NAV CHARGING ARRANGEMENTS

2020/21

CHAPTER I: INTRODUCTION

1. Context

The NAV[1] 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, waste water 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 50Ml in any year (or 250Ml 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 waste water 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; and
(ii) to provide transparency on the calculation of relevant charges for the charging year 2020/21 thereby enabling 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 2020, but note should be taken of:

(i) the dynamic application of each year's NAV charging arrangements; and

[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.

(ii) the transitional arrangements set out in these NAV charging arrangements

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

On 8th May 2018, following a consultation process, Ofwat issued new Guidance for bulk charges to NAVs. 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 Tariff charges (allowing for on-site leakage)
Minus
Avoided on-site ongoing costs including capital replacement
Minus
Avoided WACC on initial on-site assets
Minus
Avoided depreciation on initial on-site assets
Equals
Bulk supply charge

6.4.1. Operating margin on ongoing operating costs

In addition to the minus elements set out above, we have also provided for an operating cost margin.

Our approach to calculating deductible costs has been designed to facilitate an adequate margin is available for NAVs. However, we have also provided an additional minus-element (incorporated in the avoided on-site costs) to provide an overall margin of 4.08% on the operating costs (the "operating cost margin"). The operating cost margin amounts to £1.23 per dual service connection (including surface water drainage). 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 capitalised). We are undertaking a further review of the margin that is generated by our approach to bulk supply pricing and reserve the right to remove the operating cost margin when we calculate bulk supply charges in future years.

6.4.2. Avoided WACC

The 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 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 lower allowed return to incumbents set out in the Final Determinations published on 16 December 2019. In recalculating the adjusted-WACC we have followed the methodology set out in Annex 2 of the 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 relatively large build-up of the cash in the short-term that should be notionally earmarked to pay for future capital replacement.

Our Bulk Supply Charges set out below are consistent with the approach set out above, and reflect the outcome of the consultation process we previously undertook (and published on our website). 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 the customer characteristics of the site supplied by the NAV to our wholesale charges to produce a weighted average Fixed and Volumetric Charge.

Table 1 below summarises the 2020-21 wholesale tariffs for the Anglian region. For our full charges, including the Hartlepool region, please see the link below to our Wholesale Charges Schedule:

https://www.anglianwater.co.uk/siteassets/household/about-us/wholesale-charges-schedule-2020-2021.pdf

Table 1

	Household	**Non-household**[2]
Measured Water Fixed charge (p.a.) Volumetric charge (per m^3)	£3.65 151.66p	£7.00 131.07p
Measured Sewerage Fixed charge – connected for surface water (p.a.) Fixed charge – not connected for surface water (p.a.) Volumetric charge (per m^3)	£57.80 £25.80 154.07p	£61.00 £29.00 152.69p

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.

For further information on how the wholesale revenue will be calculated please see Appendix 1.

2. Ongoing On-Site Costs Including Future Capital Replacement

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 overheads; and

(ii) 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

(iii) the return on the capital expenditure of replacement on-site assets.

The avoided costs are based on audited data contained in the Annual Performance Report. These costs are calculated on the basis of the number of household and non-household billable properties in the NAV appointed area.

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

The standard values are based on a typical site. 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.

For example, where there is on-site sewerage pumping station that would otherwise have been adopted by Anglian Water in line with our the NAV Pumping Station Adoption Policy but has been retained by the NAV, we will calculate an additional element to the minus for on-going onsite costs including capital replacement, as long as the asset is sufficiently maintained to meet the adoption standards on an on-going basis.

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

Table 2

	On-site costs per property (OC)			
	Operating expenditure	**Depreciation**	**Return**	**Total**
Water	£22.85	£8.40	£7.15	£38.40
Foul Water	£6.10	£0.75	£4.15	£11.00
Surface Water	£3.20	£0.50	£2.60	£6.30
Highway Drainage	£1.55	£0.25	£1.25	£3.05

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 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 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 2020/21 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 3

Water Supply NAV Tariff	**Household**	**Non-household[2]**	**Weighted Average**
Wholesale Fixed Charge per property	£3.65	£7.00	Dependant on site property characteristics
Ongoing on-site costs per property	-£38.40	-£38.40	
NAV Fixed Charge per property	**-£34.75**	**-£31.40**	
Wholesale Volumetric Charge per m^3	151.66p	131.07p	
Leakage Allowance	2.16%		
NAV Volumetric Charge per m^3	**148.45p**	**128.30p**	

Foul Water & Highway Drainage NAV Tariff	**Household**	**Non-household[2]**	**Weighted Average**
Wholesale Fixed Charge per property	£25.80	£29.00	Dependant on site property characteristics
Ongoing on-site costs per property	-£14.05	-£14.05	
NAV Fixed Charge per property	**£11.75**	**£14.95**	
Wholesale Volumetric Charge per m^3	154.07p	152.69p	
Leakage Allowance	2.16%		
NAV Volumetric Charge per m^3	**150.81p**	**149.46p**	

Surface Water Drainage NAV Tariff	**Household**	**Non-household[2]**	**Weighted Average**
Wholesale Fixed Charge per property	£32.00	£32.00	Dependant on site property characteristics
Ongoing on-site costs per property	-£6.30	-£6.30	
NAV Fixed Charge per property	**£25.70**	**£25.70**	

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

5. Charges in the charging year 2020/21 for NAV sites with bulk agreements entered into or based on offers made pre 1 April 2020

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

Table 4

Water Supply NAV Tariff	**Household**	**Non-household[2]**	**Weighted Average**
Wholesale Fixed Charge per property	£3.65	£7.00	Dependant on site property characteristics
Ongoing on-site costs per property	-£38.40	-£38.40	
NAV Fixed Charge per property	-£34.75	-£31.40	
Avoided WACC and Depreciation on on-site assets for upfront investment	This is calculated on a site-specific basis		
NAV Fixed Charge per property	**-£x.xx**	**-£x.xx**	
Wholesale Volumetric Charge per m^3	151.66p	131.07p	
Leakage Allowance	2.16%		
NAV Volumetric Charge per m^3	**148.45p**	**128.30p**	

Foul Water & Highway Drainage NAV Tariff	**Household**	**Non-household[2]**	**Weighted Average**
Wholesale Fixed Charge per property	£25.80	£29.00	Dependant on site property characteristics
Ongoing on-site costs per property	-£14.05	-£14.05	
NAV Fixed Charge per property	£11.75	£14.95	
Avoided WACC and Depreciation on on-site assets for upfront investment	This is calculated on a site-specific basis		
NAV Fixed Charge per property	**-£x.xx**	**-£x.xx**	
Wholesale Volumetric Charge per m^3	154.07p	152.69p	
Leakage Allowance	2.16%		
NAV Volumetric Charge per m^3	**150.81p**	**149.46p**	

Surface Water Drainage NAV Tariff	**Household**	**Non-household[2]**	**Weighted Average**
Wholesale Fixed Charge per property	£32.00	£32.00	Dependant on site property characteristics
Ongoing on-site costs per property	-£6.30	-£6.30	
NAV Fixed Charge per property	£25.70	£25.70	
Avoided WACC and Depreciation on on-site assets for upfront investment	This is calculated on a site-specific basis		
NAV Fixed Charge per property	**-£x.xx**	**-£x.xx**	

6. Process Summary

The following illustrates the process for calculating the bulk supply price:

(i) Before the start of the charging year NAV's provide a forecast for each site, of:
  (a) the average number of households and non-households; and
  (b) the average annual consumption of households and non-households.

(ii) We will calculate the overall wholesale charges for the forthcoming year and deduct:
  (a) the calculated ongoing on-site costs (see section 2); and where appropriate
  (b) the calculated avoided WACC and depreciation (see section 3) for the up-front investment.

(iii) Calculate and confirm to the NAV the tariffs to be charged (see appendix 1)

(iv) Bills will be calculated monthly using the forecast number of properties supplied by the NAV and meter readings from the bulk meter, or in their absence forecast meter readings, and set out the calculated NAV Charges. Sewerage Services will be based on either the volume of water supplied less the standard sewage abatement of 10% or, where appropriate, a Sewage Discharge meter.

See Appendix 2 for an example.

7. Reconciliation

As described above the NAV tariff is based on a forecast of customer characteristics and as such there will inevitably be deviations (up or down) between NAVs' actual bills and the bills they would pay if there were an automatic year end ex post true-up (although these should be immaterial).

No automatic true up will be applied, but NAVs will be required to provide details of actual connected property numbers at the end of the Charging Year. Either party can require a retrospective true-up after the end of the Charging Year.

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 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 be 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 new connections (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 and 55, by a developer with its retailer under section 66A, or by a NAV under sections 40A and 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 5*.

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 in Condition C of our Instrument of Appointment.

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.

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.

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

<u>Charges in respect of the new linking water main</u>

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).

<u>Charges in respect of the new linking public sewer</u>

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. 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.

3.7. Alternative connection points and phasing

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. 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*.

Table 6

Charges for the construction of a new water main or new public sewer	
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	£340.00
Water recycling charge to NAV	£570.00
Gross charge to NAV (water & sewerage combined)	£910.00
Water income offset discount	£400.00
Net charge to NAV	£510.00
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 new connections (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 and 55, by a developer with its retailer under section 66A, or by a NAV under section 40A 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 of £2,244.

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

1. Annual Charge Methodology

The annual charge can be summarised as a two-part tariff per service consisting of a Fixed Charge per property and a Volumetric Charge per m^3. This equates to the relevant wholesale charges less the avoided costs:

$$NAV\ Fixed\ Charge\ per\ property = \frac{FC - OC - WD}{(NH + NN)}$$

FC = "Relevant Wholesale Tariff" Total Fixed Charge

OC = Avoided On-site Costs (see chapter II section 2)

WD = Avoided WACC and Depreciation (where appropriate) (see chapter II section 3)

NH = Number of households

NN = Number of non-households

$$NAV\ Volumetric\ Charge\ per\ m3 = \frac{VC}{(1 + LA)}$$

VC = "Relevant Wholesale Tariff" Volumetric Charge

LA = Leakage Allowance

An illustrated example is shown in appendix 2

2. Wholesale Charges

The calculation of the "Relevant Wholesale Tariff" for each service is:

$$Total\ Wholesale\ Fixed\ Charge\ (FC) = (NH\ x\ HF) + (NN\ x\ NF)$$

$$Wholesale\ Volumetric\ Charge\ per\ m3\ (VC) = \frac{\big((NH\ x\ HD\ x\ HV) + (NN\ x\ ND\ x\ NV)\big)}{(NH\ x\ HD + NN\ x\ ND)}$$

NH = Number of households

NN = Number of non-households

HD = Average household demand

ND = Average non-household demand

HF = measured household fixed charge

HV = measured household volumetric rate

NF = average measured non-household fixed charge

NV = average measured non-household volumetric rate

APPENDIX 2

1. Water Service Example (no upfront investment)

Information Required	Code	Provider	Sample Data
Number of households	NH	NAV	200
Number of non-households	NN	NAV	1
Average household demand	HD	NAV	$100m^3$
Average non-household demand	ND	NAV	$250m^3$
Measured household fixed charge	HF	AWS	£3.65
Measured household volumetric rate	HV	AWS	£1.5166
Measured non-household fixed charge	NF	AWS	£7.00
Measured non-household volumetric rate	NV	AWS	£1.3107
Leakage Allowance	LA	AWS	2.16%

Demand

$$Forecast\ Customer\ Demand = (200\ x\ 100m3) + (1\ x\ 250m3) = 20{,}250m3$$

Relevant Wholesale Tariff

$$Wholesale\ Fixed\ Charge = (200\ x\ £3.65) + (1\ x\ £7.00) = £737$$

$$Wholesale\ Volumetric\ Charge\ per\ m3 = \frac{\big((200\ x\ 100m3\ x\ £1.5166) + (1\ x\ 250m3\ x\ £1.3107)\big)}{20{,}250m3}$$

$$= £1.5141$$

Ongoing On-Site Costs

$$Ongoing\ On - Site\ Costs = £38.40\ x\ (200 + 1) = £7{,}718$$

NAV Charges

$$NAV\ Fixed\ Charge\ = \frac{£737 - £7{,}718}{(200 + 1)} = -£34.73\ per\ property$$

$$NAV\ Volumetric\ Charge\ per\ m3 = \frac{£1.5141}{(1 + 0.0216)} = £1.4821$$