



WATER ACT 2003
WATER SUPPLY LICENSING

Template for Access Codes

June 2005

Water supply licensing: template for access codes

A Introduction

From 1 December 2005, non-household customers will have the option of switching from their existing water undertaker to an alternative water supply licensee. As part of the new regime, all water undertakers must develop access codes, setting out their procedures for allowing licensees access to their supply systems. Water undertakers must publish their indicative access prices by 31 August and their access codes by 15 September 2005 in preparation for the new regime. Ofwat's June 2005 guidance on access codes sets out the policies that water undertakers must follow.

In conjunction with the guidance on access codes, this template proposes a structure for setting out an access code. It has been developed and endorsed by the Water Supply Licensing Technical Advisory Group, which comprises representatives from customers, potential licensees and water undertakers. Water undertakers must follow this template, as it will improve the clarity and consistency of individual codes throughout the industry.

This template should be read in conjunction with Ofwat's guidance on access codes and the full series of guidance, conditions and other information relating to water supply licensing that is on Ofwat's website (www.ofwat.gov.uk).

B The sections of the access code

The areas that should be included in an access code are listed below with a brief description of the issues that should be covered under each heading. This is not an exhaustive list. If a water undertaker wants to include more details than are listed here, perhaps to reflect its individual circumstances, it can do so. If some details are not relevant to a water undertaker, then this should be noted in the undertaker's access code.

1. Overview

Each access code should have an overview which should include the following headings.

1.1 Role of the access code

This section should clarify the relationship between the access code and the access agreement and define the mechanisms to develop or modify the code in the future.

1.2 Relevant framework documents

To include links to:

- Primary and secondary legislation;
- Statutory and non-statutory guidance;
- Conditions of Appointment;
- Licence conditions;
- Customer transfer protocol (CTP);
- Licence application guidance;
- Other relevant documents; and
- Information regarding pricing methodology.

1.3 About the access code documents

To include the scope of the access code and the relevant key points or principles for each water undertaker.

1.4 Role of key industry players

To include an explanation of the duties and obligations on the key players, for example the water undertaker, the licensee, and DWI.

The section should also include clarification on the validation of data.

1.5 Definition of services

To include details of the services the water undertaker is able to offer.

1.5.1 Primary water undertaker

- i) Definition of potable and non-potable water combined supply arrangements.
- ii) Definition of potable and non-potable water wholesale supply arrangements.

1.5.2 Secondary water undertaker

- i) Definition of potable and non-potable water wholesale supply arrangements including bulk export of potable and non-potable water.

2. Application for access to the water undertaker's supply system

This section of the code should include the following headings.

2.1 Process requirements

2.1.1 Confidentiality agreements

This section should clarify the role of a confidentiality agreement and any associated costs.

2.1.2 Information requirements

To include details of the information required at each stage to progress an application and the associated timescales.

This section should also include provision of a standard confidentiality agreement.

2.1.3 Timescales

This section should set out the 'target' timescales for each of the key application stages.

2.1.4 Application fees

To include information regarding processing fees for each key stage of the process and identification of the degree of associated work involved.

The section should also address how fees will be raised and the terms on which these fees are payable.

The section should clarify the position if applications are withdrawn during the process and how associated costs will be recovered.

2.1.5 Credit provisions and credit limits

This section should provide details of any credit checking processes that a licensee will be subject to.

2.2 Confirming eligibility

This section should include the high level principles of eligibility and should refer to the Ofwat guidance on eligibility.

2.2.1 Responsibilities

This section should clarify the responsibilities on establishing and confirming eligibility.

2.2.2 Boundary definition

2.2.3 Household / non-household premises

2.2.4 Volume threshold

2.2.5 Supply arrangements for licensees

2.2.6 Attachment to the supply system

2.2.7 Customers in debt

To include reference to the CTP

2.3 Application process

2.3.1 Combined supply arrangements

This section should include a process flowchart detailing each stage of the process. The section should also provide a detailed narrative of what each stage entails and should clarify the responsibilities of the water undertaker and licensee, including information provision and communications, at the various stages.

- i) Stage 1: Initial contact
- ii) Stage 2: Initial application
- iii) Stage 3: Detailed application
- iv) Stage 4: Detailed contract negotiation
- v) Role of DWI

This section should clarify the role of DWI in assessing the suitability of a person to introduce water into the public water supply system, in line with the Water Supply (Water Quality) Regulations 2000 (for England) and 2001 (for Wales) and any subsequent amendments.

The section should also clarify the role of DWI in resolving disputes between the water undertaker and licensee regarding water quality issues.

- vi) Role of the Environment Agency

This section should clarify the role of the Environment Agency with respect to establishing abstraction rights and its administration of water resource plans and drought plans.

- vii) Role of the secondary water undertaker (where applicable)

This section should clarify the role and responsibilities of a secondary water undertaker in providing water to the licensee for introduction into the primary water undertaker's supply system.

- viii) Provision of information to the sewerage undertaker

This section should identify the information required by the sewerage undertaker and the processes used to provide that information in a timely manner.

2.3.2 Retail supply arrangements

To include a process flowchart detailing each stage of the process. The section should also provide a detailed narrative of what each stage entails and should clarify the responsibilities of the water undertaker and licensee, including information provision and communications, at the various stages.

- i) Wholesale master contract: agreement process
- ii) Data exchange to create contract schedules for wholesale applications
- iii) Provision of information to the sewerage undertaker

This section should identify the information required by the sewerage undertaker and the processes used to provide that information in a timely manner.

2.3.3 Objections and rejection process

This section should clearly identify the circumstances that could result in an objection to, or a rejection of, an access application. The section should include details of the processes used, the associated timescales and where appropriate, how to take forward an application that has been rejected and objected to.

2.3.4 Application process - arbitration and disputes resolution

This section should provide details of how disputes about the application process will be handled in the event that the parties are unable to reach agreement.

2.4 Access criteria

2.4.1 Water quality input specification

To include information on the quality of water a licensee will be expected to achieve in order to gain access to the supply system. This should include guidance on the number and age of the sample set to be provided by the licensee.

The section should also include clarification of relevant laboratory accreditation and any pre-entry supply system modelling.

i) Quality parameters

To include clarification of the Water Supply (Water Quality) Regulations 2000 (for England) and 2001 (for Wales) as they are applied to water supply systems, and identification of the suite of parameters included in those regulations.

- Aesthetic parameters
- Aluminium
- Biological parameters – algae/bacteria
- Biological parameters - micro-organisms
- Cryptosporidium
- Disinfection residuals
- Fluoridation
- General microbiological quality
- Hardness and carbonate stability
- Iron and manganese
- Lead
- Nitrates
- pH - acidity and alkalinity stability
- Pipework operating regime - stagnation
- Polyaromatic hydrocarbons (PAHs)
- Trihalomethanes (THMs) and chlorine
- Turbidity
- Sulphates
- Regulation 31 – application and introduction of substances and products
- Water discolouration
- Other parameters referred to in the quality regulations as defined above.

ii) Special circumstances relating to water quality standards

To include clarification on the mechanisms to administer temporary derogations in the event of emergencies.

2.4.2 Water flow and pressure

To include information regarding the pressure management of the supply system and any access requirements resulting from the pressure regime in operation.

2.4.3 Water quality sampling and monitoring

To include clarification of the regulatory sampling regime that the water undertaker follows and any ongoing requirements of DWI. This section should also include reference to circumstances where a water undertaker can suspend inputs without notice and the supporting communication processes.

2.4.4 Volume measurement

To include clarification of the level, type, frequency and extent of metering required, at any given system entry point, based upon a risk assessment of the source.

3. Customer transfer protocol (CTP)

3.1 Principles

To include reference to the principles specified in the guidance on the CTP.

3.2 Rules of behaviour

3.2.1 CTP

To include provision of information regarding the following aspects.

- i) Objection rules
- ii) Details the grounds on which a supplier can object to a request to transfer.
- iii) Rejection rules
- iv) Details the grounds on which a supplier can reject a request to transfer.
- v) Data validation
- vi) The treatment of debt
- vii) Transfer timescale

3.2.2 Exceptions

To include provision of details of sub-processes for dealing with issues or disputes arising from the transfer process e.g. disputed

meter readings.

3.2.3 Additional operational processes

To include provision of information on sub-processes that support the operation of the CTP.

3.3 Data transfer

3.3.1 Data requirements

This section should define the data that needs to be maintained in order to support the process and clarify the responsibility for ownership and maintenance of the data.

3.3.2 Information exchange and communication

This section should detail the agreed method of transferring and communicating the data that needs to be exchanged between the relevant parties.

- i) Primary water undertaker
- ii) Licensee
- iii) Secondary water undertaker (where applicable)
- iv) Sewerage undertaker

3.3.3 Data dictionary

This section should define the data and process standards necessary to support the transfer process and to support internal business processes to achieve inter-operability. Furthermore the data dictionary should define the data fields within the data flows used to communicate between the relevant parties.

3.4 Registration and operational processes

To include clarification of the registration and operational processes to be used, clarification of the monitoring processes to be used to establish the status of application progress and audit, and any necessary system testing as specified.

4. Control and balancing of supply system

4.1 Supply system management

4.1.1 Unbilled water

This section should define the processes to address the following issues.

i) Leakage

This section should address how water lost through leakage will be accounted for.

ii) Unauthorised use of water

This section should address issues associated with illegal connections and theft.

iii) Fire water

The water undertaker is responsible for the provision of water for fire fighting purposes. Water undertakers will not charge licensees for water used for the purpose of fire fighting (including the testing of appliances).

Additional special requests for fire hydrants should be dealt with under section 58 of the Water Industry Act 1991 (WIA91). The cost of installation will be recoverable in accordance with section 147 of the WIA91.

4.1.2 Security of supply

i) Drought plans

This section should provide details on the information required from licensees to prepare or to revise drought plans and the associated timescales. This section should also address the risk assessment on the interruptibility of supplies to customers.

ii) Resource planning

This section should provide details on the information required from licensees to produce the water resource management plans and the associated timescales.

4.1.3 Telemetry requirements for supply system control

This section should address telemetry requirements and system compatibility issues. The section should also address telemetry and communication issues associated with emergency procedures.

4.1.4 Secondary connections

This section should address the issue of prevention of secondary connections after a licensee has been granted access to the supply system.

4.1.5 Supply system maps and plans

This section should address the processes for sharing relevant maps and plans between the water undertaker and the licensee.

4.1.6 Point of entry controls and failure modes

This section should address issues associated with the access to and adequacy of sampling points, interface control requirements and automatic shut down facilities of the plant.

4.2 Metering services

To include clarification of the level, type, frequency and extent of metering required for each supply point. Higher risk supply points or vulnerable supply points, susceptible to fluctuations in supply and demand, may require more frequent monitoring.

4.2.1 Meter asset management

This section should clarify responsibility for ownership and maintenance of input and output meters, and any certification processes operated.

i) Metering solutions available

This section should identify the metering technologies that the water undertaker has available.

ii) Meter installation

This section should identify the water undertaker's processes for undertaking meter installations and the associated costs.

iii) Meter maintenance

This section should identify the water undertaker's processes for undertaking meter maintenance activities and the associated costs.

4.2.2 Meter calibration and verification

This section should identify the calibration and verification technologies available and the associated costs of using them.

4.2.3 Meter reading and meter reading verification

To include clarification of the duties and obligations on water undertakers and licensees with respect to meter reading, meter verification and subsequent communication of customer meter and supply system meter readings. This section should also address disputed meter readings and the provision of meter readings to sewerage undertakers for the purpose of billing for trade effluent and/or wastewater.

(Transfer of meter readings is covered under Part 3, CTP)

4.3 Supply system balancing

4.3.1 Strategic balancing

To describe the degree of strategic balancing a water undertaker has in place to achieve optimum operation of the distribution supply system by efficient use of the pumping plant. The optimal scheduling of pumping and pressure optimisation on distribution supply systems may vary from zone to zone. The degree of strategic balancing necessary could have an impact on the operational issues.

i) Annual supply planning

To include details of the annual assessment of the available resources and the robustness of those resources throughout the year, with respect to reliability of yield, water quality and planned outages. The section should provide details on the information required from licensees in the annual supply planning process and assessment of available headroom.

ii) Use of strategic supplies

To include clarification of how the definition of strategic supply, and the associated designation and de-designation processes, will be applied as specified in Ofwat's guidance on strategic supplies.

iii) Supplier of last resort

This section should clarify whether a 'supplier of last resort' provision is offered to licensees, and if so the basis on which the costs are recovered, that is as part of the access charge. The section should also explain the impact this provision could have when it is applied.

iv) Interim duty to supply

This section should provide details on the water undertaker's interim duty to supply customers for domestic and non-domestic purposes.

v) Interruptible customers and interruptions to supply

This section should provide information on the terms of interruptible tariff options available and any associated costs.

4.3.2 Flow balancing and reconciliation processes

i) Supply system usage forecasts for wholesale supplies

To include details of the processes to be used in forecasting supply system demands and determining actual usage.

- Water undertaker's potable supply system

To include details of the information required from the licensee on its customers' forecasted annual demand and any supplementary information, such as seasonal and diurnal variations, as applicable.

- Water undertaker's non-potable supply system (where applicable)

To include details of the information required from the licensee on its customers' forecasted annual demand and any supplementary information, such as seasonal and diurnal variations, as applicable.

ii) Supply system usage forecast for combined supplies

- Water undertaker's potable supply system

To include details of the information required from the licensee on its customers' forecasted annual demand and any supplementary information, such as seasonal and diurnal variations, as applicable.

- Water undertaker's non-potable supply system

To include details of the information required from the licensee on its customers' forecasted annual demand and any supplementary information, such as seasonal and diurnal variations, as applicable.

iii) Imbalance accounting

To include details of how material variations in actual usage against that forecasted are dealt with for both wholesale and combined supplies.

To include details of the processes to assess the imbalance between the following potential scenarios:

- Licensee forecast input and customer forecast usage;
- Licensee forecast input and actual input;
- Licensee actual input and customer actual usage;
- Customer forecast usage and actual usage.

The section should also include details of the basis that any imbalance charges or reimbursements will be administered.

iv) Reconciliation processes

To include details of the processes that will be used to reconcile consumption and will clarify the time period over which the consumption will be reconciled.

v) Peak season and off-peak reconciliation (where applicable)

Where water undertakers operate their supply systems in a seasonal manner, this section should provide information on the

dates of the peak and off-peak seasons, the processes included and any associated costs.

5. Supply system maintenance and Emergency Procedures

5.1 Diagnosis of system issues

5.1.1 Obligations with respect to diagnosis of supply system problems

To include a definition of the duties and obligations on water undertakers and licensees (retail only and combined licence holders) with respect to early diagnosis of supply system problems.

i) Responsibility of water undertaker

ii) Responsibility of licensee

5.1.2 Quality Issues

This section should provide details of the required processes to exchange information, in a timely manner, regarding quality issues that could impact upon the system.

5.1.3 Hydraulic issues

To include details of the processes required for the timely exchange of information relating to hydraulic issues in order to complete level of service returns.

5.1.4 'Real' time information capture systems

This section should detail the processes for exchanging and capturing information and should specify 'real' time targets. The section should also address standardisation of the format in which the information is to be exchanged.

5.1.5 Reporting procedures

To include details of the points of contact for both water undertaker and licensee customers, procedures for the reporting and recording of emergencies and supply system problems, procedures for communicating information between all parties, and details of any systems used in interpretation and interrogation of information to achieve problem resolution.

5.2 Planned system maintenance

To include information on the maintenance of the supply system and any sub-categorisation of the maintenance based on type or duration, that is long-term or short-term planned maintenance.

5.2.1 Obligations with respect to planned maintenance

To include definition of the duties and obligations on water undertakers and licensees (retail only and combined licence holders) with respect to planned system maintenance (both short and long term where applicable).

- i) Responsibility of water undertaker
- ii) Responsibility of licensee

5.2.2 Specification of assets

To include a reference to the scope of the assets included in the planned maintenance schedules.

5.2.3 Maintenance standards

To include any details of the maintenance standards that a water undertaker adheres to, including DG levels of service and Guaranteed Standards Scheme (GSS).

5.2.4 Risk assessment processes

Where risk assessment processes are undertaken by the water undertaker prior to the start of any planned maintenance work, the section should also include details of any information required from the licensee and how and when the information will be requested.

The section should also include details of the consequence of not complying with reasonable requests by the water undertaker for information.

5.3 Unplanned system maintenance

To include information on the unplanned or emergency maintenance of the supply system.

5.3.1 Obligations with respect to unplanned maintenance

To include definition of the duties and obligations on licensees (retail only and combined licence holders) with respect to unplanned or emergency system maintenance.

- i) Responsibility of water undertaker
- ii) Responsibility of licensee

5.3.2 Risk assessment processes

Where risk assessment processes are undertaken by the water undertaker prior to the start of any planned maintenance work, the section should also include details of any information required from the licensee and how and when the information will be requested.

The section should also include details of the consequence of not complying with reasonable requests by the water undertaker for information.

5.3.3 Emergency notices

To include details of who will have responsibility for applying for emergency notices, and how and when they will be issued.

5.4 Safety aspects of unplanned and emergency work

5.4.1 Status classification

To include definition of the status of events.

5.4.2 Standard emergency reporting procedures

To include details of the water undertaker's standard emergency reporting procedures, and provide sufficient information as to the duties and obligations placed upon the water undertaker and licensees.

5.4.3 Major emergency reporting procedures

To include details of the water undertaker major emergency reporting procedures (and definition of when and how they are evoked). This section should also provide sufficient information as to the duties and obligations placed upon the water undertaker and licensees.

5.5 Emergency procedures for dealing with specific events, issues and incidents

To include any specific procedures a water undertaker may adopt in dealing with specific events, issues and incidents. The section should also provide sufficient information as to the duties and obligations placed upon the water undertaker and licensees.

5.6 Customer protection

5.6.1 Customers with particular needs

To include a common definition of customers with particular needs and priority premises and provide information as to the duties and obligations placed upon the water undertaker and licensees in respect of supplies to these customers.

5.6.2 Large scale customer warning procedures

To include procedures for undertaking large scale customer warnings on behalf of all supply system users in the event that a large geographic area or large number of properties are affected. The section should also include definition of the duties and obligations placed upon the water undertaker and licensees.

5.6.3 Emergency compensation payments

Customers of licensees do not have the benefit of the GSS. To include details of how licensees will be compensated as a result of the water undertaker's inability to perform satisfactorily, in line with the terms of the access agreement.

Any compensation payments will be paid to the licensee(s) who may pass them on to the customers as appropriate.

5.6.4 Emergency operational planning exercises

To include details of any regular testing of water undertaker's and licensee's procedures, or assessment of their ability to respond to emergency situations through a series of simulated operational exercises.

5.7 Support processes

5.7.1 Arrangements for press liaisons

This section should provide information on the procedures for contacting the media in the event of an emergency.

5.7.2 Arrangements for the dissemination of severe weather warnings

To include details of how severe weather warnings will be communicated between the water undertaker and licensee.

5.7.3 Emergency contacts

To include definition of the duties and obligations on water undertakers and licensees (retail only and combined licence holders) with respect to providing emergency points of contact and subsequent communications.

- i) Responsibility of water undertakers
- ii) Responsibility of licensees

5.8 Reportable situations

This section should provide information on situations or events that are reportable to external bodies such as DWI and the Health and Safety Executive and environmental health organisations.

6. Customer contact arrangements

6.1 Customer contact arrangements for operational queries and complaints

This section should address the following customer contact issues. Each section should address the responsibilities on water undertakers and licensees (retail and combined licence holders) with respect to the specific customer contact activity.

6.1.1 Customer meter reading

6.1.2 Billing and debt collection

6.1.3 Operational Issues

- i) Water supply queries
- ii) Sewerage queries

6.1.4 Complaint handling processes

6.1.5 Obligations on water undertaker

This section should address the issue of investigating supply system problems, at the request of the licensee, and how the results of any investigation will be communicated to the licensee or its customers.

6.1.6 Obligations on licensees

This section should address the provision of relevant contact details and customer support arrangements, including systems to record information arising from customer contact details and to identify reportable issues.

This section should also address how the licensee should provide the water undertaker with timely information so that the water undertaker can perform its duties and responsibilities.

6.2 Customer contact arrangements for emergencies and events

Customer protection issues are also considered under section 5, Maintenance and Emergency Procedures.

6.2.1 Customers with particular needs

To include a common definition of customers with particular needs and priority premises and provide information as the duties and obligations placed upon the water undertaker and licensees in respect of these customers.

6.2.2 Large scale customer warning procedures

To include procedures for undertaking large scale customers' warnings on behalf of all supply system users in the event that a large geographic area and/or large number of properties are affected. The section should also include definition of the duties and obligations placed upon the water undertaker and licensees.

6.2.3 Obligations on water undertakers

To include identification of the systems and processes that a water undertaker has in place to identify designated customers with particular needs and to inform licensees of those customers affected.

The section should also include reference to any systems or processes that a water undertaker may evoke that could impact upon a licensee's customer i.e. large scale warnings and how they will be communicated. The water undertaker should also clarify the systems in place to identify, and handle accordingly, contact from a licensee's customer.

The section should clarify the processes for regularly testing all systems and processes.

6.2.4 Obligations on licensees

This section should address the provision of relevant emergency contact details and customer support arrangements, including identification and detailing of all designated customers with particular needs and for maintaining the accuracy of this information. The section should also address the provision of information, by the licensee, to its customers regarding the water undertaker's large scale emergency procedures.

This section should also address the timely provision of accurate information to the water undertaker so that the water undertaker can perform its duties and responsibilities.

The section should clarify the processes for regularly testing all systems and processes.

7. Supply system connections

This section should include links to information on connection fees.

7.1 Connection of licensee's source to supply system

To include provision of information on the processes for connecting a licensee's source to the supply system.

7.2 Connection of qualifying premises to the supply system

To include provision of information on the processes for connecting a qualifying premise to the supply system. The section should also include provision of information to the sewerage undertaker where applicable.

7.3 Connection of secondary water undertaker's supply system to the primary water undertaker's supply system

To include provision of information on the processes for connecting a secondary water undertaker's supply system to the primary water undertaker's supply system.

8. Legal contract, arbitration and disputes resolution

8.1 Contract terms

To include definition of the heads of terms of the contract.

8.1.1 Contents

This section is envisaged to contain the headings listed below. Please note, the section does not need to be restricted to these headings. Water undertakers can use other headings, to reflect their individual circumstances.

- i) Recitals
- ii) Definitions
- iii) Conditions precedent
- iv) Permission to access the supply system in relation to the contract in question
- v) Acceptance of access code
- vi) Modifications
- vii) Ownership of supply system and vesting
- viii) Material change
- ix) Liability
- x) Force majeure
- xi) Exclusions
- xii) Indemnity
- xiii) Duration
- xiv) Termination
- xv) Emergency suspension
- xvi) Supplier of last resort
- xvii) Payment
- xviii) Dispute resolution
- xix) Notices
- xx) Assignment and alienation
- xxi) Variations
- xxii) Waiver
- xxiii) Severability
- xxiv) Entire agreement

- xxv) Jurisdiction
- xxvi) Confidentiality
- xxvii) Insurance
- xxviii) Third party rights
- xxix) Compensation
- xxx) Provision of bonds and guarantees

8.2 Arbitration and disputes resolution processes

To include processes for resolving differences that arise between the water undertaker and the licensee without recourse to the courts.

8.2.1 Negotiation

8.2.2 Conciliation

8.2.3 Mediation

8.2.4 Arbitration

9. Access Pricing

9.1 Indicative access prices

To include details of the indicative access prices in each water resource zone.

9.2 Case specific access prices

To include an explanation of how the case specific prices will be calculated and must comply with Ofwat's guidance on access codes.

10. Glossary of defined terms

Access: The wholesale supply of water by a water undertaker to a licensee for the purpose of making a retail supply of water to the premises of the licensee's customer; and the introduction of water by the licensee into a water undertaker's supply system for that purpose (common carriage).

Access agreement: An agreement between a water undertaker and a licensee for access by a licensee to a water undertaker's supply system pursuant to the Retail Authorisation and/or Supplementary Authorisation.

Access code: A water undertaker's document that sets out all principal aspects of access to its supply system and the terms and conditions on which it will grant access to its supply system by a licensee. The access code comprises the standard terms and conditions common to all water undertakers and the terms and conditions specific to that water undertaker.

Access terms: The terms under which a water undertaker and a licensee agree access to a water undertaker's supply system.

Adjoining supply system: Supply systems of other water undertakers with direct physical connections to the water undertaker's own supply system.

ARROW costs: Expenses that can be Avoided or Reduced, or any amount that is Recoverable in some Other Way (other than from other customers of the water undertaker) (see section 66E(3) WIA91).

Back-syphonage: Unwanted syphoning of water into the supply system.

Boil notices: A notice issued by the undertaker as a warning that water should be boiled before drinking as a precautionary measure.

Borehole: A hole for abstracting groundwater constructed by boring.

Chemical parameters: Limits for the level of chemicals found in water. Examples are iron, chlorine, sulphates, pesticides, ammonium compounds.

Chlorination: The use of chlorine to disinfect water.

Coliform bacteria: A group of bacteria found in the intestine and faeces of most animals. Coliforms can sometimes be found in untreated water. The treatment process removes them and disinfection prevents their reappearance in the distribution system.

Combined Licence: A Retail Licence with the Supplementary Authorisation, authorising the holder to introduce water into a water undertaker's supply system and to retail that water to a customer's eligible premises (section 17A(6) WIA91).

Combined supply: A supply made pursuant to a combined licence.

Compensation water: Water released to the environment to offset impacts of abstraction or to comply with Appointment Conditions (or both).

Costs principle: As defined in section 66E of the WIA91.

Cryptosporidium: A waterborne micro-organism, single celled protozoan parasite, which causes disease and illness.

Deployable output: The output of a commissioned water supply source, group of sources or bulk supply as constrained by: abstraction license, if applicable; environment; treatment; raw water mains and/or aquifers; pumping plant and/or well/aquifer properties; transfer and/or output main; water quality.

Disinfection: The process of treating water with, for example, small amounts of chlorine in order to kill harmful organisms.

Diurnal variations: Variations occurring within a daily (24 hrs) cycle.

Drought: A prolonged period of dry weather; said to exist if, for at least fifteen days, on each day rainfall has been less than 0.25mm.

E.Coli: A bacterium taken as an indicator of faecal contamination.

Eligible premises: Premises that satisfy the eligibility requirements in section 17A(3) WIA91. Each of the following three requirements must be satisfied in relation to each of the premises in order for a customer's premises to be eligible:

- The customer's premises must not be "household premises" (as defined in section 17C WIA91).
- When the licensee first enters into an undertaking with a customer to give the supply, the total quantity of water estimated to be supplied to the premises annually by the licensee must be not less than 50 megalitres (the "threshold requirement", section 17D WIA91).
- The premises may only be supplied by one licensee (but may also be supplied by one or more water undertakers).

Fit and proper person: For the purpose of making an access agreement, a person or party will not be deemed fit and proper if there are any relevant convictions, concerns over technical ability, insufficient financial resources available.

Fluoridation: Application of fluoride to drinking water at the request of regional health authorities as a preventative measure against dental decay.

Groundwater: For the purposes of an access agreement groundwater is defined as water abstracted directly from an aquifer by means of a well, borehole or spring.

Guaranteed Standards Scheme (GSS): A scheme that lays down the minimum guaranteed standards of service that water companies have to deliver. Water companies have to pay compensation to customers if they fail to meet these standards.

Hardness: Characteristics of waters containing dissolved calcium and magnesium salts.

HSE: Health and Safety Executive a government agency responsible for administering all regulations pertaining to health and safety and public security.

Instrument of Appointment: The water (and sewerage) companies operate under Instruments of Appointment, granted by the then Secretaries of State for the Environment and for Wales, or by the Director, to provide water and sewerage services in England and Wales. The Instrument of Appointment imposes conditions on the companies, which the Director is required to enforce.

Interruptible supply points: These are supply points where a continuous water supply is not necessary.

Licensee: A company holding either a retail licence or a combined licence.

Major Emergency Procedures: The Major Emergency Procedures are evoked when the situation or the number of people affected is in excess of those which can be dealt with by the Standard Emergency Procedures.

Mandatory parameters: Levels of chemical or biological indicators that must be measured by law. Examples for drinking water are E coli, nitrates, chlorides.

Microbiological parameters: Levels of bacteria for example E coli, coliforms, faecal streptococci, whose presence indicate that the water may be polluted and therefore should not be used as drinking water.

Non-potable water: Water which is not intended for domestic or food production purposes.

Outage: A temporary loss of unusable water output due to planned or unplanned events.

Pathogen: An organism which is capable of producing disease.

Potable: Water for domestic and food production purposes which is wholesome at the time of supply. This is defined in section 68 of the WIA91 and section 4 of the Water Supply (Water Quality) Regulations.

Primary water undertaker: For the purposes of section 66A WIA91 (wholesale water supply by primary water undertaker) and section 66C WIA91 (wholesale water supply by secondary water undertaker), a water undertaker is the primary water undertaker of a licensee if the undertaker's supply system is to be used for the purposes of making the supply to the premises of the licensee's customer.

Priority supply points: Supply points as specified by Defra.

Rechlorination: Usually applied to injection of chlorine to drinking water in the distribution system after it has left the treatment works. Often used to boost chlorine levels at a service reservoir.

Reconciliation process: The balancing of actual demand against actual water supplied into the supply system and the associated financial implications.

Regulatory Compliance Sampling Programme: This is the annual programme of drinking water sampling which the Water Companies must undertake to comply with the requirements of the Water Supply (Water Quality) Regulations 2000 (for England) and 2001 (for Wales) and subsequent amendments.

Retail authorisation: An authorisation to a company to use a water undertaker's supply system for the purpose of supplying water to the eligible premises of customers of the company (section 17A(2) of the WIA91).

Retail Licence: A Water Supply Licence giving the holder the Retail Authorisation, entitling the holder to purchase wholesale a supply of water from the water undertaker and to supply it retail to a customer's eligible premises (section 17A(4) of the WIA91).

Secondary water undertaker: A water undertaker other than a licensee's primary water undertaker (section 66C(1)(a)(I) WIA91).

Security of supply: The extent to which water supplies to customers are reliable and not subject to possible restrictions because of a lack of rainfall over a period of time.

Service reservoirs: Any reservoir, statutory or otherwise, which is used to store, treated drinking water.

Sewerage undertaker: A company appointed under the WIA91 to provide sewerage services in respect of a geographical area of England and Wales.

Standard Emergency Procedure: These are a set of procedures for dealing with an emergency. The full or partial implementation of the procedures is dependant on the degree of seriousness of the emergency.

Standby supplies: These are supplies that can be called into operation in the event of failure of the 'duty' supply.

Supplementary Authorisation: An authorisation to a company to introduce water into a water undertaker's supply system for the purpose of making a retail supply of water to a customer.

Supply point: The point at which treated water leaves the supply system system. In general this will be either to specific premises or to the supply system of an adjoining water company.

Supply system: Any water mains and other pipes used for the purposes of conveying potable water from a water undertaker's treatment works to its customer's premises and any non-potable networks that are not connected to any potable system. This term is defined in section 17B(5) of the WIA91.

Supply system balancing: The process of matching the 'water in' against the 'water out' from the supply system.

Telemetry: The technology for automatically measuring and transmitting data by radio or other means from remote sources to receiving stations.

Treated water: Water of a suitable quality for input to the treated water distribution system and that which results in satisfactory DWI compliance at the customer's tap.

Treated water quality monitoring: Regular sampling and analysis of untreated and treated water. Examples include daily measurement of free chlorine at treatment works or annual sampling for mercury at customers' taps.

Treatment works: Works where raw water from rivers or reservoirs is treated to produce drinking water. Treatment typically includes coagulation, filtration and disinfection.

Trihalomethanes: A group of chemicals produced by the reaction of chlorine with natural organic chemicals present in the raw water. Current limit is 100 ug/l averaged over three months.

Turbidity: A measure of the optical clarity of water.

UKWIR: UK Water Industry Research Limited.

Ultra-violet disinfection: Inactivation of microbiological organisms by ultra-violet radiation.

Untreated water: Raw water not of a suitable quality to put into a Control Group.

Water Fittings Regulations: The Water Supply (Water Fittings) Regulations 1999. These Regulations replaced the Water Bylaws in England and Wales and are largely enforced by the water undertakers.

Water resources management plan: A water undertaker's long term strategic plan for water resource development in its area (see section 37A WIA91).

Water Supply Licence: A licence granted to a company giving it the Retail Authorisation, or both the Retail Authorisation and the Supplementary Authorisation.

Water Supply (Water Quality) Regulations: The Water Supply (Water Quality) Regulations, SI 2000 No 3184, amended by SI 2001 No 2885, which apply to water undertakers whose area of supply is wholly or mainly in England; The Water Supply (Water Quality) Regulations 2001, SI 2001 No 3911, which apply to water undertakers whose area of supply is wholly or mainly in Wales. These Regulations specify the standards used to define wholesomeness of drinking water, the level of monitoring required, treatment requirements, reporting requirements and also specify the requirements for using approved substances and products. The DWI enforces these Regulations.

Water undertaker: A company appointed under the WIA91 to provide water services to a defined geographic area and which owns the supply system and other infrastructure.

Wholesale supplies: Supply of water to a licensee by a water undertaker for the purposes of retail by the licensee to its customer's premises.