

Bilateral markets call for information
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M: [REDACTED]

By email to: bilateral.markets@ofwat.gov.uk.

6 September 2019

Dear Sir/Madam,

Bilateral markets – call for information

Thank you for providing Yorkshire Water with the opportunity to contribute to the call for information relating to a potential future bilateral market for water trading. Our responses to the questions raised in the call for information are appended to this letter.

Yorkshire Water's Long Term Strategy is to be self-sufficient in water supply and ultimately to be able to export water to support national water resilience. We also acknowledge the current level of water trading across England and Wales has largely remained at the same level for a number of years and that this position is not sustainable when facing into the immense and pressing challenges driven by forecast population growth and extreme climactic change.

Yorkshire Water are supportive of the development of new markets, as demonstrated by our sustained positive contributions to the non-household retail market, from its inception through to go-live. We are now on a path of continual improvement as part of our business as usual.

We take our unique obligations as a regional wholesaler extremely seriously and understand the impacts we can have on the effective and efficient operation of such markets and the individual participants within them.

We feel it is important to emphasise a key principle that needs to be preserved when considering new markets on our sector; namely that all customers, whether household or non-household, should be confident in the resilience and quality of their water supply and that such provision is value for money. We have some concerns that the bilateral market model as presented, may not be wholly compatible with this principle and may create new risks that all customers are not offered equal levels of resilience, service and efficiency.

The 'big-bang' liberalisation of the non-household retail market in April 2017 changed accountabilities overnight for a specific part of the water and wastewater services value

chains. Two years on, and we continue to embed many of the market processes and procedures and make enhancements to participants responsibilities and the associated codes. We, and many others, would quite rightly classify the retail market as still immature.

The market mechanisms for water trading and demand side services in the bidding market could be instead described as organic. Growth in the bidding market should emerge over time, as efficient and innovative alternatives and additions to the incumbent's legacy resources and conventional methods are sought and discovered. We believe the Government and Ofwat should allow time for the emergent bidding market to reach a greater level of maturity before considering the implementation of a bilateral water trading market.

Should the development and rollout of a bilateral market become policy, Ofwat should consider how it brings all interested parties together to develop policies, procedures and codes that direct how this market should operate. In our opinion, a future bilateral market could be more complex to implement and operate than the bidding market, whilst it would still require effective and robust protections to be put in place to manage the public health and environmental risks, both identified and not yet identified.

We support Ofwat's view that should the bilateral market be progressed, consideration should be given to a phased, controlled implementation approach, initially focussing on the supply and import of efficient raw water to the incumbent's treatment and distribution network on behalf of the retailer(s). We consider this offers the sensible protection in addressing understandable public health and water quality concerns that otherwise may arise.

Should treated water imports from third parties or secondary water companies be considered in the future, it is imperative that the supplier of the treated water is subject to the same stringent drinking water standards and regulations and are required to follow equal management and monitoring regimes as current licensees.

We believe that the bidding market model (in the form of twin-track trading and demand side solutions) will offer a greater certainty the around level of security of supply and resilience for all customers than the bilateral market. The bilateral market has potential to offer a subset of non-household customers an economically advantageous tariff. However, it does not serve to increase the resilience of supply anymore so that the bidding market. We suggest to that time is given to allow the bidding market to embed and make a greater effect before considering the implementation of a bilateral market.

We have questioned some non-household retailers about their intentions in respect to a future bilateral market, and understand based on a limited sample, working towards that market is not considered high in retailer's current priorities. We believe quantitative research should be carried out at a sector level to appraise the potential size and value of this market that may augment the value of a parallel bidding market. We would be interested in representing wholesale companies in such research ahead of the Government and Ofwat finalising policy to advance a bilateral market.

We trust you find our responses appended helpful in your further work, and should you wish to discuss any parts of our submission in more detail, please contact me on the email address above.

Yours faithfully,



Colin Fraser
Regulatory Strategy Manager,
Yorkshire Water

Annex

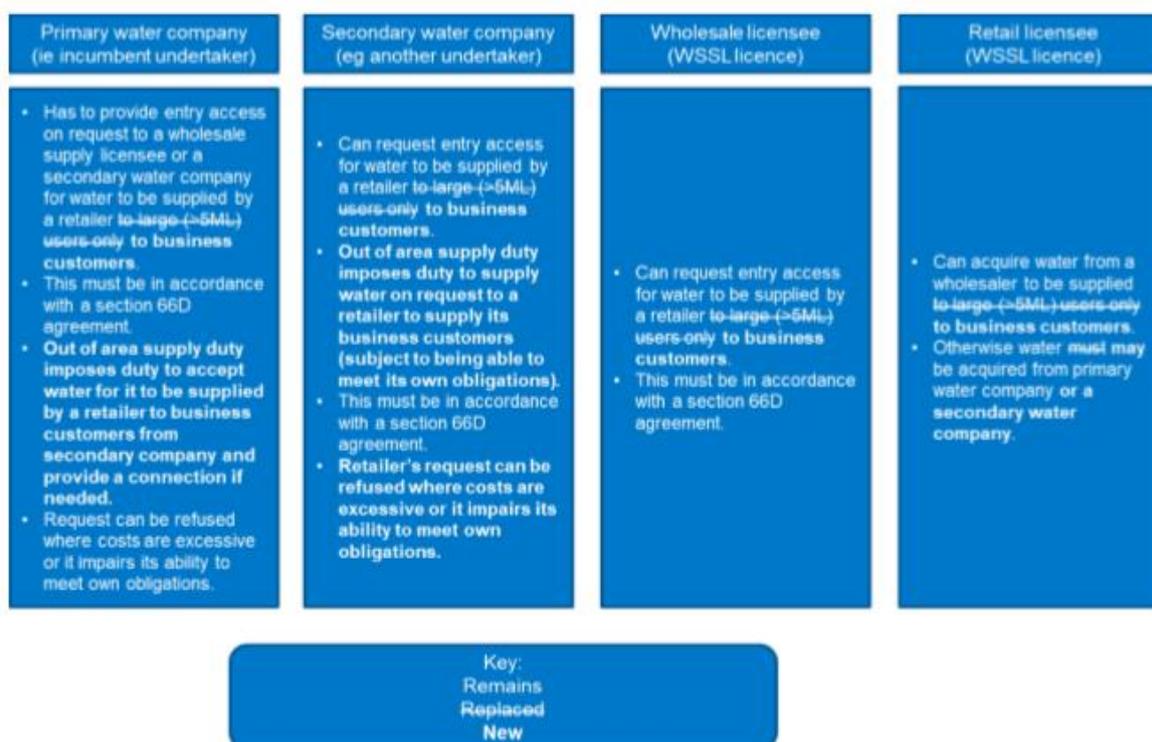
Bilateral markets – call for information: Information from Yorkshire Water

Market Design Context

Before providing feedback to the specific questions posed in Ofwat’s bilateral markets call for information, we would like to lay out some of the key characteristics we see a future bilateral water trading market may have in comparison to water trades enabled through the emergent bidding market.

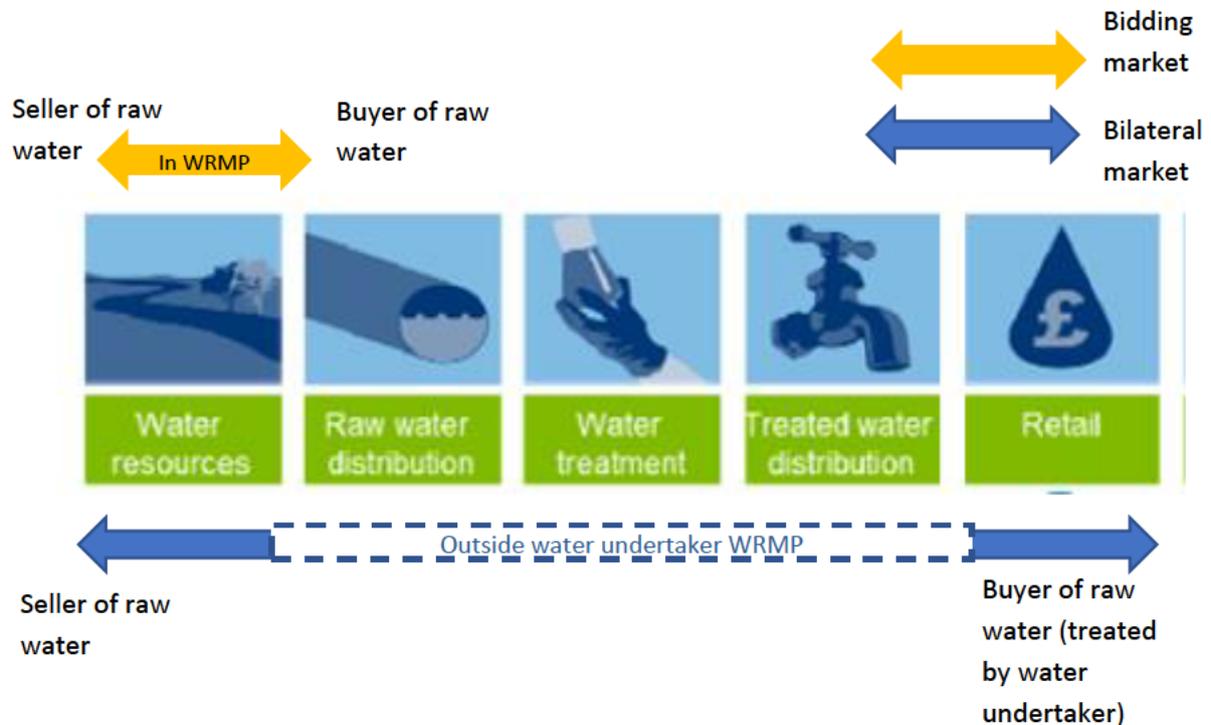
Firstly, we consider the commercial and contractual relationships between parties and what bearing that may have on the relative advantages and disadvantages between the bilateral market and water trade aspects of the bidding water market.

Ofwat helpfully provided in its call for information publication a simple graphic (re-presented below) showing the responsibilities of the key market participants and describes two approaches, one involving the primary water company providing entry access to a third party water resource provider upon request from a WSSL (suitably licensed), and one involving the primary water company providing entry access to a secondary water company (a cross border trade), again on behalf of a WSSL to supply to its business customers in the primary water company’s region.



Building on this, we can consider the trades in the context of the water value chain to highlight the primary contractual relationships and the incentives for trading. Ofwat describes a key benefit of a future bilateral market to be the substantial reduction of the

ability of water undertakers to act on any incentive to discriminate against third parties under existing market mechanisms. We note this to be an advantage the bilateral market has over the bidding market, where we assume the bidding market is not operating effectively or indeed is considered to be 'failing' either regionally or nationally.



Along similar lines, there may be a potential disadvantage to the generality of customers from bilateral trading where the retailer(s) acts on imperfect financial incentives to bring inefficient third-party water resources to the market, indirectly discriminating against other retailer's business customers and all household customers. A new water resource that is more efficient than the average efficiency of the incumbent's totality of existing water resources (including resources delivered via the bidding market) may in practice offset an incumbent's local water resource that is more efficient than the third-party resource. When taken in the round, the average efficiency viewed at a systems operator level would have worsened and the generality of customers may be exposed to increased costs over time.

For both the bidding and bilateral markets there is value in understanding the possible quantum of such risks and the potential impacts on customers. A sub-optimal bidding market may allow some opportunities to be lost for customers, and a sub-optimal bilateral market may create increased costs to customers.

Therefore, we would recommend Ofwat considers how third-party water resource providers and licensees are obliged to evaluate the whole life costs of proposed trades (and possibly the natural capital net gain) and do not simply consider the recovery of their marginal costs or the pence per m3 advantage over the incumbents regionally averaged non-household wholesale tariffs.

We envisage water undertakers (as the primary water company) may have a significant part to play in helping the commercial parties make such complex assessments. Involvement and support may well alleviate risks that the undertaker is required to resort to its ability to reasonably refuse network access requests where costs are excessive, or it impairs the undertaker's ability to meet its own obligations.

Question 1

A number of stakeholders have previously expressed interest in supplying water resources, either through the bidding market or in a future bilateral market. There are also a large number of WSSL licensees. We are interested in stakeholders' views on:

- a) Whether, in principle, they would be interested in selling water resources via means of a bilateral market;**
- b) Whether, in principle, they would be interested in purchasing water resources via means of a bilateral market; and**
- c) Whether, in principle, they would be interested in playing some other role (such as providing water treatment services or providing other services) to support a bilateral market.**

Yorkshire Water's Long Term Strategy is to be self-sufficient in water supply and ultimately to be able to export water to support the future national water resilience position. To achieve this aim, we do not believe this requires the formation of a bilateral water trading market at this time. Sector level initiatives are now in progress to facilitate strategic incumbent to incumbent trades to try and offset the need to additional water supply capacity at a national level to face into the dual challenges of climate change and population growth.

The emergent water bidding market should act as a catalyst to drive new and efficient sources of water at a tactical level within regions supporting companies future water resource management plans. The bidding market as a concept aligns to the twin-track approach recommended for the sector by the National Infrastructure Commission, in that it strives to seek both supply and demand side solutions that could bring additional innovation and benefits to our customers and the environment.

In contrast, the bilateral market is focused solely on supply side solutions for the benefit of a subset of customers (business customers). However, in our capacity as the regional incumbent (primary water company in Ofwat's bilateral model), should the bilateral market proceed in the future we would be interested in multiple roles as follows:

- Providing services to secondary water companies or third-party water resource providers
 - Network access
 - Water treatment and distribution

- Metering and data collection services
- Sampling services
- Providing services to non-household retailers
 - Water supply of last resort.
 - Metering and data collection services

It should be noted that where a water company has a 'grid', if a Retailer sources a supply in one area of an incumbent's region, it is generally unlikely that the actual water sourced will be available to that Retailers non-household customers in another locality within the region.

The water, whether treated or untreated, will enter the primary water company's system at the nearest point available to the resource provider. It will then be either transferred along a raw water network for treatment at the most appropriate water treatment works, or if treated water be blended into the primary water companies existing supply. The non-household customer receiving the water will receive water from the company's nearest water supply point and not that supplied by the retailer, if it is from a different geographic area.

For clarity, we do not envisage any form of water network being constructed to transfer a retailer's treated water supply from one area of our region to its non-household customer(s) in another area of our region. To this end the non-household customer will receive the same water and be subject to the same levels of service as other properties in the vicinity regardless of the fact that the non-household customer's retailer has provided water in a different geographic region. In this respect the retailer providing a water source will not provide additional additional resilience to its customers supply.

The cost of the infrastructure required to connect to a water company's raw or treated water network is not insignificant. Ofwat implies that the primary water company should provide the connection under its duty to introduce water into its network. It is not clear how the primary company would recover the costs for the initial capital outlay and ongoing operation and maintenance, whether this would be applied solely to the retailer who has put the bilateral agreement in place, or whether all retailers or the widest generality of customers would bear this cost in the long term.

It seems to go against the cost-reflectivity principles that we apply in other markets (for example the new connections market) to use an averaging approach over a customer base who is not in receipt of the primary benefits of a market.

We have anecdotal evidence from recent engagement we have had with some of the non-household retailers operating in our region that they are currently not looking to explore or exploit a possible bilateral market in the near future. There certainly seems to be interest in the concept, but current priorities for the retailers we have spoken to are resolving present market frictions between retail market participants, resolving data issues and improving customer switching rates and minimising attrition.

Question 2

Owners of water resources currently have an existing route to market through the bidding market, while Retailers can contract for water resources with the regional water company. We are interested in stakeholders' views on:

- a) the advantages or disadvantages bilateral markets might have compared with the trading arrangements currently available to them;**
- b) how bilateral markets could complement or conflict with existing mechanisms available for water trading; and**
- c) whether they have any preference between the existing arrangements and bilateral markets (if so, why).**

Yorkshire Water recognises that there are many similarities between the bidding market and a potential bilateral market in relation to water trading. We also acknowledge a number of risks associated with the introduction of new water resources into an incumbent's network and understanding of implications for the security and quality of services for all water customers:

Examples of possible disadvantages and/or risks that need to be avoided or minimised include:

- The socialising of costs to enable access to the network for secondary water companies (which could include costs for additional water treatment) to all customers.
- Maintaining supply to bilateral customers under contractual liabilities may increase resilience risks to other customers (household and non-household).
- Risks of periods of relative over abstraction or under compensation, possibly under periods of drought, impacting the environment and possibly other abstractors. The Environment Agency (EA) would need to consider impact scenarios before providing the resource provider a consumptive licence. We would welcome engagement with the EA on its thinking around a consumptive and non-consumptive abstraction hierarchy that recognises societal impacts (or six-capitals) in such scenarios when a future water resource market is in place.
- Bilateral non-household customers may face supply or bill risks they are not aware of, or that are not acceptable to them. This will be dependent on the contractual terms 'wholesale' authorised licensees offer their customers.
- The PR19 methodology describes at a high level how the access price mechanism will work, including the introduction of an equalisation payment to ensure that efficient third parties could compete with the water companies. With the protection of water companies' RCV investment until 2020, the practical effect of these measures may have the effect of confining most entry opportunities to new demand.

- For raw water transfers the framework must take account of the risks of spreading Invasive Non-Native Species between catchments. We would welcome engagement with Natural England to ensure suitable protections are put in place within the regulatory framework and that bilateral contracts include mandatory provisions that such protections are maintained in perpetuity.
- The nature of the raw water entering the network is be a key consideration. Water treatment works are designed to treat water from the immediate geographic area. If there is a possibility of raw water entering the water treatment works that is not from the same locality and/or is of a different nature, this could impact the ability of the water treatment works to treat the raw water as effectively. The capacity of the water treatment works to accept raw water must also be a consideration. It may be necessary to adapt the water treatment works to facilitate the acceptance of the new water supply. The capital funding for upgrades alongside connections funding needs to feature in the evaluation and approval process.
- We would expect a party inputting treated water into a network to be regulated by the Drinking Water Inspectorate in the same way as water companies are. This would include obligations to share all relevant risk and quality information with the primary water company to allow it to discharge its regulatory duties. This would require absolute clarity in areas such as Drinking Water Safety Plans and responsibility/payment for monitoring the 'shared' or 'common' network for water quality.
- There would need to be a clear approach to dealing with water quality sample failures downstream of the point of introduction, as such failures can be of high significance to the water company's performance under the Compliance Risk Index, Event Risk Index and customer contact performance commitments.
- The primary water company would need real time data, especially flow, pressure and key treatment parameters to avoid impacts such as under/over pressurisation of the receiving network and to provide visibility of treatment efficacy of water entering the network and being supplied to customers in general.
- Where treated water enters the supply, the network operator would need to be party to and have prior sight of the supplier's production plans. Any impacts on incumbent pumping regimes have an impact on costs. For example, electricity tariff optimisation may be compromised by the activity of others.
- Water treatment works are subject to planned and unplanned outages. Consideration will need to be given as to how the reduction or suspension of the third party supply will be managed in such events. We do not envisage compensation to be provided to the third party in unplanned circumstances, as we expect the incumbent's duties would mean the retailers business customers would still be receiving water from the incumbent's network under a supplier of last resort arrangement.

Whilst much of the above would in principle be the same in the water bidding market the significant difference is that the relationship in the bidding market is between the incumbent water company and the third-party supplier/secondary water company. The bilateral relationship structure has the potential to add greater complexity, significantly prioritise

financial value for some over and above the other six-capitals and increase the risks around how events and incidents are managed that affect each party in the value chain (including customers to a degree).

Examples of possible benefits of the bilateral market:

- A greater degree of cross-boundary and in-area coordination is possible due to the involvement of retailers.
- The most efficient available consumptive licenced water resources should be accessed. This would be the ideal outcome but requires careful market model design and implementation to achieve this.
- A wider range of resource solutions will be considered postponing large investment to meet new demand (which may be subject to uncertainty). Currently, we do not see this as a benefit in the Yorkshire region as large investment in new water resources is not a feature of our Water Resource Management Plan. However, our current supply-demand position does not mean that we are not open to alternative supply options that may support resilience or be most cost efficient.
- Revelation of more accurate and reliable information about the cost of supply for existing demand. There may be some potential to extend efficiency gains indirectly to entire demand. However, we do not see this as a core aim of the bilateral market, and we believe this will not be the focus of non-household retailers and the non-household customers who engage with the market.
- Improved resilience through wider access to sources of water and greater connectivity driven by engaged retailers. If the market and commercial construct allows this to be facilitated, it could free-up the incumbents' legacy water resource capacity as new consumptive abstractions are available in the round to our region.
- Additional options in preparation for drought events. Transfers from water-rich to water-stressed areas. As stated above, the construction of the market model is key without eroding value for retailers whose priorities will be to their customers.
- Reduced abstraction from water-stressed systems, subject to the EA abstraction licence reforms.
- Displacement or deferral of energy-intensive systems (where the energy required to transfer water is lower than the alternative it is displacing).
- Potentially reduce the ability of water undertakers to discriminate against third-parties under the current market mechanisms i.e. reduce the ability to prefer own solutions to more efficient third-party options.

Key differences between the market models:

The bilateral market model does have some key differences compared with the bidding market model, which are mainly driven by the different relationships between the parties involved, including the customers:

- The bilateral market is limited to non-household retailers and their customers as end consumers. We expect their respective awareness and involvement in the market to be key determinants of its success.
- The non-household retailer should over time more closely understand the needs of the customers they serve, and therefore be seeking efficient and sustainable solutions to fulfil those needs, whether that be lowest cost to serve, resilience, or water quality. The challenge for the bilateral market model is, can such diverse needs actually be met in most cases?
- The model also needs to consider the impact of variable inputs and take offs implied by this approach on the network of the incumbent. The call for information is largely silent about the provision of infrastructure which may be required where incumbent networks are operating at or near capacity.

The nature of the bilateral market is that the parties who are at the opposite ends of the value chain have the core commercial relationship. A raw water resource provider (in a locality) to a non-household retailer (in general super-regional or national). This can present a number of challenges that must be understood before a bilateral market model can be landed upon. These include:

- The raw water input volume does not match clean water demand. It is highly unlikely that raw water input by the secondary water company, once allowing for losses across the incumbents' treatment and distribution network, will match the non-household customer's demand. There will be a critical and complex requirement for balancing supply to demand positions and an expectation on the primary water company to make up or utilise the differences on a daily or hourly basis. For example, seasonal shutdowns of businesses may not align with a raw water resource seeking to import a level supply all year round.
- The expected supply-demand imbalance will require sophisticated settlement procedures to be put in place and effective commercial arrangements between all parties to fairly reflect the management of the imbalance without unduly stifling competition and the benefits such a market model could bring.
- Settlement processes are most likely to require reliable granular data and analysis, which could be managed by a central body who delivers agreed industry processes on behalf of all trading parties, supported by frequently read meters (daily or greater) at all boundaries in the value chain.
- Third parties, secondary and primary water companies, and retailers will need to provide the central settlement body with time of use data and possible tariff information for it to evaluate the supply-demand imbalances and apportion non-

household customer usage and billing positions accordingly to the water companies and other trading parties.

- Non-household customers' ability to switch retailer must not be nullified by its involvement in a bilateral trading contract. One option could be to contract water resources and retail services separately with the former having a longer-term commitment with suitable liabilities.
- Similarly, material changes in non-household customers water demand, or customers moving, or folding should be able to be reflected in bilateral arrangements between the non-household retailer and the secondary water company. Key to this is that the generality of customers (present and future) of the primary water company should not be left ultimately to carry the legacy cost of reduced or failed bilateral arrangements i.e. the costs of delivering access and treatment from a secondary water resource cannot be passed onto other customers where the secondary water resource and its connection and treatment assets are significantly under-utilised or even stranded. The market risks must be borne to a significant degree by the commercial parties involved who are not subject to price or revenue controls.
- Where a water trade is offered as a viable solution for a water company as a long-term option it will likely have to feed into the companies Water Resource Management Plan process to be assessed alongside other options. If a retailer can progress the trade independently and outside of the regulated process and timeframe it may remove the water company's ability to assess and capitalise on these water resource options.

The implementation of the bilateral market along with the existing bidding market could serve to add confusion. Both have some advantages and disadvantages over the other but are intended to run in parallel. Having two market systems of work that aim to deliver the same outcome may cause confusion to parties trying to operate across both the bidding and the bilateral market.

In summary, an effective bilateral market model should drive the delivery of the most cost optimal water solutions in the round. It should recognise where the existing incumbents water supply is of best value (including where the incumbents supply is augmented via the bidding market), and where it can be bettered by an alternative water supply without jeopardising quality and security of supply. Indeed, we would like to see demand management solutions that can demonstrate sustained cost benefit positions against ever improving value of water supply to secure the most support.

Whilst we believe that the bidding market could provide this outcome, it is possible that water companies may not be able to take advantage of all opportunities presented to them through the bidding market. Bilateral markets may offer other resource options to be actively sought out and pursued.

The development of the bilateral model does however require great care and thought, and the involvement of all parties including all regulators. As the model focuses benefits on some non-household customers served by some non-household retailers, the protection of other customers and the environment remain paramount. The benefits extracted exclusively for

those party to the market cannot be allowed to have negative impacts on stakeholders who are not party to value from that market. We believe that the bidding market can provide a more balanced package of benefits to a greater proportion of customers.

Question 3

The legal framework allows for a number of consequential changes to regulatory instruments (such as licences and codes) to effectively implement bilateral markets. We welcome views from stakeholders on:

- a) The key policy benefits that they consider need to be captured and the best means of doing this;**
- b) The key policy risks that need to be mitigated, and the best means of doing this; and**
- c) Whether there is a degree of prioritisation to the risks and benefits, and if so, what needs to be captured as a priority and what might be better left for a more informed decision once some bilateral trading has become established?**

We believe that some of the points we detail to questions 1 and 2 above in relation to arrangements and the potential exposure to risk need to be addressed via the legal and regulatory frameworks.

Protections for all other customers (potentially including small and medium sized non-household customers who in many ways act like domestic customers) should be paramount. Market enabling legislation and the subsequent licencing and codification for this market should ensure customers remain as protected as they do today, and that the bilateral market should not fetter other existing markets.

The primary water company maintains all its current obligations to customers and the environment when operating within the bidding market. The bilateral market has the potential to split some of those obligations across other parties depending on the customer being served. Whilst the consistent role remains that of the network operator who is duty bound to deliver clean and wholesome water to a level demanded, there is the potential for the future regulatory framework to expose those not party to the market - household and SME non-household customers, and the environment - to greater risks than present.

The legal framework must identify clear responsibilities for the mitigation of risks to water quality and acceptability, especially in the scenario of treated water entering an incumbent's network. The risks are significantly lower, but not entirely removed, in the case of raw water being supplied to an incumbent's water treatment works.

The input of raw water to an incumbent's water treatment works would need to be covered by the same regulatory duties as the incumbent is obliged to undertake for its own sources, such as catchment risk assessment, Regulation 15 compliance, sampling, preparation of Regulation 27 Drinking Water Safety Plan reports and their transmission to the incumbent.

Due to the high level of risk that could occur as a result of a third party supplying water into a water companies supply system, we believe that as with the non-household retail market, a set of Market Codes should be developed and implemented to ensure adherence by all parties to any needed policies and procedures to ensure a safe and resilient supply of water to all customers.

Consideration must be given as to the penalties that may be imposed should there be a breach in the licence or codes by the retailer's supplier. Due to the significant impact a breach could have, such as public health issues and concerns (including reputational damage) for the most serious cases, there should be the potential to revoke the licence of the wholesale authorised licensee.

As previously stated, we believe that the bilateral market is more complex than other current markets due to the possibility of heightened public health risks and environmental impacts.

As a result, we feel that clear regulations and codes must be developed with all impacted parties prior to market opening in a similar way as with the non-house retail market, rather than rely on retrospective regulatory interventions being made once the market has become established. We would expect all regulators to collaborate in to the development of effective regulations and codes that enable a bilateral market.
