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Paper 1 - Overview of the Water Sector in Ireland

Submission to CSO by
Department of the Environment, Community and Local Government

January 2015
Introduction

This CSO has requested, as part of its evaluation of the statistical treatment of Irish Water in Government accounts, that the Department of the Environment Community and local Government (the "Department") provide it with information on the operation and funding of the entire water sector in Ireland not just Irish Water.

1.1. Background

The OECD has noted that settlement patterns and proximity of water sources in most places has shaped the structure of the Irish drinking water sector, which is characterised by a few large systems and many smaller, widely scattered ones (OECD, 2010). The pattern of rural living and low population density in Ireland has meant that water services (drinking water and waste water treatment) falls into three main categories:

(a) Public systems covering the majority of the population;
(b) Co-operative groups delivering mainly drinking water services in rural areas (Group Water Schemes) largely in areas, where the topography and rural location has historically made provision of public infrastructure unviable; and
(c) Individuals who are remote from public or group systems, reliant on their own wells and single house waste water treatment systems (e.g. septic tanks).

The proportions break down as follows:

<table>
<thead>
<tr>
<th>Drinking Water Supply in Ireland</th>
<th>Waste Water Treatment in Ireland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Scheme</td>
<td>Public Scheme</td>
</tr>
<tr>
<td>Group scheme</td>
<td>Group scheme</td>
</tr>
<tr>
<td>other/not stated</td>
<td>other/not stated</td>
</tr>
</tbody>
</table>

Source: CSO Census 2011

1.2. Challenges In the Irish Water Sector

Government policy for the development of the water sector, including the legislative and funding approaches chosen is set in this context. The abundance of water available for treatment and the limited areas of water stress, has been an important influence on the evolution of policy instruments, as the focus has generally been on ensuring that capacity of treated water and waste water facilities meets the demands of a growing population and economy, supports regional development and meets EU and national standards.
Particular policy interventions have been required in the past decade for example to address:

- the investment needs in the public water and waste water system to meet economic need;
- increase compliance with the EU urban waste water directive with approx. 30% of the national waste water load with no treatment in 2001 falling to under 5% in 2013;
- drinking water quality deficiencies in the Group Water Sector (a matter highlighted in a ruling of the European Court of Justice case in 2002); and
- particular issues arising for diffuse pollution from septic tanks and on-site waste water treatment systems.

In recent years the rising costs of production and need for substantial on-going capital investment in the area of water supply has placed a strong emphasis on water conservation and tackling high levels of leakage in the public network.

### 1.3. Provision of water services

Traditionally, the supply of water services in Ireland has been considered to be monopolistic in nature, largely because of the large scale capital investments involved in developing water sources, treatment and transportation. Duplication of such investment for different suppliers would be an inefficient use of resources according to the independent assessment of Irish Water conducted by PWC in 2011. This report\(^1\) examined the issue of whether there should be competition “in the market” (i.e. many suppliers) or “for the market” (i.e. through public procurement). Given the absence of significant widespread utilisation of competition “in the market” internationally and the challenges facing the water and sewerage sector in Ireland regarding the move to charging, economic regulation and the investment challenge, PWC did not recommend that this route should be adopted in Ireland. The statute establishing Irish Water therefore recognises it as a public water utility, with a specific requirement in developing its water charges plan to take account of the “public utility nature of its functions” while also performing its functions in a “commercially viable manner”. Water services functions in relation to the public water services were transferred to Irish Water on 1 January 2014.

These functions are mainly set out in the Water Services Act 2007, which also governs the provision of drinking water services and while not yet commenced, envisaged that licences would be required for the provision of such services by providers, other than Irish Water, based on a threshold relating to numbers of people being serviced. These provisions are generally established to allow for the licencing of Group Water Schemes, serving some 300,000 persons (EPA Drinking Water Report, 2013 – group water schemes serving more than 50 people). Work is being currently advanced to develop the regime for the Group Water Sector.

Consideration is given during the planning application process (for both domestic and commercial buildings) to the appropriate arrangement for water services, and this is normally addressed as a condition of planning permission. Development decisions are therefore influenced by the capacity of the public system to provide services to new customers. The question of private supplies or Group Water Schemes generally arises where it is not economically or technically feasible to expand the public network to the area concerned. This generally arises in the rural environment, for reasons

of topography and the low density of population which would render extensive public water networks unduly expensive and inefficient.

While some grant support is provided to householders to ensure that investment can be made in private wells and deficient on-site waste water treatment system, the main providers of water services, other than Irish Water, and specifically drinking water supply, are the Group Water Sector. This sector accounts for some 11% of the population, and water is supplied by a mix of public and private sources. The sector is co-operative in nature and tariffs are set by the boards of the individual schemes. An umbrella organisation – the National Federation of Group Water Schemes – represents this sector and negotiates with the Department on general matters regarding subsidy and funding arrangements. A key element of their work is driving the continued improvement in quality of these schemes. The Group Water Sector is an area are supervised by the relevant local authority under the general supervisory role of the Environmental Protection Agency, which reports on monitoring results on an annual basis.

2. Cost Structure of Water Sector

The water sector in Ireland (and internationally) is characterised by high fixed costs associated with investment in water production and treatment plants and related pipelines/sewers, with a low marginal cost of production/treatment per litre. Given the differences in population density across the country and differing levels of historic investment/underinvestment, the fixed and variable cost per household served would be expected to vary widely between households, whether served by Irish Water, Group Water Schemes or private supply.

The CER in setting out a regulatory framework for Irish Water has adopted a postalised approach in setting domestic tariffs. i.e. ) the amount of revenue to be recovered from the domestic sector, having taken into account Government subvention, is apportioned across all households on an equal basis irrespective of location in Ireland and the related cost of serving that household.

3. Funding of the Water Sector

3.1. Objectives of Government Funding

The overall architecture of the policy framework for operational subvention for Irish Water and the Group Water Sector is to ensure that charges are clear, affordable and certain. This is a recognition that the water sector in Ireland is under-going a substantial transformation, which is of significant scale and requires a number of legacy issues to be resolved as the quality and efficiency of the overall sector is improved. There are also significant challenges in meeting future needs, including compliance with the Water Framework Directive, and the Urban Waste Water Directive – the particular challenges in the public water sector are set out in Irish Water’s proposed business plan which accompanies this submission.

Thus the operational support provided to water providers is set in this context and aims to ensure that the cost of water services to similar users in the public and Group Water Sector is broadly similar, taking account of the different nature and cost drivers in each of the sectors. Where the average charge to an Irish Water customer for water supply is the same as the average charge
applied to a Group Water Scheme customer the average level of Government support should be equivalent and therefore the implied product subsidy per litre would also be, on average, equivalent.

Arrangements have been agreed with the National Federation of Group Water Schemes (NFGWS) to monitor this aspect (in particular average charges) over the period ahead, given the particular difficulties of translating policy across over 1,000 different schemes which each have the power to set their own tariffs under their co-operative arrangements. A survey was conducted by the NFGWS on behalf of the Department which gives an indication of the average charges. Based on this data the subsidy levels across the Group Water Sector were reduced, such that cost faced by households for water was broadly in line with the water only charge for Irish Water Customers (average €99.50 for water only) – while taking account of, inter alia, the co-operative community and voluntary ethos in the group water sector, legacy issues, extensive networks and financial investment in capital works (including metering) on the part of group scheme members.

<table>
<thead>
<tr>
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<th>Average charge based on survey pre 1 January 2014</th>
<th>Expected average charge from 1 January 2015 following subsidy revision</th>
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<tbody>
<tr>
<td>Public source group water scheme</td>
<td>€38.79</td>
<td>€68.79</td>
</tr>
<tr>
<td>Private source group water scheme</td>
<td>€60.50</td>
<td>€105.79</td>
</tr>
<tr>
<td>Average across all schemes (based on average household size of 2.7)</td>
<td>€52.88</td>
<td>€92.29</td>
</tr>
</tbody>
</table>

The key principles which have underpinned the review of the Group Water Sector subsidy arrangements are

- Fair treatment between drinking water consumers in the public and group water sectors, taking into account the inherent differences in structure, funding and organisation between the sectors having regard to the ability of Group Water Schemes to set the price of water based on their own local circumstances;
- Recognition of particular cost structures in relation to the extent of networks in the rural environment with dispersed population and the variation between schemes with public or private sources;
- Subsidies continue to be tied to conditions to support customer charters, compliance and optimal management and operational practices;
- Administrative arrangements that are straightforward as possible recognising the scale and capacity of the Group Water Sector, and combined with capital grants support sustain improvements in drinking water quality; and
- Promote water quality and source protection.

These principles mirror in policy terms the objectives set out for Irish Water which the Commission for Energy Regulation must have regard to in relation to its functions in regulating Irish Water e.g.,
conservation of water resources, provision of services in an economical and efficient manner and compliance with the Water Framework Directive.

It should also be noted that under Statute, Group Water Schemes can request that Irish Water take over their assets, from which point Irish Water’s tariffs structure, as set out by the CER, would apply to the customers of that Scheme.

3.2. Nature of Operational Subvention
The nature and amount of operational subvention provided to Irish Water is set out in the documents which accompanies this submission. The operational subsidies provided to the Group Water Sector are paid to individual schemes by local authorities, who in turn recoup the costs from the Department via the Local Government Fund (“LGF”).

3.3. Capital Investment
Capital funding of Irish Water will take account of the investment programme approved by the CER, in line with a strategic plan for 25 years approved by the Minister. This capital contribution will be eliminated by 2020, as the Irish Water’s capacity to fund investment from its business model and borrowings increases.

A rural water action plan developed in response to the issues raised by an ECJ ruling in 2002 has guided the capital grant scheme for Group Water Schemes to-date. Over the course of 2015, a new multi-annual programme of capital investment for the sector will be developed, taking account of the issues raised in most recent EPA reports on drinking water supplies in the sector (which still lags the public water system), and the wider requirements of the Water Framework Directive on resource management and source protection.

4. Water Conservation
While most areas of Ireland are not impacted by water stress, in line with the efficient use of resources and the objectives of the Water Framework Directive, the Government have decided to introduce a universal water conservation grant. The grant of €100 per annum will be available to all households, irrespective of the manner in which their water is provided and is not tied to expenditure on any particular aspect of water provision.

An essential element around the communications on the eligibility for the grant will be on water conservation and water quality issues. In particular, households will be encouraged to

- Address leakage which may be internal to the house, e.g. fix leaking cisterns, change dripping taps etc.;
- Use the grant towards the costs of water butts or installing dual flush toilets or rain water systems;
- Use the grant to de-sludge their septic tank or maintain their well to ensure it is operating efficiently; and
- Other low cost efficiency and conservation measures which may result in a reduction in household water services costs (the Department and water providers will continue to promote and communicate such measures as the conservation market continues to develop).
The grant will be administered by the Department of Social Protection. Regulations on the exact terms and conditions of the scheme are being developed by the Department of the Environment, Community and Local Government which will be responsible for funding the costs arising. The regulations will allow for review of the schemes operation in due course to ensure that Government objectives are being met.