

DÁIL ÉIREANN

MAOINIÚ AR SHEIRBHÍSÍ UISCE TÍ SA TODHCHAÍ: AN COMHCHOISTE UM JOINT COMMITTEE ON FUTURE FUNDING OF DOMESTIC WATER SERVICES

Dé Céadaoin, 8 Feabhra 2017

Wednesday, 8 February 2017

The Joint Committee met at 1.30 p.m.

MEMBERS PRESENT:

Deputy Colm Brophy,	Senator Lorraine Clifford-Lee,
Deputy Pat Casey,*	Senator Paudie Coffey,
Deputy Barry Cowen,	Senator Grace O'Sullivan.
Deputy Alan Farrell,	
Deputy Noel Grealish,	
Deputy Seamus Healy,	
Deputy Martin Heydon,	
Deputy John Lahart,	
Deputy Paul Murphy,	
Deputy Eoin Ó Broin,	
Deputy Jonathan O'Brien,	
Deputy Kate O'Connell,	
Deputy Willie O'Dea,	
Deputy Jan O'Sullivan,	
Deputy Thomas Pringle,	

* In the absence of Deputy Mary Butler: In attendance: Deputy Danny Healy-Rae.

SENATOR PÁDRAIG Ó CÉIDIGH IN THE CHAIR.

Business of Joint Committee

Chairman: Apologies have been received from Deputy Mary Butler who will be substituted by Deputy Pat Casey. Tá failte romhat.

At the request of the broadcasting and recording services, members are requested to ensure that for the duration of the meeting, their mobile phones are turned off completely, or switched to aeroplane, safe or flight mode, depending on their device. It is not sufficient for members to put their phones on silent mode, as this will maintain the level of interference with the broadcasting system.

In accordance with the standard procedures by the Committee on Procedure and Privileges for paperless committees, all documentation for the meeting has been circulated to members on the document database.

The joint committee went into private session at 1.39 p.m. and resumed in public session at 1.45 p.m.

Scottish Water, Welsh Water and the Commission for Energy Regulation

Chairman: By virtue of section 17(2)(l) of the Defamation Act 2009, witnesses are protected by absolute privilege in respect of their evidence to the joint committee. However, if they are directed by it to cease giving evidence on a particular matter and continue to do so, they are entitled thereafter only to qualified privilege in respect of their evidence. They are directed that only evidence connected with the subject matter of these proceedings is to be given and asked to respect the parliamentary practice to the effect that, where possible, they should not criticise or make charges against any person or an entity by name or in such a way as to make him, her or it identifiable. The opening statement submitted to the committee will be published on its website after the meeting.

Members are reminded of the long-standing parliamentary practice to the effect that they should not comment on, criticise or make charges against a person outside the Houses or an official, either by name or in such a way as to make him or her identifiable.

At the request of the broadcasting and recording services, delegates and those in the Visitors Gallery are requested to ensure that for the duration of the meeting their mobile phones are turned off completely or switched to aeroplane, safe or flight mode, depending on the device used, and not merely left in silent mode.

Today we will consider the experience in respect of the provision and funding of water services in neighbouring jurisdictions. To assist us, I extend a warm Irish welcome to Mr. Douglas Millican of Scottish Water; Mr. Chris Jones, CEO of Welsh Water. The Commission for Energy Regulation is represented by Mr. Paul McGowan and Ms Sheenagh Rooney, who are present to address any relevant issues that arise.

I welcome our guests from Scotland and Wales, notwithstanding what happened in Edinburgh at the weekend. That is another matter. If we are to lose to anybody, it is no bad thing

to lose to Scotland.

Today members will engage in a question and answer session with our guests. Some members have indicated that they may have to leave early. Deputy Brophy will begin and will be followed by Senator Clifford Lee.

Deputy Colm Brophy: I join the Chairman in welcoming the delegation and thanking them for attending this committee. I have a number of questions in respect of the information that has been provided.

In Wales 53% of households have a meter. How does the billing mechanism work between the 53% of houses that have a meter and the remaining 47% of household that do not? Is there a noticeable difference between water consumption patterns between the metered households and the non metered households?

Under the Scottish system, effectively the payment for domestic water charges comes out of the local property tax. I would like some more information on the proportion of the property tax payment allocated to Scottish Water as the water utility. There are indications of high customer satisfaction. When people pay their property tax are they aware that they are effectively paying for water? Are they happy with this situation?

In respect of the savings delivered since the start-up, how important was the ability to use metering as a means of measuring and monitoring consumption and being able to use these savings for reinvestment?

Chairman: I call on the witnesses to commence.

Mr. Chris Jones: I will go first, given that the first half of the question was about the experience of Dwr Cymru Welsh Water. Our non-domestic customers are generally all metered. Our domestic household customers, as the Deputy mentioned, are roughly 50:50 with meter or still pay on the basis of the local government property tax or the rateable value of the property. A small number of customers are not metered because it is technically difficult to do so. In such cases, we have what we call “an assessed charge”. We assess what the likely consumption is given the number of people in the household and they pay on that basis.

The household bills, whether they are non-metered or metered, are kept in sync by our pricing formulas. That means a metered customer with the same consumption pays slightly more because of the additional costs of having, maintaining and reading a meter. The vast majority of our metered customers have either moved into a new property or voluntarily asked to be metered. That tends to mean that their consumption is lower than average. In practice, the average bill for a metered customer is less than the average bill for a non-metered customer. The nature of those customers tends to mean that their water consumption is quite a lot less than the unmetered customer. They are either in a new property with more water efficient devices or they have self-selected or opted for a meter as they are a small household. That is how our system works. One pays on the rateable value basis as a default. If one moves into a new property one is metered and, if one wants, one can take up a free option to be metered.

Mr. Douglas Millican: I extend my thanks for the opportunity to share some of our experience in Scotland with the committee today.

To a certain extent, the arrangements for another country or company are a function of history and are a result of the way that decisions have evolved over time. What we have in

Scotland is born out of the fact that water was in local control in Scotland until 20 years ago. Therefore, the basis for charging was linked to the way in which local authorities raised finance for their services.

Customers are charged by reference to what we call council tax bands, which is the property charge based on the size of the property. Although customers are charged on that basis, and their bills are raised and the money is collected by local authorities on our behalf, the charge levels are there purely to cover the costs of their water and wastewater services as set by an agreement between ourselves and our economic regulator. Both those charges and the cash that is collected from those customers is remitted directly to us. The points of commonality with local authority taxation are purely that we use a similar charging structure as it does through council tax bands. In addition, on grounds of efficiency, a customer or resident in a property gets one bill partly for local authority services and partly for water and wastewater services. When one looks at the face of that bill, it is very clear what the charge is for local authority services and, distinctly, what is the charge for water and wastewater services.

The second question was on using meters to drive down consumption and realise efficiencies. We effectively have no metered household customers in Scotland. We only have 600 out of 2.4 million households, which is negligible. Like Mr. Jones said about Wales, we have a large metering penetration among business customers. We have found that meters in district meter areas have helped us to understand leakage, drive down leakage levels and realise efficiencies. Metering is a powerful tool but it does not necessarily need to be done at property level and can be done at district level.

Deputy Colm Brophy: I have a question on the charge element of the local property tax or local household charge or bill. Is that a fixed amount for every household? Does the charge vary in a local authority area, based on the overall bill? Is a fixed amount charged for water per year?

Mr. Douglas Millican: In Scotland, there are nine different council tax bands. The smallest property would be in band A and the largest property would be in band H. The charge in a band H property is three times the level of a band A. The level of charge is purely a function of to which band one's property has been assigned. It does not matter whether the property is in Glasgow or located on a remote Hebridean island because the same charges apply for a given band or size of property.

Chairman: The next contributor is Senator Clifford-Lee.

Senator Lorraine Clifford-Lee: I thank the Chairman for facilitating me and thank the witnesses for their presentations. I have a few brief questions on water conservation and the information campaign on water charges. How were the public informed about water charges? Is there a continual education programme on water conservation?

The comments on district metering were interesting. It has been claimed that district meters are an effective tool for water conservation. Is water conservation down to households? How have households responded to measures that promote water conservation?

What is the average bill for water in Scotland and Wales? What is the level of water poverty in both jurisdictions? Have steps been taken to address the problem?

Mr. Chris Jones: I will share our experience of water conservation in Wales. As the Senator may know from the material that we have submitted, Welsh Water is slightly unusual because it

is a private and non-shareholder company. Our corporate purpose is to further the interests of our customers and water conservation plays a key role. We work in partnership with our customers to conserve water. One of the reasons that we set our company up in this way 16 years ago was because we thought we would get better buy-in and support from our customers. We hoped they would see that our purpose was fully aligned with theirs and it is part of our mission to encourage our customers to understand the value of water and the role that they can play in conserving water.

As we mentioned in our material, all children in Wales at key stage two will have a day's education with Welsh Water on one of our sites. The excursion is very popular with teachers. It is an opportunity for children to visit one of our education centres and learn the important skill of conserving water. We have a mocked-up African village where children can get a sense of what it is like to live in a Third World country where one must walk to a river to collect water and then bring it back to the village. We encourage our customers to help us and to value and preserve our water resources.

In response to the second part of the Senator's question, none of our activities would be powerful if we were not seen to do everything that we can to conserve water. The terminology that we tend to use is "leakage". We analyse how much water we lose through our supply system. It has been a major effort of focus for our company for the past couple of decades. I am pleased to say that leakage has never been better under control than it is today. Our leakage level is around 40% of where it was a couple of decades ago. We have substantially reduced it. Key to our success, as Mr. Millican has referred to, is control of the network. We have multiple metering points in the network and a smart network to analyse all the data in real time. We have computer algorithms that constantly look out for unexplained changes, fluctuations or variations in flows through the network as they suggest a leak has opened up. We have further to go with this technology but we are looking at reducing leakage by 4% or 5% over this period. We have made huge strides so we can legitimately talk to our customers about ways that they can help us and help the environment by conserving water.

Senator Lorraine Clifford-Lee: Is Mr. Jones satisfied that Welsh Water is running an effective conservation programme given that only half of the company's customers are metered?

Mr. Chris Jones: This is a cost-benefit scenario to some extent. The larger gains have been made in controlling leakage on the distribution network. As we have got that under control, the proportion of leakage in what we call the supply pipe to the customer's property has increased and this is an area on which we are now focusing. I cannot comment on the position in Ireland as I am not aware of the background. In Wales, the final pipe to the customer's property is the customer's legal responsibility. However, as part of our water conservation activities, Welsh Water will fix a customer's pipe at least once every two years if there is a leak to ensure water is conserved. We are able to identify leaks because we have a meter for each district of between 50 and 200 properties. If a leak opens up on a supply pipe, we can spot it relatively quickly, even though there may not be a meter on the property in question. In cases where people have a meter on their property, a reading of the meter will pick up supply pipe leaks, at which point we will intervene to help the customer deal with the leak.

Mr. Douglas Millican: In terms of the broader system, I will, to a large extent, echo Mr. Jones's comments, because they also apply to us in Scotland. The point about legitimacy cannot be stressed enough. Before a company can begin to speak to customers about saving or conserving water, it must ensure it has its own house in order. The whole issue of customer engagement is interesting. One of the materials that we use is a document featuring an image

of a child wearing a raincoat in torrential rain under the slogan “Saving water in Scotland. Really?” Saving water is a challenge because when people see abundant rain falling from the sky, they wonder why they need to save water at home.

We have been using a number of different conservation measures, one of which is to help people to understand the linkage between their use of water and their energy bills. A significant percentage of an energy bill is derived from heating water. We are working with the Energy Saving Trust in Scotland to convince people to think about water efficiency and energy efficiency at the same time. There is also a rich seam that involves trying to influence building standards. We have worked with the Scottish Government to try to have building standards tightened to ensure homes built in the future will be more water efficient than homes built in the past.

Another area in which we have been working is the social housing sector. In Scotland, social housing stock is typically refreshed with new kitchens, bathrooms and so on every ten years. We try to ensure that more water-efficient fittings are installed when this work is done. A multi-tiered approach must be taken at company level and in the way in which the company engages with customers.

Senator Lorraine Clifford-Lee: Does Mr. Millican consider the absence of domestic water meters to be a barrier to water conservation?

Mr. Douglas Millican: I would phrase it slightly differently. It is a policy choice of the Scottish Government to charge through the council tax banding structure. There are two key drivers for this. First, it enables Scottish Water to support the Government’s social policy objective of having much higher charges for people living in big houses than for those living in small houses. This policy is, therefore, a form of proxy for affordability. Second, this approach avoids the inherent overhead costs of having meters installed, to which Mr. Jones alluded, including the cost of fitting, maintaining and reading meters. This is a way of keeping total system costs down, thus improving affordability for all customers. We are doing a trial to identify what levers could give most effect to water conservation and whether providing a financial incentive gives a sustained benefit. As the trial is at an early stage, I cannot comment on whether, on balance, metering would provide a sustained incentive for substantially lower consumption.

Deputy Jan O’Sullivan: I have a number of questions. I will pursue the issue of metering, excessive use and how people pay for water. I do not know if the witnesses had an opportunity to read the expert commission’s report, which recommends a free allowance for normal household use, with tariffs imposed on additional use. This is the recommendation the joint committee is considering. In Wales, approximately 50% of domestic customers have a water meter. Mr. Jones, responding to a question from Deputy Colm Brophy, indicated that excessive use was roughly the same for customers with a meter and those without a meter. How does Welsh Water measure usage among people who do not have meters?

Perhaps I misunderstood Mr. Jones’s point, but I am interested in finding out how usage can be measured in the absence of meters. I am aware that Welsh Water and Scottish Water use district meters, which are useful for identifying leaks and so forth. However, as the committee must grapple with the recommendations of the expert commission, I am interested in finding out how excessive use would be measured in the absence of meters. I am aware that the system of local taxation applies at different rates to different sizes of houses in Scotland. In the Irish system, however, we are presented with a different question.

Mr. Jones and Mr. Millican referred to what appear to be excellent educational materials. I wonder whether we could plagiarise those or whether Welsh Water and Scottish Water have copyright on them.

Chairman: Sometimes it is better not to ask that question.

Mr. Chris Jones: I thank the Deputy for her questions. On excessive use, we do not really have that concept in our context.

Deputy Jan O'Sullivan: In that case, how does Welsh Water measure consumption?

Mr. Chris Jones: In terms of measuring consumption, this is straightforward in the case of metered customers. The simple fact in respect of non-metered customers is that we do not know what each individual household takes. What we do is measure consumption for a neighbourhood. A district is sealed area into which water is piped. This allows us to see how consumption varies and gives us a good idea of average consumption in each district. If there are businesses and so on in the district, their demand is netted off because they are metered, often in real time.

While we have a good idea of average consumption, we do not know what an individual property that is not metered consumes. However, in the context of where we are coming from, that has not been the number one issue for us. The main issues for us are getting control of the distribution network in order to reduce leakage in the network. We have made major strides in this area through technology, focus and investment, which have made a significant difference. We have reached what is known in the jargon at the economic level of leakage. This is effectively the level of leakage which minimises bills to customers. In every one of our zones, we make our calculations based on the cost of the water lost as against the cost of finding, fixing and so on so as to identify what is the optimal level. That is the point we are achieving in all our zones, which means we are able to tell our customers that leakage is well under control and costing them the least amount possible. That is probably the key point.

In terms of water conservation literature, as a not-for-profit company, we are very keen to work in co-operation with people elsewhere. We have been open to partnerships and we work well with Scottish Water and other companies in the rest of Europe. If we can help in any way, as we have done by appearing today to share our experiences, we will be delighted to do so. I do not know if it is an advantage but all of our material is bilingual. This may give people here a head start in terms of layout. It is important for us that we provide all of our educational material through the medium of Welsh in our Welsh-speaking communities. This brings me back to my point that our company's purpose is to support our customers and society. If we can make this a positive Welsh-language experience for our customers, that is something we are very keen to do.

Deputy Jan O'Sullivan: We are all keen to do that as well.

Mr. Douglas Millican: I do not have anything significant to add to what Mr. Jones has covered. Likewise, we are very happy to make our material and experience available. A great deal of it is accessible on our website. There is very much an open invitation to engage further.

Deputy Eoin Ó Broin: I have a specific question for Mr. Millican first and then some questions for both witnesses. Scotland is unique in a European context in that it does not have domestic metered household charges based on consumption. To further tease out Deputy Brophy's questions, I am interested to know how much of the local authority charge goes to the

water component. Is it a percentage depending on which band one is in? How is that calculated? Did it increase when Scottish Water was created or was it just that council tax bills were demarcated so that people were paying the same amount of money but knew what the portion going on water was? Has there been any difficulty with the European Commission in terms of Article 9 of the Water Framework Directive and the polluter-pays principle or is it satisfied that notwithstanding the fact that Scotland does not have a domestic metered water charge that it is meeting its other obligations through the river basin management plan and the core objectives of the directive?

My questions for both sides are very simple. We would be interested to hear the overall funding model of both Welsh Water and Scottish Water in terms of operational costs and capital programmes, in terms of revenues from domestic or commercial users and exchequer revenue vs loans, etc. I would be interested to know average household consumption in both cases and overall leakage rates in the distribution system. Here we have approximately 40% overall. Senator Clifford-Lee referred to water poverty. Do the companies track water poverty or have figures for the rates of water poverty in both Wales and Scotland?

On metering, there is a body of international research which suggests that when meters are introduced there is an initial drop in consumption before it starts to move back to its original level as people become accustomed to it. Is that something the witnesses have looked at and do they have an assessment over a period of time as to how meters changed behaviour?

My last question is to Scottish Water. We have a similar situation here in the sense that local authorities were traditionally responsible for the delivery of water services. One of the tricky issues has been the transfer or non-transfer of assets and staff from them to Irish Water. That is an experience Scotland went through. Can Mr. Millican tell us a bit about that?

Mr. Douglas Millican: I will kick off with the Scottish-specific questions. The way charges are calculated is straightforward in the sense that for any given six-year period, which used to be a five-year period, we have a service to deliver and a whole set of improvements we need to make through investment that are set for us through a process of ministerial direction reflecting the priorities of our customers and water quality and environmental regulators. We prepare a business plan as to what we think that will take and what it will cost and we then go through a process to agree that with our economic regulator and customers. Then what is called the “determination” is set. That sets the maximum charges we can levy on our customers each year for the next six years. It is that and that alone that determines what goes into any individual’s bill. It has nothing to do with local authority finance raising at all. It is purely through a discrete water process.

In terms of the issue of charging and the European Commission, that would be handled between the Commission and the Scottish Government rather than with Scottish Water. However, I am certainly not aware of any particular pressure on the Scottish Government around our arrangements for charging. To pick up the last question on the transfer I need to go back 21 years ago to April 1996 when water transferred from local authorities to Scottish Water. What happened then was that it was a clean transfer of all the assets, rights and liabilities, including any loan debt. At that point, it was transferred from the then 12 regional authorities into three regional water authorities.

Deputy Eoin Ó Broin: Did that include the staff?

Mr. Douglas Millican: The staff engaged in water services transferred at that point 21 years

ago.

Mr. Chris Jones: To pick up on some of the factual questions there, the key point to start with on financials is that we are a private company. All of our funding has to come from charges to our customers or money we raise in the private capital markets. In rough terms, we spend approximately £300 million a year on operating and maintaining our business and service to supply a population of approximately 3.5 million people. We spend getting on for £350 million to £400 million a year investing in asset legacy issues and new environmental and water quality standards. Our investment is more than our running costs, which is unusual. We then have just shy of £150 million to service the debt we have raised in the past to fund our previous investment. That is how our financials work out.

Without boring the committee with our history, one of the reasons we are set up the way we are is that we started off, unusually, as an exercise on a blank sheet of paper. Myself and my colleague who set the business up in this way thought the key thing to do was secure long-term secure funding for investment. Our business has a massive infrastructure need. We are 27 years into that programme and our asset condition has improved hugely as have our standards and the leakage situation. Leakage is about 20% on our network which is about the economic level for us in a rural network. While we have made massive strides in all those areas, we continue to have a major investment programme for the foreseeable future. For us to get that access to secure finances was crucial. We are not in the government sector so we do not have, for good or ill, the option of government financing. Our not-for-profit non-shareholder business model was all designed around making a virtue of that. People are very keen to invest in long-term infrastructure if it has a secure revenue source to go with it. That is why we are structured as we are.

Water poverty is a significant issue for us. Large parts of Wales are not relatively prosperous. As a consequence, approximately 15% of our customers are in what we consider water poverty which is that above a threshold, perhaps 3% of their disposable household income goes to pay water and wastewater charges. As a company, we are helping approximately 65,000 customers a year currently with loosely subsidised charges, which is to say a lower level of charge because they have a lower level of household income. Our aspiration is to grow that to the target we have set of 100,000 customers by 2020. Ultimately, our aspiration is that every customer has a bill which is affordable. To achieve that, we will need the support of government and others to have access to the data which shows who actually needs and deserves that support. We have done a great deal of customer research around this issue and have strong buy-in from our customers to support those who genuinely cannot afford to pay. In part that is because we are a not-for-profit company and customers have confidence that we are putting some of our money into supporting those customers and keeping the bills of the disadvantaged down.

Mr. Douglas Millican: Our charging structure is designed, on foot of a government policy decision, to support affordability right across the customer base. I mentioned earlier the basic principle of those in the highest band of property tax paying three times the rate of those in the lowest but further discounts are available to those on council tax benefit, social security support or in single-person households. In fact, some people could be paying a quarter of what others are paying. Those government measures are key to minimising the level of water poverty.

Deputy Thomas Pringle: I thank the witnesses for their submissions and for being here today. I have a number of questions. Scottish Water is a public corporation. If a decision was made by the Scottish Assembly to privatise it and make it into a market corporation, what would it require? I presume it would simply require an Act of the Assembly.

Is district or household metering the more valuable tool for water conservation and detecting leakages? Documents have been presented to the committee which show that it is impossible to identify the level of wastage of water from a single house through district metering but I know that it is possible because I have done it myself. How do the companies identify a single property in which there is a water wastage problem? How do they liaise with the householder and encourage him or her to rectify the problem? What role and responsibilities do the companies have in the case of single-house wastewater systems, that is, rural households which operate a septic tank? Do they assist such households in desludging or monitor such activities?

Mr. Douglas Millican: Scottish Water is publicly owned and any change in status would require a decision of the Scottish Parliament. We have been able to run Scottish Water very successfully in public ownership and have used it very effectively to say to staff they are driving for service improvements and efficiencies in order to deliver benefits to customers and communities. We do not have household meters but business meters. We use district meters in identifying and driving down leakages. We are similar to Welsh Water in having an assisted supply pipe repair policy and work with customers to repair supply pipes where it is reasonable to do so.

On single house wastewater systems, we provide a septic tank emptying service across Scotland. We are required by law to provide this service at the same cost wherever in the country, on the mainland or an island, a customer is based.

Deputy John Lahart: Deputy Thomas Pringle asked Mr. Millican specifically how the company identified a leak in an individual property through district metering.

Mr. Douglas Millican: There are various techniques, but I have no experience as a leakage technician and others are more qualified than I to answer that question precisely. If one drills into a particular district, there are techniques to identify if there are leaks from individual supply pipes.

Chairman: I have been reading about this and understand that, with district meters, a particular instrument can detect leakages in a particular area. It does not come automatically and requires extra work.

Deputy Thomas Pringle: In the real world I worked at detecting leakages as a day job. It is quite easy to identify individual properties in which water is being wasted, by step checking, making sounding checks and so on. The district meters are the most efficient tool to do this.

Mr. Chris Jones: I do not think there is any value in my repeating what Mr. Millican said about district metering. Our position is different from that of Scottish Water, however, in that we do not have any responsibility for septic tanks and non-public supplies. Those who are not on the public system make their own arrangements, although their contractors will ultimately bring the waste to one of our works and pay a gate fee for treatment.

Deputy Thomas Pringle: If single-house properties, or households identified as wasting water, do not engage in repairing or fixing the leakage problem, what power does Welsh Water have to deal with them?

Mr. Chris Jones: Our preference is to work with the householder, but we have legal powers and can apply for a warrant to go in and fix leaking pipework and recover the cost from the owner. This has happened in a very small number of cases and we try to avoid it at all costs. It tends to involve people who have a very long individual supply pipe and are, therefore, living

in rural areas. They tend not to be aware of the law that states they are responsible for the pipe until they are told there is a problem with it, after we identify excessive usage in their zone and see that the wastage is from their pipe. It can become a messy process, but in the vast majority of cases we help the householder to solve the problem.

Chairman: Deputy Willie O'Dea is next. As Deputy Martin Heydon has to leave to attend another meeting, I will allow him to speak after Deputy Willie O'Dea.

Deputy Willie O'Dea: When I read the presentation, I could not get my head around the fact that Scottish Water had run a very successful system without the need for individual meters attached to each household. It is using district metering and also detects leaks very successfully in this way. I do not know if the delegates know this, but we have spent a fortune on meters for individual houses, which makes it all the more intriguing. I did not actually believe it, but now that I have heard them explaining it, the reality has hit home.

Both companies offer discounts to people on lower incomes. Do they offer any based on household circumstances? There is greater usage in a household with more members, but if there is a fixed charge, I assume that will not come into play. Do they have a programme of exemptions based on income or anything else?

Mr. Chris Jones: There are exemptions for households with income below a certain level.

Deputy Willie O'Dea: Those in receipt of social welfare payments.

Mr. Chris Jones: Yes. Metered households with a higher consumption because of medical reasons and households with three or more children can apply for a different social tariff which caps their metered bill at a certain level if they are in receipt of benefits or meet other criteria. We are unusual in having two approaches to exemptions. In England social tariff support is only available to metered households, but both we and the Welsh Government have been keen to promote social tariffs and help for customers regardless of whether their properties are metered.

Mr. Douglas Millican: In Scotland charging and policy decisions are made by Ministers of the Scottish Government. That is because any discount given to one customer has to be paid for by another customer; therefore, trade-offs are made. The greatest discounts are for those in receipt of social security benefits and single householders who are proxy for those who use less water in their houses.

Deputy Willie O'Dea: Can Mr. Millican say that again?

Mr. Douglas Millican: The second category of discount is for single occupiers of a property who receive a 25% discount. That is a proxy for the fact that they will use less water. The cost impact of marginal increases or decreases in water usage for a company involved in running a wastewater business is really small. The big costs derive from the fixed provision of infrastructure to provide and take away wastewater. A big element, certainly in the system in Scotland, is the cost of taking away and treating rainwater that feeds into a combined sewerage system. In large part, the charging system we have reflects that fixed cost nature of our business.

Deputy Martin Heydon: I thank the witnesses for making the journey to attend here today. Their presentation has been very helpful and informative. Much of the work we are doing, in formulating our opinions, is with the aim of having as fair a model as possible while ensuring that we have a system that is fit for purpose into the future. Following on from Deputy O'Dea's

comments, the fairness question arose in my mind when I envisaged two pensioners on a low income living in a large, old house compared to a younger family in a smaller house where there are two earners and that potentially the people in the bigger house pay more. How does that fairness aspect work out? Mr. Millican said there is a 25% discount for a single occupancy but what is the position for people in those circumstances?

Taking Mr. Millican's points on metering, it is fair to say there is no way of dealing with excessive usage by individual properties through the charging mechanism. I take it from what Mr. Millican, based on goodwill, that the responsibility is not put back on the public to play their part in conservation as part of the charging mechanism? Would that be a fair comment?

Mindful that the witnesses are sitting beside our regulator, what type of regulation do they come under? Does it fall back on the Minister or do they have a regulator who plays a role?

The focus of all the questions so far has been on the water element as opposed to the wastewater element, which is half of our interest here. How many septic tanks would the organisations be dealing with in Wales and Scotland? How much of a consideration are they? When both Welsh Water and Scottish Water were established, what type of wastewater problems did they encounter and inherit? What progress have they made in dealing with those problems? In Ireland, raw sewage is going into our watercourses at 40 points. We have a huge legacy issue, for various reasons, in that regard and these issues have to be addressed. That will be a key consideration for us.

Finally, what way does a charging mechanism impact on the wastewater element? Is the witnesses' charging mechanism divided between drinking water and wastewater? Can they give us a breakdown of that also?

Mr. Douglas Millican: On the fairness question, if I take the example of an elderly couple in a larger house, they have a choice. They can either pay on the basis of the unmeasured charges I have been largely describing or they can choose to have a meter fitted and then be charged on a meter basis. That option is still open to them but it is a function of how effective we have managed to make our unmeasured charging system work that only 600 out of 2.4 million customers have chosen to go down that route.

Deputy Martin Heydon: Is that 600,000?

Mr. Douglas Millican: No, 600 meters compared to 2.4 million who are unmetered.

Chairman: Six hundred-----

Mr. Douglas Millican: Six hundred.

Deputy Colm Brophy: Is there a cost implication to having the meter fitted?

Mr. Douglas Millican: On the issue of charges relative to consumption, we do not have any evidence of what we would call excessive consumption. To a large extent that is borne out of the fact that we are in business to serve our customers and if our customers need to use water for a particular purpose, we are there to support them and to supply them. We sent out many messages on encouraging efficient use of water but, fundamentally, we are there to serve what our customers need.

On the subject of regulation, regulation plays a key role in the success of the system in Scotland, that is, water quality regulation, environmental protection regulation and economic

regulation. There is no doubt that we would not have achieved what we have achieved to date without effective, robust regulation.

On septic tank numbers, I cannot quote precise numbers for the Deputy but we would be talking in the tens of thousands of septic tanks across Scotland. We will empty some of those and private contractors empty others.

On the wastewater system, there has been a huge amount of progress on that, in large part driven by the need to comply with various European Union directives, principally the urban wastewater treatment directive. We have invested vast sums of money and when we look at it now, in terms of the cost of the system, it costs us more to run our wastewater activities than our water activities so if a customer looks at their bill they will see they are paying more for their wastewater service than for their water service.

Deputy Martin Heydon: Is there a cost if an individual property requests a meter to be installed?

Mr. Douglas Millican: There is a charge.

Deputy Martin Heydon: How much is that? Does Mr. Millican know?

Mr. Douglas Millican: I cannot quote the precise figure offhand but it is a charge that reflects the cost of installing the meter.

Deputy Martin Heydon: The individual has to pay for it.

Mr. Douglas Millican: Yes.

Deputy Paul Murphy: I thank the witnesses for the presentation. The most interesting aspect for me is the use of district metering to spot leaks and so on.

My first question is to Mr. Jones because he has a relatively substantial number of meters. On the question of usage, does Mr. Jones have figures for the average usage per household or per adult?

Mr. Chris Jones: Yes. I may get the numbers wrong but, indicatively, if one is in an unmeasured household one is generally using approximately 140 litres per day. Someone in a metered household is generally using, say, 110 litres a day, so there is a significant difference. However, I would make the point that that is not comparing apples with apples. It is a self-selected group so the people who have meters have either moved into a new property, which tends to be more water efficient, with less supply pipe leakage etc., or, unlike in Mr. Millican's case, we have approximately 10,000 customers a year who opt to go on to a meter. That is because they are low users so to go back to the previous question about a single occupier, the way one gets recognition in our system is to go onto a meter and because one is a low user one will then have a lower bill. On average, customers pay less if they are metered but overall it is more costly to serve a metered customer than an unmetered customer.

Deputy Paul Murphy: That is useful.

Mr. Jones spoke about private capital financing. His organisation gets money from customers but it also borrows money on the international markets. Are any of those loans secured against the assets of Welsh Water?

Mr. Chris Jones: I could talk at some length on this subject. Legally, they are not because we provide an essential public service so under our legal system those assets always have to be able to be taken away and given to somebody else to provide that service. It is called a special administration arrangement. However, when we created our business model we secured the debt we raised on the share capital of Welsh Water. Ultimately, the people who have loaned us money could end up owning Welsh Water and its licence in the event that Welsh Water did not meet its debt payments etc.

Deputy Paul Murphy: What is the total share capital of Welsh Water?

Mr. Chris Jones: The share capital has no value because Welsh Water is owned by a not-for-profit company limited by guarantee that myself and a colleague, Nigel Annett, created. The share capital of Welsh Water is all owned by Glas. It has no financial value because it cannot pay dividends to anyone. All the profits we make are reinvested back into the business. However, in the event that we did not make the repayments, the people who have loaned us money on 30, 40 and 50-year bonds could take ownership of the share capital of Welsh Water and get their money back that way. They would then have ownership of the licence and the ability to provide the supply.

Deputy Paul Murphy: That is useful. I have a question for the CER because having come in we would not want to leave him with no questions having been asked. It is about the question of usage. We got a report, which I believe went up on the documents page yesterday, which is beginning to examine the question of excessive usage, which is key from the point of view of the committee. A fundamental starting point of that is getting the average usage figures correct. Is it the case that the figures Mr. McGowan is using, which I understand were the figures given for the water commission report, are based on the Irish water consumption research project follow-up study, which was done in 2014 or 2015? Is that what they are based on or are they based on the metering and the experience?

Dr. Paul McGowan: The analysis that we submitted to the committee is based on metering data from 350,000 meters from the second quarter of 2016.

Deputy Paul Murphy: It is up to date.

Dr. Paul McGowan: Yes.

Deputy Paul Murphy: Some of these figures are in litres per person per day, others, including the CER's, are in household cubic metres per year. Will Dr. McGowan translate the CER's figures into litres per person per day so that we can compare the figure of 140 in unmeasured usage in Wales, for example?

Dr. Paul McGowan: I do not immediately know the answer, but we can easily convert that figure based on occupancy levels for those houses as we understand them.

Deputy Paul Murphy: That would be useful.

Dr. Paul McGowan: We can provide a written submission. I would hate to give the Deputy an erroneous number.

Deputy Paul Murphy: That would be perfect. In the CER's study on different models in England and Wales, its benchmarking indicated that Irish Water was approximately 70% to 100% less efficient than the mature utilities in those jurisdictions. How would those efficien-

cies be achieved? Would job losses and the like be included?

Dr. Paul McGowan: We do not direct Irish Water in how to achieve its efficiencies. Rather, we benchmark it against the likes of Scottish Water and various water companies in England and Wales and set it an efficiency target. It is up to Irish Water to determine how it delivers those efficiencies, but experience has shown that utilities that start out with relatively high cost bases can deliver those efficiencies over time. Scottish Water and Welsh Water have been in existence for 15-plus years. It is a journey, but efficiencies in the order that we have identified in our paper can be delivered.

Deputy Paul Murphy: I thank Dr. McGowan.

Chairman: I call Deputies Lahart and Healy, in that order.

Deputy John Lahart: It is all questions this week.

Chairman: The Deputy is my friend.

Deputy John Lahart: I would love to say much more. I thank the witnesses for attending. I hope that they at least get a night out of this and are not flying back immediately.

Wales and Scotland were cited to us in advance of the introduction of water metering. Were either of the companies approached by Irish Water or any of the semi-States connected with it in advance of Irish Water's roll-out to seek advice or guidance?

Mr. Douglas Millican: We have had quite some contact with Irish Water. We have a small consultancy business that works in a few territories. We have half a dozen people working in support of Irish Water.

Deputy John Lahart: What about in advance of Irish Water's establishment?

Mr. Douglas Millican: There have been discussions over a number of years.

Deputy John Lahart: From when to when?

Mr. Douglas Millican: I would not want to quote precisely when they started. I have been aware of them for the past four years, but I am not certain as to whether they predate that.

Deputy John Lahart: About 2013.

Mr. Douglas Millican: Yes.

Deputy John Lahart: What about Welsh Water?

Mr. Chris Jones: I am not aware of any contact with Welsh Water. We turned up today to help-----

Deputy John Lahart: We are grateful.

Mr. Chris Jones: -----with the process, but we do not have any particular commercial interest or the like outside our jurisdiction.

Deputy John Lahart: Welsh Water's not-for-profit model would appear to be one that wins with the public. I am surprised that Scottish Water was approached when Welsh Water was not. Mr. Jones might be able to confirm to the committee at another time whether there was no

contact.

Mr. Chris Jones: Yes.

Deputy John Lahart: I have questions relating to EU directives. Does the inclusion of water charges in Scotland's local property tax meet the EU directive's polluter pays principle, the EU water directives and so on?

Mr. Douglas Millican: I will refer to the answer to a previous question. That is a matter between the EU and the Scottish Government. I am not aware of any particular challenge from the EU to the Scottish Government in that regard.

Deputy John Lahart: I thank Mr. Millican. Does Scottish Water charge for its septic tank emptying service? Mr. Millican mentioned that it used private contractors.

Mr. Douglas Millican: We charge. Since it is a statutory responsibility, we apply the same charge everywhere in Scotland. It reflects our average cost of emptying a septic tank.

Deputy John Lahart: Mr. Millican does not need to get too technical on my next question, but where does all this go?

Mr. Douglas Millican: Where does what go?

Deputy John Lahart: When the septic tanks have been emptied, how is the material disposed of?

Mr. Douglas Millican: It is taken to our wastewater treatment works. The septic waste gets treated in the normal wastewater treatment facilities.

Deputy John Lahart: Ireland has group and private water schemes, particularly in rural areas. However, what I seem to be getting from both CEOs is that Welsh Water and Scottish Water look after the provision of domestic water to every home in their respective countries.

Mr. Douglas Millican: I shall take Scotland first. In Scotland, we look after every home that is connected to the public water supply system. That covers approximately 97% of the population. The remainder are connected to private water supplies. These can be to individual houses or groups of properties, for example, a hamlet or small village.

Deputy John Lahart: What about Wales?

Mr. Chris Jones: Exactly the same situation.

Deputy John Lahart: What is the percentage?

Mr. Chris Jones: I believe it is similar. I do not know off hand. Generally, an individual property with its own bore hole and small treatment plant package is the alternative.

Deputy John Lahart: To reiterate my colleague's point and confirm that Welsh Water and Scottish Water do not need meters on individual houses to detect leaks, is it therefore the case that they can use district meters to detect whether there is excessive or potentially abusive use of water?

Mr. Douglas Millican: In simple terms, one can. The type of situation that we tend to encounter does not involve wilful abuse. In the case of, for example, a small supply to an island

community, someone who has a holiday house might happen to leave a tap running when leaving the house. If there is excessive consumption like that in an area, we can discover it and deal with it. I would never call it “wilfully abusive”. It is just the sort of thing that can happen.

Mr. Chris Jones: Our experience is similar. Having a domestic water meter is an additional way of finding out whether there is a leak in the customer’s supply pipe that may be of a low order of magnitude that has not been detected at district level. That happens, but the major improvement that we have made in terms of leakage has been in our distribution system and has been driven by our district metering approach.

Deputy John Lahart: Is Mr. Jones saying that the majority of leaks are on the supply side?

Mr. Chris Jones: In our case, no. In the order of one third to 40% of leakage is on the customer supply side. The rest is in the distribution system. As we brought the distribution system’s leakage down significantly, the proportion that comes from the customer’s pipes has increased.

Chairman: I thank the Deputy for his focused questions. It was much appreciated.

Deputy John Lahart: The Chairman is welcome.

Deputy Seamus Healy: I welcome the witnesses and thank them for their presentations. The information that they have supplied has been interesting. Welsh Water and Scottish Water have confirmed how foolish Ireland has been in wasting €500 million in installing domestic water meters in recent years. Many of us have been calling for the prioritisation of district metering to identify leaks and deal with wasteful usage for quite some time. It is very welcome news to hear that what we have been saying is largely correct.

Most of that has been covered by other members of the committee so I want to take a different tack to ask about the structure of the witnesses’ organisations and how they deal with individual water users. For example, how are they dealt with on a daily basis? Are there local or regional offices? Do water users have direct contact with the witnesses’ organisations? How do the organisations deal with bursts as they arise? How are water users dealt with regarding communication with them in that instance and indeed for planned outages?

The other side that we have not discussed much yet at the committee is the whole question of wastewater. I want to specifically ask about the witnesses’ organisations responsibilities, if any, for sewers. There are significant difficulties in this country in relation to sewers or combined drains or whatever one wants to call them. Where blockages occur, particularly in streets or estates, how are those blockages dealt with in both Wales and Scotland?

Mr. Chris Jones: We have a large number of routes for interacting with customers. For example, the Deputy mentioned a burst mains or something like that. What we would generally expect to happen would be that we would see that through the telemetry monitoring of our systems. We would see a change in flow or pressure and we would hope to pick that up before customers are aware of it. We would use a variety of communication techniques to let them know, but, in particular, we would send a text message to all the customers in that area. In our system we can quickly work through from the hydraulic model, if there is a burst there, where our customers will be impacted and send information directly to them by text, social media or whatever way they have registered to let them know about such issues. That is in the immediate area. If we have planned works, which often are around aged water infrastructure, pipes, sewers or whatever, so working in someone’s street, then we will go to a lot of effort to ensure that

we have communicated face-to-face, by letter, and also with community events, drop-in centres and so on, so that the community knows and has had an input into how we are planning that work to minimise disruption. It is also, crucially, so that they understand why this is very necessary investment, why it is necessary to put them through that disruption, in order to provide a better service for the long term. Going on to the sewer issue, that would be-----

Deputy Seamus Healy: Could Mr. Jones address offices further?

Mr. Chris Jones: We have a mix. We have a central control centre and call centre so anybody ringing in or on live chat or whatever would go into a central area. That gives us efficiency and a good understanding of what is going on across the network. We generally have local hubs as well, where case management officers would then pick up that customer's issue and liaise with him or her directly, and in particular provide the information to anybody who is actually visiting the customer at their property and therefore has got the full history of the issue and so on. It is a mixture of centralised and local. The point is that there are good communications through the systems between all those points of contact.

The sewer network is a massive issue for us in Wales. We have a combined sewer network generally, much of which goes back to the period of industrialisation, certainly in south Wales and north-east Wales, the post-industrial areas. Those systems have not had the investment over decades that they need to maintain steady quality. We have done a lot of work and research on the implications of climate change and changing land use patterns, particularly on more impermeable areas in our towns and cities, such as people paving over their front garden for car parking, for example, and those sorts of issues. The amount of run-off is increasing and due to changing weather patterns, the amount of storm events is increasing.

We took a decision about seven or eight years ago that we needed to put in place what we call in the jargon a sustainable urban drainage strategy for the long term. We have come up with an approach called rainscape, which is about going into neighbourhoods and separating out the combined sewer network so that the rainwater and stormwater element is separate but retained within the local environment where it goes into planting areas, greens and things like that. It is absorbed into the local environment rather than going into the combined sewer network and causing problems of spills because the system is overcharged and cannot cope with the volume. That is something we have been doing successfully for the past five or six years, but we see this as being a generational investment programme. Ultimately, we will go into every urban community in Wales and apply the rainscape approach, so that the drainage system can cope with the sorts of climatic experience we expect in 20 or 30 years' time. On the back of that, there are really positive benefits as well to the wider community in terms of how it makes it a much greener environment, much better for biodiversity, quality of life and so on. It is disruptive of the local community and one has to work closely with it, but we have had extremely good support where we have been pioneering this sort of work.

Deputy Seamus Healy: Just to be clear on that, for what part is Welsh Water responsible? Is it responsible for all the drainage system?

Mr. Chris Jones: We are responsible for the foul drainage and surface drainage from properties. We are not responsible for highway drains, for example, or culverts and things like that. That is a local government responsibility, and it is something that the Welsh Government is looking at because there is obviously a lot of cross-over between the two and perhaps that arrangement could be made more effective. Our job is to get the dirty water away from people's properties, to drain roof and impermeable areas. The combined system that we have had for the

best part of 100 years, we think, needs to be separated in order to be able to do that in the future.

Deputy Seamus Healy: For example, in a council estate or in a private estate where there is a drainage system, would Welsh Water be responsible for blockages that occur on that system?

Mr. Chris Jones: Yes, with the exception of the drain from the house to the sewer itself, which is generally the householder's responsibility. Everything beyond that point is our responsibility.

Deputy Seamus Healy: What is the position if there are a number of houses on a system, perhaps 20 or 30 houses, and they discharge at one point into the main sewer?

Mr. Chris Jones: It is our responsibility from the point where the pipe from the house ad-joins the sewer that connects the 20 properties, so we would have all the pipe network and the individual house connections down to the main sewer and then off to the treatment works, etc.

Chairman: I need to go ahead. We are nearing the time that we have to finish up and I want to give other people an opportunity to come in. I call Deputy Farrell and then Deputy Cowen.

Deputy Alan Farrell: I welcome our guests. My first question is for Mr. Millican. He mentioned earlier that Scottish Water has 2.4 million customers. My research indicates that the charge is £351 per customer.

Mr. Douglas Millican: That is the average household charge.

Deputy Alan Farrell: That puts the revenue stream at about £1 billion or thereabouts, about £900 million. I have done a bit of research beforehand about the total cost of provision of Scottish Water's services and I am just wondering about some of the figures produced by Scottish Water. What is the compliance rate like in Scotland in terms of the customer uptake? Is there a large proportion, or what proportion of customers at local government level are actually paying for the service that is being provided? Is it 100%? What is the local government uptake like?

Mr. Douglas Millican: Unlike most companies, where if a customer does not pay for the services, the company will withdraw the provision of those services, on public health and social policy grounds, correctly, we have no ability to disconnect household customers who do not pay. Therefore, we must use other measures to encourage people to pay. Year on year, we have become more successful in that. The level of collection is about 96.6%.

Deputy Alan Farrell: Excellent. The guts of 1 million meters have been installed in this country so we have a choice to make between the completion of that or the roll-out, as has been recommended by the report that has led us here, of district metering. I have heard a lot within this committee and outside it that would justify seeing district metering as something that will work in the future in this jurisdiction. However, there is the example of most other public and private utilities across the world, which opt for household metering. What is the difference? Which one is better in a commercial or non-for-profit sense? Clearly, a better approach exists. My question is very specific. What made Scottish Water go down the road of not installing household meters except where it was an opt-in, as Mr. Millican outlined?

Mr. Douglas Millican: There are two different aspects to this. In terms of trying to drive forward the efficiency improvement in Scottish Water, part of which involved leakage reduction, district meters do the job of driving forward that efficiency improvement inside our busi-

ness. In respect of the customer dimension, that is very much a policy choice of the Scottish Government. For a variety of objectives, they are largely unmetered.

Deputy Alan Farrell: That is appreciated. Mr. Millican said that about 97% of households in Scotland are on the public system. Mr. Jones mentioned a similar figure for Wales. In respect of the cost of installation of an opt-in meter in Scotland and Wales, I think it is a policy to install these meters in Wales. Is there an opt-in policy as well? Could witnesses give me a ballpark figure for a housing estate constructed 30 or 40 years ago that did not have a meter installed when it was constructed? The witnesses will forgive my ignorance. I do not know when meters became common in the UK. The witnesses spoke about cost recovery - in other words, the cost of putting it in. I know how much it costs to put in a meter in this jurisdiction because I have 870,000 examples. Is there a figure the witnesses can attribute regarding the installation cost for a normal, average house? I am not talking about somebody living down a laneway.

Mr. Douglas Millican: The short answer is “Yes”. Those charges are transparently available to our customers, are regulated through our economic regulator and reflect the costs involved. They will be available on our website. I apologise as I cannot quote precise numbers but they are available.

Deputy Alan Farrell: I will research it further. What the situation in Wales?

Mr. Chris Jones: It is slightly different in Wales in that customers have the option to have a meter for free. Generally, the rules around how one charges customers for a monopoly service are set by the economic regulator reflecting Government policy. It is a system that seems to work for us. The system works on an unmetered basis unless people buy a new property, in which case there is a meter there, and if the customers want to, they can opt to get a meter for free. This means that those who feel they have low consumption of water and that this should be reflected in the bill have the opportunity to have a meter fitted.

Deputy Alan Farrell: What is the average age of the Welsh and Scottish networks?

Mr. Chris Jones: It is difficult to say. There are large parts of our network that go back to the Industrial Revolution - the creation of mining and heavy metal industries across south Wales - so much of our infrastructure dates back to this time. Coming across pipes that are 100 years old is not unusual. On Monday, I was at the bottom of a dam looking at pipes and valves from 1904.

Deputy Alan Farrell: I can beat that. I have wooden pipes.

Mr. Douglas Millican: As a rule of thumb, the sewers are as old as the properties. On the water side, we certainly have a number of well-functioning pipes that are up to 150 years old. Equally, there will be other pipes that were put in during the post- Second World War period that we have had to replace. It is a case of horses for courses.

Deputy Alan Farrell: I have a question for the witnesses from the Commission for Energy Regulation. Page three of their submission, which I note incorporates their additional comments, concerns the key CER assumptions made to allow the development of scenarios for illustrative purposes. The third paragraph from the bottom stated that the CER is taking into consideration the sources of the information and when it was sourced notwithstanding what Dr. McGowan has since told Deputy Healy about up-to-date figures. It has been mentioned that there are examples of customers using 100 times the average daily consumption. Where did this information come from? My next question is probably best asked of Irish Water. Have

those particular issues been tackled? Do the witnesses from the CER believe that the usage of the majority of metered properties in the State will bring the average consumption down? I ask this question because 120 or thereabouts is the figure out there in the ether. It has been discussed on a number of occasions. I am looking at 127 on page six based on all households, including those with leaks, and 102 excluding those with leaks. Will those figures continue to come down as Irish Water continues its work in the short term? I am talking about since mid-2016, which is when the figures were collated. Is it possible for the CER to use its data to extrapolate where we are heading in the next year or two?

Chairman: Is that information to hand or do the witnesses want to submit it to us later?

Dr. Paul McGowan: We can address some of the questions. The data came from a data set based on actual meters installed on the Irish Water network. As I said to Deputy Paul Murphy, the data derives from quarter two of 2016. As to the households that were identified as having high consumption, the data set we have identifies whether those households have a leak. That is based on the fact that the meter has a leak alarm. During periods when one would expect there to be no water consumption, it will measure whether there is in excess of six litres per hour, or minute. I will correct it later. Basically, it will detect whether there is a leak. What tends to happen is that households with very high consumption levels tend to have a leak. As to whether that has been tackled, under the first fix free scheme, every household with a leak is notified and has the option of a free fix as long as the leak is between the outside of the dwelling and the meter. If the leak is internal to the dwelling, it is up to the householder to fix the leak.

It is too early for us to extrapolate in terms of what we anticipate the progress being over time. As part of our revenue control, Irish Water has submitted to us its expectation regarding leakage reduction over the coming two years. We will hold Irish Water to that in terms of the overall financial settlement we have given it. Irish Water has an ambitious overall target regarding leakage levels over time. The experience is that it takes a period of time to achieve the sort of economic levels of leakage that exist in mature utilities.

Deputy Alan Farrell: I accept that entirely. The data set used, as far as I know, is over two or three years.

Dr. Paul McGowan: No, we are using a data set from one quarter's consumption.

Deputy Alan Farrell: I see. My question is how long have such data sets been available for, not which quarter is being used.

Ms Sheenagh Rooney: We have had consumption data from Irish Water for some time, and our understanding is that that data is now publicly available. In order to assist the work of this committee we took that particular quarter and produced the figures the Deputy has.

Deputy Alan Farrell: I appreciate that. Following on from Mr. McGowan's comment that there is not enough information to carry out an extrapolation, taking the information that is there in terms of Irish Water's investment programme for repairs, leak stopping, repairs to mains etc., clearly over a period of time sufficient data is going to be available. When will sufficient data be available to work on extrapolations?

Ms Sheenagh Rooney: We have put in place a performance assessment framework similar to what is in place in Wales and Scotland by which we are going to measure the performance of Irish Water on an ongoing basis. For example, in terms of leakage, Irish Water has committed, between 2017 and 2018, to reduce leakage by 117 megalitres per day of savings. Irish Water, in

return for the revenue it will get for 2017 and 2018, has committed to achieving that target, and that is something we will not only monitor but also publish information on over time.

As part of the capital investment programme that we have approved for Irish Water it has committed to various actions to reduce leaks as part of that programme. For example, district metering has been measured, and there is a commitment from Irish Water on that. There is also a commitment to mains rehabilitation, the find and fix programme and pressure management programme. Irish Water, as part of the approved capital investment programme, has measures in place to get that leakage rate down, and we will be monitoring it over time.

Senator Grace O’Sullivan: I thank the witnesses. It has been very useful having them here today. In terms of the metering, Mr. Jones mentioned that 50% of people in Wales are metered and 50% are not.

Mr. Chris Jones: Yes, roughly.

Senator Grace O’Sullivan: Does that mean that 50% are metered and the other 50% are covered by the district metering system?

Mr. Chris Jones: The contexts are different. In our case metering at properties is about charging. That is why they are there, so that those who do not have a meter are charged on the historical basis, which was according to the property value or the rateable value of the property. In our context the district metering is a different thing. That is how we approach leakage reduction in our water networks.

Senator Grace O’Sullivan: What is the advantage of metering? Does it help in getting specific data for business planning? What advantage is there in each household having a meter?

Mr. Chris Jones: It differs between countries with different policies and different legal jurisdictions. In our case, the value of having a meter is that it gives a charging option to those customers who feel that the historical rateable value basis is not appropriate for them, so it gives them the free option of going onto a meter instead. In terms of new properties, as there is no rateable value system in England and Wales anymore and no new rateable values are created, a meter is the default way of charging a new property. It does vary between jurisdictions. Many European countries have domestic meters for charging purposes but have or are developing similar district metering programmes for leakage reduction in the way that we spoke about earlier.

Senator Grace O’Sullivan: In terms of business planning is the metering per house of any advantage?

Mr. Chris Jones: It is advantageous to us because it gives customers a choice over how they are going to be charged for their service. That is the primary benefit. It is a monopoly. It is an essential service. We take great pride in the fact that we provide an essential service to our customers, but they do not get choice over that. Having a choice as to payment method has worked well as a policy.

Deputy Pat Casey: I will be brief. I want to return to a point my colleague Deputy Loherty raised earlier about what we call individual supplies and group water scheme supplies. It is quite interesting to hear the low percentages in both areas. It is significantly higher here. My question is about the initial capital investment into both hamlet schemes and individual schemes. What level of support is provided for them? Equally, on the ongoing operational side

of it, is any support provided to both these types of supplies?

Mr. Douglas Millican: It is really a function of history and the development of the water system through the various original regional authorities as to which communities are in the public system and which are not. For about 20 years there has been very little change, so generally those who had private supplies continue to have private supplies. Our policy approach is that we allow anybody with a private supply to connect to the public system. The support that we provide is capped at what we call the reasonable cost, which is effectively the function of the next ten to 12 years worth of revenue. Any cost in excess of that would have to be met by the householder, the customer or the community connecting onto the public system. There is no doubt that this is an area our Government is looking at as to whether there are further steps to be taken, recognising that in many cases the private water supplies do not meet the requisite EU regulations. We are working with the Drinking Water Quality Regulator in Scotland and with the Scottish Government to look at what else we could and should be doing. That work is under way at the moment, and no decisions have been made yet.

Mr. Chris Jones: Building on that, the Welsh context is very similar. The public water supply network is now of a generally very high quality. Of 350,000 tests every year, 99.998% meet the full EU standards. That is a very high level of compliance. It is not the same on private systems, which have a lower level of achievement of those standards. There is always the question as to whether it is economical to bring those onto the public system. There is not much happening on the water supply side at the moment, but the waste water side is equally important. Where there are septic tanks or small rural networks, there is a legislative provision there that a community can apply to the environmental regulator to put a duty on us to connect them up to the public network, and then there is a cost-benefit analysis as to whether the environmental benefit of that is worth the often substantial cost of joining them to the public sewer network. Clearly these are quite rural, isolated communities, otherwise they would be on the public network anyway. That is a process that communities can go through. The trouble in our experience has been that often individual properties within that community will not take up that option and will continue to use their own septic tanks. We can end up putting in a lot of infrastructure to little benefit.

Deputy Colm Brophy: I have spoken already, so if another Deputy wants to ask a quick question it is fine with me.

Chairman: We are a very accommodating committee.

Deputy Danny Healy-Rae: I thank the Chairman. I am not clear as to what percentage of people in Scotland and Wales are on their own private supplies or group schemes that they have to maintain themselves, that are not part of the public supply.

How much is charged for someone building a new house to get a connection to the public supply? Are they charged at connection stage? Is there a levy? We are being charged exorbitant levies here - is that happening in the witnesses' countries? What supports or grants are available to someone who wants to bore a well, for an existing house or a new one in the country where there is no public supply?

Chairman: If the witnesses cannot answer those questions, perhaps they can reply by letter to the committee.

Mr. Chris Jones: Our responsibilities are purely for the public network. If somebody wants

to drill a borehole that is absolutely fine but it is their responsibility. I do not have the number of people who are not on our network but it will be a relatively small proportion, perhaps 3% of the total. If a new property joins the public network, which the vast majority do, they will pay a connection fee for the pipework to connect them to the system and an infrastructure charge, at approximately £200 per service, to reflect the value of the infrastructure that is being provided to them as a new customer. We are allowed to charge an amount, capped by the economic regulator, to new customers to reflect the fact that they are buying into an existing infrastructure system for which existing customers have paid.

Deputy Danny Healy-Rae: Do they have to pay a levy as well?

Mr. Chris Jones: There is a one-off fee on joining the network.

Chairman: There is a once-off fee which is in two parts, a connection fee and an infrastructure charge, and an ongoing, annual fee.

Mr. Chris Jones: They will then be a customer of ours and will pay the same as everybody else.

Deputy Danny Healy-Rae: There is an infrastructural fee as well as a connection fee.

Mr. Chris Jones: Yes.

Deputy Danny Healy-Rae: How much is that?

Mr. Chris Jones: I would need to check. It is of the order of £250.

Chairman: I will take Deputy Brophy and Deputy Ó Broin if there is time. I do not know if we will get to Deputy Pringle.

Deputy Colm Brophy: There is one thing I do not understand, though the answer seems to be related to a policy decision by the Scottish Government. Mr. Millican seems to be saying there is no effective way of enforcing conservation because his company has no meters. I understand why it has no meters because it is charging between £200 and £800 for a meter and between £100 and £300 for the survey, which seems an astronomical charge considering that his Welsh colleague is providing a meter to homes for free. He said that one could detect leaks through district metering but these are a key consideration of the cost of production of water, as well as pipes and maintenance. There is no way of encouraging a reduction in water usage through a meter charge and there is no incentive to people to lower their bill, given that it costs over £1,000 to get a meter.

I gather that Scotland has the second highest per-litre charge for water in the EU and that only Denmark is higher. There seems no real way people can lower their bills so it seems to be an ideological choice at Government level not to allow easy access to meters for people who, for environmental and cost reasons, want to pay less for their water. They have to pay a very high cost structure so that there can be an unmetered charge. Mr. Millican spoke of the tap left running but there is no reason for someone to switch off the tap. Without a domestic meter, the charge would be exactly the same as all other households in the area who turned off their tap. Is that right?

Mr. Douglas Millican: The example I gave of the tap left running was an isolated case I came across on one of the islands. It is undoubtedly a policy choice on the part of the Scottish Government to support an unmeasured household charging structure. It did that for reasons of

social policy and to support affordability, especially for low-income households. It is also to support a lower total system charge because we do not have the costs of the metering infrastructure and that benefits our customers. Scotland has one third of the Great Britain landmass but its household charges are the second lowest in Great Britain and that shows the benefits to every customer of avoiding the overheads of the metering infrastructure.

All the charges for putting in a meter are regulated by our economic regulator to reflect the cost of installing meters. If we installed meters in ones and twos the unit cost would be much higher than for a company doing a full, street by street, meter roll-out programme with its economies of scale.

Deputy Colm Brophy: The information I have gives costs, admittedly in dollars to cubic meters, of Glasgow as the second highest, exceeded only by Copenhagen in Denmark, for water.

Mr. Douglas Millican: I do not recognise those numbers.

Deputy Colm Brophy: This is information supplied to us by the water in Europe public services research unit. I take the point about individual costs per meter versus an extensive roll-out programme. I assume that making meters available on demand in Wales is an important aspect of providing the service, so that they have a choice to reduce their individual bills by conserving water. That choice seems to be missing from the Scottish model.

Mr. Douglas Millican: The Scottish perspective is that customers should have a choice but because there is a preference to support the unmeasured charging structure, the flip side is that those customers who want to get the benefit of a meter should pay for the cost of the meter, rather than it being borne by general customers. That is a function of our Government policy.

Deputy Colm Brophy: It is anti-conservation in nature.

Chairman: Mr. Millican has said that it is Government policy and that is outside his remit.

Deputy Barry Cowen: This country has spent €500 million on individual metering but Scottish Water has spent €600,000 on 600 of them. What has it spent on district metering? Conservation, or the lack of it, is a matter for a policy decision but that is the beauty of this committee - it has the potential to determine what the policy will be on water conservation into the future, what methods to use and how to make savings in this regard for the customer. That was not the case before the committee came into being, when the public were told to pay the charges and that the only method of conservation was through their metered bills. That has not proved to be successful. The opportunity we have is to recognise that district metering has a role in acknowledging leakage and in identifying excessive or abusive use. It is a question for us thereafter as to how we use this information to ensure we have conservation rather than assuming conservation will come as a result of water charges. Could Mr. Jones tell us how much district metering cost?

Mr. Chris Jones: My recollection is that the amount we spend on metering programmes, that is, putting in district meters, monitoring-----

Deputy Barry Cowen: Just installation.

Mr. Chris Jones: I cannot answer that. We spend about £7 million a year on leakage control. It is a substantial cost. That is the order of expenditure that is needed to get leakage down.

Our leakage rates are running to approximately 175 megalitres a day.

Deputy Barry Cowen: There is a factor of 20%.

Mr. Chris Jones: That is about 20%. When I joined it was more than double that.

Deputy Barry Cowen: That is a phenomenal result from where Mr. Jones started. Some 20% is the European norm for it to be economically viable.

Mr. Chris Jones: That is correct.

Deputy Barry Cowen: If one gets down to 10%, it is not economically viable. That is the contradiction.

Mr. Chris Jones: At the risk of being geeky about it, percentages can be misleading in this area in terms of different supply networks and, of course, it is a percentage of the water which has been conserved. If customers are encouraged to conserve less, then the leakages as a proportion goes up. We tend to focus on leakage per kilometre of main and, on that basis, we have roughly halved our leakage over the last couple of decades but that is a substantial cost. To be clear, we do not see this as an either-or question. There is a role for meters in customers' properties, which is related to charging in our case. That does not help one control metering on the network which is a separate thing from our point of view. That is where we have a substantial budget. I cannot say how much it has cost us to put that in place but I am sure it would cost over £10 million to install that many meters along with the required telemetry and so on because one would need to monitor this 24-7.

Deputy Barry Cowen: Would it be possible for Mr. Jones to provide us with details of the installation costs of district metering?

Mr. Chris Jones: I will see what we can do. I would say this has been built up over around 20 years and it has not been a one-off programme.

Chairman: I support the Deputy's suggestion. It would be helpful if we could get this information for Scotland and Wales. We understand if those metrics are not readily to hand, as it is not an area that is focused on, but it would be of assistance to the committee. I thank Ms Rooney and Mr. McGowan for their contributions, which have been very helpful. We especially thank Mr. Millican and Mr. Jones who have come a long way and have given two or three days of their time to share their knowledge and information with us. This committee is at the stage where it is getting towards the end of its evidence-based fact finding and understanding what is happening internationally. The success Mr. Millican and Mr. Jones has achieved has been very helpful to us in broadening our minds on the overall picture. I sincerely thank Mr. Millican and Mr. Jones for their contributions and effort. I also thank Deputies and Senators for their strong and informed questions. Obviously, they have been doing their homework and the background work. The committee is doing well.

The committee went into private session at 3.35 p.m. and adjourned at 4 p.m. until 1.30 p.m. on Wednesday, 15 February 2017.