

**IMPACT ASSESSMENT OF THE GOVERNMENT'S
PROPOSALS FOR THE REFORM OF WATER AND
SEWERAGE SERVICES**

PART III:

A PARTIAL REGULATORY IMPACT ASSESSMENT

November 2004

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Chapter One

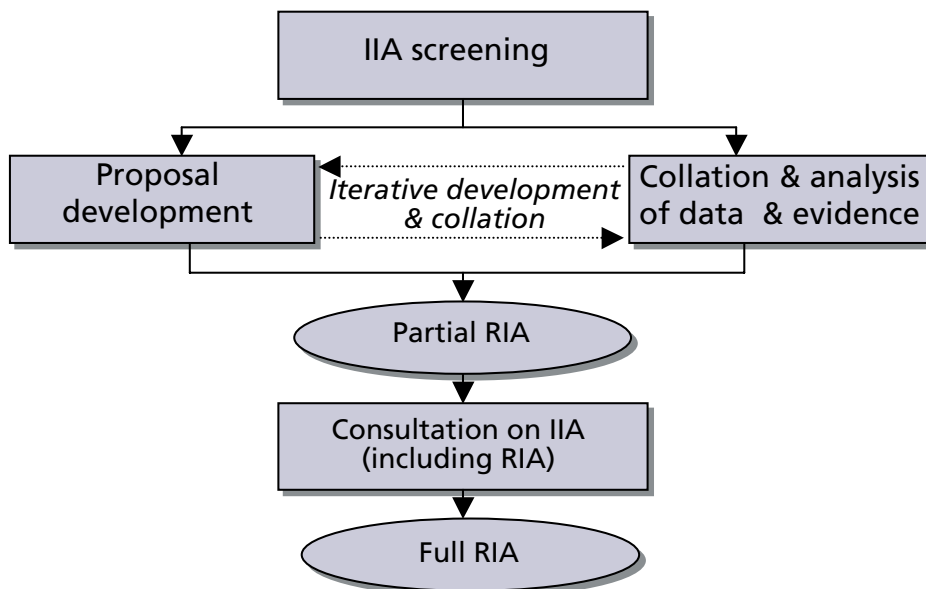
Introduction

1.1 The agenda of change associated with Water Reform is very wide-ranging. In line with best practice DRD has performed an Integrated Impact Assessment (IIA) to consider the totality of impacts of the Water Reform proposals. A key element of the IIA is a Regulatory Impact Assessment (RIA) which focuses on the impacts of the non-domestic charging proposals on business, charities and the public and voluntary sectors. This Report presents the findings of this RIA to date, also known as a partial RIA. It is included as Part III of the full IIA document. The remaining Parts of the IIA can be obtained from the Water Reform website (www.waterreformni.gov.uk), or from the Water Reform Unit (WRU) (see contact details on page 36).

Approach

1.2 An overview of the approach used in undertaking this RIA, which has been developed in line with published Cabinet Office guidance², is provided in Figure 1.1, and discussed in the subsequent paragraphs.

Figure 1.1: An overview of the approach adopted for the RIA



¹ An IIA is intended to consider the following types of impact assessment where appropriate: Equality impact assessment; community safety; health impact assessment; human rights; new targeting social need; public expenditure and public service; regional development strategy compliance; regulatory impact assessment; rural proofing; state aid compliance; strategic environmental assessment; and sustainable development.

² Cabinet Office (2003), 'Better policy making: A guide to regulatory impact assessment'.

- 1.3 The IIA guidance prepared by the Office of the First Minister and Deputy First Minister (OFMDFM) sets out a series of screening questions for determining if a full RIA is required. This screening (See Chapter Two of the IIA – Part I) revealed that it was highly probable that the non-domestic charging proposals would have a wide-ranging impact on businesses and on other non-domestic water users (e.g. voluntary organisations). Consequently, a full RIA was deemed appropriate to assess these impacts.
- 1.4 It is important to note that a RIA is not an exercise that is undertaken only after policy proposals have been decided upon. Rather an RIA is a tool that not only assesses the impact of policy proposals, but also informs the policy development itself. Therefore, the initial stages of the RIA were iterative in that the data and evidence collated and analysed was used to assess and inform the **policy development**. The resulting proposals are outlined in Chapter Two.
- 1.5 The **collation and analysis of data and evidence** included:
- **Interrogation of current customer database;** Water Service provided WRU with an anonymised snapshot of the **current** customer database which contained information in relation to the sectoral profile of customers, annual consumption levels, and the charges levied. This database was analysed and an understanding of the composition developed; and
 - **Key stakeholder interviews;** A range of representative organisations from the business and voluntary sectors were invited to have pre-consultation meetings with officials to canvass their views in relation to the impact of the proposals. The organisations that took up this invitation were: the Confederation of British Industry (CBI); the Federation of Small Business (FSB); the Institute of Directors (IoD); the Northern Ireland Agricultural Producers Association (NIAPA); and the Ulster Farmers Union (UFU).
 - This report presents the findings of the RIA to date and is therefore termed a partial RIA. It is published for public consultation and comment during the consultation period for the wider IIA ending on 4 March 2004. The proposals for non-domestic charging will be reconsidered and refocused following assessment of the comments received during this consultation process. Subsequently, a final RIA will be undertaken, providing the conclusive assessment of the proposals to be implemented.

Structure of report

1.6 The remainder of this report is structured as follows:

- **Chapter Two – Strategic context:** this Chapter provides an overview of the current and proposed non-domestic charging regimes. It also outlines the current cost environment within which businesses in Northern Ireland currently operate and into which the new charging regime will be introduced;
- **Chapter Three – Impact assessment:** this Chapter details our assessment of the potential costs and benefits of the non-domestic charging proposals; and
- **Chapter Four– Summary:** this Chapter provides a summary of the RIA and sets out our consultation questions on the proposals.

Chapter Two

Strategic Context

Current charging arrangements

2.1 Currently, Water Service partially finances its operations by levying direct charges to certain categories of non-domestic customers, raising around £38 million of its total running costs of £150 million in this way. The majority of this (around £32 million) is raised by metering and charging non-domestic water customers in relation to the amount of water they consume. Metered water customers pay a two-part metered water charge comprising:

- A multi-tiered standing charge based on the internal diameter of their supply pipe³; and
- A volumetric charge.

2.2 Non-domestic properties are treated slightly different depending on whether or not they are rated. Under the current charging arrangements, non-domestic premises on which rates are paid are liable to be charged for that amount of water that they consume that exceeds 200 cubic meters (m³) per annum. This threshold is known as the 'domestic allowance'⁴. Unrated non-domestic properties do not benefit from a domestic allowance and are charged for all the water that they consume.

2.3 Historically, rated non-domestic properties were metered if they were deemed to be revenue bearing (i.e. their consumption was assessed to exceed the domestic allowance of 200 m³ per annum), while all unrated non-domestic properties were metered. In practice, it was not possible to fully implement this policy because of financial and resource constraints in terms of assessing water consumption and extending

³ The standing charge is intended to cover the cost of installing maintaining, and reading meters, and billing and collection. It includes a variable element to reflect the fact that the cost of making available a supply of water increases with the size of the pipe delivering the supply.

⁴ For a number of years in the 1990s, a proportion of the revenue collected through the Regional Rate was allocated to fund the Water Service. While this doesn't mean that the regional rate included a specific water charge, the domestic allowance reflects the fact that ratepayers contributed through general taxation to the funding of the Water Service. This arrangement ceased in 1999 when HM Treasury in the Comprehensive Spending Review gave Northern Ireland full discretion to use whatever was raised from the Regional Rate as additional resources for the budget of the Northern Ireland departments. Despite the continued provision of a domestic allowance, there is no longer a direct link between the Regional Rate and the funding of Water Service.

metering, and in other instances because of technical constraints where a meter could not be fitted. This is further complicated in cases where the use of a property has changed which can result in a change in the level of water usage. Currently, the policy is that all new water supplies to non-domestic premises are metered.

- 2.4 Those rated non-domestic premises that are metered and consume less than the domestic allowance do not currently pay either a standing or volumetric charge. Only those premises that consume over 200 m³ per annum are liable to pay a charge.
- 2.5 In addition to water charges, a small number of de-rated industrial customers (approximately 500) pay trade effluent charges. These charges seek to recover the additional costs of treating the larger volumes and greater strengths of 'process' discharges made by certain trade premises.

Proposed charging arrangements

- 2.6 An overview of the development of the charging proposals, both domestic and non-domestic, and the charging principles that underpin them is provided in the Policy Proposals Paper issued along with this IIA. In essence, the charging regime has been devised so that charges are set to recover the cost incurred in the provision of the service.
- 2.7 The main elements of the proposals⁵ in relation to the non-domestic charging are as follows:
- The preferred method of charging non-domestic properties for water will continue to be via a metered supply, with customers paying a two-part charge comprising a standing charge (depending on diameter of the supply pipe) and a volumetric charge;
 - The domestic allowance for metered non-domestic properties will be phased out;
 - The programme for extending metering to those un-metered non-domestic properties will be accelerated;
 - Where it is not possible to install a meter for technical reasons, an assessed charge may be applied.

⁵ John Spellar MP, 13th September 2004: full details on www.waterreformni.gov.uk

- Charges for those properties that remain unmetered will be calculated on the basis of a standing charge and a variable element based on rateable values. A charge cap for properties with a high Net Annual Value (NAV) will also be applied;
- Under the current regime, no charges are levied in respect of sewerage services (although approximately 500 de-rated industrial customers pay trade effluent charges). From April 2006, or as soon as practicable thereafter, non-domestic properties connected to the public sewer will be charged for sewerage services. The charge will consist of a standing charge and a volumetric charge applied to a percentage of metered water delivered;
- The calculation of trade effluent charges will be brought into line with GB practice in this area. Under the current arrangements trade effluent charges in NI are restricted to customers that do not pay rates. While this means that the vast majority of properties that discharge effluent strength process waste water are charged (in fact it is estimated that 80% of trade effluent revenue derives from the top 10% of dischargers, around 50 customers), a significant number of this cohort produce effluent which is only of standard strength. Under the new regime all non-domestic properties that discharge effluent strength process waste water will be charged appropriately whether or not rates are payable on the property. Changes in the way that effluent charges are calculated will result in an increase of up to 35% in charges. All trade effluent customers will pay sewerage charges on the 'non trade effluent' element of their discharges;
- Currently rated properties that are not connected to the public sewer are entitled to one emptying of a septic tank free of charge. Once comprehensive charges are introduced, charges will be applied for all tank emptyings; and
- New charges are to be phased in. Assuming the new arrangements commence on 1 April 2006 this would mean that one-third of these costs would fall in the first year, two-thirds in the second year, and full cost in the third year. The domestic allowance is also to be phased out in a similar fashion over the same period.

⁶ Full report available from the Economic Policy Unit, OFMDFM.

Cost of operating business in Northern Ireland

- 2.8 Data presented in PricewaterhouseCoopers (PwC) report, **The cost of operating business in Northern Ireland: a review of existing information**⁶ suggested that on average, water costs account for less than 1 % of turnover in the case of most businesses in Northern Ireland. Therefore in these cases it could be argued that changes in the cost of water (and sewerage) are unlikely to have a major impact on the overall cost base of businesses given that these costs represent such a small proportion of this total base.
- 2.9 However, in considering the impact of the Water Reform proposals, it is important to consider the wider cost environment in which businesses in Northern Ireland are operating, and into which comprehensive charges are being introduced. It has been argued strongly by the business community that a number of key operating costs of business for Northern Ireland firms are already higher than elsewhere (e.g. energy, transport and insurance costs). Consequently it is argued that local businesses are placed at competitive disadvantage which can impact on export performance and their ability to compete in local markets.
- 2.10 Therefore in making any assessment it is important to be mindful that any increase in water costs will not occur in isolation, but rather might well be one of a number of cost pressures impacting on businesses. While the individual impact of such increases might be small, the aggregate could be more significant.
- 2.11 In addition, it is not always the case that water costs represent only a small proportion of the overall cost base for businesses, particularly in the case of water intensive manufacturing sub-sectors. Any increase in costs is likely to impact on these businesses even more so.

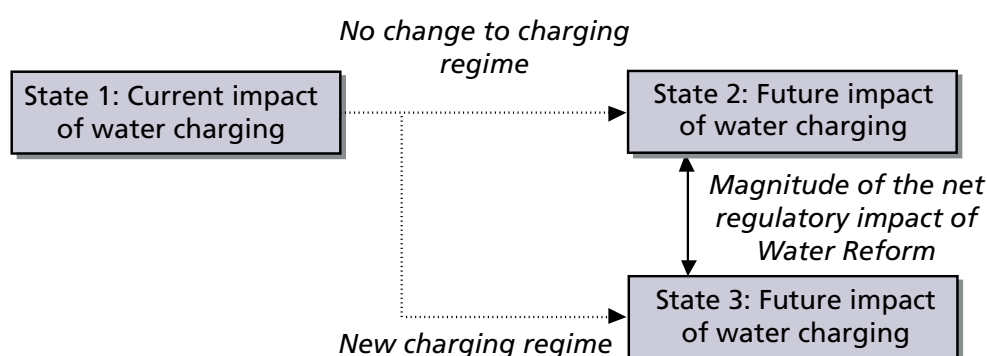
Chapter Three

Impact Assessment

Overview

3.1 In order to assess the potential regulatory impact of Water Reform, it is necessary to look at the effect of water charges under the current charging regime (a policy neutral scenario), and under the new proposed charging regime. A conceptual framework for assessing the

Figure 1.2: Conceptual framework for assessing the impact of Water Reform



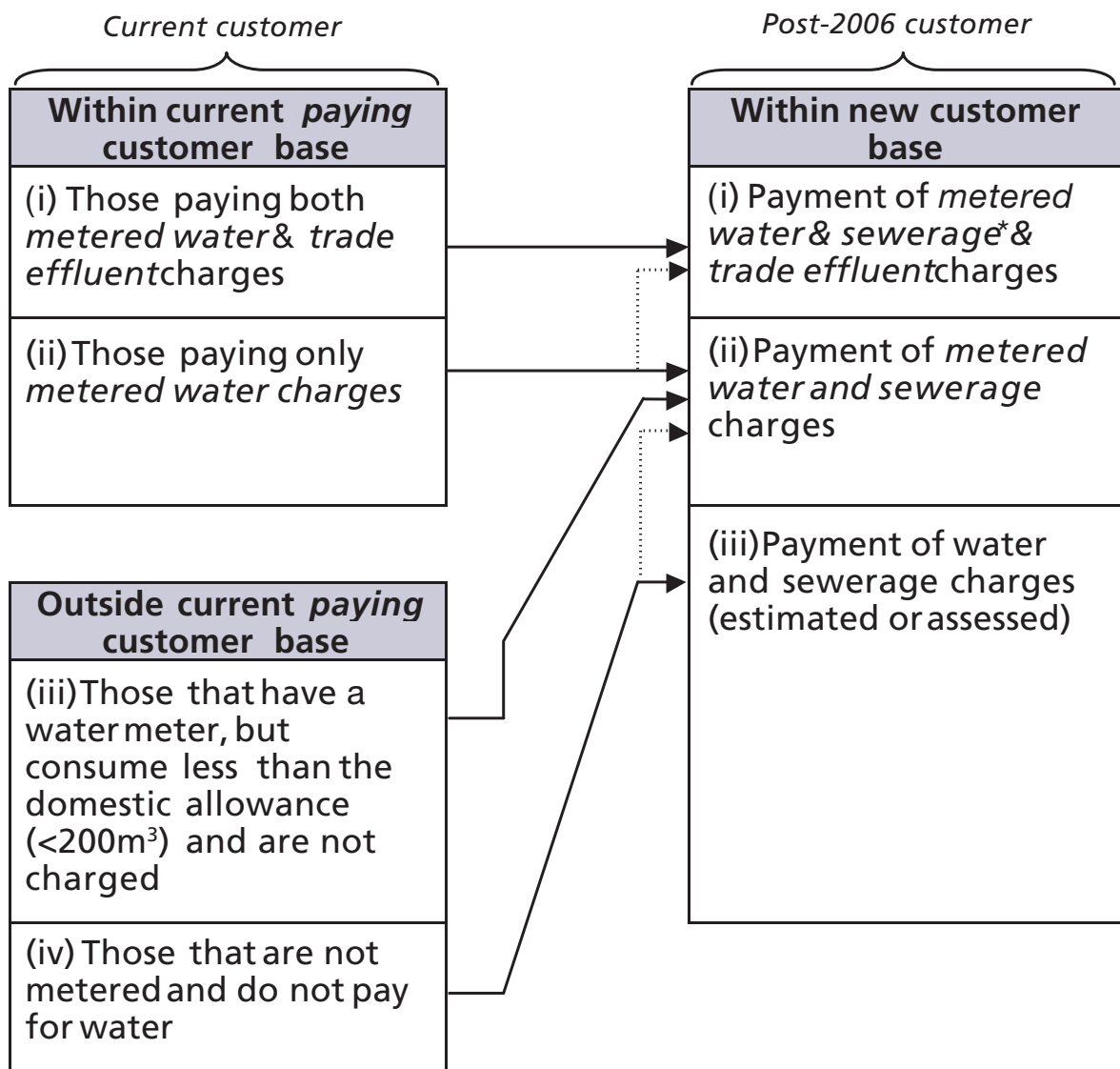
impact is given in Figure 1.2.

- 3.2 In order to carry out this assessment, it is important to quantify each of the three 'states' illustrated in Figure 1.2. The key issues to be considered in making this assessment are:
- **Scoping the customer base:** Who pays, and what do they pay for?
 - **Costs:** How much do they pay?
 - **Benefits:** What are the benefits of Water Reform?
- 3.3 For the purpose of this analysis, it is assumed that the impact of water charging in the future, where there is no change to the charging regime (State 2), is the same as the current impact of water charging (State 1).
- 3.4 In the subsequent paragraphs, each of the issues detailed above are considered under the current charging, and the new charging regime consequent to Water Reform. This will allow an assessment to be made of the magnitude of the net regulatory impact of Water Reform.

Scoping the customer base

3.5 As outlined previously in Chapter Two of this RIA, one of the main changes under Water Reform is the removal of the domestic allowance. Consequently, all non-domestic users will have to pay for the water they consume. This will result in a 'widening of the net' and increase the 'paying' customer base of Water Service. Figure 1.2 illustrates this 'widening of the net', the implications of which is discussed below. The solid lines in the Figure indicate where the majority of customers will sit in the new post-2006 customer base. The dotted lines reflect the changed charging status (e.g. unmeasured to metered) of a small number of customers.

Figure 1.3: Widening of the net



* Note: Sewerage charges will only be levied where the customer is connected to the mains sewer network.

3.6 The main changes to the customer base are as follows:

- All those customers currently paying metered water charges and trade effluent charges will continue to pay these post 2006. However, they will also be required to pay sewerage charges in relation to their non-trade effluent discharges to the public sewer;
- In the case of those metered water customers that currently pay water charges only, they will continue to pay these, plus sewerage charges which will be introduced once comprehensive charges are introduced in 2006. In the case of the 500 or so rated water customers that currently also have trade effluent discharge consent (but who don't currently pay trade effluent charges), they will have to pay the appropriate trade effluent charges in addition to their water and sewerage bills;
- Those properties that currently are metered, but are not charged because they consume less than the domestic allowance, will have to pay for the water they use once the domestic allowance is phased out as well as sewerage charges where they are connected to the public sewer; and
- Currently a significant proportion of properties are unmeasured and consequently do not pay any charges. Once comprehensive charges are introduced, these properties will pay a charge for water and sewerage services based on the rateable value of their property. Prior to the introduction of comprehensive charges, the Water Service metering exercise will be accelerated and meters will be installed in a significant number of these unmeasured properties. These newly metered properties will be charged for water and sewerage on the basis of their metered consumption.

3.7 In the paragraphs that follow, information is provided in relation to the size and composition of the current customer base, along with estimates of the potential new customer base post 2006.

Current customer base

3.8 Water Service currently has approximately 63,000 metered non-domestic customers in Northern Ireland (excluding test meters). However, not all of these metered customers are actually charged and pay for water. Those customers that consume no water, or less than the domestic allowance, 200m³ per annum, are not currently charged. Therefore, the paying customer base is significantly smaller as detailed in Table 1.1.

Table 1.1: Quantifying the current customer base

Current paying customer base	
(i) Those paying both metered water & trade effluent charges	500
(ii) Those paying only metered water charges	41,000
Total (current paying customer base)	41,500
Outside current paying customer base	
(iii) Those that have a water meter, but consume less than the domestic allowance (<200m³) and are not charged	21,500
(iv) Those that are not metered and do not pay for water	47,000
Total (outside current paying customer base)	68,500
GRAND TOTAL (all customers)	110,000

3.9 Table 1.1 reveals that the number of metered customers that actually pay, including those that pay either both water and trade effluent charges, or water charges only, currently stands at 41,500⁷. There are 21,500 metered customers who don't currently pay any charges. Because they consume less than their domestic allowance. There are also an additional 47,000 unmetered non-domestic properties that currently do not pay charges either. Consequently, Water Service currently charges only approximately 38 % of its non-domestic customer base.

New customer base

3.10 Once comprehensive charges are introduced in 2006, all customers will have to pay for the services they receive. Table 1.2 provides an overview of the impact that this will have on the 'paying' customer base of Water Service.

⁷ It is important to note that for Water Services purposes a customer relates to a single connection to the water supply. It is possible that a non-domestic property (e.g. a business) may have more than one connection and in this case would received a number of separate water bills.

Table 1.2: Quantifying the post-2006 customer base

Post-2006 paying customer base	
(i) Those paying both metered water & sewerage* & trade effluent charges	1,000
(ii) Those paying metered water & sewerage* charges	67,000
(iii) Those that are unmeasured and pay for water and sewerage* based on the value of the property	42,000
Total	110,000
Outside current paying customer base	
Total (outside current paying customer base)	0
GRAND TOTAL (all customers)	110,000

3.11 The number of customers paying water, sewerage, and trade effluent charges will increase to approximately 1,000 as those 500 rated properties with discharge consents are brought into the trade effluent regime. The number of properties paying metered water and sewerage charges (where connected to the mains sewer network) will increase to 67,000 as the domestic allowance is removed. Furthermore it is estimated that meters will be installed in a further 5,000 currently unmeasured properties. The remaining 42,000 unmeasured non-domestic properties will be charged on the basis of rateable value as outlined previously. All of this will increase Water Service's 'paying' customer base (non-domestic only) from its current level of 41,500 to approximately 110,000 once comprehensive charges are introduced.

Costs

3.12 In addition to the increase in the number of non-domestic customers facing charges, there will also be a change in the scale of the charges themselves. In the paragraphs that follow, a comparison of current charges and the charges that will be applied from April 2006 is provided. These comparisons are made in relation to the different customer categories, namely:

- Metered customers;
- Unmeasured customers; and
- Trade effluent customers.

* Note: Sewerage charges will only be levied where the customer is connected to the mains sewer network.

3.13 It is important to note that these comparisons compare the full charges to be recovered from non-domestic customer and do not reflect any phasing in. However, a number of individual case studies are also provided which illustrate the impact of phasing in charges on a range of businesses.

Metered customers

3.14 As indicated previously, Water Service currently has approximately 63,000 non-domestic customers that are metered, of which 41,000 current pay a charge for metered water (not including those 500 or so that also pay trade effluent charges. The impact on these customers shall be considered separately). Table 1.3 details the change in the average charges facing these customers by broad industrial sector. The new average combined charge refers to the total charge (for both water and sewerage) that customers in that sector will face on average once comprehensive charges are introduced. It is important to stress again that these comparisons refer to full charges and do not reflect any phasing in period⁸.

⁸ See John Spellar's announcement dated 13th September 2004: full details on www.waterreformni.gov.uk

* Note: Sewerage charges will only be levied where the customer is connected to the mains sewer network.

Table 1.3: Impact on charges – current paying metered water customers

Sector	No. of customers	Current Average Water Charge	New Average Water Charge	New Average Sewerage Charge*	New Average Combined Charge
Agriculture	30,500	£340	£440	£0	£440
Mining & Quarrying	60	£1,360	£1,440	£1,440	£2,880
Manufacturing – Food	110	£7,160	£7,320	£7,320	£14,640
Manufacturing - Textiles	50	£130	£320	£320	£640
Manufacturing - Wood Products	130	£830	£940	£940	£1,880
Manufacturing - Chemicals	35	£2,860	£3,020	£3,020	£6,040
Manufacturing - Non-metallics	160	£1,740	£1,830	£1,830	£3,660
Manufacturing - Metals	110	£2,690	£2,780	£2,780	£5,560
Manufacturing - Electronics	35	£5,060	£5,130	£5,130	£10,260
Manufacturing – Other	530	£4,060	£4,150	£4,150	£8,300
Construction	160	£830	£900	£900	£1,800
Wholesale & Retail Trade	1,770	£830	£1,000	£1,000	£2,000
Hotels, Bars & Restaurants	2,000	£1,120	£1,300	£1,300	£2,600
Transport	155	£3,040	£3,130	£3,130	£6,260
Business Activities	420	£1,560	£1,820	£1,820	£3,640
Miscellaneous Public Sector	1,060	£2,940	£3,310	£3,310	£6,620
Government Department – Core	210	£2,490	£2,610	£2,610	£5,220
Education Institutions	1,320	£1,610	£1,760	£1,760	£3,520
Hospitals	100	£16,000	£16,200	£16,200	£32,400
Misc. Services / Community	1,890	£930	£1,030	£1,030	£2,060
TOTALS	40,805	£740	£860	£860	£1,720

- 3.15 The information above reveals that on average, the charges levied on those customers that currently pay metered water charges will increase by 134% from £740 to £1,720 per annum. This is due to the removal of the domestic allowance, causing the increase in water charges, and the introduction of sewerage charges which are broadly equal in magnitude to water charges.
- 3.16 However, it is important to note that this average masks significant sectoral variations. Around 75% of these paying metered customers are agricultural properties. Bills in the case of these 30,500 properties (a mix of farmhouses and other agricultural 'properties' such as out-houses and cattle troughs) bills only increase on average by 29%, or £100. This is because agricultural properties tend not to be connected to the public sewer and consequently will not incur a sewerage charge. However, it must be noted that agricultural properties will now be charged for any emptying of septic tanks performed by Water Service on a full recovery basis. In many instances though, farmers may not need to empty their tank every year and consequently the equivalent yearly charge would still be significantly lower than if they paid sewerage charges.
- 3.17 Alternatively, for those businesses in sectors that typically are large consumers of water (e.g. food manufacturing) the increase in bills can be in the order of thousands of pounds. However as outlined later, around 500 businesses in these manufacturing industries already pay a trade effluent charge in addition to their water charge currently.
- 3.18 There are also just around 21,500 non-domestic properties that are metered but which do not pay any charges at present because their level of consumption is below their domestic allowance. The change in the average charges facing these customers is provided in Table 1.4.

* Note: Sewerage charges will only be levied where the customer is connected to the mains sewer network.

Table 1.4: Impact on charges – current metered water customers that do not pay any charges at present

Sector	No.	Current Average Water Charge	New Average Water Charge	New Average Sewerage Charge*	New Average Combined Charge
Agriculture	16100	£0	£130	£0	£130
Mining & Quarrying	30	£0	£100	£100	£200
Manufacturing – Food	60	£0	£170	£170	£340
Manufacturing – Textiles	30	£0	£200	£200	£400
Manufacturing - Wood Products	70	£0	£170	£170	£340
Manufacturing – Chemicals	15	£0	£170	£170	£340
Manufacturing - Non-metallics	85	£0	£150	£150	£300
Manufacturing - Metals	75	£0	£180	£180	£360
Manufacturing – Electronics	35	£0	£170	£170	£340
Manufacturing – Other	350	£0	£240	£240	£480
Construction	100	£0	£170	£170	£340
Wholesale & Retail Trade	1450	£0	£180	£180	£360
Hotels, Bars & Restaurants	750	£0	£420	£420	£840
Transport	90	£0	£190	£190	£380
Business Activities	330	£0	£250	£250	£500
Miscellaneous Public Sector	580	£0	£240	£240	£480
Government Department - Core	80	£0	£310	£310	£620
Education Institutions	335	£0	£210	£210	£420
Hospitals	20	£0	£450	£450	£900
Misc. Services / Community	1125	£0	£130	£130	£260
TOTALS	21,710	£0	£153	£153	£306

- 3.19 On average, charges levied on these metered customers will increase from zero to £306 per annum.
- 3.20 Once again the majority of these metered customers (in this case, none paying), some 16,100 are in the agricultural sector. Similarly, their bills will not increase by as much (increasing on average to £130) as such properties are unlikely to be liable to pay a sewerage charge. These properties will mostly be farmhouses as water supplies to cattle troughs and out-buildings do not receive a domestic allowance.
- 3.21 Most non-agricultural properties will not experience a total combined bill in excess of £400 except in a small number of cases where a property has more than one domestic allowance.

Unmeasured customers

- 3.22 As indicated previously, it is estimated that 42,000 non-domestic properties will remain unmeasured in 2006/07. While these properties do not currently pay a charge, it is estimated that the average these customers will pay will be £365 per annum for water and sewerage services in 2006/07 before phasing is taken into account. However it is important to recognise that this figure masks significant sectoral variation in charges as illustrated in Table 1.5.

Table 1.5: Average water and sewerage bills for unmeasured customers by sector

Customers	Current Position			Proposed 2006/07		
	Water charge	Sewerage charge	Total charge	Water charge	Sewerage charge	Total charge
Sector (total number of properties)						
Agriculture (very few)	This Sector is almost entirely metered			This Sector is almost entirely metered		
Commercial (32,500)	£0	£0	£0	£175	£170	£345
Industrial (2,500)	£0	£0	£0	£265	£260	£520
Voluntary (2,000)	£0	£0	£0	£110	£105	£215
Total - all sectors (42,000)⁹	£0	£0	£0	£185	£180	£365

⁹This total also includes 3,500 unmeasured public sector customers and 1,500 educational, recreational and religious properties

3.23 The average charge for industrial properties for water and sewerage is more than twice that facing voluntary organisations. The average charges for commercial properties lies in between these, standing at £345, broadly similar to the average charge for a domestic household. Furthermore, there is also a large degree of variation in charges between non-domestic properties within the same sector. Table 1.6 provides a profile of charges for the main sectors that will remain unmeasured and that will have to pay an unmeasured charge.

Table 1.6: Profile of post-2006 water and sewerage bills for unmeasured customers by sector

Customers				Proposed Bills 2006/07		
Sector (total number of properties)	NAV threshold (up to £)	Cumulative (those facing the lowest charges through to the highest)...		Water bill up to (£)	Sewerage bill up to (£)	Total bill up to (£)
		% of cust.	number of cust.			
Commercial (32,500)	2,100	25%	8,125	75	75	150
	4,500	50%	13,250	105	105	210
	21,800	90%	29,250	330	320	650
Industrial (2,500)	2,800	25%	625	85	85	165
	6,160	50%	1,250	130	125	250
	37,970	90%	2,250	535	525	1,060
Voluntary (2,000)	910	25%	500	60	60	120
	1,850	50%	1,000	75	70	140
	10,770	90%	1,800	190	185	370

3.24 Table 1.6 reveals that in the case of the 32,500 commercial properties remaining unmeasured, 25% (8,125 properties) with a NAV of up to £2,100 will face a bill up to a maximum of £150 for both water and sewerage. It is important to stress that only a property with a NAV of £2,100 will be charged this maximum of £150. Properties with a lower NAV will face a charge of less than £150. Properties with a NAV of between £2,100 and £4,500 will pay between £150 and £210. Overall, 90 % of commercial properties can expect to pay a bill of less than £650 per annum. The top 10% will pay bills in excess of this. However, given the cap of £75,000 that has been imposed in relation to property NAV, the maximum combined charge that any unmeasured property can be charged is £1,500.

3.25 Table 1.6 also reveals that the general profile of charges for industrial customers is higher, while that of voluntary organisations is lower.

Trade effluent customers

3.26 All of the previous tables in this Section have considered customers that are to be charged only for water and sewerage services. However, as commented previously, the trade effluent regime will also change under Water Reform. Table 1.7 illustrates the impact on trade effluent charges for the 500 existing paying trade effluent customers. Generally, existing customers will experience an increase of approximately 35% in their trade effluent charges.

Table 1.7: Change in trade effluent costs

Customers		Current Position	Proposed 2006/07	Change
Cumulative % of customers	Number of customers	Trade effluent bill up to (£)	Trade effluent bill up to (£)	Trade effluent bill up to (£)
25%	125	350	480	130
50%	250	870	1,170	300
75%	375	4,050	5,450	1,400
90%	450	21,400	28,700	7,400
99%	495	163,000	219,000	56,000

3.27 However, it is important that the increase in trade effluent costs is considered in the context of the introduction of sewerage charges. Customers currently paying for the waste water that they discharge via a trade effluent charge will not have to pay a sewerage charge in respect of that same volume of waste. Table 1.8 provides an overview of the impact on the charge facing these customers.

* Note: Very large consumers of water might see a small reduction in their water charges as a consequence of a slight reduction in the volumetric charge. In the case of most other smaller consumers of water, any slight reduction in the volumetric charge is more than offset by the removal of the domestic allowance. Consequently, their overall water charge will rise.

Table 1.8: Impact on charges – current paying metered water and trade effluent customers

Sector	No.	Current Average Water Charge	Current Average TE Charge	Current Average Total Charge	New Average Water Charge*	New Average TE Charge	New Average Total Charge
Agriculture	-	-	-	-	-	-	-
Mining & Quarrying	-	-	-	-	-	-	-
Man. - Food	130	20,400	28,900	49,300	20,100	41,000	61,100
Man. - Textiles	40	11,700	25,800	37,500	11,500	36,600	48,100
Man. - Wood Product	10	6,400	2,750	9,150	6,400	3,900	10,300
Man. - Chemicals	30	11,700	28,100	39,800	11,500	39,900	51,400
Man. - Non-metallics	20	12,800	2,500	15,300	12,700	3,500	16,200
Man. - Metals	15	9,700	6,100	15,800	9,600	8,700	18,300
Man. - Electronics	20	21,800	25,300	47,100	21,600	35,900	57,500
Man. - Other	60	14,000	15,000	29,000	13,800	21,300	35,100
Construction	-	-	-	-	-	-	-
Wholesale & Retail Trade	20	32,100	4,700	36,800	31,700	6,700	38,400
Hotels, Bars & Restaurants	-	-	-	-	-	-	-
Transport							
Business Activities							
Misc. Public Sector	240	2,200	910	3,110	2,200	1,300	3,500
Govt. Depart. - Core	-	-	-	-	-	-	-
Education Institutions	-	-	-	-	-	-	-
Hospitals	-	-	-	-	-	-	-
Misc. Services / Community	10	12,300	8,000	20,300	12,200	11,300	23,500
TOTALS	595	10,220	8,211	18,431	10,112	11,085	21,197

- 3.28 The figures provided above reveal that the proportionate increases in the bills of these customers are not as large as for other metered customers (which can be greater than 100%), standing at 15% on average. However, it is important to note that in some cases this could still amount to many thousands of pounds. For example, businesses in the food manufacturing sector will experience an increase in bills for both water and trade effluent of £11,800 (24%) on average. Some businesses will also experience increases of a larger magnitude.
- 3.29 Furthermore, around 500 additional rated customers who currently have trade effluent discharge consents, but who don't pay trade effluent charges, will be brought within the trade effluent regime once comprehensive charges are introduced. These customers will only pay effluent charges on the process related element of their discharge, and will pay a standard sewerage charge on the remainder of their discharge to the public sewer. It is important to stress that customers will not be double charged for the same volume of water, but pay either a sewerage or trade effluent charge on each element of their discharge as appropriate. In cases where the effluent produced is very weak in strength an annual discharge licence charge could be levied.

Illustration of charges

- 3.30 As indicated previously, the charges detailed in the tables above relate to the full charges to be recovered from non-domestic customers and do not reflect any phasing in. However, new charges are to be phased on the basis of one-third of full cost in the first year, two-thirds in the second year, and full cost in the third year. The domestic allowance is also to be phased out in a similar fashion over the same period. Table 1.9 provide a number of illustrative examples of customers and the profile of their bills over the next five years reflecting this phasing-in:
- **Example 1:** Existing metered water (with two meters) and trade effluent customer (Large food manufacturer);
 - **Example 2:** Existing metered water customer with a trade effluent consent that currently does not pay trade effluent charges at present (Small/Medium electrical manufacturer);
 - **Example 3:** Existing metered water customer (Medium sized retail outlet);
 - **Example 4:** Currently unmeasured customer (Small office); and
 - **Example 5:** Existing metered water customer not connected to public sewer (Farmhouse).

Table 1.9: Illustrative examples of the impact of phasing in charges

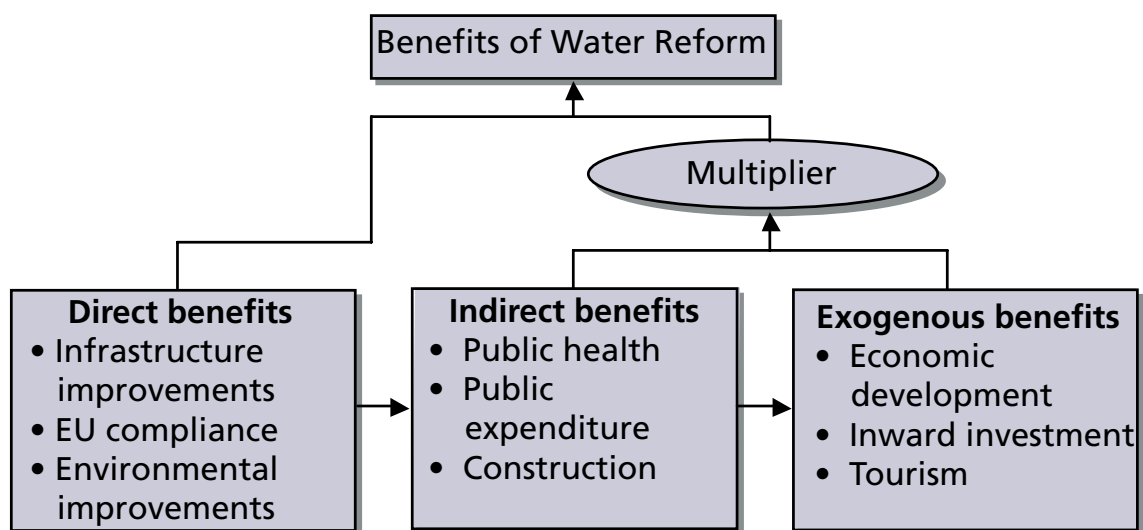
Example 1: Existing metered water (with two meters) and trade effluent customer (Large food manufacturer)						
	Volume (m ³)	Charge (2005/06)	Charge (2006/07)	Charge (2007/08)	Charge (2008/09)	Charge (2009/10)
Water – Meter 1	106,064	85,153	84,156	84,156	84,156	84,156
Water - Meter 2	2,321	1,783	1,816	1,868	1,921	1,921
Sewerage	1,123	0	341	683	1,024	1,024
Trade effluent	101,899	59,631	66,588	73,545	80,502	80,502
Total charge	-	146,568	152,902	160,253	167,604	167,604
Charge index	-	100%	104%	109%	114%	114%
Example 2: Existing metered water customer with a trade effluent consent that currently does not pay trade effluent charges at present (Small/Medium electrical manufacturer)						
	Volume (m3)	Charge (2005/06)	Charge (2006/07)	Charge (2007/08)	Charge (2008/09)	Charge (2009/10)
Water	2067	£1,694	£1,675	£1,675	£1,675	£1,675
Sewerage	31	£0	£24	£48	£72	£72
Trade effluent	1,934	£0	£373	£747	£1,120	£1,120
Total charge	-	£1,694	£2,072	£2,470	£2,867	£2,867
Charge index	-	100%	122%	146%	169%	169%
Example 3: Existing metered water customer (Medium sized retail outlet)						
	Volume (m3)	Charge (2005/06)	Charge (2006/07)	Charge (2007/08)	Charge (2008/09)	Charge (2009/10)
Water	522	£303	£352	£405	£457	£457
Sewerage	496	£0	£153	£305	£458	£458
Total charge	-	£303	£505	£710	£915	£915
Charge index	-	100%	167%	234%	302%	302%
Example 4: Currently unmeasured customer (Small office)						
	Volume (m3)	Charge (2005/06)	Charge (2006/07)	Charge (2007/08)	Charge (2008/09)	Charge (2009/10)
Water	n/a	£0	£59	£118	£178	£178
Sewerage	n/a	£0	£55	£110	£166	£166
Total charge	-	£0	£114	£229	£343	£343
Charge index	-	n/a	N/a	n/a	n/a	n/a
Example 5: Existing metered water customer not connected to public sewer (Farmhouse)						
	Volume (m3)	Charge (2005/06)	Charge (2006/07)	Charge (2007/08)	Charge (2008/09)	Charge (2009/10)
Water	500	£285	£335	£387	£440	£440
Sewerage	0	£0	£0	£0	£0	£0
Total charge	-	£285	£335	£387	£440	£440
Charge index	-	100%	117%	136%	154%	154%

- 3.31 The illustrative examples suggest that existing metered water customers that also pay trade effluent charges, typically larger industrial users, will experience the smallest proportionate increase in their annual bills (14% over five years in this example). However given the large volume of water consumed and effluent discharged, this still results in a significant increase in the actual bill of approximately £21,000.
- 3.32 Existing metered water customers (who are not paying trade effluent and are connect to the public sewer) on the other hand will experience a greater proportionate increases over the period as sewerage charges, which are broadly similar in magnitude to their current water charge are introduced and the domestic allowance is phased out. Example 3 illustrates the increase in charges in relation to a medium sized retail outlet whose charges treble from £303 to £915 over the period.

Benefits

- 3.33 Having addressed the costs that will be imposed on non-domestic properties as a consequence of Water Reform, it is essential that the benefits of reform are also considered in the RIA. It is important that the full range of benefits resulting from reform are weighed against the associated costs, and not just the immediate or 'direct' benefits. Figure 1.4 identifies the main benefits resulting from Water Reform, and each of these is discussed in the subsequent paragraphs.

Figure 1.4: Identifying the benefits of Water Reform



Direct benefits

- 3.34 The expansion of non-domestic charges outlined in Chapter Three is a direct consequence of the introduction of self-financing arrangements for water and sewerage services and hence must be understood in the context of the rationale underpinning this change. For many years, investment in water and sewerage infrastructure, has struggled in its competition for Government funding with other priority services such as health and education. Some £3 billion investment in water and sewerage services is required over the next 20 years¹⁰. There has been a considerable increase in investment in the water and sewerage system since 1998. For example, over £600 million will have been invested in the 3-year period to 2006. However, this level of expenditure cannot be sustained without diverting significant resources from other priority services.
- 3.35 The new strategic approach represented by self-financing arrangements will enable a step change in the level of investment in water and sewerage services over the long term that will result in infrastructure improvements. This investment will mean that Water Service will be able to comply fully with increasing European standards on water quality. The level of investment that will be funded under the self-financing arrangements will result in environmental improvements, which means a cleaner environment, cleaner rivers, and cleaner beaches. Failure to comply with these Directives would leave a devolved Northern Ireland Executive open to infraction proceedings, possibly resulting in costly fines. In effect, Water Reform provides the fastest strategic route to full compliance with European Directives.

Indirect benefits

- 3.36 There are also a number of indirect benefits that flow from the direct benefits outlined above. Clean water and effective sewerage services are fundamental to public health (See consideration of Health Impacts, IIA Part I). Improvements in water quality that result from increased infrastructure investment will have further benefits in this regard.
- 3.37 Furthermore, providing funding for water and sewerage services on a self-financing basis has a positive impact on the public expenditure system. Firstly, removing these services from the system will release public expenditure which may be used to meet the needs of other key public services such as education and health (see Policy Proposals Paper issued along with the IIA). In strict economic terms, this does

¹⁰ It is estimated that around £6 billion extra needs to be invested over the next 20 years in total to address the infrastructure deficit that has build up across all public services.

not represent an economic benefit of Water Reform, rather it is a redistributive effect.

- 3.38 This substantial investment in infrastructure over the next two decades, which is in part made possible by Water Reform, will result in a substantial increase in public construction expenditure. Consequently, this investment will create and safeguard employment in the construction sector.

Exogenous benefits

- 3.39 A broad range of potential exogenous benefits, or sometimes termed 'induced' benefits also exist. These benefits are termed exogenous because they are external to the activities of the water and sewerage sector, but are induced by its outputs.
- 3.40 Clean water supplies and effective sewerage services underpin sustainable economic activity and economic development. Failure to deliver on the level of investment needed for water and sewerage infrastructure referred to above would lead to constrained planning processes in relation to both domestic and non-domestic properties as treatment works approach capacity and fail to cope with additional demand. Furthermore, the continued deterioration of the aging water and sewerage infrastructure in the absence of this investment would lead to out-of-sewer flooding and traffic disruption as a result of burst mains. Consequently, Water Reform is an important factor in facilitating economic development.
- 3.41 Similarly modern, cost-effective water and sewerage services also play an important part in the inward investment decisions of potential investors. Inward investment plays an important role in establishing and developing new industries and increasing the number of high quality employment opportunities in Northern Ireland. Northern Ireland faces strong competition for inward investment from other regions of the UK, Ireland and further afield. In light of this, any investment which improves the attractiveness of Northern Ireland's business environment is beneficial.
- 3.42 As stated previously, Water Reform will also result in environmental improvements, such as cleaner environment, cleaner rivers, and cleaner beaches. These improvements will positively impact on Northern Ireland's ability to sell its tourism product in both domestic and foreign markets.

Multiplier effects

3.43 Multiplier effects are the secondary effects of the incomes generated by the employment that is created as a consequence of Water Reform. It can be expressed in a number of ways including as a financial value or as a measure of multiplied employment. A standard multiplier used in a wide range of economic research is a value of 1.1. That is, for every 10 jobs created, an additional 1 will be created via multiplier effects.

Assessing the impact

3.44 The proposals in relation to non-domestic charging will have a number of costs and benefits as outlined previously in this Chapter. In order to fully assess the impact of the proposals, it is necessary to once again look at the future scenarios where there is no change to non-domestic charging (policy neutral scenario), and where non-domestic charging is adjusted in accordance with the proposals.

Policy neutral scenario – no change

3.45 Under the existing regime, Water Service is funded by a block grant from the Northern Ireland Executive and by direct charges to certain categories of non-domestic customers. If the organisation were to be continually funded on this basis, either:

- The level of investment in water and sewerage infrastructure needed in the future could only be sustained by redirecting significant resources away from other public spending priorities such as health and education. This would impact on the availability and quality of these front-line services in Northern Ireland; or
- In the absence of these resources, Water Service would not be able to fund the investment programme required. This would mean that it would be unlikely that the organisation would be able to ensure compliance with European Directives on water quality, protect public health and the environment, respond to increasing demand for water and sewerage services, and upgrade ageing water and sewerage infrastructure in the future.

3.46 It is unlikely that the resources could be released on a sustainable basis from the Northern Ireland budget to fund the investment programme without unacceptably impacting on other key spending programme. Therefore, under a policy neutral scenario, the most likely outcome is the latter proposition. Failure to comply with the European Directives

could result in costly infractions. These infraction proceedings take the form of fines, which can amount to tens of thousands of pounds per day, and which would divert public resources away from key services and spending priorities.

- 3.47 In this scenario there would not be any significant change in the scope of the customer base or the magnitude of the charges and as such there would be little direct impact on businesses and other non-domestic properties. However, the benefits of Water Reform outlined earlier in this Chapter such as the health, environmental and economic development benefits would not be realised. In fact it is possible that in the future, as the sewerage system reaches capacity, there could be detrimental impacts on health and the environment and a constraining of economic development.

New charging regime - non-domestic charging proposals

- 3.48 The non-domestic charging proposals will have a wide range of positive impacts as discussed previously under 'benefits' in this Chapter. The level of investment made possible by the introduction of comprehensive charges will ensure compliance with European Directives and will realise the other benefits identified. However, given the nature of the indirect and exogenous benefits, it is not possible to quantify in monetary terms the overall benefit that will accrue from implementing the proposals (e.g. while modern infrastructure might well be a key element influencing the decision of a potential inward investor whether or not to locate in Northern Ireland, it is not possible to say how much of the investment was as a consequence of that infrastructure). Nevertheless, while these benefits cannot be quantified, it is important not to underestimate their value to the general public in Northern Ireland and the wider economy of the region.
- 3.49 On the other hand, the non-domestic charging proposals also impose a greater cost burden on businesses and other non-domestic properties in Northern Ireland.
- 3.50 Pre-consultation with representatives of the business and farming communities revealed a number of concerns in relation the potential impact that these increased costs could have. These representatives highlighted the fact that while water charges in many cases might constitute a relatively small component of a business' overall cost base, an increase in these costs must be considered in the context of the wider cost to the environment in Northern Ireland. Businesses locally have experienced significant increases in other cost areas such as energy

and insurance over recent years. They also commented that increases in the overall cost base can eat into profits and threaten the viability of marginal businesses. The importance of maintaining international competitiveness was also stressed in relation to Northern Ireland's large number of exporting firms.

3.51 In terms of impact:

- **Competition** – Cabinet Office guidance stipulates that all RIAs must include a competition assessment. It is important to note that the competition assessment does not attempt to consider whether the proposals will affect the ability of local firms to compete outside of Northern Ireland and the UK (i.e. the impact on a firm's competitiveness). Rather, the assessment considers whether proposals will prevent markets from functioning competitively (e.g. deterring/preventing new entrants to the market). Comprehensive charging for water and sewerage services is the norm in the rest of the UK, and throughout many other countries. The introduction of comprehensive charging in Northern Ireland will bring the region into line with the rest of the UK and other EU member states. Charges will be applied universally across all businesses and all sectors. Consequently the proposals will not distort the operation of the market and there are no competition issues.
- **Vulnerable sectors** – The analysis has revealed the introduction of comprehensive charges will have the greatest proportional impact on those water intensive industries that do not currently pay for the treatment of their waste water via trade effluent charges. Many of the businesses in these intensive industries such as textiles, food processing and electronic manufacturing do pay trade effluent charges already, which should cushion the cost increases to a certain extent. However, given the volume of water consumed and discharged these cost increases could be large in magnitude. Furthermore, many of these businesses compete in international markets and where demand might be sensitive to price rises. The impact of these proposals on profitability/viability will vary depending on individual business circumstances.
- **Small business** – The analysis also reveals that most unmeasured customers who do not currently pay charges will receive a bill in the order of a few hundred pounds per annum. These customers typically tend to be small businesses. While the analysis reveals that these cost increases might be relatively low in comparison to other

cost pressure, our pre-consultation suggest that some marginal businesses might find these difficult to absorb.

- **Agriculture** – Because farms are almost entirely metered and in most cases not connected to the public sewer, the additional costs imposed will be equivalent to the removal of the domestic allowance. Against this, farmhouses supplied through the farm meter will not incur an unmeasured domestic charge.
- **Public Sector** – The charges faced by Public Sector organisations will also be affected by the proposals. Hospitals in particular tend to consume substantial volumes of water and will experience increases in charges largely as a consequence of the introduction of sewerage charges.

3.52 One of the main purposes of the public consultation is to obtain the views of those in the business and community/voluntary sectors of potential consequences of the reform of non-domestic charging arrangements. Chapter Four outlines some of the issues that on which views would be particularly welcome; although all comments are welcomed and will be considered carefully.

Chapter Four

Summary

- 4.1 This Report presented the findings of the partial RIA that has been undertaken in relation to the proposals on non-domestic charging for water and sewerage services. The Report detailed the main elements of these proposals and provided an overview of the resulting costs and the benefits.
- 4.2 The partial RIA revealed that the paying consumer base of Water Service would be broadened to include all non-domestic properties that are connected either to the mains water supply and/or the public sewer. The domestic allowance is to be phased out, the trade effluent regime is to be brought into line with the practice in GB, and sewerage charges are to be introduced from 1st April 2006 or as soon as practicable thereafter. These changes will result in an increase in the amount that businesses, voluntary and community and public sector organisations in Northern Ireland have to pay for these services, as detailed in the main body of this Report.
- 4.3 The partial RIA also identified the benefits associated with these proposals, namely:
- **Direct benefits:**
 - Infrastructure improvements;
 - EU compliance; and
 - Environmental compliance.
 - **Indirect benefits:**
 - Public health;
 - Increased public expenditure; and
 - Benefits to the construction sector.
 - **Exogenous benefits:**
 - Economic development;
 - Inward investment ; and
 - Tourism.

4.4 In order to complete the final RIA, we are seeking comments and views on the assessment provided in this Report.

Consultation questions

1. Do you have any general comments on the overall approach that was taken in completing this RIA?
2. Do you consider that there are any other issues which need to be either assessed or taken into account in the development of the non-domestic charging arrangements?
3. What are your views on the identification and assessment of costs?
4. What impact do you think these additional costs will have on businesses and other voluntary and community organisations?
5. What sectors or types of businesses / organisations do you think might be particularly vulnerable to the introduction of comprehensive charges?
6. What are your views on the identification and assessment of benefits?
7. Do you agree that the benefits outlined justify the changes in the charging regime covered in our proposals?
8. Do you agree that the proposals represent a fair and equitable means of charging non-domestic properties for the costs that they impose on the water and sewerage system?

How to give your views

You are invited to send your views on this draft Integrated Impact Assessment on Water Reform by **Friday 4 March 2005**. **A response form is attached within the Summary Document**. Please note that your response may be made publicly available unless you specifically indicate that it is to be treated in confidence.

Please send your response to:

Martin McKee
Water Reform Unit
Department for Regional Development
6th Floor
Lancashire House
5 Linenhall Street
Belfast
BT2 8AA

Fax: (028) 9054 7875
e-mail: queries@waterreformni.gov.uk

Further information is provided on the Water Reform website at: www.waterreformni.gov.uk

Following consideration of all responses a final Integrated Impact Assessment will be published on the Water Reform website, www.waterreformni.gov.uk. This document will also be available from the Water Reform Unit.