24 wholesale tariffs. For our full charges please see the link below to our Wholesale Charges Schedule:

<https://www.anglianwater.co.uk/about-us/who-we-are/what-we-do/our-charges/>

Table 1 - Wholesale Charges

	Household	Non-household²
Anglian Region		
Measured Water		
Fixed charge (p.a.)	£6.05	£6.50
Volumetric charge (per m ³)	£1.9206	£1.6930
Measured Sewerage		
Fixed charge – foul water & highway drainage (p.a.)	£28.20	£28.20
Volumetric charge (per m ³)	£1.9388	£1.9388 ³
Fixed charge – surface water drainage (p.a.)	£42.00	£42.00
Hartlepool Region		
Measured Water		
Fixed charge (p.a.)	£6.70	£6.50
Volumetric charge (per m ³)	£1.1755	£1.1022

No wholesale charge is made for the water taken for the purposes of extinguishing fires, training personnel or for testing firefighting equipment or apparatus pursuant to section 147(1) of the Act.

1.1. Leakage Allowance

For all NAV sites a downward adjustment of 2.16% will be applied to volumes recorded on the bulk meter to take account of leakage and other types of network losses on-site.

$$NAV \text{ Volumetric Charge per } m^3 = \frac{VC}{(1 + LA)}$$

VC = "Relevant Wholesale Tariff" Volumetric Charge

LA = Leakage Allowance

1.2. Highway Drainage

For the avoidance of doubt, highway drainage charges are payable where a foul water and/or surface water drainage wholesale service is provided.

We consider the correct approach to highway drainage cost recovery is to levy a fixed charge on all sewerage customers as the charge does not relate to the drainage outside a specific property or of a specific area, it relates to all highways and public spaces which are accessible to customers.

² For the purposes of illustration, we assume that all non-household premises use less than 500m³ per annum and therefore the above reference is to the Streamline Green tariff. However, where consumption is higher the appropriate alternative non-household tariff will apply per connection in line with our published Wholesale Charges Schedule.

³ The standard non-household return to sewer allowance (RTS) is 95%. The above non-household charge has been

grossed up so is expressed on a consistent basis as household at 90% RTS

Ongoing On-Site Costs Including Future Capital Replacement

1.3. Standard On-Site Costs

Ongoing on-site costs are categorised as:

- (i) operating expenditures on manpower (including hired and contracted services), transport and materials required to operate and monitor the network on the NAV site including an allocation of indirect costs to cover overheads and the provision of emergency support; and
- (ii) infrastructure renewals expensed in year and capital expenditure on the replacement of on-site assets over time, including mains and associated fixtures such as valves, communication pipes, sewers and meters, and management and general assets; and
- (iii) the depreciation and return on the capital expenditure on the upfront installation of and replacement of on-site assets.

The avoided costs are based on:

- (i) for direct costs, an activity-based costing methodology which identifies the typical materials and labour costs of the avoided activities; and
- (ii) for indirect costs an average of the last 3 years of audited data contained in the Annual Performance Report. These costs are calculated on the basis of the respective average length of network required to serve each premises per service.

This makes reference to the list of relevant activities formulated by the industry working group established by Ofwat.

The standard ongoing on-site costs to be deducted per connected premises are summarised in the following table:

Table 2 - Standard On-Site

	Water	Foul Water	Highway Drainage	Surface Water Drainage
Mains/Sewers: Repair, Replacement & Maintenance	£15.26	£10.50	£3.13	£8.40
Emergency/Risk Management & Monitoring	£4.30	£0.74	£0.15	£0.66
Meter & Meter Box: Repair, Replacement & Maintenance	£13.72	£0.00	£0.00	£0.00
Regulatory Compliance & Quality	£1.16	£0.07	£0.02	£0.05
General & Support	£5.63	£3.06	£0.84	£1.28
Other	£2.98	£0.53	£0.06	£0.26
On-site costs per property (OC)	£43.05	£14.90	£4.20	£10.65
		£19.10		

1.4. Site Specific Characteristics

The standard values are based on a typical site served by Anglian Water. Where a NAV presents appropriate evidence that there are significant variations to the characteristics of, or service required, at a site that materially impact on the costs to serve the site, additional allowances will be calculated to reflect these features on a site-specific basis.

1.4.1. Environmental Incentives

Where a NAV presents appropriate evidence that the site characteristics are such that significant environmental benefit is derived and that this contributes to further material “upstream” avoided cost we will discuss how this should be reflected in bulk charges.

1.4.2. Sewerage Infrastructure Charges

For development projects commenced on or after 1 April 2023 on brownfield sites, where a NAV informs us within two years of the connection and where we can confirm that a previous surface water connection to a foul or combined sewer existed, we will reduce the 2023-24 sewerage Infrastructure Charge by 50% if a sustainable surface water discharge method (meaning one of those methods set out below) is used as an alternative in respect of all surface water draining from the development project.

Sustainable surface water discharge methods are limited to:

- (i) Rainwater harvesting re-use
- (ii) Infiltration methods
- (iii) Discharge to an open surface water body
- (iv) Discharge to the downstream surface water sewer, highway drain or other drainage system at a restricted rate

1.4.3. Pumping Stations

Where there is on-site sewerage pumping station that would otherwise have been adopted by Anglian Water but has been adopted by the NAV, an additional element will be applied to the minus for on-going onsite costs including capital replacement. This requires the asset to be sufficiently maintained to meet the adoption standards on an on-going basis.

We would expect all pumping stations to be adopted in accordance with published Design & Construction Guidance (DCG) which was introduced on 1st April 2020 by the Sewer Sector Guidance (SSG) and is now mandatory across the industry. We strongly encourage NAVs to contact us to engage on proposals and designs for an on-site sewerage pumping station for their development.

On-site minus will be provided on application. See appendix 3 for the information required for the assessment and pricing process.

Table 3 – Pumping Stations

	On-site costs per property (OC)
Wastewater	On application

3. Additional avoided WACC and Depreciation on on-site assets

The avoided WACC on the initial up-front investment in a site is dependent on the impact it would have had on the incumbent's RCV.

Under the RCV methodology used by Ofwat for setting price controls, in the hypothetical counter-factual situation in which an inset is not awarded, the increment to RCV is equal to "net capital expenditure" for the site in question, which in turn is equal to the gross capital expenditure for the site less the capital contributions made by developers. This means that where an asset that is fully funded by a developer is acquired by an undertaker it has no impact on the RCV, because the gross capital expenditure is fully offset by the capital contribution.

Where there is an impact on the value of the RCV this will reflect the value of the "income offset" which will be different from one site to another, meaning that this part of the NAV tariff cannot be common to all NAVs or sites.

For Bulk Agreements based on offers made after 1 April 2020, there is no income offset in the counter-factual situation, as developers are responsible for funding all upfront on-site investment for both the water and wastewater services.

For Bulk Agreements based on offers made between April 2018 and March 2020, the calculation of the hypothetical RCV will reflect the discount given to the NAV on the water infrastructure charge for properties connected on the site (for further details see Chapter III, section 3.4).

Otherwise, for relevant sites, a case-by-case approach will be undertaken for the purposes of calculating the site-specific "minus" for each site, including local authority rates.

The process can be summarised as follows:

- (i) NAVs provide information on property numbers for each year of the first 12 years of operation of the site, together with averages for billed volumes (household and non-household);
- (ii) We calculate what the income offset would have been at the time had we served the site, in order to calculate the initial RCV;
- (iii)
 - (a) We calculate for each asset category of the RCV the depreciation, on an annual basis, based on average life of the asset; or
 - (b) NAVs (as relevant) provide details of actual properties connected on the site in order to calculate the discount received on water infrastructure charges;
- (iv) We calculate the Return by applying the WACC methodology detailed by Ofwat to the net RCV, including the appropriate allocation of local authority rates; and
- (v) The depreciation and return are expressed as a 'minus' against the wholesale revenue.

4. Charges in the charging year 2023/24 for NAV sites with bulk agreements based on offers made post 1 April 2020

The deductions and subsequent charges are summarised in the following table:

Table 4 – Post 1 April 2020 Agreements

Water Supply NAV Tariff – Anglian Region	Household	Non-household²
Wholesale Fixed Charge per property	£6.05	£6.50
Ongoing on-site costs per property	-£43.05	-£43.05
NAV Fixed Charge per property	-£37.00	-£36.55
Wholesale Volumetric Charge per m ³	£1.9206	£1.6930
Leakage Allowance	2.16%	
NAV Volumetric Charge per m ³	£1.8800	£1.6572

Foul Water & Highway Drainage NAV Tariff – Anglian Region	Household	Non-household²
Wholesale Fixed Charge per property	£28.20	£28.20
Ongoing on-site costs per property	-£19.10	-£19.10
NAV Fixed Charge per property	£9.10	£9.10
Wholesale Volumetric Charge per m ³	£1.9388	£1.9388
Leakage Allowance ⁴	2.16%	
NAV Volumetric Charge per m ³	£1.8978	£1.8978

Surface Water Drainage NAV Tariff – Anglian Region	Household	Non-household²
Wholesale Fixed Charge per property	£42.00	£42.00
Ongoing on-site costs per property	-£10.65	-£10.65
NAV Fixed Charge per property	£31.35	£31.35

For further information on how the charge will be calculated please see appendix 1.

5. Charges in the charging year 2023/24 for NAV sites with bulk agreements entered into or based on offers made pre 1 April 2020

For offers made pre 1 April 2020 there is an additional deduction to those summarised in table 4. This deduction, which covers the avoided WACC and Depreciation on on-site assets for upfront investment, is calculated on a site-specific basis.

⁴ In the absence of a bulk discharge meter. Where a bulk discharge meter has been installed wholesale foul water volumetric charges will be calculated by reference to the discharge meter volumes.

6. Process Summary

Bills will be calculated in arrears quarterly, using:

- (i) the Wholesale Tariffs (see table 1) less the avoided costs per billable property (see table 2); and
- (ii) Quarterly information provided by the NAV on:
 - (a) the actual number of connected households and non-households within the area; and
 - (b) where appropriate, any non-household consumption within the area; and
- (iii) meter readings from the bulk water meter, or in their absence forecast meter readings. Sewerage Services will be based on either the volume of water supplied less the standard sewage abatement of 10% (as grossed-up for non-household connections) or, where appropriate, a Bulk Sewage Discharge meter.

See Appendix 1 for an example of the billing process and Appendix 2 for the information required.

For the avoidance of doubt, we will only commence billing a site when there is a connected property and positive consumption on the bulk meter. All consumption that applies before the first property is connected will be treated as building supplies and included in the first bill.

7. Reconciliation

No automatic true up at the end of the Charging Year will be applied. However, either party can require a retrospective true-up after the end of the Charging Year where forecast data has been used during the year.

8. Payment Terms

Charges are payable in full within 14 days of receipt of the invoice.

9. Value Added Tax (VAT)

All Charges are subject to the addition of Value Added Tax where this is payable under the relevant legislation.

CHAPTER III: CHARGES FOR NEW INFRASTRUCTURE

1. Introduction

When a NAV is seeking a new appointment, it will be planning to construct new infrastructure within the new appointment area. To facilitate such a supply or such sewerage services, new infrastructure linking the new appointment area to the incumbents existing network may also be required, and sometimes this infrastructure can be substantial. This section of our NAV charging arrangements relates to:

- (i) the capital contribution that new appointees must make in respect of that infrastructure; and
- (ii) how infrastructure charges will be dealt with.

2. Definitions and Scope

2.1. "Site Specific" and "Network Reinforcement"

In these charging arrangements, we use the same definitions of "site-specific" and "network reinforcement" that we use in our [Developer Charging Arrangements](#). Consequently:

- (i) "site specific" work means work undertaken beyond our existing network, which means downstream of the point of connection on our water network or upstream of the point of connection on our sewerage network; and
- (ii) "network reinforcement" means work undertaken to our existing network, which means upstream of the point of connection on our water network or downstream of the point of connection on our sewerage network.

2.2. Capital Contributions to Site Specific Work

A capital contribution is payable where capital costs are incurred in carrying out site-specific work for the purposes of providing new or additional water supply and/or water recycling services. It is not payable in respect of network reinforcement.

2.3. Infrastructure Charges fund Network Reinforcement

The cost of Network Reinforcement specific to the bulk supply or bulk sewerage services is not charged directly to the NAV. Instead, the costs of all Network Reinforcement in the Anglian Water region (whether to NAVs or direct to developers) are funded via the Infrastructure Charge. The Infrastructure Charge is payable by the developer or the NAV each time a property is connected to the relevant network.

2.4. Activities to which this Policy is relevant

Table 5 highlights the activities for which this Policy is relevant, together with the sections of the [Water Industry Act](#) that set out our duties in respect of each activity.

Table 5

Applicant	Purpose of Infrastructure	Properties to be served	WIA section
NAV	Domestic water supply	Household	40, 40A
NAV	Domestic water supply	Non-household	40, 40A
NAV	Non-domestic water supply	Non-household	40, 40A
NAV	Domestic discharge	Household	110A, 110B
NAV	Domestic discharge	Non-household	110A, 110B
NAV	Non-domestic discharge	Non-household	110A, 110B

2.5. Governing Laws and Rules

Ofwat has set out rules governing how undertakers may charge for requisitions made under sections 41 (water infrastructure for domestic purposes) and 98 (sewerage infrastructure for domestic purposes). However, charging rules do not currently extend to the other activities set out in section 2.4 at the current time, although Ofwat has the ability to create charging rules in respect of NAV charges under sections 40B and 110C of the [Water Industry Act](#).

Condition E1 of our [Instrument of Appointment](#), a condition that was introduced in November 2018, requires that Anglian Water does “not show undue preference towards (including towards itself), or undue discrimination against, any person in the doing of such things as relate to the provision by itself or by other relevant undertakers ... of:

- the laying of lateral drains, service pipes, sewers and/or water mains that are intended to be connected to [Anglian Water’s] supply system or its sewerage system; or
- the provision of supplies of water or, as the case may be, sewerage services to premises by a relevant undertaker...”

Section 18 of the Competition Act 1998 prohibits undertakings from abusing a dominant position in a market in order to distort competition. It is clear law that section 18 is engaged even if the dominant position and the distortion of competition occur in different markets.

In view of Condition E1 of our Instrument of Appointment and section 18 of the Competition Act 1998, it is therefore important that we do not apply charges for infrastructure in a way that either unduly subsidises or unduly penalises a potential NAV, particularly in comparison to our developer charges, because any given developer will compare the two when deciding whether or not to ask a NAV to serve its development.

3. Principles of these Charging Arrangements

3.1. No Discount Applied to Charges Based on Site-Specific Costs

In line with our [Developer Charging Arrangements](#) (which must in turn comply with Ofwat’s rules), a discount is no longer given against charges based on the cost of constructing the new infrastructure for domestic purposes (whether water supply or sewerage). Hence, developer requisition charges are based on 100% of the construction cost, there are no longer asset payments to self-lay operators, and therefore also no equivalent discount or asset payment for NAVs. So:

- (i) for requests by NAVs for site-specific work by way of the provision by Anglian Water of new water mains or public sewers, whether for domestic or non-domestic purposes between the current network and the boundary of the NAV’s appointed area (including the new connection itself), we will levy a charge equal to 100% of the actual cost of the site-specific work;
- (ii) if the NAV wishes to construct such infrastructure itself and offer it for adoption by Anglian Water, we will make no asset payment for that site-specific work; and
- (iii) if the NAV wishes to construct such infrastructure itself to remain vested in it, we will make no asset payment for that site-specific work, although as site-specific work created by the NAV, it will be considered in the same way as on-site work and used in the calculations set out in Chapter II.

3.2. Meaning of “construction cost” in this paragraph 3

Where a developer chooses Anglian Water to provide services, rather than a NAV, its charges are determined in accordance with our [Developer Charging Arrangements](#). For new infrastructure, such as the provision of new water mains, and new public sewers, our charges are based on the construction cost, as can be seen from Parts E and F of those arrangements. In the interests of equivalence, where a NAV asks Anglian Water to provide site-specific infrastructure we will apply the provisions in those Parts to charging of the NAV.

We will honour a “fixed charge calculation” (as elaborated in those arrangements) if a NAV so chooses. However, the value of this method to NAV charging may not be great: it is rare enough for a developer to opt for charges based on the “fixed charge calculation” in those arrangements; and furthermore, and there may be a number of NAV-related work elements that do not attract a published cost figure. Consequently, unless a NAV specifically asks us for a fixed charge calculation before the commencement of works, we will provide an estimate for costs and reconcile the figures once all costs are known.

In accordance with Ofwat guidance, we will not charge for bulk meters or any other part of the connection work that would not have been required if Anglian Water had been chosen to serve the NAV’s area.

3.3. Network Reinforcement and the Infrastructure Charge

Developer charging rules prohibit the costs of network reinforcement being added to charges for requisitions for domestic purposes. Instead, these are socialised into our infrastructure charge, details of which can be found in part L of our [Developer Charging Arrangements](#).

We will apply the principles of the infrastructure charge in exactly the same way, whether the application is by a developer under sections 41 or 98, by a developer with its retailer under section 66A or 117B, or by a NAV under sections 40/40A or 110A/110B of the Act and whether the water main or sewer is constructed in order to provide a service for domestic or non-domestic purposes. The NAV is required to pay the equivalent of the infrastructure charge each time premises are connected.

3.4. The Discount to the Infrastructure Charge

In its November 2017 “[Decision Document](#)”, Ofwat noted that the position of the NAV is not the same as that of a developer in respect of the infrastructure it may construct within the new appointment area or development. Whereas the developer was then entitled to a discount on requisition charges and a self-lay operator to an asset payment (in each case based on the old statutory income-offset), a NAV was entitled to neither. Ofwat then altered charging rules in its [decision document](#) of July 2019, to ensure water companies applied a discount to infrastructure charges that the developer must pay, but not to charges based on the creation of new water mains or public sewers.

Ofwat has not yet created NAV charging rules to reflect this method of developer charging, although it clearly expects companies to do so. We agree entirely with this approach and therefore apply a discount on the water infrastructure charge as set out in *Table 6*.

The same NAV discount will be given against the “relevant multiplier” infrastructure charges payable in respect of the connection of non-household properties. This is described on our [website](#).

However, no discount will be given in respect of connections to a water main constructed entirely for non-domestic purposes (process water); nor will any discount be given against the sewerage infrastructure charges, because we do not make any asset payments to developers when they lay sewers for adoption. Our capital contributions policy in respect of infrastructure for non-domestic purposes forms part of our suite of wholesale charging documents.

Since the water infrastructure charge discount exceeds the water infrastructure charge itself, the resultant credit will not be given as a payment by Anglian Water, but rather set against any concomitant sewerage infrastructure charge. Where Anglian Water serves developments, developers can set any unextinguished credit against connection charges; because NAVs pay no connection charges to Anglian Water, and because there is an ongoing relationship between Anglian Water and the NAV, we will instead set any credit unextinguished by sewerage infrastructure charges on the same site against any non- primary charge due from that NAV to us over the following six years on this or any other site. This could include infrastructure charges due to us from any other site, offsite site- specific work or bulk mains connections we complete for the NAV.

3.5. New Infrastructure Created for Both Domestic and Non-domestic Purposes

Where capital costs are incurred in providing a new water main or public sewer to be used for both domestic and non-domestic purposes, the principles in this section apply.

Charging rules concerning network reinforcement and the discount do not apply so far as the water is to be used – or the sewage generated – by an industrial process. It has therefore always been the case that charges for infrastructure built for non-domestic purposes are based on the entire cost of the infrastructure, whether that is site-specific or network reinforcement, and without an income-offset discount.

To calculate the charges applicable to a water main or public sewer, we will simply calculate the proportion of its design is attributable to use for non-domestic purposes. We do this by applying standardised peak flow assumptions for each household unit that will be served by the infrastructure; for commercial domestic use, we may use the infrastructure charge relevant multiplier to make the calculation. That domestic use peak flow is then deducted from the peak flow that the infrastructure provides, in order to give the non-domestic proportion. That non-domestic proportion is then applied to the overall cost of network reinforcement to calculate the charge. Further details can be seen in our capital contributions policy in respect of infrastructure for non-domestic purposes.

Example:

- A development is planned to comprise of factories, houses and shops;
- The developer wishes the development to be served by a NAV;
- A new water main and sewer is required to link Anglian Water's existing water and sewerage networks to the NAV's on-site network;
- The linking water main will cost £500,000 and the linking sewer will cost £400,000;
- Network reinforcement upstream of the linking water main will cost £200,000; network reinforcement downstream of the linking sewer will cost £100,000.
- On a peak flow calculation, 60% of the water main's design capacity will be attributable to the houses and shops, and the staff washrooms in the factories, such that 40% will be attributable to the factories' industrial processes; for the sewer, the split is 50% domestic and 50% industrial processes.
- The NAV requests Anglian Water to lay both pipes, to remain part of Anglian Water's network

Charges in respect of the new linking water main

Site-specific element (domestic and non-domestic): 100% of costs, being £500,000

Network reinforcement element – domestic: zero – each factory, house and shop will, when connected, attract the standard infrastructure charge and the standard discount to the infrastructure charge, with the relevant multiplier applied to both the charge and discount applicable to the factories and shops based on domestic water fittings in each.

Network reinforcement element – non-domestic: £80,000 (being 40% of overall network reinforcement costs of £200,000).

Charges in respect of the new linking public sewer

Site-specific element: 100% of costs, being £400,000

Network reinforcement element – domestic: zero – each factory, house and shop will, when connected, attract the standard infrastructure charge, with the relevant multiplier applied to both the charge and discount applicable to the factories and shops based on domestic water fittings in each. There is no sewerage discount.

Network reinforcement element – non-domestic: £50,000 (being 50% of overall network reinforcement costs of £100,000).

Overall charge: £1,030,000 plus infrastructure charges

(Overall cost: £1,200,000)

There will be no upper or lower threshold to application of this principle. Consequently, even if only one property (or all but one property) among those to be supplied via the main is using water for non-domestic purposes, the principle in this paragraph will still be applied.

The principle in this paragraph will be applied regardless of whether the application is by a developer under sections 41 and 55, by a developer with its retailer under section 66A, or by a NAV under section 40A of the Act.

3.6. Maintaining headroom when providing infrastructure for non-domestic purposes

When we design and cost the infrastructure that must be provided to make supplies of water or sewerage services for non-domestic purposes, including network reinforcement for those purposes, we will do so in a manner that preserves any existing headroom or capacity to supply water or provide sewerage services for domestic purposes. This will be reflected in the NAV's charges. There is one exception to this principle, which is that our design (and therefore the charges) will be mitigated to the extent that any available

headroom has no reasonable prospect of being taken up for domestic purposes within the following 12 years.

3.7. Supporting greater capacity than that required by the primary customer

Where it is appropriate to do so, we may decide to provide additional capacity beyond that required by the applicant (whether developer or NAV) in anticipation of demand from future developments. In such circumstances it would be unreasonable to request a capital contribution for the entire scheme from that applicant.

In this case we will apportion the cost of the infrastructure in accordance with the capacity provided to the applicant.

Our position on attributing the costs of that extra capacity to subsequent developers or NAVs that use it has changed. We no longer charge requisitioning developers on an individual scheme basis for capacity provided in water mains or sewers requisitioned in the previous 12 years (under sections 43(4)(b) or 100(4)(b) of the Water Industry Act): this charge is "socialised" within our infrastructure charge. The same charge will be made to any NAV seeking a bulk supply for domestic purposes in the same way.

3.8. Connection points

The charging basis for new water mains and sewers between the appointment area and our network assumes a connection point that is the nearest water main or sewer (as appropriate) on our network to the desired point of delivery, whose diameter is no less than the new water main or sewer.

However, there are two further principles in relation to connection points that must be taken into account:

- (i) The diameter of the new main for this purpose must be sized appropriately for a main supplying the *whole* of the development it might reasonably be expected to serve.
- (ii) Any points of connection that we have identified as impractical in any pre-planning advice we have given in respect of the development must be discounted. Lack of capacity in the existing network or water treatment works is not considered to fall within the definition of "impractical" for these purposes unless there is a potential connection point on a different water main that is equally close to the boundary of the development expected to be served.

3.9. Alternative connection points and phasing

Occasionally, we may select a different point on our network. If we lay the new water main or sewer, the NAV's contribution will not change; if the NAV lays it, we will pay the reasonable marginal costs.

Occasionally, either we or the NAV may seek to install more than one connection between the new appointment area and the existing network in order to accommodate accelerated phases of development, or to accommodate network reinforcement works necessary to avoid supply deficiencies or flooding risks. This may, or may not, involve the installation and subsequent disconnection of a temporary supply or discharge point. If these works are undertaken at the NAV's request, the NAV will be charged in accordance with the principles set out in paragraph 3.1; but if these works are undertaken at our option, we will bear the costs of the additional work in accordance with the foregoing paragraph.

4. Summary of Application of Charges for New Infrastructure

Without prejudice to any of the principles set out elsewhere in these Charging Arrangements, NAV charges for new infrastructure in typical arrangements are set out in *Table 6 - Charges for New Infrastructure*.

Table 6 - Charges for New Infrastructure

Charges for the construction of a new water main or new public sewer	Anglian region	Hartlepool region
Anglian Water constructs the infrastructure	100% of the cost	
The NAV constructs the infrastructure whether or not for adoption by Anglian Water	No asset payment	
Pass-through of water & sewerage infrastructure charges (household) per property		
Water charge to NAV	£233.00	£136.00
Water recycling charge to NAV	£400.00	n/a
Gross charge to NAV (water & sewerage combined)	£633.00	£136.00
Water income offset discount	-£471.00	-£471.00
Net charge to NAV	£162.00	-£335.00
Pass-through of all infrastructure charges (non-household) per property		
Apply Relevant Multiplier to appropriate household net charge		

5. Date these arrangements comes into effect

These charging arrangements come into effect in full on the date of publication, although:

- (i) the developer charging principles that:
 - charges for infrastructure built to accommodate a particular development must be limited to site-specific charges; and
 - network reinforcement costs are socialised into infrastructure charges; have been reflected in our NAV charges since April 2018; and
- (ii) the developer charging principle that the “income-offset” discount should be applied to infrastructure charges rather than requisition charges or asset payments has at the election of the NAV been reflected in our NAV charges (with the exception of a cash payment in lieu of part of the discount in some circumstances) since May 2018.

Part O of our [Developer Charging Arrangements](#) sets out transitional provisions that apply to developers seeking new infrastructure. We will apply these in the same way, whether the application is by a developer under sections 41 or 98, by a developer with its retailer under section 66AA or 117B, or by a NAV under section 40A or 110 of the Act and whether the water main or sewer is constructed in order to provide a service for domestic or non-domestic purposes. We recognise that the period of engagement on the matter of infrastructure creation and connection, between the developer and the NAV, and between the NAV and Anglian Water, can be a long one which may fall within two or more charging rule regimes. The precepts set out in the above document will provide clarity. Those precepts are:

- (i) the precept of charge integrity;
- (ii) the precept of parent/daughter water main or sewer connections; and
- (iii) the precept that charges follow the date of the legal agreement.

6. Application

These charging arrangements, along with Ofwat's charging rules for new developments and our charges regime, will guide our approach to collecting contributions for capital infrastructure as a result of additional demand. Setting out our principles in - and consistently applying - these arrangements will ensure that we treat all of those to whom we provide a service fairly, transparently and equivalently.

CHAPTER IV: CHARGES FOR ADDITIONAL SERVICES

1. Assistance Supplies

It is difficult to set out charges for the sort of assistance services Anglian Water can provide to a NAV when there are problems on the NAV's water and/or sewerage network. Anglian Water's policy is to charge the NAV in accordance with the cost to Anglian Water in providing such services. The NAV can at any time discuss the type of services that it may require, and, providing sufficient information is provided, we can give an estimate of the costs involved.

2. Design Work

The bulk agreements provide both for design of the connection works, and (if there are any) design of the off-site infrastructure between the existing network and the Supply Point or Discharge Point, to be undertaken by Anglian Water, if the parties agree. Our charges for either type of design work is 10% of the estimated construction cost, subject to a minimum as detailed in the Developer Charging Arrangements.

3. Other Services

There may be other services that Anglian Water makes available to developers, which the NAV may seek from Anglian Water. Unless set out otherwise in any agreement to provide such services, Anglian Water will charge the NAV the same as it charges developers, whether under its [Developer Charging Arrangements](#), or otherwise.

APPENDIX 1

Water Service Billing Example (no relevant upfront on-site investment)

Code	Bulk Meter Billing – Anglian Region	Source	Household	Non-household	Total
NP	Number of properties	NAV	200	1	201
WF	Wholesale Fixed Charge per connection	AW	£6.05	£6.50	
AC	Avoided On-site Costs	AW	-£43.05	-£43.05	
NF	NAV Fixed Charge	$np \times (wf - ac)$	-£7,400.00	-£36.55	-£7,436.55
BD	Bulk Meter Volume	AW			20,479m ³
ND	Non-household demand (including leakage adjustment)	NAV demand plus 2.16%		255.4m ³	
HD	Household demand	$(bd - nd)$	20,223.6m ³		
WV	Wholesale Volumetric Charge per m ³ (including allowances)	AW	£1.8800	£1.6572	
NV	NAV Volumetric Charge	$(n(h)d \times wv)$	£38,020.37	£423.25	£38,443.62
	TOTAL CHARGE	$nf + nv$			£31,007.07

Code	Information Received	Household	Non-household	Total
NP	Number of properties	200	1	201
BD	Bulk Meter Volume			20,479m ³
ND	Non-household demand		250m ³	

APPENDIX 2

List of the minimum quarterly information needed for billing

Property Type (household/non-household)

Connection Date

Meter Point ID or Meter Serial Number

Property Address

Property Post Code

Property Status (occupied/vacant)

Meter Reading Date & Read (current) (for each non-household)

Meter Reading Date & Read (previous) (for each non-household)

APPENDIX 3

Information required where there is a Pumping Station on-site

Development Name	
Development size (number of properties)	
Detailed design drawing	
Pump kW rating (kW)	
Rising main size	
Notional hours run per day	
Description of site characteristics that result in the need for an on-site pumping station.	

APPENDIX 4

Checklist of avoided costs

Checklist		Water		Wastewater		Central Cost	Notes / Comments
Code	Activity	Direct Operating Cost	Direct Capital maintenance Cost	Direct Operating Cost	Direct Capital maintenance Cost		
WD1	Routine and adhoc water quality sampling. Regulatory monitoring at every site irrespective of size	✓	✗				
WD2	DWI - Drinking Water Safety Planning (Water Supply (Water Quality) Regulations 2016 - Regs 27 & 28), Monthly water quality reporting, submission of annual data returns.	✓	✗				
WD3	Monitoring and auditing of Laboratory performance - Water Supply (Water Quality) Regulations 2016 - Regulation 16	✓	✗				
WD4	Water Fittings inspections - enforcement of Water Supply (Water Fittings) Regulations 1999	✓	✗				
WD5	Supplementary water quality monitoring e.g. Response to customer contacts,	✓	✗				
WD6	Additional flushing/sampling due to poor performance and/or condition of assets owned and maintained by the upstream incumbent	✓	✗				
WD7	Local Authority and Public Health England Liaison and updates.	✓	✗				
WD8	Planned Maintenance – e.g. flushing activities	✓	✓				
WD9	Unplanned Maintenance	✓	✓				
WD10	Emergency Response	✓	✗				
WD11	Meter maintenance / replacement	✗	✓				
WD12	Meter accuracy testing costs	✓	✗				
WD13	Meter reading	✗	✗				Retail cost.
WD14	Battery replacement	✗	✓				
WD15	Arrangements for sharing meter data	✗	✗				No cost incurred in the counter factual.
WD16	Standby arrangements	✓	✗				
WD17	Incumbent bulk metering costs	✗	✗				
WD18	Financial penalties for GSS failure	✓	✗				
WD19	Network losses / unaccounted for water at a direct wholesale cost.	✓	✗				Included in leakage adjustment.
WD20	Activities to monitor and control leakage/unaccounted for water	✓	✗				Included in leakage adjustment.
WD21	'Free' water provided under social tariffs	✗	✗				Retail cost.
WD22	Offsite network maintenance / repair (No income if NAV tariff assumes connection at boundary)	✗	✗				All connections at boundary.

WD23	Water resource planning and drought plans	x	x				
WWD1 & WWD17	Planned / unplanned pumping station maintenance			✓	✓		
WWD2 & WWD18	Planned sewer jetting maintenance			✓	x		
WWD3	Unplanned / emergency response and or maintenance			✓	✓		
WWD4	Telemetry			✓	✓		
WWD5	Planned / unplanned sewer jetting, blockage removal			✓	x		
WWD6	Incumbent customer meter data costs + supplementary data.			x	x		Retail cost.
WWD7	Incumbent discharge costs for water losses not returned to sewer i.e. where bulk discharge costs are based on a bulk water meter.			✓	x		Included in non-return to sewer allowance.
WWD8 & WWD22	Capital replacement in made up ground			✓	✓		
WWD9 & WWD23	'Free' sewerage provided under social tariffs			x	x		Retail cost.
WWD10 & WWD24	Sewer flooding remediation and compensation			✓	x		
WWD11	Financial penalties for GSS failure			✓	x		
WWD12 & WWD25	Offsite network maintenance / repair (No income if NAV tariff assumes connection at boundary)			x	x		All connections at boundary.
WWD13	Tankering incl. pre NAV approval			✓	x		
WWD14	Trade effluent costs - admin, monitoring, data sharing with downstream incumbent			✓	x		Where relevant.
WWD15	Blank						
WWD16	Blank						
WWD19	Incidence response sewer jetting			✓	x		
WWD20	De-silting			✓	x		
WWD21	Clearing and maintenance of drainage areas.			✓	x		
WWD26	Discharge permits/costs			✓	x		
C1	Finance/ HR / Legal and IT staff resource costs					✓	
C2	Regulatory Costs - Licence fees, regulatory reporting and compliance					✓	
C3	NAV application and administration costs.					✓	

C4	End customer billing and customer service costs					✘	Retail cost.
C5	Management costs					✓	
C6	External consultancy					✓	
C7	IT systems and development					✓	
C8	Travel and subsistence					✓	
C9	Vehicle fleet costs					✓	
C10	Plant, tools and equipment					✓	
C11	Health and Safety					✓	
C12	Insurance					✓	
C13	Employer pension					✓	
C14	Employer NI					✓	
C15	Premises and utilities					✓	
C16	Telecommunication costs					✓	
C17	Business Rates					✓	
C18	Recruitment					✓	
C19	Training and Development					✓	
C20	Bank charges incl. those relating to customer income collection					✘	Retail cost.
C21	Customer bad debt and debt recovery costs.					✘	Retail cost.
C22	Revenue protection and voids management					✘	Retail cost.
C23	External audit / accountancy costs					✓	
C24	Asset Financing Costs					✓	
C25	Working Capital					✓	This is not an avoided cost but an allowance has been made. See operating margin section.
C26	Incumbent Working Capital					✓	
C27	Marketing, Branding and Customer Relations					✓	
C28	Billing systems costs					✘	Retail cost.
C29	Billing and other postage / stationery costs					✘	Retail cost.
C30	Cost of Debt					✓	This is not an avoided cost, but an allowance has been made. See operating margin section.