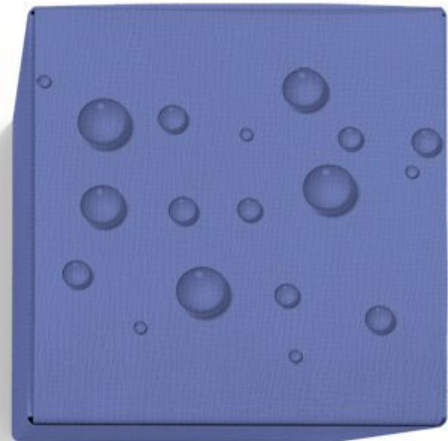


Benefits of independent network competition in the water and wastewater sector

Independent Networks Association



FINAL REPORT

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EXECUTIVE SUMMARY

This report, commissioned by the Independent Networks Association (INA), provides an independent analysis of the benefits of competition for the provision of 'last mile' network infrastructure services in the water and wastewater sectors in England and Wales.

In this report, we refer to 'last mile' network infrastructure services as covering:

- contestable connection services – covering the design and build of new connections to the existing network operated by the incumbent monopoly; and
- the ongoing ownership and operation of these assets.

The number of new appointments and variations (commonly known as NAVs¹) has more than doubled over the last couple of years, signalling that developers recognise the benefits that NAVs can deliver. While demand for NAV services is expected to continue to grow in the future given the Government's appetite to foster greater competition in utilities² and the expected growth in the housing market, the market penetration of NAVs is still considerably lower than that of independent networks in energy and gas. Ofwat estimates the share of new properties served by new appointees to have increased from around 2% in 2017 to approximately 20% in 2021, whilst independent network companies in gas and electricity serve approximately 80% of new connections.³

In this report, we examine the potential benefits of competition in the provision of 'last mile' infrastructure in the water and wastewater sectors and contribute to the understanding of how the regulatory and market arrangements applicable to independent water companies differ from those in other similar sectors. We consider which policies may be required to enable the further development of the sector.

We also present case studies of how NAVs contribute to better economic and social outcomes and to Great Britain's ambition to:

- **build 300,000 more homes per year** by the mid-2020s, as stated in the Government's 2019 Conservative Manifesto⁴;
- **enhance the environment**, as defined by Defra, which is seeking to challenge industry to improve their environmental performance and similarly deliver greater environmental and social value and outcomes as defined by Ofwat in its framework for the future⁵;
- **deliver a resilient water sector plan**, as defined by Defra, which is seeking to challenge the industry to invest in, and operate water and wastewater services to secure the needs of current and future customers and similarly improve asset health and operational resilience as defined by Ofwat in its framework for the future; and

¹ NAVs are independent water companies that provide water and/or sewerage services to developers and final consumers on specific sites across England and Wales instead of the local incumbent water and/or sewerage companies.

² In its January 2022 Economic Regulation Policy Paper, BEIS stated that: "Competition can lead to increased innovation, greener solutions, and provide savings to consumers by incentivising lower cost, more efficient business plans. For the design and delivery of infrastructure, all regulators should harness competition to unlock opportunities for strategic investment. As such, the Government is supportive of removing strategic investments, including sustainable, nature-based solutions, from the standard price control process and opening them up for competition where appropriate." BEIS (January 2022). [Economic Regulation Policy Paper](#).

³ Ofwat (July 2022), Competition in strategic investment: a high-level stocktake, para 6.1.1.

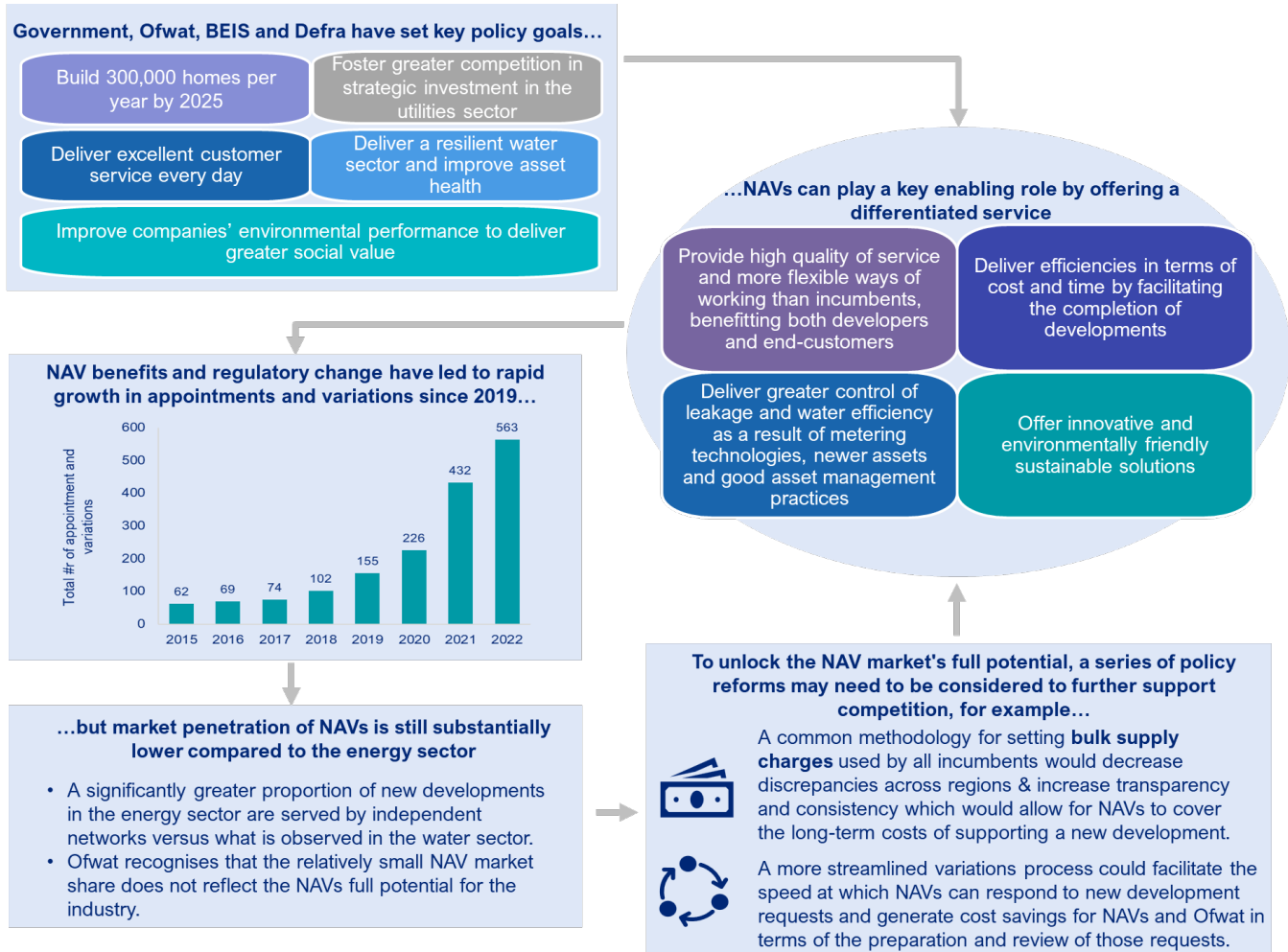
⁴ (1) the Conservative Manifesto 2019, [URL](#) and (2) UK Parliament (February 2022), Research Briefing, Tackling the under-supply of housing in England.

⁵ This also aligns with HM Government's policy paper published in 2018 entitled "[A Green Future: Our 25 Year Plan to Improve the Environment](#)".

- **deliver excellent customer service every day**, as defined by Ofwat and Defra, which are seeking industry to provide a better water service for all customers.

Figure 1 below highlights some key facts and figures on the NAV market and a summary of the key themes that are discussed within this report.

Figure 1: NAVs: Key facts and figures



Source: CEPA

How do NAVs help the water sector to deliver on these ambitions?

NAVs offer a differentiated service

As independent water companies, NAVs must compete for business by differentiating their service by offering:

- excellent quality of service and flexible ways of working which has resulted in repeated business with developers;
- wide geographical coverage across regions in England and Wales⁶ (vs the incumbent being limited to its own region);
- site-specific solutions that increase choice for customers and bring benefits in terms of cost, quality of service or innovation;

⁶ Though we note that not all NAVs work across all regions in England and Wales.

- cost savings from acting as a multi-utility provider, providing connections to all utilities in a single lay as well as cost savings associated with the optimisation of design for onsite infrastructure;
- time savings generated by the developer needing to coordinate with a single point of contact for all utilities which in turn may prevent delays in the completion of the development, reduce the need to interact with multiple parties and reduce the overall time to connect;
- operational co-ordination of utilities as multi-utility networks, e.g., wastewater heat recovery; and
- simplicity for the end-customer of having a single multi-utility provider operating the networks on sites.

We elaborate on these points in Section 2.1.

NAV's support the Government's environmental ambitions

Independent water companies can play a key role in helping Government achieve its long-term environmental ambitions. Part of this is via the technologies and flexible solutions they are able to offer. The other part is related to the behavioural aspects in terms of how NAVs are able to support customers with those environmental outcomes.

More specifically, NAVs can offer:

- innovative and environmentally friendly sustainable solutions for water and wastewater in new housing developments;
- best practice of leakage on their networks including improved asset management practices;
- adoption of flexible sustainable drainage systems; and
- the latest water metering technologies in new housing developments to incentivise lower water consumption.

We elaborate on these points in Section 2.2.

NAV's are key enablers to housing growth

The Government has set an ambitious target to build 300,000 new homes per year by the mid-2020s. As each home requires connections to water, wastewater, telecoms and electricity (and gas) networks, bottlenecks in the connection process can substantially slow down the completion of developments.

NAV's, acting as multi-utility providers, are well-positioned to remove these bottlenecks with their flexible ways of working and transparent service offering which may contribute to the faster completion of connections. As NAV's can work across England and Wales, they are also able to navigate through the complexities of dealing with local authorities. Furthermore, the geographical footprint of NAV's and developers may also overlap, thus fostering stronger business relationships that may facilitate the speedy delivery and completion of new developments.

We elaborate on these points in Section 2.3.

Competition in the market incentivises service improvements

It is well-documented in economic literature that competition can incentivise companies to bring improvements and innovations to the market. For NAV's to increase their market share, they will naturally identify and fill gaps in incumbents' service offering. However, the benefits that competition can deliver are not solely based on new entrants bringing new solutions and better service to the market. The dynamic effects of competition also mean that all companies operating in the sector will have the incentive to improve their service offering. The existence of multiple business models, including independent water companies alongside incumbents, can help to evolve processes and approaches across the entire industry by disseminating new practices and solutions.

The introduction of competition for 'last mile' infrastructure services has given customers greater choice, which increases pressure on all providers, including incumbents, to fundamentally improve the quality and cost of their

services. It can also lead to downward pressure on prices for connections and operation of ‘last mile’ network infrastructure, quality of service improvements and environmental benefits from both incumbents and new entrants.

We elaborate on these points in Section 2.4.

Policy changes have helped stimulate the expansion of NAVs in the market...

In recent years, Ofwat has identified and implemented some policy reforms to help facilitate competition in the market for construction and operation of ‘last mile’ infrastructure in the water sector with the aim of encouraging competition and new entry.

Some of the main changes introduced include:

- publishing guidance on how incumbents should charge NAVs for bulk supply services to their sites;
- introducing a framework to assess developer customers satisfaction with incumbent water companies;
- issuing information requests and reviewing incumbent companies’ support for operation of effective markets; and
- making changes to regulatory rules (e.g., around income offset) to help create a level playing field for new connections between incumbent companies and independent networks.

These policy reforms have contributed to a significant increase in the number of sites served by NAVs in the last four to five years. Despite this, the level of market penetration of NAVs is still considerably lower than that of independent networks in the electricity and gas sectors. In part, this can be explained by the fact that the regulatory and legislative environment for NAVs still presents some challenges that may prevent competition from expanding to its full potential.

We acknowledge that services provided by NAVs are different to those provided by independent networks in gas and electricity because of the nature of the service and the associated health and safety risks in the water sector. As a result, it would be expected that independent networks operating in the water sector would be subject to differences in regulations and processes given the specific consumers protections that are necessary in the industry. Nevertheless, policy makers may wish to consider if current arrangements strike the right balance between customer protection and the regulatory requirements that are placed on NAVs.

...but there are a number of further reforms that may help facilitate the NAV market reaching its full potential

Our discussions with NAVs have revealed that they consider a number of obstacles remain which restrain the level of activity that can be undertaken by their businesses. There are several further areas of reforms that policy makers in the sector may wish to consider to further support the NAV market.

Application processes for sites

One of these key issues highlighted by the INA’s members is the site-specific nature of Ofwat’s process for granting appointments and variations, where NAVs need to submit an application for each site they are planning to serve and Ofwat assesses each of these separately. This process can take several months, and we understand is a significant source of administrative costs for NAVs serving multiple sites.

As a result of this application process, we understand some NAVs may not apply for smaller developments that are not large enough to justify the cost of the appointment process. This, in turn, can restrict competition between NAVs and incumbents to larger sites and limits the reach of NAVs end-user benefits. There are also risks that the process may become too onerous for Ofwat especially as the number of NAV application grows.

In its recent stock take on competition, Ofwat acknowledges these limitations, recognising that the current site-specific licensing regime does not reflect the full benefits of NAVs and can create disproportionate administrative

burden. It also suggests that changes to primary legislation and updates to wider NAV regulation would “enable it to extend the scale of the benefits of the market”.⁷

Bulk supply charges

Another area of regulation that is critical to NAV’s commercial operations is the way incumbents’ bulk supply charges are set and the bulk supply agreements used.

While Ofwat has introduced high-level guidance for how incumbents should set bulk supply charges for NAVs, this does not constitute a detailed methodology for calculating charges. As a result, we understand from NAVs that bulk supply charges for some incumbent companies can remain opaque and there can be large differences in how NAVs are charged by different incumbents. This can lead to concerns that, in some cases, the bulk supply charges that are applied to NAVs may not be sufficiently cost reflective.

Additionally, although there is a common template for a bulk supply agreement, we understand not all incumbents use this template which can cause delays. Experience from the energy sector suggests that a common charging methodology has facilitated the process between independent networks and incumbents with regards to distribution use of system charges. A common, detailed and industry-agreed methodology for bulk supply charges could maximise transparency, and improve the interaction between incumbents and NAVs. This could foster further growth of the market for NAVs unlocking their benefits to more developers and end-consumers.

⁷ Ofwat, Competition in strategic investment: a high-level stock take, para. 6.1.3.

1. INTRODUCTION

CEPA has been commissioned by the Independent Networks Association (INA) to prepare an independent report that examines the benefits of competition for provision of ‘last mile’ network infrastructure services in the water and wastewater sectors in England and Wales.

In this report, we refer to ‘last mile’ network infrastructure services as covering:

- contestable connection services – covering the design and build of new connections to the existing network operated by the incumbent monopoly; and
- the ongoing ownership and operation of these assets.

This report is based on a combination of quantitative and qualitative analysis. The sources of evidence used for our analysis include interviews with some NAVs and desk-based research.

1.1. CONTEXT

In the water and wastewater sectors, Ofwat has put significant emphasis in the past few years on the use of markets to deliver benefits for customers, society and the environment in the form of innovation, improvements in quality of services and affordability. For the use of markets to succeed in delivering these benefits, the NAV market needs to be fully enabled.

BEIS is also seeking to foster greater competition in strategic investment in the utilities sector. In its January 2022 [Economic Regulation Policy Paper](#), BEIS stated that:

“Competition can lead to increased innovation, greener solutions, and provide savings to consumers by incentivising lower cost, more efficient business plans. For the design and delivery of infrastructure, all regulators should harness competition to unlock opportunities for strategic investment. As such, the Government is supportive of removing strategic investments, including sustainable, nature-based solutions, from the standard price control process and opening them up for competition where appropriate.”⁸

The focus on the role of competition is likely to increase as the Department for Environmental, Food & Rural Affairs (Defra) has included the “use of markets to deliver for customers” on its list of strategic priorities for the sector.⁹

As we present in this report, competition can help the water industry to deliver the challenging improvements that are expected and which are captured in the remaining strategic priorities set out by the Government for Ofwat, namely: protect and enhance the environment by challenging the industry to improve their environmental performance; deliver a resilient water sector plan by challenging the industry to invest in and operate water and wastewater services to secure the needs of current and future customers and serve and protect customers by providing a better water service for all customers.

1.2. THE EVOLUTION OF THE UK INDEPENDENT WATER NETWORK SECTOR

Independent networks compete with established incumbent networks to provide ‘last mile’ infrastructure services in sectors such as gas, electricity and water and wastewater services.

One area where Ofwat has facilitated competition in this context for water and wastewater services is the New Appointments and Variations (NAV) regime, which was introduced in the 1990s. This entails newly appointed companies (the “NAVs”) providing water and/or sewerage services to developers and final consumers in an area across England and Wales instead of the local incumbent water and/or sewerage companies. Depending on

⁸ BEIS (January 2022). [Economic Regulation Policy Paper](#).

⁹ Defra (February 2022), “Government’s strategic priorities for Ofwat”, [URL](#), last visited on 13th June 2022.

whether a given NAV provides water services, sewerage services or both, the incumbent company in whose area the NAV operates will provide sewerage services, water services or neither.

There are two different types of companies providing different contestable services: Self-lay Providers (SLPs) and NAVs.

- SLPs can carry out contestable mains laying and or connection work on behalf of the developer but cannot own, maintain or operate the on-site infrastructure which is then adopted by the incumbent or by a NAV. SLPs are typically accredited under the LRQA¹⁰ Water Industry Registration Scheme (WIRS); a WIRS accredited self-lay organisation may perform works on the connection of water mains and supplies to a property, dependent on the status and scope of accreditation;^{11 12}
- NAVs are independent water companies that own, operate and maintain the on-site infrastructure, becoming the new water company serving the new development. NAVs essentially adopt assets that SLPs construct. Some companies may have a NAV and an SLP; such companies can therefore fulfil both the SLP and NAV functions, but only the NAV is licensed by Ofwat.¹³

NAVs operate a site-specific licensing regime. Rather than issuing a nation-wide or region-wide license, Ofwat “appoints” a new company (the NAV) to replace the incumbent for the provision of water/sewerage service for a specific site, becoming the new monopoly provider for that site only. Existing appointees aiming at serving new sites will need to submit a new application for each site. If successful, Ofwat will grant a “variation” of their license, allowing them to become the monopoly provider for the new sites as well. While some NAVs may own and operate their own water resources or water treatment works, most appointees need to negotiate bulk supply agreements with the incumbent water company at the boundary of the site. NAVs core services will then be the provision of retail services and “last mile” wholesale services to end customers on the site.

As shown in Table 1, there are currently nine independent water companies (known as new appointees or NAVs) operating in England and Wales, competing against incumbents for the provision of water and/or wastewater services in different sites. ESP Water Ltd has been appointed its first NAV site in summer 2022 and has also submitted further applications for additional variations at various sites.¹⁴ This is the first new company appointment since 2018.

¹⁰ LRQA is a leading global assurance provider. It operated the WIRS on behalf of water utility companies.

¹¹ <https://www.lrq.com/en/utilities/water-industry-registration-scheme-wirs-wirsae/search/>

¹² The Ofwat website explains the benefits of being a WIRS accredited SLP: “Before a self-lay organisation can carry out work, they must be approved by the relevant water company. Self-lay organisations can avoid having to comply with the 22 separate water companies’ requirements by becoming accredited under the Water Industry Registration Scheme (WIRS) which is recognised by all the water companies and Water UK.” <https://www.ofwat.gov.uk/regulated-companies/markets/connections-market/self-laying-a-connection/>

¹³ <https://www.ofwat.gov.uk/regulated-companies/markets/nav-market/>

¹⁴ For example: [Merchant’s Wharf \(Salford\)](#), [Varsity Quarter in Manchester College](#), [Pershore Road \(Birmingham\)](#), Halifax Road ([South Yorkshire](#)).

Table 1: List of existing NAVs

Company	First appointment	Part of a multi-utility group?	Asset development? ¹⁵	Number of regions in which NAVs operate ^{16*}
Albion Water Ltd	1999	No	Yes	4
Albion Eco Limited	2016	No	No	1
County Water Limited	2018	No	Yes	1
ESP Water Ltd	2022	Yes	No	1
Icosa Water Services Limited	2016	Yes	Yes	11
Independent Water Networks Ltd	2007	Yes	No	18
Leep Networks Ltd	2018	Yes	No	10
Severn Trent Services Ltd	2015	No	Yes	2
Veolia Water Projects Ltd	2009	No	Yes	1

Source: CEPA formatting of (i) Ofwat website, "Choosing your supplier", [URL](#), last visited on 13th June 2022 and (ii) companies websites, last visited on 13th June 2022. (3) Ofwat, register of new appointments and variations granted to date.

These companies have consistently increased their market penetration over time, particularly after Ofwat clarified the methodology underpinning bulk supply charges that incumbents are permitted charge NAVs (see text box below for a brief introduction to bulk supply charges).

What are bulk supply charges?

The term bulk supply refers to two different types of agreements and charges: A) it covers agreements for the supply of bulk water between incumbent water companies (these are often referred to as water trades); B) it covers bulk agreements between incumbent water companies and NAVs. These cover either the supply of bulk water, waste water discharge or, in the majority of cases, both services.

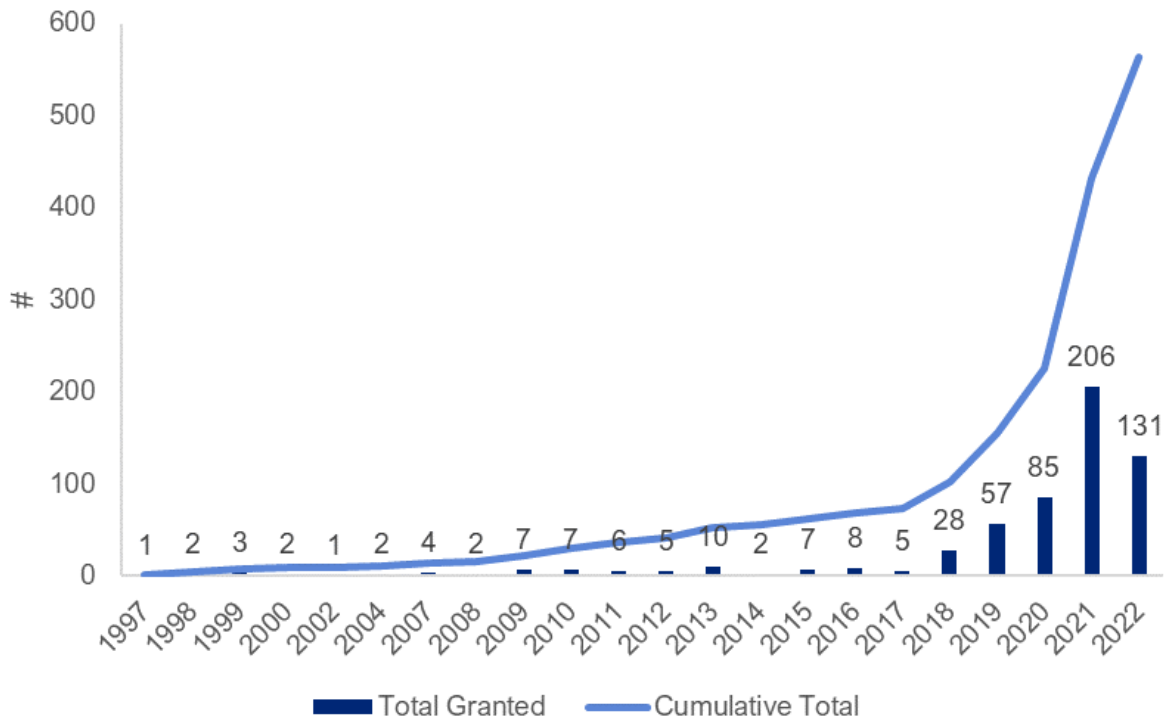
Source: [Defra. \(April 2018\), Water industry: Guidance to Ofwat for water bulk supply and discharge charges.](#)

Figure 2 shows that Ofwat granted appointments and variations (i.e., sites served by NAVs) increased to 230 by 2020 and increased to 432 in 2021, with 131 granted between January and May 2022.

¹⁵ i.e., whether the NAV makes connections as well.

¹⁶ This is an estimate based on the number of incumbent companies that NAVs replace. Given the presence of overlapping service areas and unserved sites, the actual number of service areas served can be different. This is an essence a proxy of the number of incumbents NAVs work with.

Figure 2: Number of appointments and variations since 1997



Source: For data points until 2018, Ofwat (February 2021), “Our monitoring and reporting approach for new appointees”, Figure 1.1. Since 2019, CEPA analysis of Ofwat’s (June 2022) “Register of new appointments and variations granted to date”, [URL](#).

As of March 2021, NAVs sites covered circa 50,000 properties,¹⁷ 7,000 more than the previous year when NAVs served 42,000 residential properties and 1,000 business properties, equating to 100,000 individuals.¹⁸ More recent data gathered from Icosa, IWNL and Leep suggests that as of summer 2022, there were roughly over 61,000 live connections and about 365,000 contracted connections to be delivered over the next 10 years.¹⁹

Despite the growth in the number of sites served by NAVs in recent years, the scale of the market is relatively modest²⁰, especially when compared against independent network providers in other utility sectors such as gas and electricity. In both gas and electricity, there are currently fifteen Independent Gas Transporters and fifteen Independent Distribution Network Operators, almost twice as many as in water. As shown in Figure 3, the number of companies has also increased almost every year since 2000.

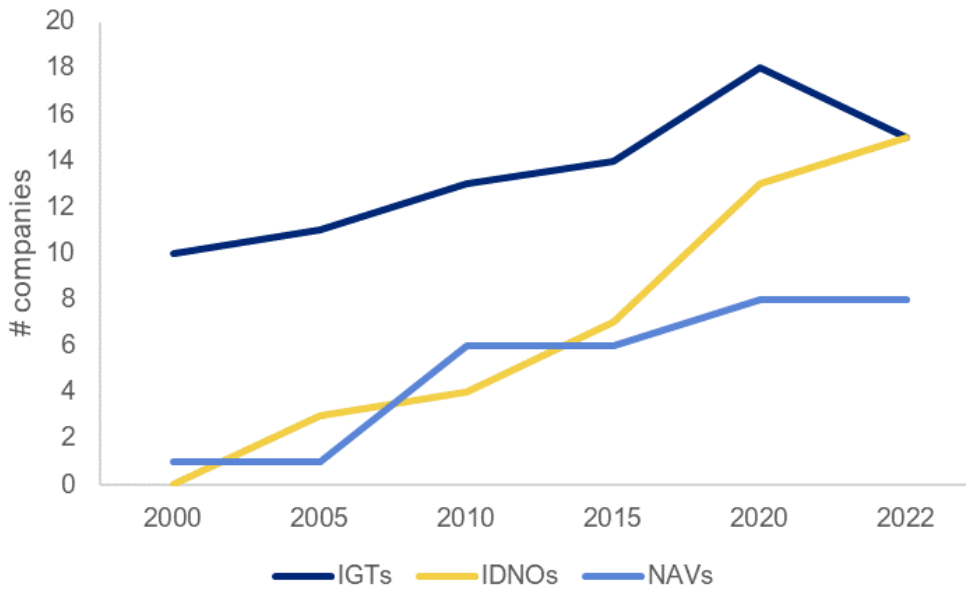
¹⁷ Ofwat website, “New Appointments and Variations (NAV’s)”, [URL](#), last visited on 13th June 2022.

¹⁸ Ofwat (February 2021), “Our monitoring and reporting approach for new appointees”, p.6.

¹⁹ Sum of live and contracted connections for Icosa (as of May 2022), IWNL (as of end of March 2022) and Leep (as of 21 July 2022) only. The total industry figures are likely to be higher.

²⁰ Ofwat website, “New Appointments and Variations (NAV’s)”, [URL](#), last visited on 13th June 2022.

Figure 3: Evolution of independent network companies – gas (IGTs), electricity (IDNOs) and water (NAVs)



Source: For gas and power series, (1) LSE (October 2020), *Building Back Faster*, p. 10 and (2) Ofgem (2022), *Gas and Power all licensees*. For water, CEPA analysis of Ofwat’s “Register of new appointments and variations granted to date”, [URL](#).

More importantly, the share of new connections covered by IGTs and IDNOs is considerably larger than that of NAVs, notwithstanding that new housing developments need both an electricity and a water connection. For example:

- Moody’s estimates suggest that IGTs and IDNOs accounted for 60% and 40% of new connections over the 2010-2017 period, respectively.²¹
- More recent estimates show that this share has considerably increased since 2017. IGTs and IDNOs served 80% of new connections as of 2021,²² corroborating INA’s own estimate of 70-80% by April 2021, when IGTs and IDNOs covered about 150,000 homes and small businesses per year and served around 3 million customers across Great Britain.²³
- In contrast, in the water sector, new appointees are estimated to serve approximately 20% of new connections in 2021, albeit increasing from around 2% in 2017.²⁴

It is important to note, however, that SLPs play a big part in the new connections market. Whereas some NAVs also make new connections themselves, others adopt the new connections from SLPs to operate and maintain the network. Incumbents may also adopt new connections made by SLPs. So, although the NAV market remains small, the overall market for new connections including the work completed by SLPs is larger, but not to the extent seen in the energy sector.

²¹ Moody’s (Sep 2017), FAQ on independent gas transporters and electricity distribution network operators, p.3.

²² Ofwat (July 2022), Competition in strategic investment: a high-level stocktake, para. 6.1.1.

²³ Independent Network Association (23rd November 2021), response to Ofwat’s Request for Information on the benefits of NAVs, p.1.

²⁴ Ofwat (July 2022), Competition in strategic investment: a high-level stocktake, para. 6.1.1.

Ofwat recognises that the relatively small NAV market share does not reflect the full potential for competition in the industry and that, at least in part, constraints on the expansion of the NAV sector are related to low levels of support from incumbents and wider barriers to entry.²⁵

With this in mind, Ofwat has introduced various policies aimed at enabling the expansion of the NAV market including updated guidance on setting bulk supply charges and the introduction of the D-MeX incentive on incumbent companies in the current price control (PR19) (see text box below). We discuss in detail Ofwat's and wider policies on NAVs market in Sections 3 and 4.

What is D-MeX?

Developer services measure of experience (D-MeX) is a performance commitment as part of the incumbents' price control that financially rewards or penalises incumbents that provide excellent/poor customer experiences to developers, SLPs or NAVs. The measure is based on relative performance.

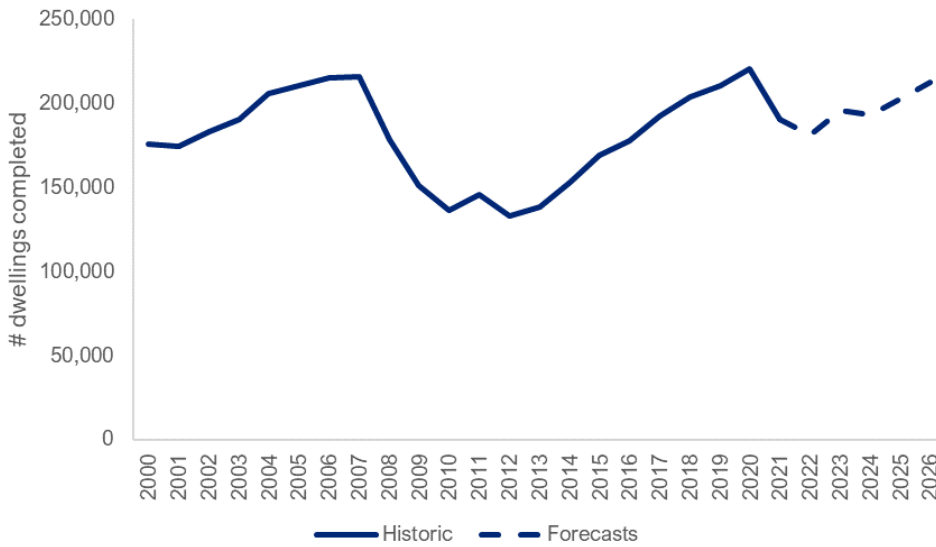
NAV market expansion opportunities are also driven by the expected increase in demand for new connections. In 2019, the government set the ambitious target to build 300,000 new homes per year by the mid-2020s, implying 1,000,000 homes to be built between 2020-2025.²⁶ As shown in Figure 4 overleaf, this target came after persistent growth in dwelling completion since 2013 and triggered a recent peak of 224,000 completed dwellings in 2020. After a contraction in 2021, dwelling completion is expected to increase again in the future, although at a slower pace compared to the past, with 213,000 expected completed dwellings in 2026, 87,000 completions below the target.

Such an expansion in housebuilding will increase demand for utilities connections, offering new opportunities for NAVs. As we discuss in Section 2.2, NAVs are a key enabler to housing growth as they may be able to offer a faster, leaner and more transparent connection process compared to incumbents but also offer multi-utility services, which makes them a one-stop shop for all utilities connections.

²⁵ (1) Ofwat (August 2020), Review of incumbent company support for effective markets, p.30. (2) Ofwat (July 2022), Competition in strategic investment: a high-level stocktake, para. 6.1.3.

²⁶ National Infrastructure Commission (March 2020), Infrastructure to support housing, p.4.

Figure 4: New dwellings completed – historic and forecasts



Source: CEPA analysis of (1) ONS, “House building data, UK: financial year ending March 2021”, [URL](#), downloaded on 13th June 2022, (2) Savills (October 2021), “Completion forecasts”, [URL](#), last visited on 13th June 2022.

1.3. PURPOSE AND STRUCTURE OF THIS REPORT

The aim of this report is to:

- examine the potential benefits of competition in the provision of ‘last mile’ infrastructure in the water and wastewater sectors; and
- contribute to the understanding of how the regulatory and market arrangements applicable to independent water companies differ from those in other similar sectors and the policies that may be required to help enable the development of the sector.

The rest of this report is structured as follows:

- Section 2 presents the benefits that NAVs bring to the water and wastewater sectors as well as the broader economy.
- Section 3 discusses the policy changes that have been implemented in recent years to promote competition in the NAVs sector.
- Section 4 compares the regulatory and market arrangements independent network companies are subject to across other utilities sectors.
- Section 5 sets out next steps for the INA and NAVs.

2. THE BENEFITS OF INDEPENDENT WATER COMPANIES

In 2015, the Department of Energy and Climate Change (now BEIS) acknowledged the benefits of competition in connections in the electricity network sector. In the context of an Impact Assessment, it stated that one of its policy objectives and intended effect were “[t]o support competition in the connections market, by ensuring greater parity between different connection providers”.²⁷ DECC also stated that “Government believes competition in connections can play a valuable role in giving customers greater choice and helping to drive up performance across the network industry”.

In theory, this would be equally applicable to the water sector. In fact, Ofwat recognises that the presence of NAVs, and independent water companies more widely, can be beneficial for end-customers, developers and society as a whole.²⁸ More specifically, competition in water and wastewater can trigger efficiencies, improvements in service quality and innovation. NAVs provide a differentiated service by enabling lean build cycles, control of leakage levels and environmentally sustainable solutions to its developer customers and end-customers.

As per Ofwat’s PR24 draft methodology published in July²⁹:

“New appointees can provide faster, more responsive services and lower prices than incumbents. They can also [...] provide developer services across utilities, reducing coordination issues.”

NAV’s core activities provide key benefits for the water sector, allowing them to contribute towards the achievement of Ofwat’s, Defra’s and BEIS’s policy goals and strategic priorities. Notably:

- Through control of leakage levels and by introducing sustainable drainage system, NAVs can help with achieving Defra’s strategic priorities to “protect and enhance the environment”, “deliver a resilient water sector”³⁰ as well as Ofwat PR24’s objective to “deliver greater environmental value”.³¹
- Competition for the provision of new connections generate pressures on incumbents, SLPs and NAVs to generate cost efficiencies, playing a part in reaching Ofwat’s “affordability” objective.
- NAVs can also incentivise behaviours that align and extends the UK Government’s guidance on Future Home Standard to water. For example, by installing latest metering technologies, they can increase awareness on water consumption and help increase homes water efficiency.

We discuss each of the benefits in turn in the rest of this section.

2.1. NAVS OFFER A DIFFERENTIATED SERVICE

Competition between providers of ‘last mile’ infrastructure gives customers a choice about who builds the connection and operates the infrastructure assets. This means that customers can choose the provider that offers them the best solution for a particular development in terms of cost, quality of service or innovation. It does not

²⁷ [DECC \(2015\), Widening the scope and application of the Second Comer Regime](#)”.

²⁸ Ofwat website, “New Appointments and Variations (NAV’s)”, [URL](#), last visited on 13th June 2022.

²⁹ Ofwat (July 2022), Creating tomorrow, together: consulting on our methodology for PR24, Appendix 3 – developer services, p.8.

³⁰ Defra (February 2022), “Government’s strategic priorities for Ofwat”, [URL](#), last visited on 13th June 2022.

³¹ Ofwat (May 2021), “PR24 and beyond: Creating tomorrow, together”. p. 3.

mean that developers will always chose to work with a NAV or another independent provider. In some cases, incumbents may be better placed to carry out the activities due to their experience or economies of scale that come with operating a large network. However, in other cases, NAVs may be better placed to carry out the activities due to the economies of scope they can generate by connecting multiple utilities, when operating as multi-utility providers, and/or the use of alternative service offerings (e.g., more flexible or innovative approaches) that are not offered by the local incumbent water company.



Arguably, the ability of independent network providers to grow their business is entirely dependent on their capacity to attract work from new connections. In contrast, the incumbents' core business focuses on serving the existing customer base and operating the wider network. Their main revenue stream, set by Ofwat at periodic price control reviews, is less impacted by competitive pressures. This creates stronger incentives for NAVs to offer a proposition that is appealing to customers, including offering new and more flexible solutions that are tailored to the customer's specific needs.

Efficiencies

Often independent network operators act as multi-utility providers, offering connections and services for various utility services such as electricity, gas, water and telecoms. This creates a **one-stop shop saving for developers and end-customers**, rather than the need to interact with multiple different incumbents for their utilities connections and services. This can create several benefits.

In economic theory, **economies of scope** are said to occur when the simultaneous provision of different products and services can be done at a lower cost than the provision of each product separately. One way a multi-utility provider can generate **cost savings** is by spreading overheads (e.g., fixed costs associated with running a business such as administrative and head office costs), avoiding cost duplications and optimising logistics and operational arrangements over different activities.

In Box 1 below, we offer an example of how a multi-utility provider can achieve cost savings for developers. This is based on discussions the CEPA team has had with the INA's members during the course of the study.

Box 1: Example of efficiencies delivered by multi-utility provider

In the absence of multi-utility providers, an independent network company estimates that at least two different teams of employees, each of at least four members, would be required to provide utilities and fibre connections to a typical new housing development.

With a multi-utility provider, all connections can be made in a single instance using a team of three people. As the cost of service for the independent network company is lower, the price paid by the developer can also be lower, in principle by as much as the savings induced by relying on five less employees to provide the service.

Estimates produced by one multi-utility provider suggest that the cost of laying three connections (water, gas and electricity) in one single instance can be less than 50% that of three separate utility connections. In addition to cost savings, NAVs and multi-utility providers tend to have shorter average lead times for sites visit than some incumbents. This further contributes to the swift progress and competition of new developments.

Source: INA members

In addition to potential cost savings, a multi-utility provider can simplify the process of getting utilities connection for new developments, through a **single point of contact, preventing delays in the completion of the development**, reducing the need to interact with multiple parties, and reducing the time to connect (helping to deliver leaner construction cycles as we describe in Section 2.3 below).

In Box 2 below, we provide an example of these efficiencies and describe how a multi-utility provider was able to optimise the design of onsite infrastructure which generated a saving of over £100,000 in connection costs for the developer and end customer. Again, this is based on a case study provided by an INA member.

Box 2: Case study – multi-utility provider optimises design of onsite infrastructure

In early 2022, a NAV signed a multi-utility adoption contract for the provision of electricity, water, wastewater and fibre services to a site comprising 1,795 properties. Under this contract, a multi-utility provider will construct the site infrastructure, while the NAV, acting as a multi-utility operator, will own and operate the assets.

Given the NAV's enduring role in owning and operating the site, it has worked closely with the construction company on the design of the onsite network infrastructure.

A key focus has been to deliver a sustainable engineering solution that will facilitate optimal end customer outcomes, while ensuring that upfront costs for the developer are efficient as well as minimising the ongoing cost of operation. While any design solution must be considered within the constraints of the overall site topography and existing infrastructure, as a multi-utility offering, the NAV was able to assess the scope to flex the design for all infrastructure elements on the site.

A crucial constraint on this site is the existing wastewater pumping station, located to the south-east of the site, and a key requirement underpinning the wastewater network design was that it must be correctly engineered to match available capacity at the pumping station. Given associated costs, the NAV was keen to optimise the number of onsite pumping stations required and, therefore, split the site into two discrete areas that would drain to the eastern and western pumping stations respectively.

Within each of these areas, defined water catchment areas and associated detention basins were identified to accommodate run off in zones likely to be at risk of flooding.

In some cases, existing trees and ditches needed to be removed while in others, HV cables needed to be diverted and pylons needed to be removed. Acting in a multi-utility role facilitated this operation. It is estimated that, in total, the developer (and in turn the end-customer) benefitted from a saving of over £100,000 in connection costs.

Source: INA members

In addition to the direct cost savings discussed in the case study in Box 2, we understand that the **optimised design** of the onsite infrastructure in this case also contributed to wider benefits for water users. In the specific example above, the design of the onsite infrastructure significantly reduced the risks of site flooding without the need for significant additional infrastructure investment. The improved flood resilience was estimated to reduce the risk of site flooding from a 1-in-100 year event to a 1-in-150 year event.

The capacity for onsite infrastructure to reduce flooding risk is a significant issue as surface water flooding is the most common flood risk in England affecting more properties than any other type of flooding.³² The damage due to surface water flooding is estimated to exceed £300m per year, on average.³³ The risk is also increasing due to climate change and population growth. Therefore, there is a growing need to ensure that the risk is managed in new developments through high quality drainage systems.

This is an important area where NAVs – and the flexible, optimised, infrastructure solutions they can offer to developers – **can help contribute to broader environmental and flood resilience goals**. There are also additional benefits and externalities for end-consumers of reducing on-site flooding. For example, this may include

³² UK Government website, “Reducing the Risks of Surface Water Flooding: Terms of Reference”, [URL](#), last visited 22 July 2022.

³³ Climate Change Committee (July 2018), First the heat, then the rain: The problem of surface water flooding in England.

lower insurance premiums on houses, lower stress and anxiety about risk of flooding for customers, ease of selling houses close to banks, etc.

While the expected level of end consumer benefit will differ from site to site, these are still important wider benefits that NAVs can bring to the industry via the solutions they offer to developers.

Quality of service

NAVs and multi-utility providers can offer a seamless services from start to finish

Competition from NAVs and multi-utility providers allows customers to choose who they contract with to deliver the connection assets and operate the new network in terms of price but also quality of service provided.

During the construction phase, developers need to engage with multiple parties – local authorities, incumbent utility providers, ‘last mile’ infrastructure providers. The National Infrastructure Commission (NIC) found that the information flows between the main parties involved in delivering housing and utilities are often inadequate which can hamper the effective delivery of the infrastructure needed for new housing developments.³⁴ It also found that infrastructure providers in particular, face a cost to actively engaging with the number of planning authorities across the regions they supply. Increased competition from multi-utility providers and NAVs can offer developers more choice in terms of selecting a provider that is able and willing to help improve transparency and accuracy of information flows.

When operating as multi-utility providers, NAVs can **ensure that the connections design is optimised** for all utility connections and **avoid the need for additional communication and project management across different providers**. Developers are able to schedule work with a single point of contact which should ensure better coordination both of the onsite works and with the incumbent network owners. This can help deliver new development projects faster and more efficiently with associated economic and social benefits.

Another benefit compared to the regional monopoly incumbent model is that the **NAV/multi-utility provider can work for a developer on projects across all regions in England and Wales** (see Table 1 for the number of service areas served by each NAV). This further **reduces the burden of having to interact with different utility providers on projects in different regions** and helps to create closer relationships between multi-utility providers and developers.

The benefits of competition also extend to end-consumers. Similar to developers, **end consumers can benefit from having a single multi-utility operator adopt and operate all the utilities on a new development** as this creates a single point of contact for resolving any operational issues that may arise in the future.

In addition, competitive pressures on ‘last mile’ infrastructure operators mean that they should strive to provide their customers with an improved service such as **better customer service, better/more efficient billing or more efficient meter reading**. The box below highlights a few examples of measures implemented by NAVs to improve the billing process for their customers.

³⁴ National Infrastructure Commission (March 2020), Infrastructure to support housing.

Box 3: Examples of measures implemented by NAVs to improve customers billing experience

Based on our engagement with NAVs, they have highlighted examples of measures implemented by their businesses to improve the billing experience for customers. These include:

- 100% metered networks ensuring using the data gathered to accurately bill customers; calculating their bills based on the amount of water they have actually used, rather than an estimated volume.
- Automating direct debit reviews to ensure customers pay the correct amount for their water usage and helping to ensure customers do not find themselves in a debt situation or build up large amounts of credit.
- Automated account closure to ensure customers receive, and are able to pay, their final bill as efficiently as possible.
- A clear process to support the early identification of leaks and facilitate associated customer engagement to minimise potential costs and wasted water for customers.
- Additional training and diagnostic tools for advisors to support queries from customers.
- Review of debt management processes and associated support offered to customers, as well as the provision of tailored training focused on helping advisors identify signs of vulnerability, recognising the specific needs of our customers e.g., matching customer to WaterSure.
- Automating the process of raising refunds to ensure efficient and swift resolution for customers.
- Redesign of a NAV’s bills reviewed by CCW, Step Change and their customers.³⁵

Source: INA members

2.2. NAVs SUPPORT THE GOVERNMENT’S ENVIRONMENTAL AMBITIONS

The water sector can have a significant environmental impact. For example, the discharge of raw sewage can pollute rivers and aquifers. Water leakage contributes to depleting water resources and adds to greenhouse gas emissions due to the increased need for energy-intensive processes, such as water treatment and pumping, and the additional chemicals needed to treat water and wastewater. To mitigate these impacts, water and wastewater companies are required to maintain their networks and manage their operations effectively.

Reducing leakage levels is one of the top priorities for the water sector. Ofwat has set performance targets that would require water companies to reduce leakage by 16% by 2025.³⁶ The industry has committed to triple the rate of leakage reduction by 2030 and halve leakage by 2050 compared to 2018 levels.³⁷ Achieving these improvements will require innovation including use of new technologies and approaches to finding and fixing leaks.

To prepare for the expected impacts of climate change, in the form of severe droughts and depletion of water resources, as well as the impact of population growth, the Government has also indicated the need for reduced per capita consumption (PCC) of water. The NIC in their report ‘Preparing for a Drier Future’, recommended a reduction in the demand for water by



³⁵ (1) The Consumer Council for Water (CCW) is a statutory consumer body for the water industry in England and Wales, providing independent advice and support to water consumers e.g., helping resolving complaints against water companies and retailers. (2) Step Change is a charity providing free expert advice on debt management and money guidance.

³⁶ Ofwat website, “Leakage”, [URL](#), last visited 23 June 2022.

³⁷ WaterUK website, “Leakage”, [URL](#), last visited 23 June 2022.

around 1,400 million litres per day (Ml/d) by 2050. To achieve this may require smart metering (enabling innovative tariffs), reduced water wastage (i.e., reduced leakage) as well as Government interventions in areas such as tightening Building Regulations and water supply fittings regulations.³⁸ Yet, the recent Future Homes Standard consultation outcome published in January 2021 and proposals to update Building Regulations did not consider standards pertaining to water efficiency, neutrality and conservation.³⁹

NAV's can offer innovative and sustainable solutions benefitting the environment

To date, the main mechanisms for driving improvements in the environmental performance of incumbent water companies have come in the form of regulations, mandated targets and incentive mechanisms that reward good performance and penalise poor performance. Competition from NAVs can also play a facilitating role in **improving environmental standards and introducing innovations** in areas such as:

- Working with developers to **implement sustainable solutions** for water and wastewater in new housing developments.
- Achieving **lower leakage levels due to asset health** (newer assets) and improved asset management practices.
- Adopting **flexible sustainable drainage systems**. NAVs can offer flexible solutions for dealing with operation and maintenance of surface water drainage systems.
- Achieving **lower per capita consumption (PCC)** on new sites through good asset management practices (reducing leakage), non-potable water networks, combined with the latest metering technology and water efficient fittings.

Sustainable Drainage Systems (SuDs) are an important element that can both reduce surface water flood risk and help ensure storm water is not unnecessarily “lost”, or over-treated at wastewater treatment plants. SuDs adopt a natural approach to managing drainage.⁴⁰ The main benefits of SuDs may include:

- reducing the risk of flooding
- reducing the risk of sewer flooding during heavy rain
- preventing water pollution
- recharging groundwater to help prevent drought
- providing valuable habitats for wildlife in urban areas
- creating green spaces for people in urban areas

SuDs may rely on techniques such as: i) green roofs; ii) permeable surfaces; and iii) infiltration trenches.

There are a number of examples where NAVs have adopted innovative practices in relation to SuDs. One INA NAV member adopts all SuDs and drainage facilities on-site and integrates them with the rest of the water assets. This allows the company to effectively manage the water cycle, its resources and the environment, by having control of all the elements of the water system.⁴¹ It helps improve customer service, flood resilience and control and enhance the environment in which customers live. In Box 4 below, we have highlighted further examples of how NAVs can facilitate the use of SuDs.

³⁸ Artesia report for Water UK (2019), Pathways to long-term PCC reduction.

³⁹The Future Buildings Standard, Consultation outcome, [URL](#), last visited 28 June 2022.

⁴⁰ New sewerage sector guidance has been developed by Water UK and approved by Ofwat. It includes guidance for developers when planning, designing and constructing foul and surface water drainage systems. It will allow water and sewerage companies to adopt a wider range of sewer types, including some SuDs. The new rules were effective from 1 April 2020. The government is committed to reviewing the non-statutory technical standards for SuDS, published in 2015. These technical standards relate to the design, construction, operation and maintenance of SuDS. The review will explore whether updating the standards could help create SuDS that provide multiple benefits in addition to managing surface water runoff.

⁴¹Icosa Water website, “SuDs”, [URL](#), last visited 23 June 2022.

Box 4: Examples of innovative practices used by NAVs to facilitate adoption of SuDs

The INA's members have highlighted a few examples of innovative practices being applied by NAVs in relation to the adoption of SuDs:

- Offer to adopt attenuation components of sustainable drainage networks (elements that are designed to reduce the flow of stormwater into the drainage system). Our understanding is that this is not offered by all incumbents.
- Detailed review of the surface water drainage design to help provide innovative approaches to storage and flooding bearing in mind site specific constraints.
- Design review working as a two-way process directly with the drainage design consultant, which leads to a high-level of engagement and speed of response.
- Dedicated asset surveyors who regularly attend sites to monitor the construction of these attenuation assets. Feedback from developers reveals that incumbents do not do this to the same level, if at all.

Source: INA members

NAVs and other water companies are likely to incur additional costs associated with adoption of new measures to reduce the environmental impacts of their operation. Therefore, competition is likely to be a driver of better environmental outcomes to the extent that customers value these improvements and are willing to pay for the costs required to deliver these.

NAVs are incentivised to maintain good control over leakage on their networks

As the networks operated by NAVs are new, leakage levels are lower than on incumbents' broader existing network. However, **good asset management practices**, combined with more metering technologies and NAVs commercial focus on reducing leakage as far as possible, also contribute to them maintaining low leakage levels.

NAVs' business model on most sites means they are highly incentivised to reduce on-site leakage through the way their bulk supply charges with incumbent companies are set. In simple terms, NAVs buy water at the boundary point at the bulk supply charge and must supply a level of water to the customer. The more a NAV reduces leakage, the lower its input cost will be. As such, this gives NAVs a strong, natural incentive, to manage and limit leakage.

A more technical explanation is that Ofwat's guidance on calculating bulk supply charges for NAVs states that the incumbent should make an allowance for avoided leakage (i.e., the amount of leakage that the incumbent would have incurred if they were operating the site). Leakage represents a cost for a NAV because it is a volume of water that the NAV must procure from the incumbent but cannot bill to its end consumers. The NAV is, therefore, highly incentivised to manage actual leakage, at or below the notional level that is accounted for in the bulk supply charge calculation, to maintain or increase the operating margin it earns from operating the on-site infrastructure.

In Box 5 below we present a case study showing how leakage levels have been managed by one INA member.

Box 5: Case study on the impact of a NAV's metering strategy on leakage levels

One of the main principles of a NAV's metering strategy is that an AMR meter (Automated Meter Read) is installed at the connection to every single Domestic & Non-Domestic connection on this NAV's network.

- This NAV differs from typical incumbent Water Companies as every connected plot has a metered supply – i.e., 100% metering penetration.
- The volume of all water passing into the NAV site is metered at the point of connection, via a bulk meter. (Data logger).
- Unaccounted water (also known as distribution losses) can be simply calculated from the difference between the summed property meters and the bulk meter consumption, for the same period.
- The NAV estimates distribution losses on a site-by-site basis at the end of each month via a bottom-up approach.
- The NAV is also able to use the data loggers in a “live” operational incident – for example, using historical flow data, the NAV can set a site specific “alarm” for each network. Instead of relying on customer contacts to notify the NAV of bursts etc, (which we understand is the traditional incumbent route) these alarms help the NAV manage operational incidents far more efficiently and can accelerate its response on the ground.

Source: INA members

2.3. NAVS ARE KEY ENABLERS TO HOUSING GROWTH

In Section 1.2, we discussed the Government's ambitious target to build 300,000 new homes per year by the mid-2020s which implies 1,000,000 homes to be built between 2020-2025⁴² but also the fact that dwelling completion forecasts expect growth to be well below the 300,000 homes target.

As each home will require connections to water, wastewater, telecoms and energy networks, bottlenecks in the connection process can substantially slow down the completion of developments. The NIC has identified the lack of transparency and coordination issues as two key factors that delay substantially completion of new developments.⁴³

“NAVs have greatly improved the service that housebuilders receive, both by reducing the delivery time of water new connections and by improving the quality of those connections. They have made a big difference and are a positive addition to the water market.”

Property Developer – Barratt Plc

NAVs are well-positioned to remove these bottlenecks and thus enable future housing growth, indirectly contributing to the wider economic and social improvements that this growth will generate.

NAVs may be able to **complete water connections faster than incumbents**, speeding up, all else equal, the house completion process. Several developers have told Ofwat that NAVs install assets 25-50% quicker than incumbents. More widely, developers feel much more in control of the end-to-end construction sequence with NAVs and are more likely to recover losses from construction delays.⁴⁴

This happens because competitive differentiation, i.e., offering a transparent, efficient and effective connection, is their core business for NAVs. NAV's revenue base and financial viability is substantially reliant on providing services

⁴² National Infrastructure Commission (March 2020), Infrastructure to support housing, p.4.

⁴³ National Infrastructure Commission (March 2020), Infrastructure to support housing, p.10-11.

⁴⁴ Ofwat (July 2022), Competition in strategic investment: a high-level stocktake, para. 6.1.2.

that satisfies developers. When NAVs also operate as multi-utility providers, their enabling role extends beyond water connections, increasing the speed of completion for electricity, gas and telecoms connections as well.

The text box below provides a series of examples of how NAVs can provide **leaner build cycles**, again based on examples provided by INA members.

Box 6: Example of how NAVs can offer leaner build cycles

Lower lead times for open excavation

Leaner build cycles can be illustrated by the amount of time excavations are open. If a single multi-utility provider does the work, excavations will be open only until the three people team complete the job in a single trench lay. If three different companies would do the job, three different teams would do the work in three different subsequent instances, leaving excavation open for substantially more days, increasing overall costs including third party costs such as traffic management measures.

Another advantage of working with a multi-utility provider is that any variations required to the design of the networks can be dealt with via a single designer.

Flexibility in bond posting requirements

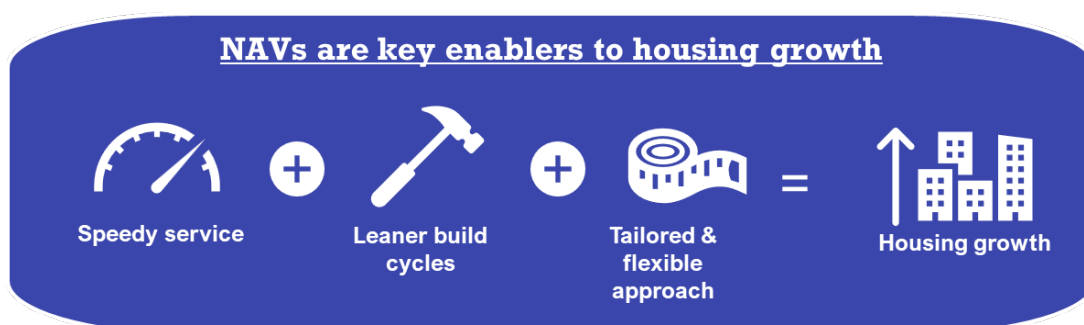
A developer wanted to arrange for the early adoption of primary roads within a new development of circa 5,000 new homes, to be built over 20 to 30 years. Under standard procedures, this would have required the developer to post a bond for millions of pounds until 50% occupancy is reached which could have taken as much as 10 to 15 years. A NAV was able to offer an alternative procedure which facilitated and simplified the overall process.

By additional oversight during construction, regular testing of the completed phases of the installation and contractual guarantees from the developer, a NAV was able to permit the immediate adoption of new rising mains without incurring excessive financial risk on the developer or risking unreliable service.

The NAV identified a tailor-made solution that went beyond the standard procedure offered by the incumbent thus speeding up the completion of the build cycle.

Source: INA members

We understand from INA members, that in addition to the examples provided in the text box above, other advantages NAVs can offer include: **speedier response to drainage designs** (with some NAVs able to provide outline approval within five working days); the provision of **all-inclusive offers** covering design and subsequent variations, inspections, chlorination, sampling, testing and coordination with fire authority; and no separate charge for design approval and onsite inspections.



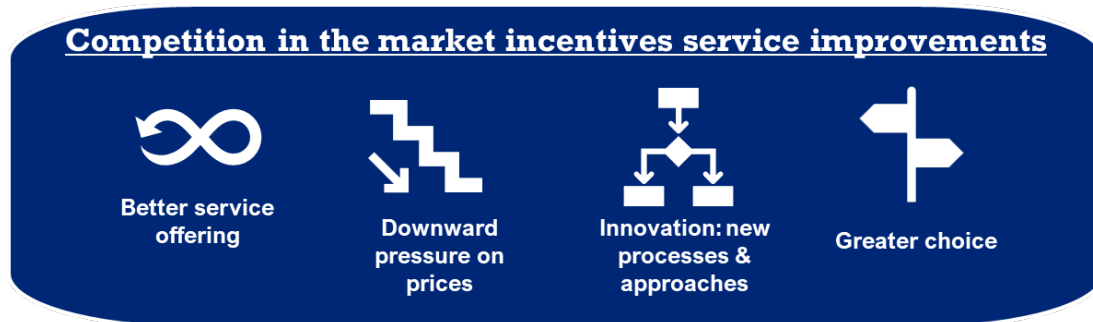
2.4. COMPETITION IN THE MARKET INCENTIVISES SERVICE IMPROVEMENTS

The benefits that competition can deliver are not solely based on new entrants bringing new solutions and better service to the market. The dynamic effects of competition mean that all companies operating in the sector will have the incentive to **improve their service offering**. The existence of multiple business models can **help to evolve processes and approaches** across the entire industry by disseminating new practices and solutions.

The introduction of competition for 'last mile' infrastructure services has given customers **greater choice**, which increases pressure on all providers, including incumbents, to fundamentally **improve the quality and cost** of their services. The existence of multiple business models can also help to evolve processes and approaches across the entire industry by disseminating new practices and solutions. It can lead to **downward pressure on prices** for

connections and operation of ‘last mile’ network infrastructure, quality of service improvements and environmental benefits from both incumbents and new entrants, via the mechanisms we have discussed in the sub-sections above.

Another benefit of competition, from the perspective of sector regulators, is that, as the market share of NAVs grows, they can increasingly serve as a comparator to the services that incumbents offer for their ‘last mile’ wholesale services to consumers and developers. This can help lead to better and more dynamic regulatory frameworks in the future. We note that Ofwat has signalled in its draft PR24 methodology that it expects to benchmark incumbent water companies’ household retail operations to NAVs.⁴⁵



2.5. WHO BENEFITS FROM INCREASED COMPETITION?

In the sections above, we have identified a number of benefits that competition in the ‘last mile’ infrastructure sector can potentially bring. It is also useful to be clear on who the main beneficiaries are.

As discussed before, competition for ‘last mile’ network services covers both contestable connection services and ongoing operation of the assets. These two areas largely determine who benefits from competition. The main beneficiaries of better connection services tend to be **developers** who can benefit from:

- **Efficiencies of scope** from connecting multiple utilities at the same time which can generate cost savings and having a single point of contact that can simplify the process of designing and building the connections.
- **Faster connections** from simplifying the process of designing and building the connections through having a single point of contact for all utilities which in turn may prevent delays in the completion of the development.

At the same time, it is not only developers that benefit from more timely and efficient connections. **Residents and businesses** that occupy the new developments also benefit from avoiding construction delays and cost savings where they are passed through to them by the developers.

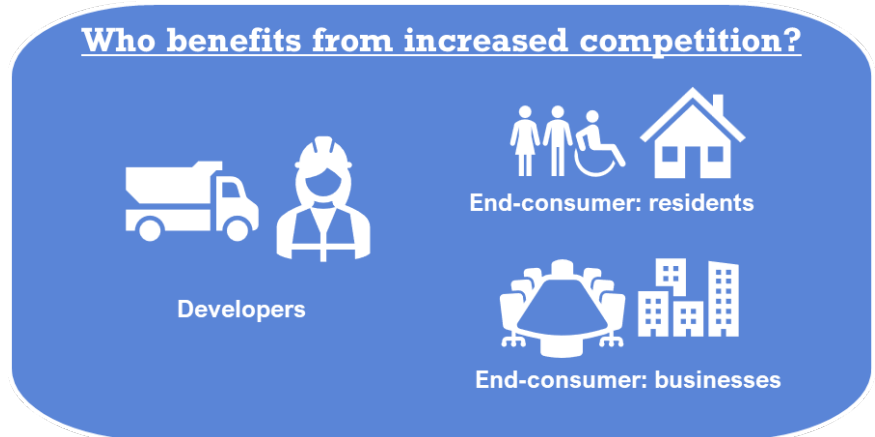
The benefits that derive from independent networks owning and operating ‘last mile’ infrastructure tend to accrue primarily to end consumers. These include:

⁴⁵ Ofwat (July 2022), Creating tomorrow, together: consulting on our methodology for PR24. Appendix 9: Setting expenditure allowances p.45.

- **Improved customer service**, for example via the use of the latest metering technology, better billing processes that ensure that customer bills are reflective of consumption and encourages reduced usage, and bespoke payment plans for those in need of support tailored to local conditions.

- Providing a **single point of contact**, in the case of multi-utility providers, for consumers for operational issues (such as, reporting interruptions, leaks, etc.).

- **Reducing the risk and impact of flooding** through better, more innovative and sustainable design and operation of drainage systems.



In addition, there are benefits that can be better described as applying to society as a whole. These are primarily environmental benefits that are associated with some of the positive externalities from NAVs' business models and optimised infrastructure solutions, including:

- **Better network monitoring and leakage management** that helps early identification of leak detection within the home, reduce overall water usage thus reducing emissions and depletion of water resources.
- **Sustainable drainage systems** that prevent water pollution, help recharge groundwater and provide habitat for wildlife.
- The practice of not using combined sewer overflows on their networks, thus reducing the likelihood of pollution incidents occurring.

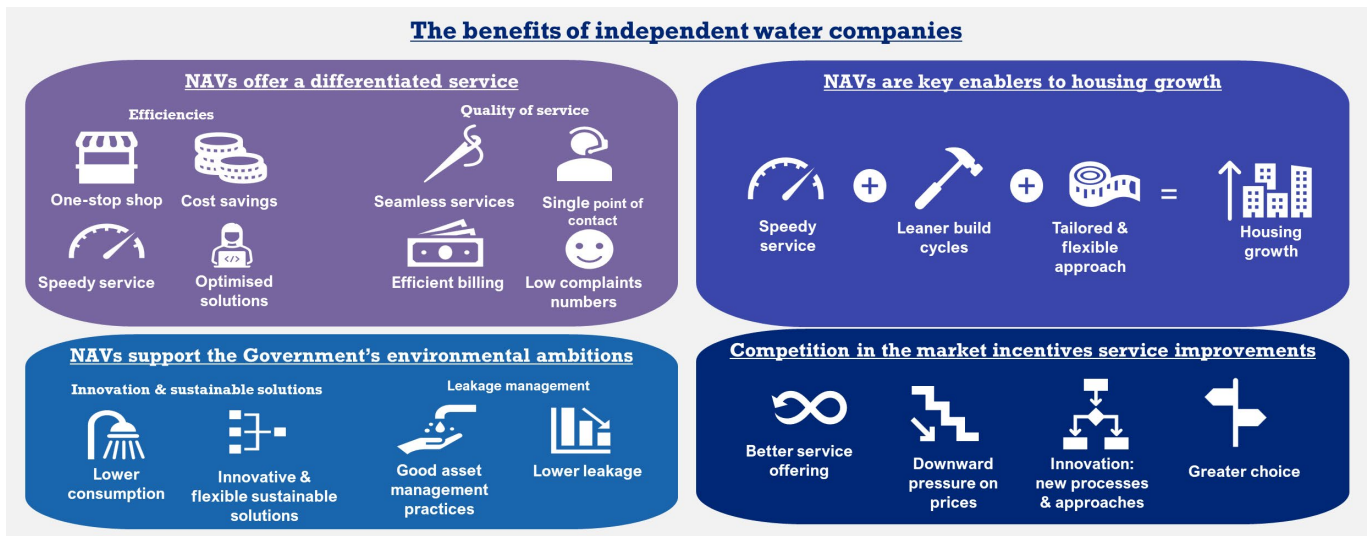
2.6. WHAT ARE THE KEY TAKEAWAYS?

In this section we explored the direct and indirect benefits that independent water companies can offer developers, end-consumers and society as a whole. Independent water companies are also able to contribute to addressing externalities in the sector such as from reducing on-site flooding, as discussed in Section 2.1.

As the UK faces more extreme weather events, such as floods in the winter and droughts in the summer, the water sector will need to adapt and find solutions to respond to these challenges to minimise disruptions for end-consumers and ensure they continue to have access to the water they need to enable their lives. In addition to local incumbent water and wastewater businesses, NAVs are another set of businesses that can provide the delivery mechanism for these solutions to the sector's challenges. This was discussed in Section 2.2 where we showed how NAVs can support the Government's long-term environmental ambitions.

Looking forward to the next 10 to 20 years, as demand for new housing increases and technology and innovation improve and further transform how society delivers and consumes essential services such as water supply, independent water companies may be able to unleash further benefits to end-consumers and society as whole. This may only be possible in a market where competition is truly able to thrive. In this context, it is worth policymakers ensuring that the legal and regulatory frameworks required to support competition in the sector are proportionate, flexible and adapted to the needs of today and tomorrow. We discuss this further in Sections 3 and 4 below.

Figure 5: Benefits of independent water companies



Source: CEPA

3. RECENT POLICY CHANGES SUPPORTING COMPETITION IN THE NAV SECTOR

In recent years, Ofwat has identified and implemented a range of policy reforms to help facilitate competition in the market for construction and operation of ‘last mile’ infrastructure in the water sector with the aim of encouraging competition and new entry.

In the light of the modest increase in NAVs’ market shares, Ofwat undertook a study in 2016⁴⁶ to identify potential barriers to competition in this market. This study identified two key barriers hampering the ability of NAVs to compete effectively with incumbents in the market:

- **Process/behaviour** – the requirements and processes around applying to be a NAV operator and the transparency, timeliness and effectiveness of information provision by, and communications with, incumbent water companies.
- **Pricing** – the margin that NAV operators are able to earn, including the underlying methodology of the incumbents’ charges underpinning those margins, and whether there is a level playing field between SLPs and incumbents regarding these charges.

Based on these findings, during the last few years, Ofwat has undertaken several policy actions aimed at facilitating a level playing field for NAVs competing in the market. These are summarised below.

Table 2: Major policy actions undertaken by Ofwat to promote competition in the market for ‘last mile’ infrastructure

Timing	Measure	Description
October 2017	NAVs market study	Consultancy study highlighting barriers to entry in the market for NAVs
May 2018	Bulk supply charging guidance for NAVs	Set out the approach that Ofwat expects to adopt if asked to determine on the charges set by an incumbent for providing bulk supply services to a NAV
2019	Review of incumbent company support for effective markets (RISE).	Ofwat issued an information request and letters to incumbent companies informing a programme to facilitate more effective markets. Ofwat used this evidence to review incumbent company processes and behaviours to identify areas of good performance and areas where more work is needed.
July 2019	NAV policy statement	Update to Ofwat’s policy statement for NAVs taking into account of changes in the sector
April 2020	Changes to “income offset” rules	Removed the discount offered by incumbents on the costs of on-site assets charged to developers. This was considered necessary to create a level playing field with costs charged upfront to developers by SLPs and NAVs
2020	D-MeX	Ofwat introduced the D-MeX framework to assess developer customers satisfaction with water companies. The framework rewards incumbent companies that perform well and penalises poor performers
January 2021	Further guidance on bulk supply charges for NAVs	Updated guidance following consultation on approach to regulating bulk supply charges and findings of study on incumbents’ current practices
February 2021	New monitoring and reporting requirements for NAVs	Revised approach on reporting requirements e.g., new regulatory reporting tables, that NAVs have to meet once they reach a certain size

⁴⁶ Frontier Economics (May 2017), “Study of the NAV market - Final report prepared for Ofwat”.

In May 2018, Ofwat introduced detailed guidance on bulk supply charges for NAVs, which sets out the approach Ofwat would expect to take if asked to determine on the charges that should be set by an incumbent water company for bulk supply services provided to a NAV in England and Wales. Bulk supply charges set by the incumbent water company are an important determinant of the ability of NAVs to enter and compete in the market as they affect the operating and profit margin that operators can earn.

In 2019, Ofwat launched a review of incumbent company support for effective markets looking at both the developer services market as well as the business retail market. Incumbent water companies and stakeholders were invited to respond to a detailed information request and Ofwat used this evidence to review incumbent company processes and behaviours to identify areas of good performance and areas where more work is needed.

One of the key findings of Ofwat's review in relation to the NAV market penetration was that the market remained small but was growing quickly. It also found that many incumbents' companies' support for NAV entry remained weak. The industry's NAV market behaviour improvement project, commonly known as the "NAV project", has contributed to some of the recent improvements seen in the market.

The introduction of D-MeX and new asset adoption arrangements, to name but a few, may have also helped drive support for the market. However, some of the benefits from these initiatives are yet to be realised as they are relatively recent changes in regulatory policy.

Another important change in regulatory rules affecting NAVs was implemented in England in April 2020. Under the pre-April 2020 connection charging rules, the charges recovered by incumbent companies from developers would not always be 100% of the costs incurred, given that developers were benefiting from the so-called "income offset". Under the new connection rules applicable from April 2020 in England, incumbents should recover from developers 100% of the gross on-site capex through requisition charges.⁴⁷ This change helps create a level playing field for new connections between incumbent companies and independent networks.

As a result of these policy reforms and wider industry efforts, the number of sites served by NAVs has increased significantly in the last four to five years. Despite this, the level of market penetration of NAVs is still considerably lower than that of independent networks in the electricity and gas sectors. This may be at least in part due to differences in the regulatory arrangements applied to independent networks in different sectors. We explore these differences in the next section with the aim of understanding what further changes could be introduced in the water sector to further stimulate competition and ensure growth in the NAV market in the future.

⁴⁷ The "income offset" continues to be offered by incumbent water companies through a discount on infrastructure charges that cover the cost of off-site works. The same "income offset" is reflected in infrastructure charges paid by the NAVs.

4. CROSS-SECTOR LEARNINGS FOR FURTHER CONSIDERATION

As discussed in Section 1, the level of NAVs activity in the water sector is relatively low compared to the energy sector, though we note that SLPs are increasing their presence in the new connections market.⁴⁸ In part, a smaller market penetration from NAVs could be explained by different policies and regulations in water compared to gas and electricity, where existing regulation seem to have generated, all else equal, higher market activity from IGTs and IDNOs.

Understating regulatory differences and similarities within the utilities sectors can help identify any useful learnings that may be applicable to the water and wastewater sectors. To this end, we compared: the appointment process, tariff regulation and the financial requirements needed to operate as an independent network company.

It is worth stating upfront that there is a fundamental difference between water and the energy sectors when it comes to ‘last mile’ infrastructure services which inevitably has an impact on the regulatory regime:

- in the water sector, a NAV acts both as the network operator and provider of retail services; while
- in the energy sectors, IDNOs and IGTs only act as network operators with consumers contracting separately for electricity and gas with retailers.

We also acknowledge that there are certain costs and possible risks associated with independent water companies, hence the need to have the necessary protections in place to protect consumers. With that in mind, when reading this section, we invite policymakers to consider whether the regulations currently in place for NAVs are targeted, proportionate and as supportive as they can be for the industry.

4.1. APPOINTMENT PROCESS

Ofwat and Ofgem processes for appointing NAVs, IDNOs and IGTs are fundamentally different. As shown in Table 3 overleaf, Ofwat grants appointments and variations on a site-by-site basis, requiring companies with multiple sites to submit separate applications for each site. In contrast, Ofgem makes a single decision to issue a general electricity/distribution license that allows companies to operate on a nation-wide basis. However, Ofgem requires a fee for the initial licence application, whilst Ofwat does not.

⁴⁸ In Ofwat’s “Creating tomorrow, together: consulting on our methodology for PR24: Appendix 3 - Developer services (p.11) it states that “The overall level of self lay provider activity is growing. There are now over 100 self lay providers delivering water site-specific developer services across England and Wales. And water connections made by self lay providers increased from 26% to 34% between 2018-19 and 2020-21. [...] The percentage of new water connections completed by self lay providers ranged from ~7% (South West Water), ~11% (Northumbrian Water), ~16% (Southern Water) to ~51% (Severn Trent England), ~52% (United Utilities) and ~59% (Wessex Water) in 2020-21.”

Table 3: Comparison of independent networks appointment process in water, gas and electricity

Process	Water	Electricity	Gas
Area covered	<ul style="list-style-type: none"> Site-specific 	Nation-wide	Nation-wide
Duration – new appointments	<ul style="list-style-type: none"> 85 working days for each site (115 days). Up to 5 working days for Ofwat to confirm if received application is complete 	<ul style="list-style-type: none"> 6 months (~180 days) as one-off to get a nation-wide licence 	<ul style="list-style-type: none"> 8 months (~240 days) as one-off to get a nation-wide licence
Duration - variations	<ul style="list-style-type: none"> 85 working days for each site (115 days). Up to 5 working days for Ofwat to confirm if received application is complete 	<ul style="list-style-type: none"> 0 days (for all future sites) 	<ul style="list-style-type: none"> 0 days (for all future sites)
Application fee	None	£3,200 (one-off)	£3,200 (one-off)

Source: CEPA formatting of (1) Ofwat (September 2018), Application guidance for new appointments and variations, (2) Ofgem (March 2022), Applying for a gas or electricity licence, (3) Law 2019 n.1023, The Electricity Regulations, p.36, and (4) Law 2019 n.1024, The Gas Regulations, p.36.

Although Ofwat refers to 85-90 working days to complete a new appointment, actual timings can differ substantially in practice.⁴⁹ The Ofwat process also has a ‘clock-stopping’ feature, whereby Ofwat stops counting the elapsed time (working days) until further information is provided by the NAV. As a result, the actual time to complete the appointment will typically be longer than Ofwat’s stated timescales. In addition to Ofwat’s time to process appointments and variations, NAVs also face significant timescales associated with incumbents providing key information on their networks for NAVs to be able to connect.

NAVs need to apply for every single site separately, whereas a new IDNO would only have to go through the process once before being given a nation-wide licence. This means that a NAV operating multiple sites is likely to face a longer overall appointment process compared to an IDNO or IGT, even if Ofwat’s process takes, in theory, 85-90 working days. For instance, a NAV submitting applications for four sites at four different times could face a process lasting up to 340 working days, which is longer than the 180 and 240 days process IDNO and IGTs face to serve any number of sites.

These estimates do not take into account the additional requirements NAVs need to comply with to prepare the application, which we understand from INA members can substantially increase time and costs of the approval process compared to energy and gas. For each site, NAV need to engage with the Environment Agency (EA), the Drinking Water Inspectorate (DWI), CCW and Market Operator Service Limited (MOSL); as well as agreeing bulk supply charges and obtaining information on off-site connection points with the relevant incumbent.⁵⁰ Any delay in responses from these stakeholders can be a bottleneck, slowing down the entire appointment process.

We understand that the Ofwat site-specific approach is derived from an interpretation of the legal requirements of the Water Industry Act 1991.⁵¹ Notwithstanding this, a nation-wide appointment process could offer some benefits for both Ofwat and NAVs. In terms of NAVs, the benefits would come from the reduction in the time needed to be allowed to operate a site and the reduction in the costs associated with preparing the variations submissions to Ofwat. It could also benefit Ofwat and consumers, notably:

- A site-by-site process we expect can be resource intensive for Ofwat. As the number of NAVs in the market, and the number of sites served by NAVs, is expected to grow, it is possible the appointment

⁴⁹ For example, we understand Ofwat took on average 173 and 138 days to process one of the INA member’s applications in 2020 and 2021, respectively.

⁵⁰ If a site is located in Wales, the applicant should contact Natural Resources Wales. Source: Ofwat (September 2018), Application guidance for new appointments and variations, p.9.

⁵¹ Ofwat (April 2015), New appointments and variations, a statement of our policy.

process may become unsustainable for Ofwat in the longer-term. Therefore, the benefits for Ofwat of a revised appointment process would come from the lower level of work required to process NAV submissions.

- A site-by-site process can make smaller developments uneconomical for NAVs, thus impeding the reach of NAVs benefits to these areas. As NAVs will incur the cost of the application process for every site, some developments can be too small to justify the application costs. A nationwide process would remove these costs, potentially extending competition between NAVs and incumbents to smaller developments and allow NAVs benefits to reach more areas.

4.2. TARIFF REGULATION

Incumbent charges to independent network companies

Independent network companies need access to incumbent resources and/or networks to serve their customers. In water, NAVs in the majority of cases pay the incumbent bulk supply charges to access incumbents water supply and transportation up to the onsite infrastructure, whilst in electricity IDNOs pay incumbent charges to cover the cost for distributing electricity up to the 'last mile' infrastructure. In gas, there is no charge between GDNs and IGTs as shippers pay both directly. In particular:

- Ofwat's guidance on bulk supply charges suggest a "wholesale minus" approach where incumbents charge NAVs based on the wholesale tariffs applicable to the end consumers present on a specific site, but after deducting all the costs the incumbents expect to avoid due to NAVs operating and maintaining the 'last mile' infrastructure.⁵²
- IDNOs pay DNOs a discounted Distribution Use of System (DUoS) charge to reflect that IDNOs operate the 'last mile' network connecting to end-users. DUoS charges and the discount are based on industry wide methodologies developed by several stakeholders (including DNOs and IDNOs) and agreed through a multi-party contract (Distribution Connection and Use of System Agreement (DCUSA). These are known as Common Distribution Charging Methodology and Price Control Disaggregation Model.⁵³
- In gas, shippers pay a Connected System Exit Point charge to GDNs reflecting the cost of transporting gas on their network until the entry point on the IGT network and pay IGTs a separate charge for gas transportation on its local network.⁵⁴ As such, cross sector learnings from gas are limited.

Ofwat and Ofgem approaches from NAVs and IDNOs are based on a similar principle: allowing incumbents to recover the cost of the service they provide to independent network companies, whilst ensuring that they reflect a fair assessment of the costs the incumbent avoids as a result of the NAV operating the site (which determines the operating margin the NAV will receive for supporting the costs it incurs in operating the site).

The level of transparency and standardisation of these charges within the respective industries is very different though. On the one hand, the creation of DCUSA in the electricity sector has completely replaced bespoke bi-lateral contracts and established a shared charging methodology across the entire industry, giving IDNOs full transparency on how their charges are set. Notably, a recent proposed modification of the methodology

⁵² Ofwat (January 2021), Bulk charges for new appointees – guidance on our approach and expectations, Section 2.

⁵³ Ofgem (March 2021), Distribution Connection and Use of System Agreement (DCUSA), DCP266 – the calculation and application of LDNO discounts, p.1.

⁵⁴ Ofgem (May 2013), Relative Price Control Guidance, paras. 2.2-2.4.

underpinning the IDNO discount was dismissed by Ofgem precisely because the transparency of the DCUSA industry-wide decision process showed the potential risk of margin squeeze.⁵⁵

On the other hand, Ofwat's bulk supply charging guidance and the standard bulk supply agreement template developed by Anglian Water have helped reduce the informational barriers and inconsistencies that NAVs have historically faced when negotiating arrangements with incumbents. However, some challenges persist:

- NAVs still report lack of transparency on specific areas of bulk supply charges where Ofwat's guidance leaves a degree of freedom of interpretation, such as the detailed methodology underpinning the determination of avoided costs.
- Different approaches to estimating avoided costs among incumbents can result in different levels of bulk supply charges for NAVs.
- NAVs have also reported that the bulk supply charges can vary substantially from one region to another and in some cases the level of those charges makes it uneconomic for a NAV to operate in some of those regions.⁵⁶

Additionally, although there is a common standard template for a bulk supply agreement, not all incumbents use this template and consequently, NAVs *“need to negotiate the terms of each bulk supply agreement with the relevant the relevant appointed water company for the connection and ongoing supply of water or sewage treatment. [NAV]s also need to have this bulk supply agreement with them in place before [Ofwat] can grant a new appointment. Each bulk supply agreement is negotiated separately and different approaches have been used successfully in different situations”*.⁵⁷ This can delay the process of new appointments.

Overall, the scale of IDNOs activity under an industry agreed common methodology highlights the potential gains of a more transparent and centralised approach for the water sector.

Independent network charges to end users/suppliers

Regulation governing charges that independent network companies apply to end customers is similar across sectors and it is based on the same principle: independent network companies cannot charge more than the incumbent would for the same service.

In water, this is called the “no worse off” principle. It does not require NAVs and incumbent to have the exact same services and charges but simply ensures that consumers pay, at worst, a similar amount to the one the incumbent would have charged in absence of the NAV. NAVs charges can, in principle, exceed incumbents' provided that they demonstrate they are providing a better service⁵⁸ or be lower than the incumbent's (on the assumption the NAV is able to supply the site at a lower level of cost).

In electricity and gas, Ofgem has a Relative Price Control ensuring IDNOs/IGTs tariffs do not exceed the level of incumbents' equivalent charges.⁵⁹ For IGTs, charges are also subject to a cap and floor limiting fluctuations to +/- 5% even if incumbents vary by more. Cap and floor are subject to annual inflation adjustments.⁶⁰

⁵⁵ Ofgem (March 2021), Distribution Connection and Use of System Agreement (DCUSA), DCP266 – the calculation and application of LDNO discounts.

⁵⁶ Of course, this would be justified if the incumbents' charges are considered adequately cost reflective as it would signal that incumbents are able to supply the 'last mile' services more efficiently.

⁵⁷ Ofwat. [Bulk supply agreements](#).

⁵⁸ Ofwat (July 2019), new appointment and variation applications – a Statement of our policy.

⁵⁹ Ofgem, Electricity Distribution Licence, Amended Standard Conditions, Section BA2.

⁶⁰ (1) Ofgem (July 2003), The Regulation of Independent Gas Transporter Charging, Final Proposals, para. 3.4. (2) Ofgem (May 2014), Modification to Special Condition 1 of the Independent Gas Transporters' Licence.

4.3. FINANCIAL REQUIREMENTS TO OPERATE AS AN INDEPENDENT NETWORK COMPANY

Ofwat and Ofgem impose several financial requirements on independent network company candidates before granting new appointments/licenses, to ensure the candidates have sufficient financial resources to finance their duties and obligations.

Due to the site-by-site licensing approach, Ofwat assesses both the candidate's financial position and the financial viability of the site in its own right.⁶¹ In practice, this means that Ofwat assesses:

- that “(reasonably) projected costs of operating the site will be covered by the (reasonably) projected revenues”; and
- that the candidate has sufficient levels of finance to deal with unexpected cost pressures.

To this end, Ofwat sets a minimum level of financial security equal to the annual level of operating costs required to supply the number of connections projected in two years' time. This level of security can be provided through a Parent Company Guarantee, loan facility or bond.⁶² In case of a NAVs' default, Ofwat will apply the special administration process that applies to incumbents' default.⁶³

As NAVs are also the end-user supplier, Ofwat's financial requirements need to be compared with both of Ofgem's requirements for independent network operators and retail suppliers. In particular:

- At network level, financial requirements are very similar between gas and electricity and are standard conditions of the distribution/transport licence. Beyond general provisions on “restriction of activity and financial ring fencing” and “availability of resources”, network operators are required to maintain an investment grade credit rating at all times or, with prior written permission by Ofgem, other appropriate arrangements (e.g., keep well agreements with parent companies).⁶⁴ Credit requirements can be different depending on companies' size, to avoid being unduly burdensome on smaller companies. In electricity distribution, IDNOs with less than 500k connected supply points for which there is no direct or parent company's credit rating are required to hold “cash in escrow or an on-demand bond issued from a third party with an investment grade credit rating of a value of no less than six months operating costs and six months asset replacement expenditure”.⁶⁵ In gas, Ofgem can give derogations to smaller licensees from the obligation to retain the investment grade rating.⁶⁶
- The electricity and gas retail market has been experiencing extraordinary failure rates amongst suppliers over the last few years. Ofgem has reacted by launching consultations and issued decisions aimed at strengthening financial resiliency for suppliers built around (i) strengthening supply license rules on direct debits, (ii) protecting consumer credit balances and green levies when suppliers fail, (iii) introducing stress testing and (iv) extending the assessment period for new supply applications.⁶⁷

⁶¹ While Ofwat has expressed the intention to reduce the relevance of site-specific viability principles, they are still part of the assessment Ofwat can do when there is a need case for it. Ofwat website, “Financial Viability”, [URL](#), last visited on 22nd June 2022.

⁶² Ofwat (July 2019), New appointment and variation applications- A statement of our policy, Section 5.2.

⁶³ Ofwat, Statement on our approach for assessing financial viability of applications for new appointments and variations, section 3.3, p.13.

⁶⁴ (1) Ofgem, Electricity Distribution Licence, Amended Standard Conditions, Schedule BA3.1, p.5. (2) Gas transporters license: standard conditions, SLC 43-47.

⁶⁵ Ofgem (January 2005), Regulation of Independent Electricity Distribution Network Operators, p.30.

⁶⁶ Ofgem (July 2003), Regulation of Independent Gas Transporters Charging, para. 5.25.

⁶⁷ For example: (1) Ofgem (December 2021), Action Plan for retail financial resilience, (2) Ofgem (June 2022), Statutory Consultation, Strengthening fixed direct debit rules, (3) Ofgem (June 2022), Policy Consultation: Strengthening Financial Resilience.

While these requirements represent a cost for companies (and potentially a high one for smaller operators), they are necessary to ensure that end users are protected. Ofgem and Ofwat introduced financial requirements to ensure that companies have sufficient financial resources not only to carry out their day to day operations but also to be resilient to stress events.

Recent energy supplier failure and the related tightening of the requirements show that these markets cannot be taken as a reference to understand the appropriate level of financial requirements in the NAV market. While NAVs are less exposed to sudden and persistent price shocks than electricity and gas operators, lowering financial requirements would still make NAVs less resilient to stress events and potentially increase the risk of default.

Nevertheless, Ofwat may wish to consider how it can strike the right balance between the level of customer protection and the level of burden that its requirements may impose on NAVs.

4.4. OTHER CROSS-SECTOR LEARNINGS AND POLICIES TO FACILITATE COMPETITION

Other regulatory provisions (or lack of thereof) that we understand from INA members can cause issues for the NAV market, relate to DWI's water zone definition and provision of emergency services.

DWI regulation foresees water sampling, inspections, regulatory oversight and reporting are done on a site by site basis because each of these is considered as an individual network. Given the number of sites served by each NAV and expected growth in sites served by NAVs in the future, NAVs incur relevant and repeated costs for these activities even when there is a single source of water which might come from incumbents' reservoirs. Merging water zones when there is a common water source could easily reduce the instances in which NAVs incur these costs without having a detrimental impact on public safety.

In gas, there is a special licence condition obliging GDNs to provide emergency services through a single emergency telephone number which also integrates services required on IGTs or GDN networks.⁶⁸ While some water incumbents are keen to integrate emergency response with NAV networks others are not willing to as there is no legal obligation to do so. As a result, NAVs need offer such emergency response on their site, resulting in higher costs. Where costs are significant (e.g., smaller sites), this can make NAVs less advantageous to end-consumers and may therefore act as a barrier to the full development of the NAV market. We understand that some incumbents offer such services to NAVs via their menu-based approach to bulk supply charges, but it is not offered consistently across the entire industry.

4.5. WHAT ARE THE KEY TAKEAWAYS?

In a nutshell, the comparison shows that:

- A more streamlined appointment process that departs from the site-specific approach, similar to Ofgem's, could reduce the overall time required for a potential NAV to obtain the appointment for the first site and subsequent variations to operate additional sites. This would not only avoid cost duplication related to NAVs application but also allow a faster and wider penetration of NAVs benefits for developers and consumers, whilst potentially reducing resource burden for Ofwat.
- A common and detailed charging methodology for bulk supply charges combined with a common bulk supply agreement could improve transparency, as well as facilitate the interaction between incumbents and NAVs, fostering the expansion of the NAV market and the benefits they bring.

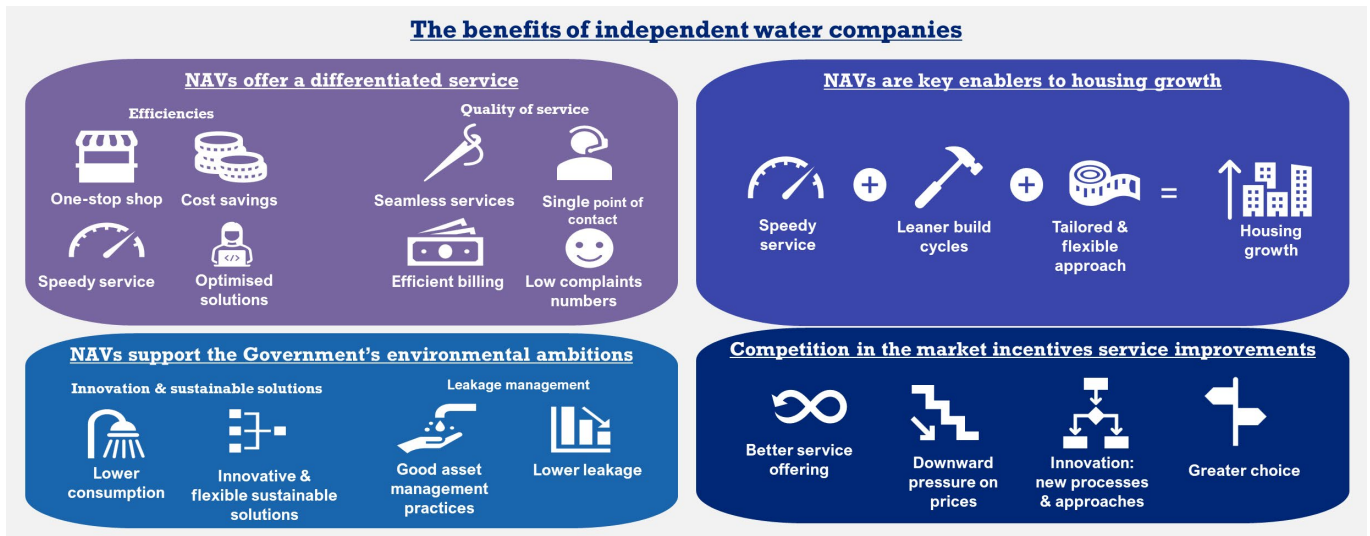
⁶⁸ Ofgem, Gas Transporter Licence, Standard Special Condition 8.

5. NEXT STEPS FOR THE INA AND NAVS

In this report we have discussed the benefits of competition for the provision of ‘last mile’ network infrastructure services in the water and wastewater sectors in England and Wales. We provided evidence and examples showing the growth of NAVs in the sector and the benefits they offer to developers, end-consumers and society as a whole. We also discussed that to unlock the NAV market’s full potential, a series of policy reforms may need to be considered to further support competition.

A summary of the benefits of independent water companies is presented in Figure 6 below.

Figure 6: Benefits of independent water companies



Source: CEPA

Looking forward to the next 10 to 20 years, as demand for new housing increases and technology and innovation improve and further transform how society delivers and consumes essential services such as water supply, independent water companies may be able to unleash further benefits to end-consumers and society as whole. This may only be possible in a market where competition is truly able to thrive. In this context, it is worth policymakers ensuring that the legal and regulatory frameworks required to support competition in the sector are proportionate, flexible and adapted to the needs of today and tomorrow.

The INA and NAVs would now like to invite policymakers to consider how further competition could be facilitated in the sector; this includes whether legislation and the regulations currently in place for NAVs are targeted, proportionate and as supportive as they can be for the industry. We hope that the findings and discussion in this paper can help to facilitate this debate.

Appendix A **GLOSSARY**

Terms	Definition
BEIS	Department for Business, Energy & Industrial Strategy
CCW	Consumer Council for Water
CSEP	Connected System Exit Point
DECC	Department of Energy & Climate Change
Defra	Department for Environment, Food & Rural Affairs
DCUSA	Distribution Connection and Use of System Agreement
D-MeX	Developer services measure of experience
DNO	Distribution Network Operator
DWI	Drinking Water Inspectorate
EA	Environment Agency
GNO	Gas Network Operator
ICP	Independent Connection Provider
IDNO	Independent Distribution Network Operator
IGT	Independent Gas Transporter
IGTAD	Independent Gas Transporter Arrangements Document
INA	Independent Networks Association
NAV	New Appointee and Variations
NIC	National Infrastructure Commission
Ofgem	Office of Gas and Electricity Markets
Ofwat	Water Services Regulation Authority
PCC	Per Capita Consumption
RIIO	(Revenue = Incentives + Innovation + Output). The Ofgem performance-based regulatory framework, used to set price controls
SLP	Self-Lay Provider
SuD _s	Sustainable Drainage Systems
WIRS	Water Industry Regulation Scheme (Lloyds Register)



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