

***CONSULTATION ON DRAFT
ENVIRONMENTAL & SOCIAL
GUIDANCE FOR WATER AND
SEWERAGE SERVICES (2010-13)***

MARCH 2009

WATER POLICY DIVISION



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1. The Consultation

What this consultation concerns

- 1.1 The Water and Sewerage Services Order (Northern Ireland) 2006, enables the Regional Development Minister ('Minister') to issue Social and Environmental Guidance to the Northern Ireland Authority for Utility Regulation ('NIAUR').
- 1.2 This consultation invites comments on the draft Guidance which sets out how the Minister expects NIAUR to contribute to key areas of social and environmental policy in its regulation of water and sewerage services provided by Northern Ireland Water (NIW). The Guidance will help determine future investment priorities for NIW during the 2010/11-2012/13 period.
- 1.3 This consultation is not about the way water and sewerage services should be funded and governed. The Executive commissioned an Independent Review to look at this in 2007. The Review completed its work last year and the Executive is committed to consulting separately on any decisions it takes on the Review's recommendations. For 2009/10, the Executive has decided to defer the introduction of additional household payments for water and sewerage services.

Your Views

- 1.4 **The purpose of this consultation paper is to seek your views on the draft investment priorities for the water and sewerage industry from 2010-13.** Your views will help to inform the final Guidance to be laid before the Assembly in the Autumn.
- 1.5 We analysed the impact of the proposed Guidance on equality of opportunity, and the need for an Equality Impact Assessment (EQIA) was screened out. We believe that there may be equality implications for some Section 75 groups from some of the proposed Social Policies outlined in Chapter 3. However, the Executive has yet to agree the policy in these areas and will consult separately in due course. The impact on equality of opportunity will therefore be considered as part of the Executive Consultation. A copy of the screening form can be viewed on the Department's website through the following link http://www.drdni.gov.uk/equality_screening_for_se_guidance.pdf.
- 1.6 The Guidance provides high-level policy on future investment priorities for water and sewerage services and does not have a direct impact on businesses apart from NIW itself. The investment proposed by the Guidance will have beneficial effects on the environment and social well being and no need to conduct detailed assessments in these areas has been identified. Investment will be carried out across the North and no disproportional impact between rural and urban investment has been identified.

Where to send your views

- 1.7 Responses to the consultation can either be emailed to waterpolicy@drdni.gov.uk or posted to the address below:

David Lynch
Water Policy Division
Department for Regional Development
3rd Floor Lancashire House
5 Linenhall Street
Belfast BT2 8AA
Telephone: (028) 90542987

Responses can also be faxed to: 02890 547875. For audio impaired users text responses can be sent to: 02890 540642

Closing date for comments

- 1.8 Please note that responses to the consultation **must be received by 8 May 2009**. All responses received by this date will be considered.

Additional copies

- 1.9 Additional copies of this document can be obtained, free of charge, by contacting us at the address above or downloaded from the water policy section of the Department for Regional Development's website, <http://www.drdni.gov.uk/>. The consultation document can also be made available in alternative formats or languages on request.

Confidentiality of consultation responses

- 1.10 A summary of responses will be published following completion of the consultation process. If you would prefer your comments not to be published, please indicate this when responding. Requests for non-publication of responses will be respected but, in accordance with the Freedom of Information Act 2000, cannot be guaranteed. For further information about the confidentiality of responses please contact the Information Commissioner's office¹.

Next Steps

- 1.11 After consideration of all the responses received by the deadline, a further revision of the draft Guidance (Principal Guidance) will be published on the Department's website in May 2009. The final version of the draft Guidance will be laid before the Assembly in late 2009 for the statutory period (30 calendar days or 5 sitting days) before coming into force.

¹www.informationcommissioner.gov.uk

***DRAFT ENVIRONMENTAL & SOCIAL
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MARCH 2009

WATER POLICY DIVISION



2 Introduction

Summary

2.1 The purpose of this Guidance is to provide the Northern Ireland Authority for Utility Regulation (NIAUR) with guidance on the key environmental and social policies the Minister expects it to contribute to in carrying out its role as the independent economic regulator of the water industry.

2.2 The Executive has continued to make significant investment in water and sewerage services. This has raised the quality of drinking water and of water in the environment. Our policy is to continue these improvements by delivering on existing commitments. This includes our EU obligations, but also targeting service improvements for customers in critical areas such as flooding from sewers and interruptions to water supply. Our key strategic investment priorities in this Guidance can be summarised as:

- Affordability – provide affordable cost effective services for customers;
- EU Compliance – meet our European legal obligations in relation to drinking water quality and waste water discharges into the environment;
- Service Improvements – work towards improvements that provide noticeable customer benefits in areas such as sewer flooding and interruptions to water supply; and
- Sustainability - improve our infrastructure to reduce leakage, cut unsatisfactory sewerage discharges, lower energy consumption, and allow for future growth.

2.3 The contents of the Guidance can be summarised as follows:

Chapter 3 outlines the key social policy assumptions that we have made in terms of Affordability, Metering and the Independent Water Review. The Executive has yet to agree the policy in these areas and will consult separately in due course.

Chapter 4 outlines the main European quality requirements that will apply to the water and sewerage industry during the period.

Chapter 5 outlines the results of independent research completed on consumer priorities for service improvements and highlights how this influenced our proposals.

Chapter 6 outlines our draft investment priorities for the water and sewerage industry from 2010-13. The draft priorities are also summarised in Annex B.

Legislative Background

- 2.4 This Guidance is issued by the Regional Development Minister to NIAUR under powers contained in Article 7 of the Water and Sewerage Services Order (Northern Ireland) 2006. NIAUR must have regard to this Guidance when discharging its functions. The legal basis for this Guidance is set out in Annex A.
- 2.5 Section 25 of the Northern Ireland (Miscellaneous Provisions) Act 2006 requires the Department for Regional Development in exercising its functions, to, “act in the way it considers best calculated to contribute to the achievement of sustainable development in Northern Ireland.” We expect NIAUR, in having regard to this Guidance, to act on this requirement and contribute to the achievement of sustainable development in Northern Ireland.

The Price Control Process (PC10)

- 2.6 This Guidance is part of a wider process called Price Control 10 (PC10). The purpose of this process is to determine strategic priorities, costs, plans, targets, prices and customers’ views for water and sewerage services over the 2010/13 period.
- 2.7 The Guidance will inform NIAUR’s wider price control process by providing direction on the strategic priorities for the water industry. Northern Ireland Water (NIW) will identify the costs of meeting the objectives in this guidance through a business plan. In this plan, NIW will demonstrate how it will deliver to agreed milestones within its revenue limit.
- 2.8 Through its final determination, NIAUR will agree service performance targets for NIW over the Price Control period². These targets should be intelligent, that is they should be challenging, achievable and tailored to reflect local service needs including:
- the social and environmental priorities in this guidance;
 - the costs of efficiently³ delivering these priorities; and
 - the interests of water and sewerage customers here.
- 2.9 The Drinking Water Inspectorate (DWI) and the Northern Ireland Environment Agency (NIEA) regulate the quality aspects of drinking water and waste water discharges respectively. The Consumer Council represents the interests of water and sewerage customers. We have

² In a fully regulated regime, the role of NIAUR would normally be to ensure that NIW is in a position to fund delivery of these commitments. However, while significant funding continues to be paid by Government on customers’ behalf, NIAUR’s primary role will be to regulate NIW’s performance and maximise the service levels for the funding available.

³ Taking account of local demographics and higher service provision costs than comparative companies in GB.

worked with DWI, NIEA and Consumer Council as well as NIW and NIAUR to establish the draft investment priorities set out in this Guidance. Any views and comments we receive through the public consultation will inform the investment priorities in the final Guidance.

- 2.10 Water and sewerage price limits are reviewed every 4 years in Scotland, and every five years in England and Wales. For the first regulatory price control here, a 3-year period will be covered. The final Guidance will be laid before the Assembly in the Autumn of 2009. Following this, NIAUR will complete final determination of what NIW should deliver in the 2010-2013 period. The current price control process (PC10) will be completed in early 2010. More information on PC10 can be found on the NIAUR website at <http://ofreg.nics.gov.uk>.

Funding Assumptions

- 2.11 The Executive will set the policy in respect of domestic and non-domestic water and sewerage charging over the PC10 period. Its policy direction will determine the amount of overall funding that will be provided to water and sewerage services through public expenditure channels, and the amount of funding that will be provided through income from customers.
- 2.12 Until the policy direction is set, and the overall funding parameters are established for the period beyond 2009/10, it is not possible to set concrete funding assumptions for the PC10 period. However, we have made an initial working assumption that total annual revenue for the price control period will be of the following order:

Year	2010/11	2011/12	2012/13
Revenue	£390m	£415m	£440m

These figures are based on previous outline projections set out within the Strategic Business Plan for the period 2007 to 2014 and estimates of the additional efficiencies to be achieved following the Independent Water Review Panel's Reports.

- 2.13 The Executive has set out its Investment Strategy (ISNI) for the period 2008-2018. It identifies priority areas for investment and the funding to support this. Based on ISNI, the following sums have been committed for NIW to borrow to enhance its assets over the PC10 period.

Year	2010/11	2011/12	2012/13
Loans available	£130m	£120m	£90m

Transformation and Efficiency

- 2.14 The Executive has continued to invest in improving water and sewerage services since the restoration of local Institutions. Over the past decade, the emphasis has been on drinking water quality and, more recently, on waste water management. But NIW also needs to invest in technology, planning and information systems if it is to deliver a modern service.
- 2.15 NIW needs to transform and become more efficient if it is to deliver higher standards of customer service. Projects that deliver real efficiencies will be afforded priority. If projects are to be funded, they must show that they are meeting targets and demonstrating measurable benefits.
- 2.16 Customers will benefit from NIW becoming more efficient. Reducing costs through efficiencies will mean lower bills for customers or taxpayers. NIW should be expected to adopt stretching targets for operational and capital expenditure. Realistic efficiency targets will be developed as part of the PC10 process.
- 2.17 Priority should be given to improving the accuracy, reliability and consistency of information. This includes customer, financial, management and asset data. The Regional Development Committee has highlighted the needs for improved data and the management of risks associated with it. This should build on the work already being done by NIW and NIAUR.

Equality Impact

- 2.18 The impact of the proposed Guidance on equality of opportunity was analysed and the need for an Equality Impact Assessment screened out for the following reasons:
- The Guidance provides high level policy on the future investment priorities for water and sewerage services. This investment will benefit all NIW's customers and reduce impacts on the environment; and
 - Any impact on equality of opportunity resulting from the proposed Social Policies outlined in Chapter 3 will be considered as part of the Executive's wider Consultation on its response to the Independent Review of Water and Sewerage Services.
- 2.19 It should also be noted that some of the future investment priorities set out in this Guidance are mandatory and driven by European legislation. Failure to implement these European requirements could result in infraction and substantial fines for the Executive, leading to reduced investment in public services here.

3 Social Policies

Independent Review of Water & Sewerage services

- 3.1 In 2007, the Executive commissioned an independent review to determine the longer term approach for delivering water and sewerage services. The review had two strands. The first strand focused on the cost of water and sewerage services and how these should be funded. The second strand concentrated on the wider aspects of management and governance. Copies of the Independent Water Review Panel's Strand 1 and Strand 2 Reports can be viewed at <http://www.iwrp-ni.org.uk/index.htm>.
- 3.2 In October 2007, the Executive agreed that the first report of the Independent Review provided a basis for the way forward. Ministers gave a commitment to consult on the Executive's response to the Independent Review proposals. That response remains to be finalised.
- 3.3 In November 2008 the Executive announced that the proposed introduction of additional household water and sewerage payments in April 2009 would be deferred. The balance of income required from customers is paid on their behalf through DRD.
- 3.4 Any reference in this Guidance to future financing and regulatory arrangements must be interpreted in light of the Executive's pending decisions. The final version of the Guidance will take account of any further decisions taken by the Executive on the Independent Review or on the future funding for water and sewerage services.

Funding Policy

- 3.5 The Independent Review proposed that funding arrangements for water and sewerage services should be self financing and that households should make additional contributions. The Executive has yet to conclude its position on this. On the non-domestic side, the Independent Review recommended the extension of comprehensive payments for water and sewerage services to the whole sector. The Executive is considering phasing arrangements for non-domestic payments.

Affordability

- 3.6 Following its meeting on 20 November 2008, the Executive decided that there will be no additional household water and sewerage payments in 2009/10 in light of the current economic situation. The Independent Review stressed the need not to exacerbate poverty or widen social exclusion. In October 2007, the Executive agreed that any future funding measures should protect the less well off.

Metering

- 3.7 There are contending views on metering and its social and environmental impact. In line with the Independent Review's recommendations, no immediate move to universal metering is feasible during this price control period. However, the installation of metering facilities in new buildings should continue as it remains a legislative requirement. Ministers will consider the needs of particular groups – such as pensioners - who might benefit from metering. But any conclusions on metering in this Guidance would be premature before the Executive has decided its overall response to the recommendations of the Independent Review. Metering as the preferred methodology for the non-domestic sector will continue.

Water Connections

- 3.8 We recognise the needs of existing households that are not currently served by the mains water network. The Department for Regional Development currently makes an allowance available to help people with existing unconnected properties to meet the costs of connection. This is already set at a higher level than in GB. Investigation of options aimed at increasing the affordability of water mains provision to existing households will be carried out.

4 Environmental Obligations

Environmental Quality Requirements

- 4.1 Major investment in water and sewerage infrastructure over the last decade has resulted in significant improvements in drinking water and the quality of our inland and coastal waters. This Guidance builds on these improvements and introduces further measures to maintain the quality of drinking water and enhance waste water treatment. As waste water treatment continues to improve through investment, priority should now also be given to reducing the risks of pollution from unsatisfactory discharges from sewerage networks. Success in reducing these risks is becoming increasingly important to meeting environmental quality obligations under various European Directives.
- 4.2 DWI and NIEA are responsible for regulating the quality aspects of drinking water and waste water discharges respectively. They monitor and enforce NIW's compliance with the environmental quality requirements set out in domestic and European legislation. Before NIW was established on 1 April 2007, the Water Service as part of Government, had crown immunity and could not be prosecuted. NIW can now be prosecuted and fined for failing to meet these quality requirements. Large fines can also be imposed on our Government by the European Commission if environmental commitments are not met.
- 4.3 Through the price control process we worked closely with both quality regulators and NIW to establish the environmental investment priorities for the period. The following paragraphs outline the main European quality requirements.

Water Framework Directive

- 4.4 A key long-term driver for environmental improvements is the Water Framework Directive⁴ (WFD). This establishes an integrated approach to the protection, improvement and sustainable use of water bodies⁵. The WFD impacts on the management of water quality and water resources, and affects conservation, fisheries, flood defence, planning and environmental monitoring. It introduces ecological objectives that are designed to protect, and where necessary restore the structure and function of aquatic ecosystems.
- 4.5 The WFD also promotes the sustainable use of water resources through the introduction of water pricing. Under Article 9, water and sewerage pricing measures must be in place by 2010. Through pricing, an adequate contribution must be recovered from customers towards the costs of providing these services taking account of the polluter pays principle.

⁴ Council Directive 2000/60/EC

⁵ These include rivers, lakes, transitional waters (estuaries), coastal waters and groundwater.

- 4.6 The WFD is to be delivered through an integrated framework of River Basin Management Plans (RBMPs) across Europe. Three RBMPs cover the North. These plans will set the framework for future regulatory decisions within each of the river basins. Programmes of Measures within each plan will deliver improvements. These will target pollution pressures, and identify the risk to water bodies with the aim of enabling them to attain good status. The initial RBMP measures must be in place by 2012.
- 4.7 The water and sewerage investment needs to meet the WFD during the price control period will depend on the content of the final RBMPs. However, many of the initial measures were anticipated in the development of existing plans. Any further action to achieve WFD objectives should fall outside the PC10 period. These will not be decided until NIEA completes additional assessments and reviews the impact and success of the initial measures. The WFD will help establish objectives for the next price control period (PC13) and beyond.
- 4.8 The draft RBMPs are currently undergoing a 6-month public consultation and can be viewed at <http://www.ni-environment.gov.uk/wfd>. Once the final versions of the RBMPs are submitted to the European Commission in December 2009, an ongoing six-year cycle of review, reassessment and revision will commence.

Urban Waste Water Treatment Directive

- 4.9 NIW collects and treats 134 million cubic metres of waste water every year on our behalf. This involves the maintenance and operation of about 1,100⁶ waste water treatment works and the maintenance of more than 14,500 km of sewers. The focus of recent sewerage investment has been on meeting the requirements of the Urban Waste Water Treatment Directive (UWWTD)⁷.
- 4.10 The UWWTD was adopted in May 1991. It is transposed into legislation here through the Urban Waste Water Treatment Regulations (Northern Ireland) 2007. Its objective is to protect the environment from sewage pollution through the effective collection, treatment and discharge of waste water. The Directive sets treatment levels based on the size of population (population equivalent) served by the sewerage system and the sensitivity of waters receiving their treated discharges.
- 4.11 Action to improve compliance includes major projects such as:
- the Belfast Sewers Project (£140M) which reduces river pollution, reduces the risk of out of sewer flooding and increases sewerage capacity;

⁶ Over 800 of these works serve a population equivalent less than 250.

⁷ Council Directive 91/271/EEC

- the Omega Waste Water Treatment Project (£122M) which represents 20% of total waste water treatment and 100% of sewage sludge disposal capacity; and
- many smaller sewerage upgrades and improvements including investing £5M annually on upgrading small waste water treatment facilities.

4.12 Despite this recent investment and NIW's increasing levels of compliance, the UWWTD remains a major driver for investment in the period. Moreover, there is possibility of new interpretations of the Directive's requirements which could necessitate additional investment.

Bathing Water Directive

4.13 The aim of the first Bathing Water Directive (BWD), adopted in 1975 was to protect public health and the environment by keeping coastal and inland bathing waters free from pollution. To ensure good bathing water quality, the Directive includes maximum limits for physico-chemical and microbiological parameters. Water samples are regularly taken by NIEA for analysis throughout the bathing season from June through to mid September. Experience of past years shows that the main issue for bathing water quality today is microbiological pollution, either from waste water or from agricultural run-off. Our focus must therefore be on reducing the risk of bathing water pollution from waste water discharges. This can be achieved through appropriate treatment plant and sewerage system upgrades. However, we recognise that sewerage systems cannot be economically designed and constructed to cope with extreme weather conditions such as were experienced in August 2008.

4.14 In 2008, Ballyholme was the only one of Northern Ireland's 24 identified bathing waters that failed to achieve the mandatory standards of the BWD. This was due to inadequacies in the local sewer network. An upgrade to the local sewerage system will be completed to address these issues in early 2010. Priority should also be given to completing any necessary sewerage or treatment upgrades in Newcastle which failed to meet the mandatory BWD standards in 2007. Any proposed upgrades should satisfy the quality requirements of the revised BWD.

4.15 The revised BWD⁸ adopted in 2006 is transposed here through The Quality of Bathing Water Regulations (Northern Ireland) 2008. It includes higher quality standards through four new bathing water classifications:

- excellent – approximately twice as stringent as the previous guideline standard;
- good – similar to the existing guideline standard;

⁸ Council Directive 2006/7/EC.

- sufficient – more stringent than the existing mandatory standard; and
- poor – equates to what is normally considered to be noncompliant waters.

4.16 The revised Directive requires all identified bathing waters to achieve “sufficient” classification by the end of the bathing season in 2015. Recent investment on improved waste water treatment will help ensure that most of the bathing waters will meet the revised BWD requirements. This includes the completion of a new £47.5M waste water treatment works on the North Coast⁹. Any further sewerage and waste water treatment upgrades necessary for ensuring BWD compliance should be given priority during the period.

Shellfish Waters Directive

4.17 The Department of the Environment (DOE) is responsible for designating shellfish waters under the Shellfish Waters Directive (SWD)¹⁰. The aims of the SWD are to protect and where necessary improve the quality of waters where shellfish grow. And, ultimately to contribute to the high quality of edible shellfish products. Under the SWD, there is an obligation to review and, if necessary, make new designations. Once designated, shellfish waters must meet the necessary quality standards within 6 years.

4.18 As of January 2008, there were 38 classified shellfish beds here. However, a significant number of these lie outside existing designated shellfish waters and are not protected under the SWD. DOE recently consulted on proposals to make a number of additional shellfish water designations in 2009. Details of this consultation can be viewed on the DOE website¹¹.

4.19 An initial analysis of the proposed designations by DOE indicates that additional sewerage and waste water treatment investment over and above that already undertaken and planned by NIW should not be significant. This assumes that the target is to achieve Category B shellfish classification within these designations and not the higher quality standards of Category A. Future investment requirements will be informed by NIEA monitoring and are assumed to fall outside the scope of this price control period. The Directive allows a period of six years following designation to achieve full compliance. Any necessary sewerage upgrades should therefore be planned for completion during the next price control period.

⁹ The new facilities treat waste water from Coleraine, Portrush, Castlerock & Portstewart.

¹⁰ Council Directive 2006/113/EC.

¹¹ http://www.doeni.gov.uk/index/protect_the_environment/water.htm.

Drinking Water Directive

- 4.20 The objective of the Drinking Water Directive¹² (DWD) is to protect the health of water consumers by ensuring drinking water is wholesome and clean. It sets standards for the most common substances (or parameters) that can be found in drinking water. A total of 48 microbiological and chemical parameters must be monitored and tested regularly. The DWD is transposed into our national legislation through the Water Supply (Water Quality) Regulations (Northern Ireland) 2007¹³. The Drinking Water Inspectorate monitors and regulates drinking water quality on behalf of the Department for Regional Development.
- 4.21 NIW abstracts, treats and distributes approximately 614 million litres of drinking water every day through a network of over 26,500 km of water mains. Recent investment focussed on improving water treatment facilities and mains networks to achieve the quality requirements of the DWD. The current high levels of drinking water compliance have been achieved through sustained investment on water treatment facilities and on mains rehabilitation. It is essential that this investment continues to maintain water quality and address authorised departures from the DWD and other statutory obligations.
- 4.22 We recently consulted on proposals to amend the 2007 Regulations. The proposed amendments will:
- make the monitoring of raw water quality by NIW a legal requirement;
 - take forward the water safety plan approach recommended by the World Health Organisation by widening the scope of risk assessment;
 - facilitate the identification of trends in raw water quality in a timely manner potentially enabling solutions, other than treatment, to be identified and implemented in line with the WFD; and
 - introduce additional enforcement powers in respect of water treatment.
- 4.23 The consultation can be viewed at www.drdni.gov.uk/waterpolicy.

¹² Council Directive 98/83/EC

¹³ SR 2007/147.

5 Service Improvements

EU Driven Service Improvements

- 5.1 Through the water and sewerage investment programme outlined in Chapter 4, we expect customers will benefit from:
- Reduced pollution through improvements to sewerage facilities.
 - Improved ecological quality of our inland and coastal waters - providing benefits for aquaculture, fish, wildlife, and recreational use.
 - Cleaner beaches and bathing water - direct benefits for customers and for tourism.
 - A reduced risk of sewer flooding through quality improvements to the sewerage network.
 - Clean, safe, wholesome drinking water, meeting the quality standards of the DWD.
 - Further safeguards to drinking water quality through the introduction of wider catchment risk assessments and new raw water monitoring programmes.
 - A reduction in the number of unplanned interruptions to supply through investment on water mains rehabilitation.
 - Continuing improvements in pressure and leakage reduction through the water mains rehabilitation programme.
- 5.2 However, we recognise the importance of including further measured improvements to service levels that will provide noticeable customer benefits. The rest of this chapter provides an initial overview of the results of independent consumer research and highlights how this has influenced the proposed investment priorities listed in Chapter 6.

Independent Consumer Research

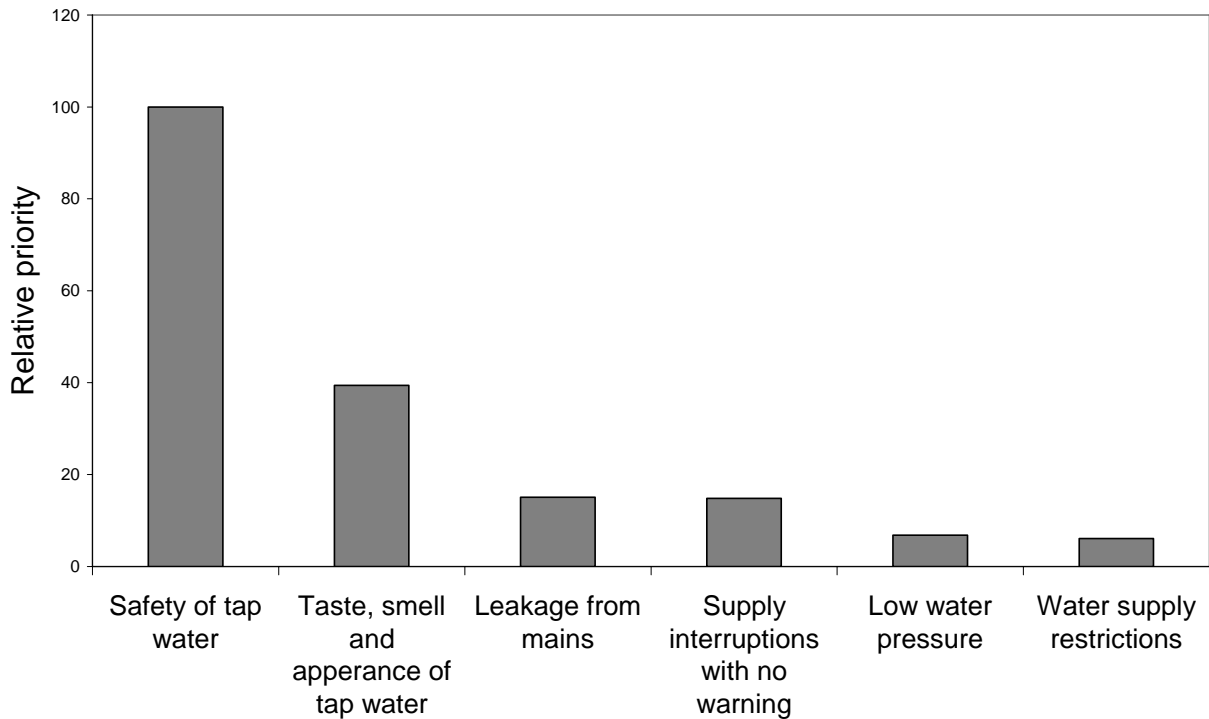
- 5.3 In Autumn 2008, NIW asked the Consumer Council to carry out independent research to find out what consumers want from their water and sewerage services. The research project was undertaken during 2008 and involved:
- group discussions;
 - telephone interviews with non-domestic customers; and
 - a survey of 1000 households.

A copy of the final report is available on the Consumer Council's website, <http://www.consumer council.org.uk/>.

- 5.4 Consumers were given information about the different services NIW provides. They were asked to rank the services in the order they felt

were the most important to the least important for maintaining and improving water and sewerage services. The survey results are categorised into water, sewerage, environmental and customer service. The graphical illustrations show the relative priorities of individual service factors within each category.

Water Supply Service Factors



5.5 An overwhelming majority stated that safety and the taste, smell and appearance of drinking water are their main preferences. The Drinking Water Directive described in Chapter 4, already commits us to ensuring high standards in these areas. Investing in infrastructure to maintain high standards of drinking water quality and address areas where DWI has authorised NIW to temporarily depart from standards is therefore included in Investment Priority 1.

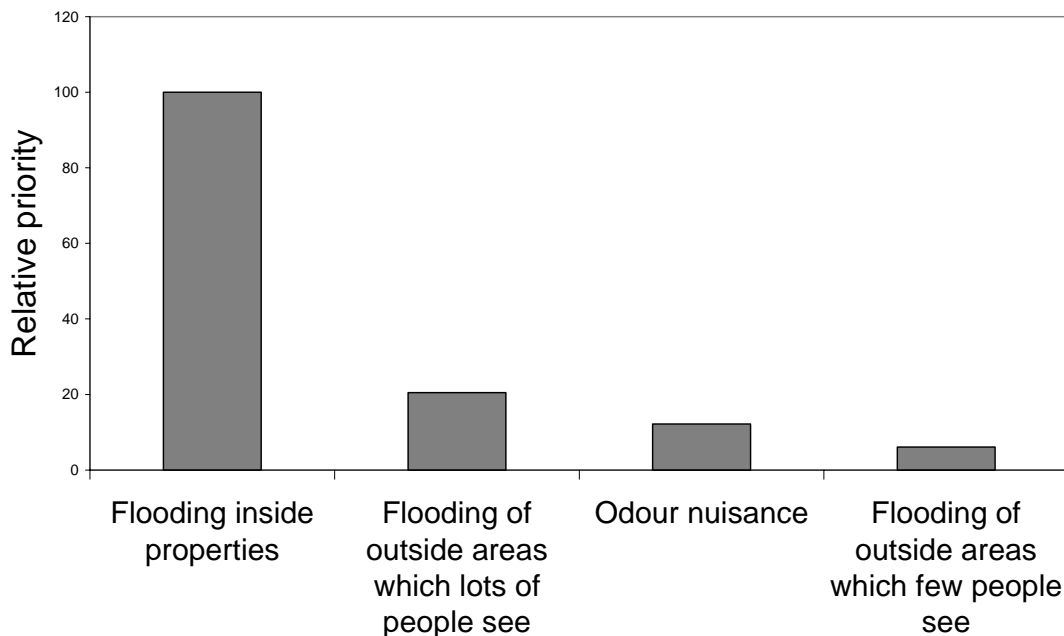
5.6 Consumers' third preference was leakage. This is included in Investment Priority 3. There are environmental and economic benefits from reducing leakage. However, in a pressurised water system with over 26,500 km of mains, there is inevitably an optimum level of leakage. This is where it is no longer cost effective to invest in further reductions and is called the Economic Level of Leakage (ELL). We expect current levels of leakage investment to continue during the period with the focus of achieving and maintaining the Economic Level of Leakage.

5.7 Also in investment priority 3 is low pressure, consumers' fifth preference. We expect improvements in pressure to continue through

the ongoing investment in water infrastructure, and in particular the mains rehabilitation programme. Improvements during the period are to be monitored by maintaining a register of properties at risk of receiving low pressure (DG2 Register). We would expect to see a reduction in the number of properties at risk over the period.

- 5.8 Consumers consider interruptions to the supply of drinking water with no warning as their fourth preference. These are usually caused by burst or damaged water mains. These take time to fix and can involve expensive road excavations along with traffic management restrictions. We therefore recognise the need to reduce the number and frequency of these interruptions and include this as an Investment Priority 2 along with limiting restrictions to supply (identified by customers as their sixth preference).

Sewerage Service Factors

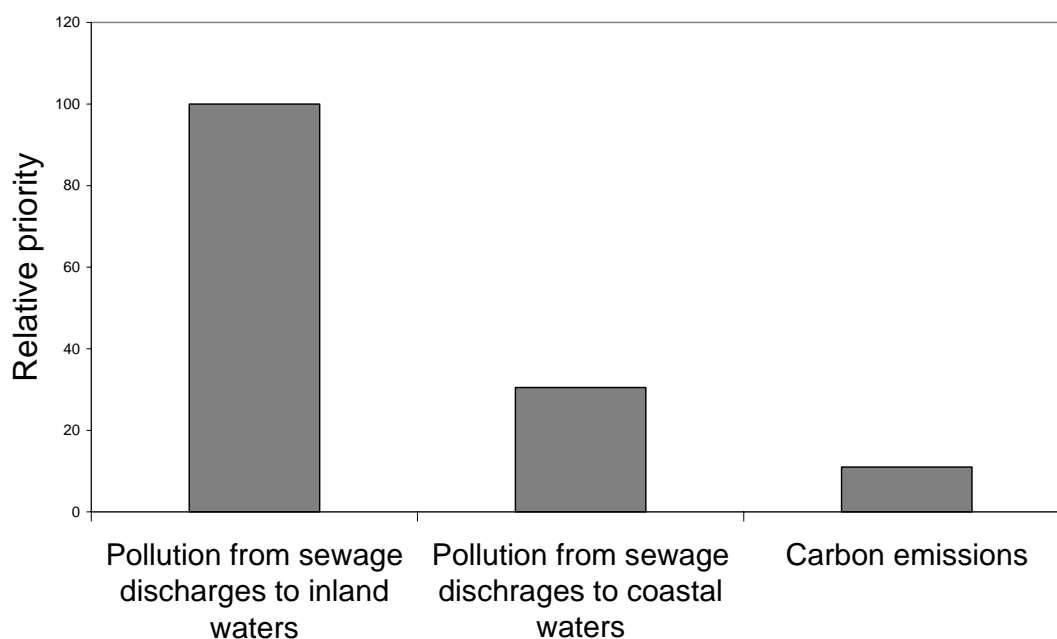


- 5.9 Preventing flooding inside properties, that is, flooding from sewers which occurs inside a property, was consumers' overwhelming preference. This is understandable given the damage and distress caused by such flooding. In Investment Priority 2, we include specific measures to reduce the risk of internal flooding events. A register of properties at risk from internal sewer flooding is to be maintained (DG5 Register). We expect NIW to maximise returns for DG5 investment during the period in terms of the number of properties to be removed from the register.
- 5.10 Investment Priority 2 also includes proposals to improve the management of the sewerage system in general. These improvements along with the proposals for internal sewer flooding will reduce the

extent of external sewer flooding (second and fourth preferences by consumers).

- 5.11 Odour nuisance was consumers' third preference. Sewage odours are often attributed to sewer flooding or spills, both of which will be reduced by improvements to the sewerage network. We expect NIW to continue effective management of sewage odours during its waste water treatment operations and to deal with existing issues on a prioritised basis in consultation with NIEA and Environmental Health Officers.

Environmental Service Factors

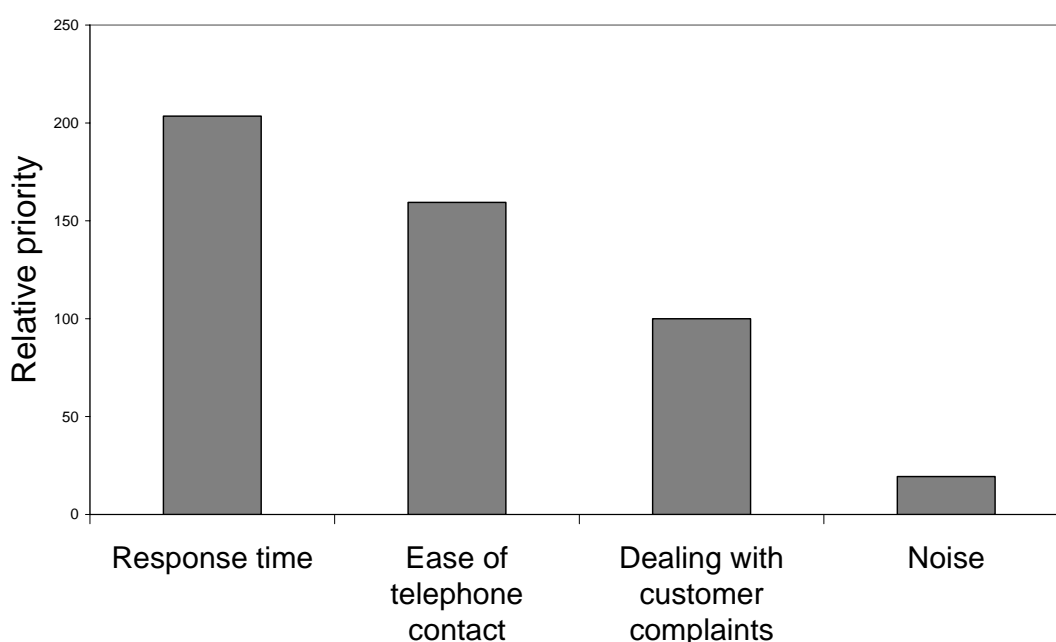


- 5.12 Preventing sewage pollution to inland waters (rivers and lakes) and coastal waters were the top two environmental preferences for consumers. The UWWTD and other legal instruments require such pollution to be minimised. Fines can be imposed not only directly on NIW through enforcement action, but also on our Government if these commitments are not met. We therefore recognise the importance of reducing sewage pollution and include a number of measures in Investment Priority 1 to improve the quality of sewerage discharges in line with European requirements.
- 5.13 Combined sewerage systems which collect both waste water and rainwater can become overloaded during periods of particularly heavy rain. This increases the risk of sewer flooding or overloading of treatment works. These risks are managed through emergency overflows which discharge into inland and coastal waters to alleviate hydraulic pressure on the sewerage system. We recognise the need to effectively monitor and control these discharges to prevent pollution. In Investment Priority 2, we therefore expect to see a continued reduction

on the number of pollution incidents through efficient and effective monitoring and control of the sewerage infrastructure.

5.14 NIW's role in reducing carbon emissions (ranked third by consumers) is reflected in Investment Priority 6. This identifies measures for contributing to sustainability and tackling climate change. As the largest single consumer of electricity here, we recognise that NIW can make a valuable contribution to reducing carbon emissions. We therefore expect NIW to increase its use of green energy and deliver energy efficiency improvements over the period. In addition, for the next price control period, it is expected that carbon costs will be included in the assessment for all significant capital projects.

Customer Service Quality and Effectiveness



5.15 Consumers rank NIW's ability to respond and fix problems as their main preference, followed by ease of telephone contact. Dealing with customer's written complaints within 10 working days was ranked third. We recognise the importance of supporting service delivery with efficient and effective customer services. Good customer service depends on having good information readily available. This can be about the state of the asset, its location, or the availability of staff to respond to an event. This should be delivered through NIW's transformation programme. In investment Priority 2 we highlight our expectation for continued customer service improvements during the period.

5.16 Noise was not considered a main priority for consumers.

6 Key Investment Priorities for 2010-13

Overview

- 6.1 In its Investment Strategy, the Executive has identified “a high quality water and waste water infrastructure for the region, capable of meeting EU requirements” as a key environmental goal. A major consideration in achieving this goal is affordability for customers and for the taxpayer. Not everything can be fixed at once and it would not be good use of investment to try to do so.
- 6.2 This is recognised by the Independent Review which cautions against making the substantial investment required to effect marginal improvements in drinking water quality which are already above 99% compliant. We also recognise that in a pressurised water system there will always be a certain level¹⁴ of leakage. Similarly, trying to build water and sewerage infrastructure now to accommodate all potential long term development or to cope with any weather event would not be sensible use of finite resources. Removing all risk of flooding is therefore not feasible.
- 6.3 The scale of capital investment envisaged in this Guidance is over £600 million across the PC10 period. This will provide continuing major improvements in our water and sewerage infrastructure to meet the Executive’s goal.
- 6.4 Meeting EU legislative requirements is mandatory. Fines can be imposed not only on NIW through prosecution, but also on our Government if these requirements are not met. Implementing the measures to secure compliance will improve the quality of services for customers. Independent consumer research has informed the proposals for further service quality improvements in areas such as the quality and safety of drinking water and sewer flooding. Wider programmes such as water mains rehabilitation will also provide benefits for customers in terms of reduced unplanned supply interruptions, improvements in pressure and reduced leakage.
- 6.5 We recognise the need to identify and plan for any infrastructure improvements to comply with EU requirements beyond 2013. Further improvements associated with the WFD need to be considered. Water and sewerage services need to be sustainable if we are to build for the future. This includes planning for growth, improving energy efficiency and adopting any new innovative systems or practices that can improve the sustainability of water and sewerage assets.
- 6.6 The draft investment priorities for the PC10 period (2010-13) are listed in the following paragraphs and summarised in Annex B. These have

¹⁴ This is the Economic Level of Leakage (ELL), where it is no longer cost effective to invest in further leakage reductions.

been developed in conjunction with the key stakeholders¹⁵. Although these investment priorities are listed in a provisional order of importance, it is difficult to draw a clear distinction between them because of dependencies and overlap. For instance, all the priorities contribute towards sustainability, whether it is through meeting the mandatory quality requirements of the Water Framework Directive (Priority 1) or reducing water mains leakage (Priority 3).

EU Environmental Quality Obligations (Priority 1)

6.7 Our strategic investment priorities for water and sewerage services focus on meeting the essential requirements of EU environmental legislation and include:

- completing initial measures identified in the WFD River Basin Management Plans to achieve the aims of the Directive;
- raising waste water discharge standards to comply with the UWWTD, BWD and SWD;
- maintaining the high levels of drinking water quality that have been achieved in recent years;
- addressing authorised departures from the quality standards of the DWD and other statutory obligations; and
- addressing immediate development pressures by providing increased capacity, particularly at overloaded waste water treatment works.

6.8 The current levels of investment on water and sewerage treatment facilities and on the networks should therefore be sustained. We recognise that, with a higher average length of water mains and sewer per household here compared to GB, the maintenance and replacement costs may be higher. Where funding does not permit the progressing of all quality or growth related projects identified during the period, we expect any deferred projects to be addressed in the next price control period.

6.9 Our priorities during the period can be summarised as:

- *Complete treatment and capacity upgrades at waste water treatment works necessary for ensuring compliance (with UWWTD, BWD, SWD) and addressing immediate development pressures. This includes providing appropriate treatment at small waste water treatment works¹⁶.*
- *Implement those drainage area plans identified (by NIEA) as the highest priority and develop programme to address specific*

¹⁵ Key stakeholders include the environmental quality regulators (NIEA & DWI), the Consumer Council and the water company (NIW).

¹⁶ Small waste water treatment works are defined as those which serve a population equivalent of less than 250 people. There are around 800 such works.

sewerage issues such as internal sewer flooding, unsatisfactory discharges and spills from sewer overflows.

- *Implement site specific WFD sewerage measures detailed in the draft RBMPs. These may include reducing the number of sewerage spills or providing enhanced treatment in certain catchments.*
- *Complete water infrastructure and treatment upgrades necessary to address authorised departures and other statutory obligations from the Water Supply (Water Quality) Regulations (Northern Ireland) 2007.*
- *Complete water infrastructure and treatment upgrades necessary to maintain current¹⁷ drinking water quality standards in line with the recommendations¹⁸ of the Independent Review.*
- *Introduce wider catchment risk assessments and new raw water monitoring programmes in line with the proposed Water Supply (Water Quality) (Amendment) Regulations (Northern Ireland) 2009.*

Improving Service Levels (Priority 2)

6.10 Independent customer research has informed the proposed service quality improvements below. We recognise that these must be supported by high quality customer services and founded on accurate, reliable and consistent information. This includes customer, financial, management and asset information. We expect NIW to:

- *Continue improvements in customer service quality and effectiveness through the development of better data and information systems.*
- *Improve the accuracy, reliability and consistency of information - customer, financial, management and asset information.*
- *Adopt any new technology or systems that provide tangible benefits in terms of improving service performance or reducing operational costs.*

6.11 Our main priority for water is to provide consistent high standards of quality and service for all customers. We expect improvements in security of supply and unplanned interruptions to continue and a safety plan approach to be adopted to further safeguard water quality. The proposed priorities for water service quality improvements can be summarised as:

¹⁷ Current drinking water quality standards taken as the mean zonal compliance achieved in 2009 (estimated MZC of 99.7% for 2009).

¹⁸ Given the high level of drinking water compliance already achieved and the substantial investment required to effect further marginal improvements, the Independent Review recommends that the Executive should consider the cost effectiveness of increasingly exacting drinking water compliance targets.

- *Implement the proposed Water Supply (Water Fittings) (Amendment) Regulations (Northern Ireland) 2009 to prevent the waste and contamination of public water supplies and protect against the use of defective water fittings.*
 - *Complete the risk assessments required to inform Water Safety Plans (WSPs) for public water supply systems during the period in line with the proposed amendments to the Water Supply (Water Quality) Regulations (Northern Ireland) 2007.*
 - *Reduce regional variations in drinking water quality and improve security of supply through the decommissioning of any abstraction points susceptible to contamination and installing additional water mains as necessary.*
 - *Continue to reduce the number of properties that experience unplanned and unwarned interruptions to drinking water supply in excess of 6/12/24 hrs (DG3 Register).*
- 6.12 Recent sewerage investment focussed on upgrading and improving treatment processes to comply with UWWTD standards. Significant work remains to be done in this area (as identified in Priority 1).
- 6.13 We also expect to see investment used to improve the quality of the sewerage networks to comply with UWWTD and to target key customer priorities including unsatisfactory discharges and flooding from overloaded sewers. This will include collecting accurate and reliable information on sewerage infrastructure to inform drainage area plan work. NIW should also collect accurate data on sewer flooding and maintain a register of properties at risk for monitoring purposes. The proposed sewerage service quality improvements can be summarised as:
- *Collect accurate and reliable information on sewerage infrastructure¹⁹ to inform the development of a future programme of drainage area plan work for the price control period and beyond.*
 - *Develop a priority long-term drainage area plan programme (in conjunction with NIEA) for the price control period and beyond.*
 - *Following completion of urgent drainage area plan (DAP) work identified through Priority 1, commence long-term DAP programme.*
 - *Develop and maintain a register of properties at risk from internal sewer flooding (DG5 Register).*
 - *Implement a programme of projects to reduce the number of properties on the DG5 Register over the PC10 period and beyond.*
 - *Reduce the number of pollution incidents through efficient and effective monitoring and control of the water and sewerage assets.*

¹⁹ This will include information on unsatisfactory intermittent discharges, external sewer flooding and other capacity related issues.

6.14 With the introduction of trenchless technology, the number of road excavations for water mains and sewerage work has been reduced and the quality of the road reinstatements has improved. We expect these improvements to continue and that NIW fulfils its legal obligations for Street Works under The Street Works (Northern Ireland) Order 1995. NIW's priority during the period should be to:

- *Fulfil the streetworks notification requirements and continue to improve the quality of road reinstatements in line with Roads Service targets (90% pass rate).*

Water Leakage and Pressure (Priority 3)

6.15 Existing water and sewerage service levels will continue to be improved through EU quality driven projects associated with drinking water and water in the environment. We expect current levels of investment on leakage to continue with the focus of achieving the Economic Level of Leakage. Investment on water pressure should also be sustained through the water mains rehabilitation programme. The proposed service level improvements can be summarised as:

- *Continue to focus on leakage detection and reduction with the aim of achieving and maintaining the Economic Level of Leakage.*
- *Target areas of low pressure through the mains rehabilitation programme to ensure all customers benefit from at least the minimum levels of supply.*
- *Maintain a register of properties at risk of receiving low pressure (DG2 Register) and agree the number of properties to be removed from the register over the period.*

Surface Flooding (Priority 4)

6.16 The increased instances of heavy flooding over the last few years highlight the need for effective and efficient drainage infrastructure. It would require enormous sums of money to eliminate the risk of flooding. Any investment needs to be carefully prioritised to achieve maximum benefit. One of the key goals of the Executive's Investment Strategy is "sustainable flood risk management to meet the social, environmental and economic needs of the region. Responsibility for flood risk management falls to the Department of Agriculture's Rivers Agency. Roads Service and NIW also have a part to play in this planning as owners of key infrastructure. All these agencies and others need to work together to respond effectively to flooding events.

6.17 NIW provides and maintains sewerage systems which receive both waste water and surface water. Flooding can occur where the existing sewer is unable to collect all the surface water during heavy periods of rain. Implementation of drainage area plans will help to reduce the risk of this surface flooding. However, we recognise that specific improvements may be needed to address particular parts of the

sewerage network which are prone to surface flooding. We expect NIW to continue to invest in such improvements during the period.

6.18 The proposed priorities for surface flooding can be summarised as:

- *Ensure that Drainage Area Plans focus on reducing the risk of surface flooding²⁰ in addition to addressing EU environmental quality drivers.*
- *Continue to address those parts of the sewerage network which are prone to surface flooding.*
- *Assist Rivers Agency in the development of Flood Risk Management Plans (FRMPs), a requirement under the new EU Floods Directive.*
- *Put the necessary resources in place to provide an effective emergency response during flooding incidents, in partnership with the other relevant agencies.*

Longer-term EU Requirements (Priority 5)

6.19 We expect NIW to identify and program any improvements necessary to comply with longer term EU requirements beyond 2013. These are detailed below and include any additional WFD measures identified through monitoring and any further improvements necessary for UWWTD compliance.

- *Identify and program any further waste water treatment, collection or capacity upgrades necessary for ensuring future compliance with UWWTD, revised BWD & SWD including continued improvements of small treatment works;*
- *Take account of the potential impact of emerging EU policies and developments during the period (e.g. UWWTD requirements for collection systems and CSOs);*
- *Put in place effective arrangements to monitor future compliance with UWWTD and discharge consents²¹; and*
- *Address any further RBMP water and sewerage measures identified through WFD monitoring.*

Sustainability & Climate Change (Priority 6)

6.20 NIW should continue its investment on sustainability measures. Through its capital works programme it will continue to reduce water leakage and help improve water quality in the environment through sewerage improvements. However, NIW is currently the largest single consumer of electricity here and can make a valuable contribution towards sustainability. NIW should develop a monitoring system to provide effective management information on its energy usage and set targets for improving its energy efficiency over the price control period.

²⁰ Taking account of future development plans and the effects of climate change.

²¹ Discharge consents are issued by NIEA under the Water (Northern Ireland) Order 1999.

NIW should also explore how renewable energy deployment could be used to help meet its energy needs and bring forward proposals in this regard where it is economically justified.

- 6.21 NIW should also explore the contribution that could be made to the sustainability of its infrastructure by Sustainable Drainage Systems (SuDS) and other innovative water conservation measures and bring forward proposals on the deployment of such technologies. We also expect carbon costs to be included in the planning of all significant projects from PC13 onwards.
- 6.22 We expect any proposed drinking water or sewerage upgrades to be sustainable by including sufficient capacity for planned development and growth. Future capital investment programmes should be integrated with land-use planning through close cooperation with Planning Service. The Regional Development Strategy²² (RDS) and local development plans should also be factored into water resource management planning. This will help identify any long-term security of supply issues and inform future investment needs. Water Resource Management Plans should aim to reduce future water demand by promoting water conservation and efficiency measures.
- 6.23 Our priorities for contributing to sustainability and tackling climate change can be summarised as:
- *Ensure that planned²³ development and growth is factored into any proposed water or sewerage upgrades during the period.*
 - *Improve resource efficiency by:*
 - *Setting targets and developing and implementing action plans to deliver operational/energy efficiencies,*
 - *Planning infrastructure development that balances the requirements of future development, the needs of people, and protection of the environment – both pollution prevention and mitigation of climate change, and*
 - *Developing a Sustainable Economic Level of Leakage to include carbon costs and determine future capital investment needs for achievement in PC13.*
 - *Agree appropriate targets to plan and deliver a contribution to the Programme for Government greenhouse gas emissions reduction target – for example through increased use of green energy.*
 - *Promote the recycling and reuse of sewage and water sludge in an environmentally friendly manner where this is economically viable - for example through sustainable application to forestry and agriculture.*

²² The RDS provides the spatial planning context for housing, transport, air and water quality, energy and waste strategies, and for infrastructure providers and public service promoters.

²³ The RDS along with individual Development Plans should form the basis of future growth predictions.

- *NIW should continue to invest in education campaigns to promote efficient water usage (water bus).*
- *Investigate the options for adopting Sustainable Drainage Systems (SuDS) to help reduce pressure on the sewerage systems during periods of heavy rain.*
- *Establish an appropriately indexed carbon cost to be included in the assessment of all significant capital projects from PC13 onwards.*
- *Commence work on Water Resource Management Plans (WRMPs) to identify the long-term water resource management and security of supply investment needs.*

Other Policy Areas

Protection of National Infrastructure

6.24 The Department for Environment Food and Rural Affairs (DEFRA) is responsible for implementing Government policy for the water industry in England and Wales. DEFRA issues advice to water and sewerage companies on security measures and procedures which should be adopted to ensure the protection of nationally important infrastructure. The advice has been adopted by the devolved administration and water industry in Scotland. We recognise that NIW already undertakes many of the requirements of the advice as best practice and would expect this to continue over the period. Significant investment would be required to meet all requirements (some of which may not be relevant here) and funding would be needed outside the price control settlement. We expect NIW to support any measures agreed by Ministers in this area.

Septic Tanks

6.25 We will continue to work with DOE and NIEA to develop and implement any approach that could contribute to addressing the problems caused by the proliferation of private septic tanks. This is particularly a problem in inland waters where large numbers of septic tanks discharging in the same vicinity can have a detrimental impact on water quality. NIW is not responsible for private septic tanks (though it provides an emptying service). But we expect NIW and NIAUR to contribute to any policy development in this area, recognising that funding for any implementation will have to be allocated outside this price control settlement.

Properties unconnected to the Public Water Supply

6.26 NIW is not responsible for private water supplies. Funding to assist unconnected properties to connect to the mains (should they wish to do so) will need to be provided outside the current price control settlement. We expect NIW to support any policy initiative agreed by the Executive in this area.

Glossary

Authorised Drinking Water Departure	An authorisation issued by the Drinking Water Inspectorate enabling NIW to depart from the drinking water quality standards set out in the Drinking Water Directive for a set period of time.
Category A/B Shellfish Classifications	Shellfish Classifications provide a measure of shellfish quality harvested from certain beds. Classifications are determined by the Foods Standards Agency.
Consumer Council	The Consumer Council for Northern Ireland. CCNI represents the interests of water and sewerage customers to NIW and Government.
Combined Sewer Overflow (CSO)	Combined Sewer Overflows are overflows used in combined sewerage system to discharge storm waste water directly into surface waters to relieve hydraulic pressure in the system under storm conditions.
Combined Sewer	A sewerage system that collects both waste water and rain water.
DEFRA	Department for Environment Food and Rural Affairs. National Government Department, based in London.
Discharge Consent	All discharges to the water environment are regulated and controlled by NIEA through Discharge Consents.
Discharge Standard	A standard issued by NIEA to allow the discharge of sewage/waste water into a water body, such as a river. The standard will include conditions, to minimise the effects on the receiving water.
DOE	The Department of the Environment. Northern Ireland regional Government Department, based in Belfast.
Drainage Area Plan (DAP)	A list of necessary sewerage improvements within a catchment area determined by a Drainage Area Study. The DAP normally takes the form of a prioritised list of unsatisfactory intermittent discharges.
Drainage Area Study (DAS)	A comprehensive study of an entire drainage catchment which uses a vast amount of asset and performance data on the condition, performance and future capabilities of the sewers in a given area.

Drinking Water Inspectorate	The Drinking Water Inspectorate monitors and regulates public drinking water supplies on behalf of the Department for Regional Development. It monitors and regulates private water supplies on behalf of the Department of the Environment.
Economic Level of Leakage (ELL)	The level at which it would cost more to reduce water leaking from pipes than pump more water into them.
EQIA	Equality Impact Assessment. A detailed assessment of a Government policy to ensure that it does not discriminate against any group of people, for example women or older people.
European Union	The European Union (EU) is an economic and political union of 27 member states, located primarily in Europe. It was established by the Treaty of Maastricht on 1 November 1993 upon the foundations of the pre-existing European Economic Community.
European Commission	The European Commission (formally the Commission of the European Communities) is the executive branch of the European Union. The body is responsible for proposing legislation, implementing decisions, upholding the Union's treaties and the general day-to-day running of the Union.
European Directive	European Directives are laws which apply in European Union countries. Examples include: the Drinking Water Directive; the Urban Waste water Treatment Directive; the Water Framework Directive and others.
Freedom of Information (FOI)	Freedom of Information. In 2000 Parliament passed the Freedom of Information Act, which provides everyone with the right to access information held by the Government.
Flood Risk Management Plan (FRMP)	Under the EU Floods Directive, Flood Risk Management Plans must be prepared at a river basin or sub-basin level. The plans shall include policies for managing flood risk in the long term taking account of the possible effects of climate change. The plans shall focus on prevention, protection and preparedness, including flood forecasting and early warning systems. Rivers Agency is the designated authority for the implementation of the Directive in Northern Ireland.

Independent Flood Management Policy Review	The Independent Flood Management Policy Review (completed in March 2007) sets out a flexible policy framework for the delivery of flood risk management in Northern Ireland for the next ten years and beyond. The Government produced its response to the Review ('Living with Rivers and Sea') in September 2008.
Information Commissioner	The Information Commissioner and his Office were set up under the Freedom of Information Act 2000. They monitor how well and quickly Government Departments provide information when they are asked for it.
Investment Strategy for Northern Ireland (ISNI)	The Investment Strategy for Northern Ireland (ISNI) sets out the Executive's priorities for investment in infrastructure (for example new roads, hospitals or sewers) for the years 2008 to 2011.
Independent Review	The Independent Review of Water and Sewerage Services commissioned by the Executive in 2007 to determine the longer term approach for delivering water and sewerage services.
Mean Zonal Compliance (MZC)	This is the figure used to compare the quality of drinking water from one region to another. It is represented as a percentage figure. MZC here in 2007 was 99.30%.
NIAUR	The Northern Ireland Authority for Utility Regulation
NIEA	The Northern Ireland Environment Agency
NIW	Northern Ireland Water
PC10	Price Control 2010-2013. PC10 is the process by which NIAUR determines what NIW should deliver during the period by agreeing the Strategic Business Plan (SBP) for the Company. The SBP will be based on the priorities set out in this Guidance.
Planning Service	The Planning Service is part of DOE and is responsible for developing and implementing Government planning policies and development plans in Northern Ireland.
Population Equivalent (PE)	PE is a measure of the amount of sewage treated by a waste water treatment works.

RBMP	A River Basin Management Plan contains a range of measures aimed at protecting, improving and sustaining the use of the water environment, from source to sea.
Regional Development Strategy (RDS)	The RDS sets out the Executive's broad plans for the future development and planning in Northern Ireland up to 2025.
Regional Development Committee	The Regional Development Committee is made up of 11 Members of the Assembly. The Committee advises and monitors the work of the Minister for Regional Development and the Department.
RIA	Regulatory Impact Assessment. A RIA is an assessment of the impact of a policy in terms of its costs, benefits and risks.
Rivers Agency	The Rivers Agency is part of the Department for Agriculture and Rural Development. The Rivers Agency is responsible for managing the risk of flooding from rivers and the sea.
SBP	A Strategic Business Plan (SBP) sets out the overall goals and policies/programmes that an organisation will pursue over a particular time period. NIW's current SBP covers the period 2007 to 2010. Under PC10, see above, NIW will produce a new SBP for the period 2010-2013.
SDS	Sustainable Development Strategy for Northern Ireland. The SDS sets out the Government intends to achieve a balance between its economic, social and environmental goals.
Section 75	Section 75 of the Northern Ireland Act 1998. This law requires the Government to promote equality of opportunity for all. Government policies must be reviewed to ensure that they do so, in a process known as 'screening'. If this screening identifies a potential problem then an EQIA (see above) must also be completed.

Sewerage system/ infrastructure	A system of pipes and ducting which collects and transports sewage.
Sustainable Drainage System (SuDS)	A drainage system that controls the quantity and quality of run-off waters by providing storage in tanks or ponds. This delays or prevents discharge to streams or rivers until there is capacity to accommodate it.
The Assembly	The Northern Ireland Assembly
The Department	The Department for Regional Development
The Executive	The Northern Ireland Executive
The Minister	The Minister for Regional Development
Water Resource Management Plan	A water resources plan shows how a water company intends to maintain the balance between supply and demand for water over the next 25 years.
Waste Water Treatment Works (WWTWs)	The treatment plant or site where sewage/waste water is received, treated and discharged.
Water Safety Plan	A Water Safety Plan (WSP) is the most effective way of ensuring that a water supply is safe for human consumption and that it meets the health based standards and other regulatory requirements. It is based on a comprehensive risk assessment and risk management approach to all the steps in a water supply chain from catchment to consumer.
Water Service	The Water and Sewerage Services Order (Northern Ireland) 2006 set up Northern Ireland Water. Before then Water Service, which was a part of the Department for Regional Development, ran the water and sewerage industry in Northern Ireland.
Water Treatment Works (WTWs)	The treatment plant or site where raw water is treated to provide safe and wholesome drinking water for public supply.

Annex A – Legal Basis

The Water and Sewerage Services (Northern Ireland) Order 2006

Article 7 - Guidance on Social and Environmental matters

7.(1) The Department may from time to time issue guidance about the making by the Authority in the exercise of its water and sewerage functions of a contribution towards the attainment of any social or environmental policies set out or referred to in the guidance.

(2) In formulating guidance, the Department shall, where practicable, have regard to the costs and benefits which may be expected to result from the guidance.

(3) The Authority shall, in exercising and performing the functions mentioned in Article 6(1) (subject to Article 6(6)), have regard to any guidance issued under this Article.

(4) Before issuing guidance under this Article the Department shall consult

(a) the Authority (NIAUR);

(b) the Council (Consumer Council);

(c) relevant undertakers (NIW);

(d) DOE; and

(e) such other persons, if any, as the Department considers it appropriate to consult in relation to the guidance.

(5) A draft of any guidance proposed to be issued by the Department under this Article shall be laid before the Assembly.

(6) Guidance shall not be issued by the Department under this Article until after the statutory period beginning with the day on which the draft is laid before the Assembly.

(7) If, before the end of that period, the Assembly resolves that the guidance should not be issued, the Department shall not issue it.

(8) The Department shall arrange for any guidance issued by it under this Article to be published in such manner as it considers appropriate

Annex B – Summary of Key Investment Priorities

TABLE1 - Mandatory EU Obligations (Priority 1)	
Ref:	Description
1A	Complete treatment and capacity upgrades at waste water treatment works necessary for ensuring compliance (with UWWTD, BWD, SWD) and addressing immediate development pressures. This includes providing appropriate treatment at small waste water treatment works.
1B	Implement those drainage area plans identified (by NIEA) as the highest priority and develop programme to address specific sewerage issues such as internal sewer flooding, unsatisfactory discharges and spills from sewer overflows.
1C	Implement site specific WFD sewerage measures detailed in the draft RBMPs. These may include reducing the number of sewerage spills or providing enhanced treatment in certain catchments.
1D	Complete any water infrastructure and treatment upgrades necessary to address authorised departures and other statutory obligations from the Water Supply (Water Quality) Regulations (Northern Ireland) 2007.
1E	Complete water infrastructure and treatment upgrades necessary to <u>maintain</u> current drinking water quality standards in line with the recommendations of the Independent Review.
1F	Introduce wider catchment risk assessments and new raw water monitoring programmes in line with the proposed Water Supply (Water Quality) (Amendment) Regulations (Northern Ireland) 2009.

TABLE 2 – Improving Service Quality (Priority 2)

Ref:	Description
2A	Continue improvements in customer service quality and effectiveness through the development of better data and information systems.
2B	Improve the accuracy, reliability and consistency of information - customer, financial, management and asset information.
2C	Adopt any new technology or systems that provide tangible benefits in terms of improving service performance or reducing operational costs.
2D	Implement the proposed Water Supply (Water Fittings) (Amendment) Regulations (Northern Ireland) 2009 to prevent the waste and contamination of public water supplies and protect against the use of defective water fittings.
2E	Complete the risk assessments required to inform Water Safety Plans (WSPs) for public water supply systems during the period in line with the proposed amendments to the Water Supply (Water Quality) Regulations (Northern Ireland) 2007.
2F	Reduce regional variations in drinking water quality and improve security of supply through the decommissioning of any abstraction points susceptible to contamination and installing additional water mains as necessary.
2G	Continue to reduce the number of properties that experience unplanned and unwarned interruptions to drinking water supply in excess of 6/12/24 hrs (DG3 Register).
2H	Collect accurate and reliable information on sewerage infrastructure to inform the development of a future programme of drainage area plan work for the price control period and beyond.
2I	Develop a priority <u>long-term</u> drainage area plan programme (in conjunction with NIEA) for the price control period and beyond.
2J	Following completion of urgent drainage area plan (DAP) work identified in Priority 1, commence long-term DAP programme.
2K	Develop and maintain a register of properties at risk from internal sewer flooding (DG5 Register).
2L	Implement a programme of projects to reduce the number of properties on the DG5 Register over the PC10 period and beyond.
2M	Reduce the number of pollution incidents through efficient and effective monitoring and control of the water and sewerage assets.
2N	Fulfil the streetworks notification requirements and continue to improve the quality of road reinstatements in line with Roads Service targets (90% pass rate).

TABLE 3 – Water Leakage and Pressure (Priority 3)	
Ref:	Description
3A	Continue to focus on leakage detection and reduction with the aim of achieving and maintaining the Economic Level of Leakage.
3B	Target areas of low pressure through the mains rehabilitation programme to ensure all customers benefit from at least the minimum levels of supply.
3C	Maintain a register of properties at risk of receiving low pressure (DG2 Register) and agree the number of properties to be removed from the register over the period.

TABLE 4 – Surface Flooding (Priority 4)	
Ref:	Description
4A	Ensure that Drainage Area Plans focus on reducing the risk of surface flooding ²⁴ in addition to addressing EU environmental quality drivers.
4B	Continue to address those parts of the sewerage network which are prone to surface flooding.
4C	Assist Rivers Agency in the development of Flood Risk Management Plans (FRMPs), a requirement under the new EU Floods Directive.
4D	Put the necessary resources in place to provide an effective emergency response during flooding incidents, in partnership with the other relevant agencies.

TABLE 5 - Longer-term EU Requirements (Priority 4)	
Ref:	Description
5A	Identify and program any further waste water treatment, collection or capacity upgrades necessary for ensuring future compliance with UWWTD, revised BWD & SWD including continued improvements of small treatment works.
5B	Take account of the potential impact of emerging EU policies and developments during the period (e.g. UWWTD requirements for collection systems and CSOs).
5C	Put in place effective arrangements to monitor future compliance with UWWTD and discharge consents.
5D	Address any further RBMP water and sewerage measures identified through WFD monitoring.

²⁴ Taking account of future development plans and the effects of climate change.

TABLE 6 – Sustainability & Climate Change (Priority 6)

Ref:	Description
6A	Ensure that planned development and growth is factored into any proposed water or sewerage upgrades during the period.
6B	Improve resource efficiency by: <ul style="list-style-type: none">- Setting targets and developing and implementing action plans to deliver operational/energy efficiencies,- Planning infrastructure development that balances the requirements of future development, the needs of people, and protection of the environment – both pollution prevention and mitigation of climate change, and- Developing a Sustainable Economic Level of Leakage to include carbon costs and determine future capital investment needs for achievement in PC13.
6C	Agree appropriate targets with NIAUR to plan and deliver a contribution to the Programme for Government greenhouse gas emissions reduction target – for example through increased use of green energy.
6D	Promote the recycling and reuse of sewage and water sludge in an environmentally friendly manner where this is economically viable - for example through sustainable application to forestry and agriculture.
6E	NIW should continue to invest in education campaigns to promote efficient water usage (water bus).
6F	Investigate the options for adopting Sustainable Drainage Systems (SuDS) to help reduce pressure on the sewerage systems during periods of heavy rain.
6G	Establish an appropriately indexed carbon cost to be included in the assessment of all significant capital projects from PC13 onwards.
6H	Commence work on Water Resource Management Plans (WRMPs) to identify the long-term water resource management and security of supply investment needs.