

January 2018

Trust in water

# Information for applicants

**Senior Software Developer (Senior Associate)**  
**Ref: OFWBC197**

[www.ofwat.gov.uk](http://www.ofwat.gov.uk)

**ofwat**



## Introduction from Rachel Fletcher, Chief Executive



### **Water is not a dry issue.**

The water sector in England and Wales has come a long way in the past 27 years. At privatisation, polluted beaches and rivers and neglected infrastructure meant we were seen as the ‘dirty man of Europe’.

The regulation of this sector was entrusted to the Water Services Regulation Authority (Ofwat) which has maintained a steady hand in driving and incentivising the sector to deliver and to improve. Over the period since privatisation, the water companies have invested more than £140 billion in maintaining and improving services for consumers and the environment. Today, for example, the amount of water lost through leaks is down by about a third since the mid-1990s. In addition, salmon have returned to the River Mersey, once considered one of the most polluted in Europe. All of this has been delivered efficiently too – a litre of tap water, supplied and taken away, costs less than half a penny.

But the world is changing. The water sector faces new problems and very different challenges. In the future, climate change may mean we get more droughts and more floods, making it harder to maintain resilient supplies. Our population is growing, putting more pressure on the water we use. Lifestyle changes have increased our appetite for water in our homes, our work places and our places of leisure. The changing social and economic landscape also means we need to reconsider how business operates and how customers are able to afford their water and sewerage bills.

Ofwat needs to be at forefront of determining and implementing a regulatory system that will protect customers’ interests, drive efficiencies and innovation, enable efficient companies to finance their functions and to ensure that the ‘promises of privatisation’ are delivered. We all need to have trust and confidence in the water and wastewater services we receive.

To do this, Ofwat needs to be at the very top of its game. Our software developers support our other functions by creating new and innovative software solutions to a range of problems across the organisation. As a developer you will be expected to apply your knowledge and work with other projects to develop modern applications to improve processes across Ofwat.

Thank you for your interest in joining Ofwat at what is a very exciting time for us. We look forward to receiving your application.

**Rachel Fletcher**  
**Ofwat Chief Executive**

## **About Ofwat and the role**

Ofwat (the Water Services Regulation Authority) is the economic regulator of the water and wastewater sector in England and Wales. Our role is to help it build trust and confidence with customers, the environment and wider society. Our strategic priorities include:

- Working with the sector to improve the customer experience in particular by improving resilience, delivering a step change in customer service, maintaining affordability and driving efficiency.
- Improving information and transparency in the sector to hold companies to account.
- Supporting the development and investability of markets, to enable the sector to deliver more for less.
- Securing stakeholder engagement and support for change.
- Ensuring Ofwat has the skills, experience, systems, processes and culture to deliver the strategy.

Our focus as a regulator is on regulating in a pro-market way which means establishing an effective framework that improves information (e.g. quality and visibility); improves buyers' and sellers' ability to transact (e.g. reducing 'transaction costs'); and/or by improving incentives on buyers and sellers to transact efficiently. In addition, we will look to make targeted interventions only, rather than taking a prescriptive, one-size-fits-all approach.

## **About the Operations Resource Pool**

Ofwat has been pursuing an ambitious business transformation programme to enable us to deliver our new vision for the water and sewerage sectors. Supporting this change agenda the Operations pool is delivering business improvements.

Central to the changes we have been putting in place is a move to become a programme-based organisation, where resourcing is driven by programme demand and supported by first-rate matrix management.

The Operations Pool supports all Ofwat programmes, playing a central role in developing the strategy and delivering the vision for an agile, dynamic Ofwat enabled to support delivery of its ambitious strategy and making sure ICT meets the needs of our users every day. As an organisation we strive to be at the leading edge of regulation, our IT needs to support us in this by also being at the leading edge through exploiting the digital technologies available. A new Digital Strategy will be formed of which the development team will have a large role to play in how our applications can deliver to the expectations of our users and customers of our services. The development team currently spends most of its energies working on the Information and Modelling project within the Finance and Governance programme which is critical to the core business of Ofwat.

## **Finance and Governance programme**

Our shared vision for the water sector in England and Wales is one where customers, the environment and wider society have trust and confidence in water and wastewater services, reflecting the vital nature of these public services. We want the companies that provide these services to be accountable to their customers for delivering the services they need and want at a price they can afford.

At the last price review in 2014, we expected companies to engage with their customers and customer challenge groups to agree the long-term outcomes customers wanted. This resulted in the biggest customer conversation ever in the sector – engaging with over 250,000 customers.

We now expect companies to continue to develop and maintain their relationship with their customers in delivering these outcomes, with customers and other stakeholders engaged and empowered to understand and challenge companies on whether or not this is being delivered.

The programme includes six key projects: Monitoring and assuring delivery; Company ownership and control; Business retail market monitoring; Board leadership, transparency and governance; Licence co-ordination and streamlining; and Information and modelling.

**Information and modelling** - this project will build the information and modelling capacity and infrastructure we need to support all of the programmes across Ofwat,

including future price reviews. Core to this is a suite of web applications to facilitate data collection, storage, reporting, model building and public access. Our development team has already created the Fountain application and is now developing a new Data Capture System. We will build the capacity for public access to our data through Fountain, too. This project also includes training staff in using Fountain, introducing modelling standards (FAST), introducing analytical software for future modelling, and establishing model quality assurance capacity and processes across the organisation. We will work with Water 2020 to prepare for PR19, especially through the delivery of the information and modelling five-year plan.

## **Role expectations**

Ofwat operates using a matrix working structure. As such the successful candidate will work on a range of projects as needed. Initially there are two work packages the successful candidate will work on:

- The development of a Data Capture System to automate and speed up inputting data into Fountain.
- The maintenance and improvement of our regulatory data application “Fountain”.

The Data Capture System is a new piece of software to facilitate other projects in collecting data. The upcoming price review (PR19) will require swift handling of data to make sure that Ofwat reaches the deadlines it has set. As such the data capture system is an important piece of work that we are carrying out. It is a good chance to use software development skills in an application that will add real value to the functions of Ofwat.

Fountain is an important analytical tool that is used by many teams across Ofwat to support analysis that is necessary for Ofwat to make informed decisions. This will be especially true during the upcoming price review where teams will have to carry out modelling accurately and quickly. As such maintaining and enhancing Fountain during this period will be essential.

In general the successful candidate will be expected to bring the following qualities to Ofwat:

- Software Development
  - Implement high quality, scalable and extendable IT solutions that meet Ofwat requirements.

- Work with the wider Technology and Infrastructure team, consultants and external suppliers to deliver software solutions.
- Work collaboratively with internal and external customers to translate business needs into appropriate development specifications and deployed software solutions.
- Work with colleagues to deliver the future requirements for applications such as financial modelling, price setting and compliance systems requirements.
- Act as DevOps for solutions provided by the Software Development team. Contributing to the maintenance of software solutions.
- Be responsible for the development of best practices such as knowledge sharing, development practices, source control, and technical documentation.
- Conduct appropriate unit, integration and other developer testing and contribute to the management of end user acceptance testing.
- Provide professional input to decisions on IT applications design, development and deployment, and identify routes to technological and process improvement.
- Corporate Responsibilities
  - Contribute to the overall success of Ofwat.
  - Take responsibility for own continuing professional development.
  - Promote a positive image of Ofwat externally.
  - Be responsible for having a positive approach to team working.
  - Take responsibility for own understanding of, and apply the principle of, equality in respect of Ofwat services.
  - Adopt a visibly positive, customer first approach in both behaviour and outputs.
- Stakeholder engagement responsibilities
  - Build and maintain relationships with internal stakeholders at all levels in the organisation.
  - Interact using discretion & customer-facing skills with a range of contacts outside & inside Ofwat.

## **Key deliverables**

- Engage in all stages of the software delivery cycle to develop software applications for internal and external use which support the end user in the delivery of the Ofwat strategy.

## Professional requirements

	Essential	Desirable
Qualifications	Educated to degree level or equivalent.	A Computer Science or Information Technology degree.
		Certification in relevant product set, whether proprietary or open source.
		ScrumMaster
Experience	Evidence of full stack development experience in a software development role encompassing: database, Java application layer and Web presentation.	
	Experience of Java, HTML, JavaScript and SQL.	
	Extensive experience with development toolset and open source development tools.	
	Software development life cycle.	
	Agile Software Development	Kanban/Scrum
	Java 8, Spring, Spring Boot, Spring Security,	Gradle, Apache, Tomcat, A REST library
	Angular 2/4, HTML5, CSS3, HTTPS, JSON, REST, Node.js, jQuery	JHipster, Bootstrap, Yeoman, Yarn/NPM, WebPack, other JavaScript frameworks,
	SQL	JPA, Hibernate, Liquibase, MySQL/MariaDB
	TDD	Junit, Mockito/A mocking framework, BDD, Gherkin/Cucumber
	Git	GitHub, Subversion
		IntelliJ IDEA, Eclipse, Jenkins/Hudson, Confluence
		Docker, PaaS, CloudFoundry, MongoDB, Elasticsearch, Kibana
		Experience of the GDS Service Toolkit
	Windows, Linux	
Knowledge	Software development methodologies.	
	Object orientated development.	
	Understanding of software testing practices. EG. User acceptance testing, Test automation.	
	Build and deployment practices and tools.	

	Essential	Desirable
	Continuous Integration/Delivery	
	Test Driven Development	
		Story Mapping
		Behaviour Driven Development
		Agile Development methodologies.
		Design Patterns.
		Refactoring
		Unit testing.
Skills	Clear and confident communication skills. Ability to communicate with technical and non-technical people.	
	Proven success in a team environment and ability to work in team of developers.	
	Self-motivated with ability to work on own initiative.	
	Excellent interpersonal skills to be able to build good relationships with customers as well as those within a small team.	
	Excellent critical thinking, problem solving, design, coding and debugging skills.	
	Ability to work under pressure to meet deadlines.	
		ScrumMaster
		Management of consultants.

## Terms and conditions of employment

### Contract

This is a permanent appointment.

## Salary

The salary range for this role is Band 3, £32,363 to £48,406. External candidates can expect to achieve a starting salary from the bottom of the band up to £48,406, depending on relevant skills and experience required for the post. Salary is paid monthly by credit transfer.

Internal and Civil Service candidates already at this job level would normally maintain their existing salary arrangements as this would be classed as a level transfer. If applying for the role as a promotion, these candidates can typically expect to be appointed on a salary at the bottom of the band or a 10% increase to existing salary, whichever is greater.

## Location

The role will be based in Birmingham. However, it is likely that travel between offices in London and Birmingham as well as throughout the UK will be needed to be effective.

## Contracted place of work and taxable expenses

Any person who regularly works more than two days a month in both the Birmingham and London offices, irrespective of their contracted place of work, is considered by HMRC to have [two permanent workplaces](#).

The payment of your rail fare, accommodation or subsistence in this situation attracts tax and National Insurance because you are receiving a benefit.

Ofwat meets the cost of the tax and National Insurance by grossing up your expenses and recovering the net amount through your monthly pay package. But the expenses are classed as taxable earnings, which could impact on any attachment of earnings – for example, student loan repayments, high income child benefit and state benefits.

For further information on taxable expenses, please email [payroll@ofwat.gsi.gov.uk](mailto:payroll@ofwat.gsi.gov.uk).

## Hours of work

The successful post holder will be required to work a minimum of 37 hours, excluding lunch breaks. You will be required to work such additional hours as is reasonable and necessary for the efficient performance of your duties.

## Probation

There is a probationary period of six months for all new entrants. Subject to satisfactory performance, the post holder will be transferred to permanent establishment at the end of their probation.

## Annual leave

On appointment the post holder will be entitled to 25 days annual leave plus 10½ days' public and privilege holidays a year. Annual leave entitlement will be increased by one day for each year of continuous employment with Ofwat, up to a maximum leave allowance of 30 days.

## Pension

On appointment, you are eligible to join the Civil Service Pension. The Civil Service offers a choice of defined benefit and stakeholder pensions, giving you the flexibility to choose the pension that suits you best. We offer you a choice of two types of pension.

**Alpha:** alpha is an occupational pension scheme and provides a defined benefit worked out on a Career Average basis.

From 1 April 2017, employee contributions will be:

From 1 April 2017, member contributions will be based on actual salaries.

From 1 April 2017, employee contributions will be:

Actual pensionable salary (annual)	All members
Up to and including £21,422	4.60%
£21,423 to £51,005	5.45%

£51,006 to £150,000	7.35%
£150,001 and above	8.05%

From 1 April 2017, employer contributions will be:

Revised Salary Band (£)	ASLC rate from 1 April 2017
23,000 and under	20.0%
23,001 to 45,500	20.9%
45,501 to 76,000	22.1%
76,001 and over	24.5%

**Partnership:** this is a stakeholder pension with a contribution from Ofwat. How much we pay is based on your age. We pay this regardless of whether you choose to contribute anything. You do not have to contribute but, if you do, we will also match your contributions up to 3% of your pensionable earnings. The contributions are in addition to the age-related contribution mentioned above.

To learn more about the Civil Service Pension schemes, please follow the link <http://www.civilservicepensionscheme.org.uk/>

## Ofwat benefits

We also offer a range of additional benefits. These include:

- access to our package of benefits via our 'Rewards on Tap' scheme. This is a voluntary benefits scheme where staff have access to exclusive discounts on a range of goods and services such as retail outlets, theatre tickets, holidays, insurance and gym membership;
- childcare voucher scheme;
- cycle-to-work scheme;
- season ticket loan for travel between home and office;
- flexible working arrangements;
- fees paid for membership of relevant professional bodies;
- regular professional development;
- health and wellbeing initiatives; and

- free eye tests and contribution towards lenses/spectacles for VDU users, if appropriate.

## Further information

### Security clearance

Any offer of appointment will be subject to satisfactory completion of security and pre-employment checks. Further information about the security checking procedure is available on request.

### Nationality and immigration control

This post is open to nationals of states within the British Commonwealth and the European Economic Area (EEA) and certain members of their families. There must be no employment restriction or time limit on your permitted stay in the UK.

If you would like further information on Nationality and Immigration Control, please email us at [people@ofwat.gsi.gov.uk](mailto:people@ofwat.gsi.gov.uk).

### Stocks or shares

Because of the nature of the information you will come into contact with and the need to be wholly independent of the water sector in England and Wales, you and your family (including your spouse or civil partner and any children or step-children under the age of 18 who still live at home, or any other member of your household) will be precluded from owning, purchasing or dealing in the shares of the water companies and their holding companies.

### How to apply

Applications should include a:

- curriculum vitae (**CV**);

- **covering letter** or supporting statement that outlines the contribution you can make to Ofwat, including how you feel you meet our professional requirements and demonstrate behaviours outlined in our competency framework;
- completed **CV supplement form**; and
- completed **diversity monitoring form**. This form is not mandatory.

Please email your CV and supporting documents to [recruitment@ofwat.gsi.gov.uk](mailto:recruitment@ofwat.gsi.gov.uk) by the closing date.

If you are unable to make an electronic application, you may submit your application on paper. Please contact us to find out how.

### Selection timetable

Closing date	9 February 2018 @ 5:00PM
Sifting	12 February 2018
Interview date	w/c 19 February

If you have any queries about any aspect of this role or selection process, please email [recruitment@ofwat.gsi.gov.uk](mailto:recruitment@ofwat.gsi.gov.uk)

### Expenses

We will refund travelling costs at the rate of standard rail fare for the journey or motor mileage rates (cars: 25p per mile).

Please note that proof of purchase will be required for all public transport expenses.

We cannot refund expenses for travel into the UK. If you have to stay overnight, please contact [recruitment@ofwat.gsi.gov.uk](mailto:recruitment@ofwat.gsi.gov.uk) for further details.

### Data protection

We will use your application only to inform the selection process, after which we will destroy it. If you are successful, it will form the basis of your personal record with us and we will store it in manual and electronic files.

We will hold any data about you in completely secure conditions, with restricted access. Information in statistical form on present and former employees is given to appropriate outside bodies.

We will include data that you provide on the diversity monitoring form in a general database for statistical monitoring purposes only, enabling us to monitor the effectiveness of our policy on equal opportunities in employment. Individuals will not be identified by name.

We shall consider that, by applying for this role, you are giving your consent to the processing of your data in the ways described above.

## **Diversity**

Ofwat aims to be an equal opportunities employer. We intend to make sure that there is equality of opportunity and fair treatment for all irrespective of:

- age;
- disability;
- gender reassignment;
- marriage and civil partnership status;
- pregnancy and maternity;
- race, religion or belief; or
- sex or sexual orientation.

We would like to assure you that we will treat the information you provide on the diversity monitoring form in the strictest confidence and only use it to help us monitor appropriate equal opportunities policies. This information plays no part in our selection process.

## **Investors in People (IIP)**

Ofwat has IIP accreditation which reflects good management practices throughout our organisation, including in business planning, individual objective setting, learning and development opportunities, as well as continuous constructive feedback through our delivery and development conversations approach to performance management.

## **Complaints procedure**

The process of recruitment and assessment embraces the principles of fair and open competition and best practice. The first is to maintain the principle of selection for appointment to the Civil Service on merit on the basis of fair and open competition as outlined in the [Civil Service Recruitment Principles](#). The second is to promote an

understanding of the [Civil Service Code](#) which sets out the constitutional framework in which all civil servants work and the values they are expected to uphold, and to hear and determine appeals made under it.

If feel your application has not been treated in accordance with the recruitment principles and you wish to make a complaint, you should contact Natasha Harris, Director, Operations (People), Ofwat, Centre City Tower, 7 Hill Street, Birmingham, B5 4UA in the first instance. If you are not satisfied with the response you receive from us you can contact the Civil Service Commission