

DÁIL ÉIREANN

AN COMHCHOISTE UM THITHÍOCHT, PLEANÁIL AGUS RIALTAS ÁITIÚIL

JOINT COMMITTEE ON HOUSING, PLANNING AND LOCAL GOVERNMENT

Dé Céadaoin, 21 Márta 2018

Wednesday, 21 March 2018

Tháinig an Comhchoiste le chéile ag 5 p.m.

The Joint Committee met at 5 p.m.

Comhaltaí a bhí i láthair / Members present:

Teachtaí Dála / Deputies	Seanadóirí / Senators
Mick Barry,	Victor Boyhan,
Pat Casey,	Jennifer Murnane O'Connor,
Barry Cowen,	Grace O'Sullivan.
Mattie McGrath,	
Fergus O'Dowd,	
Eoin Ó Broin.	

* In éagmais / In the absence of Deputy Ruth Coppinger.

Teachta / Deputy Maria Bailey sa Chathaoir / in the Chair.

Business of Joint Committee

Chairman: I call the meeting to order. We are now in public session. Apologies have been received from Deputy Coppinger and Deputy Mick Barry will substitute in her place.

Scrutiny of EU Legislative Proposals

Chairman: At the request of the broadcasting and recording services, members and visitors in the Gallery are asked to ensure that, for the duration of the meeting, their mobile phones are switched off completely or switched to airplane, safe or flight mode, depending on the device. It is not sufficient merely to place the phone in silent mode as it will maintain a level of interference with the broadcasting system.

No. 1 on the agenda is further scrutiny COM (2017) 753, proposal for a directive of the European Parliament and the Council on the quality of water intended for human consumption (recast).

I welcome from the Department of Housing, Planning and Local Government, Mr. Cian Ó Lionáin and Mr. Colin Byrne; from Irish Water, Mr. Michael O’Leary and Mr. Seán Laffey; from the Environmental Protection Agency, Mr. Darragh Page and Ms Aoife Loughnane; and from the National Federation of Group Water Schemes, Mr. Barry Deane and Mr. Brian MacDonald.

Before we begin, I draw attention to the fact that 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 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.

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.

I ask Mr. Ó Lionáin to make his opening statement.

Mr. Cian Ó Lionáin: I thank the committee for this opportunity to discuss this European Commission proposal to recast what we call the drinking water directive. I am accompanied by Mr. Colin Byrne, to my right, a senior adviser in the Department’s water and marine advisory unit.

This proposal is a result of the EU REFIT process which is aimed at making EU law simpler and more cost effective. It implements the European Commission’s response to the European citizens’ initiative on access to water which was submitted to it in December 2013. It is also a contribution to meeting the targets of the UN sustainable development goals. It has three core objectives, namely, to improve access to water, update drinking water standards, and provide more information on drinking water to consumers. As the drinking water directive has been in

place for 20 years now, it is entirely appropriate that it be revised to update existing standards taking account of the most recent international scientific advice and to provide customers with more information regarding the quality and management of drinking water. We look forward to a detailed examination of the proposals, in conjunction with our fellow EU member states, at both official level in the working party on the environment and at ministerial level. The current Bulgarian Presidency of the Council of Ministers is progressing work on that.

The European Commission proposals were published on 1 February 2018 and the Department is now engaging with key stakeholders, including the organisations before the committee, as an important part of our internal deliberative process. We also want to seek the views of An Fóram Uisce, the national water forum. The forum was established in 2017 under the chairmanship of Dr. Tom Collins to facilitate national stakeholder engagement on water issues and to provide a strong, independent voice and advice on water policy issues. The proposals will also be examined by the water policy advisory committee which was established by regulation in 2014 to provide advice to the Minister on, *inter alia*, the protection and management of the aquatic environment and water resources. With regard to the timetable for progressing the proposals, the European Commission has set us all an ambitious target of concluding negotiations with the Council of Ministers and the European Parliament under the co-decision process by May 2019 when the next European Parliament elections are due to take place. However, it remains to be seen whether this is achievable given the range of issues to be considered.

At this moment in time, therefore, the Department cannot set out definitive policy positions on the proposals but I would like to highlight some issues that will require careful consideration and set out the main building blocks of the proposals. With regard to technical standards, the Commission proposes the inclusion of a range of new parameters largely based on recommendations by the World Health Organization, WHO. However, in a number of instances, the parametric values proposed by the Commission go beyond the WHO recommendations. It will be important, therefore, to examine whether what is being proposed is proportionate and why there is deviation from the recommendations. It is also important to be sure that additional monitoring provides added value. A risk-based assessment of waters to identify possible risks to water sources is proposed. The principle of linking up what happens at the water source with what comes out of the tap is one that we fully support and my colleagues from Irish Water and the National Federation of Group Water Schemes will brief the committee on the progress being made to protect drinking water sources.

The proposals would also introduce new obligations on member states to improve access to public drinking water with a specific focus on vulnerable or marginalised groups that might have inadequate access to drinking water. The practical implications of this particular proposal will need to be examined carefully. The proposal is also intended to contribute to a reduction in the use of plastic bottles by promoting confidence in, and consumption of, tap water and through improved access. Given the impact of microplastics on our water environment, this is a welcome contribution.

The recast directive would also require the provision of significantly more information by water providers to consumers on issues such as drinking water quality, the input costs and the price of drinking water, the overall performance of the water systems, household consumption levels, the types of water treatment and information on consumer complaints. This will present challenges for water suppliers but, as a general principle, a broadening of awareness of the value and quality of water is a laudable goal. My colleagues and I look forward to the discussion and we would be happy to meet bilaterally with members who have a particular interest in

these proposals. Mile buíochas as ucht an deis seo labhairt libh inniu.

Mr. Michael O’Leary: I am head of environmental regulation for Irish Water. I am joined today by Mr. Seán Laffey, head of asset management. I would like to thank the Chairman and the committee for the opportunity to present our observations on the proposal for a directive of the European Parliament and of the Council on the quality of water intended for human consumption. It is not my intention to repeat the observations given by previous presenters to the committee but rather to offer the viewpoint of a provider of public water services and comment on the potential effects on the operation of water services and the delivery of capital programmes by Irish Water should the draft directive, as presented, be adopted and subsequently transposed into Irish law. Notwithstanding any views or comments offered to the committee, Irish Water, as a public utility, will take any actions required to implement future changes made in law regulating the production and supply of drinking water.

The current legislation that regulates the quality of drinking water is 20 years old. We welcome the proposed revision of the standards and the approach to the supply of water which reflects the greater understanding that has been gained over that time about how we manage our natural resources. Article 7 proposes to formally introduce a risk-based approach to the management of bodies of water used to supply our treatment plants. This approach is one which Irish Water is currently utilising and reflects best practice worldwide. However, the emphasis in the proposed legislation is on the identification of hazards in a catchment serving a treatment plant and the monitoring of pollutants. For completeness, any enacted legislation transcribing this proposal should also include provision for action to be taken to regulate, remove or mitigate identified hazards. Hazards to drinking water quality that are identified are much more effectively and economically addressed at source rather than through the treatment process at the water treatment plant.

Article 10 proposes that each member state ensures that a distribution risk assessment is performed for domestic properties. Under current legislation, Irish Water is required to test for water quality at the point of consumption, that is, the customer’s tap with the responsibility for the condition of internal plumbing residing with the property owner. This proposal fundamentally alters this position and may result in owners being required to carry out remedial actions to the water distribution systems in properties they own.

With respect to Article 13, which relates to access to water intended for human consumption, we will fully support whatever measures are enacted in law. Irish Water provides a great deal of information on the quality of the drinking water we provide across all of our water supply zones. We believe that provision of this type of information is critical to the confidence that the public have in the water they are consuming and we make such information freely available on our website. However, the provisions, as set out in Article 14, are detailed and may, in certain circumstances, be difficult, if not impossible, to comply with. For instance, the requirement to provide a household with the volume consumed on a yearly basis will not be possible where a household is not metered or where an address is located in an apartment block in which water consumption data is supplied on a bulk meter basis to the management company.

The proposed changes to the limits of current parameters used for water quality testing and the addition of new parameters will have two main effects. First, the introduction of new testing parameters will result in increased costs and may require Irish Water to significantly alter proposed capital investment plans to meet non-compliances with those parameters. Second, the reduction of limits for existing parameters will, in some instances, fundamentally affect our current agreed treatment strategies. Of note is the proposed reduction in the lead limit from 10 mg

per litre to 5 mg per litre. Irish Water's strategy currently is to introduce orthophosphate dosing as a short to medium-term solution to high lead levels with a longer-term plan to remove all lead connections. A reduction in the levels as proposed will result in the orthophosphate solution being insufficient with a move to lead removal at a substantially increased short-term cost. This would result in a collateral effect on other investment priorities. Additionally, it has been recognised that even in properties with no lead plumbing brass fittings can give rise to lead levels in excess of 5 mg per litre, which may necessitate some internal replumbing of properties.

In summary the adoption of the new proposals as set out in the revised directive will have three main effects on our operations and capital investment activities. First, the proposed new parameters for chemicals in drinking water may result in the need for additional treatment at some plants or a revised treatment strategy at new plants, which, in turn, will result in the need for additional capital. Second, Irish Water operations will need to alter its current monitoring programme for drinking water to include enhanced testing for new parameters, which will need further allocation of operational funding, and, third, additional staff will be needed to carry out enhanced monitoring plans and to operate more complex water treatment plants.

Mr. Darragh Page: I am grateful for the opportunity to contribute. I am joined by Ms Aoife Loughnane, a senior inspector with the drinking water team. I am the programme manager for the office of environmental enforcement. The EPA welcomes the Commission proposal to review the directive in light of scientific and technical developments that have occurred since 1998. In particular, the EPA supports the risk-based approach to the management of drinking water supplies using the water safety plan approach, which the agency has long promoted. The EPA has assisted the Department of Housing, Planning and Local Government on the drinking water expert group established under the existing drinking water directive and has been active in the various consultation phases prior to the publication of the recast directive.

The draft proposal represents a significant change compared to the existing directive and I will outline two of the main scientific and technical changes that will impact on Ireland. The first is the change to drinking water standards. The World Health Organization carried out a review on behalf of the Commission of the existing standards in order to identify new potential standards. While the Commission had regard to the review, it did not adopt the recommendations of the WHO, a fact that it has been keen to stress. The proposal includes the introduction of standards for ten new chemical parameters, namely, beta-estradiol, bisphenol A, chlorate, chlorite, haloacetic acids, microcystin-LR, nonlyphenol, PFAS (individual), PFAS (total) and uranium. With the exception of uranium, very little historical monitoring has been carried out in Ireland within these parameters. The Commission has chosen to adopt the existing WHO guideline values for the parameters mentioned, with the exception of chlorate and chlorite. The adoption of a more stringent standard for chlorate would have significant consequences as it would greatly restrict the use of sodium hypochlorite as a disinfectant. If the less stringent WHO guideline value was applied, this would not be an issue.

The Commission has also decided to retain the standards for some parameters such as nickel, boron, selenium and antimony, contrary to the advice of the WHO which had recommended revising the standards upwards. The draft proposal also proposes to reduce the lead standard to 5 µg/l from 10 µg/l. As was outlined by Irish Water, this standard cannot be complied with without the full removal of all lead from the public water supply network and private and commercial plumbing systems.

A further significant change to the directive is that all exceedances of the standards must be considered to be a potential danger to human health. Currently, each exceedance is assessed

in consultation with the HSE and a decision made as to whether there is a risk. This will be particularly problematic for those parameters where the Commission has opted to impose a standard that is more stringent than the WHO guideline value.

The second area in which there have been significant changes is monitoring. The draft proposal proposes a significant increase in monitoring frequencies and changes to those parameters that have to be monitored. The directive does permit a reduction in monitoring frequency for some of the parameters but only after a minimum of three years' monitoring has been carried out. For example, a supply for 4,000 people, or around 800 cu. m, is currently required to be monitored five times a year, or four times for a small group of parameters and once for the full suite. This will now need to be monitored ten times for the full suites of parameters irrespective. I have included a table in the document which I do not propose to go through, giving an outline of the main implications. It will result in significantly increased monitoring by Irish Water and of private water supplies.

Chairman: I thank Mr. Page and invite Mr. Deane to make his opening statement.

Mr. Barry Deane: I introduce my colleague, Mr. Brian McDonald.

The National Federation of Group Water Schemes, NFGWS, thanks the joint committee for giving us the opportunity to attend. While the NFGWS welcomes the overall proposal, there are several aspects which are likely to present a significant challenge for the private group water schemes sector. The following is a summary of our initial observations.

The requirement for a risk assessment approach to monitoring, from catchment to consumer, outlined in Articles 7 and 8, with particular emphasis on the source catchment, is recognised internationally as best practice in identifying risks that can potentially impact on drinking water supplies. The NFGWS is committed to this approach as the first step in protecting drinking water supplies and has been advancing work in this area on all regulated private supplies in recent years. However, the completion of detailed assessments and the implementation of associated measures to overcome identified risks on every scheme could pose a significant challenge in the short term. Any timeframe for the completion of assessments and the implementation of mitigating measures that might arise needs to be closely considered from a practical perspective. The group water schemes sector does not have the power of enforcement to implement significant measures to mitigate risk at catchment level and relies heavily on the good will of the community and the enforcement powers of the local authority to overcome significant issues.

On monitoring implications, the schedule of parameters to be monitored under the proposed directive sees the addition of several new parameters to the annexed list. The requirement to monitor water for new and emerging threats to water supplies is essential from a public health perspective. However, the scale and frequency of water quality monitoring proposed would see a significant increase in the current monitoring requirements. The proposal outlines significant increases in the level of compliance monitoring required, to a minimum of ten samples per annum for all small supplies of under 1,000 cu. m per day, and 52 samples per annum for supplies greater than 1,000 cu. m per day. In addition, all suppliers are required to monitor all parameters initially, even if there is an exceptionally low risk of occurrence, until sufficient evidence is obtained to justify ruling them out. By their nature, group water schemes are low-cost, community-owned, community-run co-operatives which would not have the capacity to carry out the increased level of quite expensive monitoring. We looked to get an indication of the costs that would be involved for a private, accredited laboratory to carry out this testing. We are looking at in the region of €1,857 to test for all parameters. For a group water scheme

servicing 30 houses, the cost over a 12-month period would be €18,570, or about €619 per house, which is quite significant. From our initial research, all of the proposed new parameters cannot be analysed in this country. For microplastics, we were unable to get a quote.

It appears that some parametric values in the Commission's proposal differ from those recommended by the WHO. It will be difficult for individuals in group water schemes to understand and accept the need for such a change. The WHO produces international norms for water quality and human health in the form of guidelines that are used as the basis for regulation and standard setting worldwide. The proposal to introduce lower parametric values for certain parameters may also have practical and financial implications for the level of treatment required for certain water supplies.

On the practical implications for the group water schemes sector, under the proposed directive, responsibility for carrying out monitoring is placed on the water provider. In Ireland compliance monitoring of the private group water schemes sector is carried out by the water services authority which for group water schemes is the local authority, with only operational monitoring being carried out by schemes. Extensive guidance training for group water schemes will be required to fulfil this obligation. All monitoring results must also be published online, which, again, will provide a challenge for small schemes. Article 10 relates to the assessment of domestic distribution systems and monitoring for lead and legionella. Group water schemes are not technically competent to complete such assessments. Access and property rights would need to be considered to fulfil this role, as well as funding to implement measures to deal with issues identified.

The group water schemes sector's overall compliance with drinking water regulations has improved in recent years, with over 96% microbiological compliance in 2016. With the proposed changes to parametric values and the inclusion of new parameters, there will be a period of uncertainty about future compliance levels until further analysis is completed.

These are just some initial observations. The NFGWS will continue to review the proposal in the coming weeks to establish all potential implications for the group water schemes sector. It would welcome an extensive consultation process for this proposal prior to its implementation.

Deputy Eoin Ó Broin: I thank the delegates for their presentations. I would appreciate it if somebody could explain for the benefit of the committee what is meant by a risk based approach. I think I understand it from the presentations, but it would be helpful to have it explained in plain English and more detail.

One of the things that comes to mind first is cost. The NFGWS has given indications of cost in one area. In its presentation Irish Water stated new testing parameters would result in increased costs and might require it to significantly alter proposed capital investment plans. Given the heavy strains on existing infrastructure and the need for all of the capital identified to go where it is needed, is Irish Water suggesting it would be looking to absorb new costs within existing capital budgets? Would there be a conversation between the Department and Irish Water about increased capital funding, or increased borrowing capacity, over and above what has been committed to? We are talking about monitoring, lead piping and having to move away from the use of sodium chlorate, particularly in group schemes. Has there been any attempt made to get a sense of the costs that would arise if the revision of the directive was to move in a certain direction? Perhaps the answer is no at this stage. At what point would the delegates start to have that information?

Beyond the issue of cost is capacity. We know that the State is before the European Court of Justice for a failure to comply with aspects of the urban wastewater treatment directive.

My next question is as much for Irish Water and the Department as the EPA. Given the capacity problems that limit the ability of water service providers to meet EU obligations, to what extent would an additional layer of demand be added? This is not just about funding; it is also about staff and expertise. What are the delegates' thoughts on that matter?

I am interested in knowing in a little more detail why the Commission rejected the WHO's recommendations. This question is for the EPA and the Department. Has a rationale been provided? Has it given an explanation? Any information on that issue would be useful.

Perhaps the EPA might give the committee its sense of the current state or standard of drinking water in public and private systems and group water schemes, based on its research. It published a report on this issue last year. Will it share the findings?

My last question is for the Department. This is obviously a major issue. It is very worthwhile for us to have this conversation. Is there a role the committee could play between now and the deadline of May 2019 or a date beyond it, depending on developments? Could it have an additional scrutiny role, even if is beyond its the formal legislative responsibility? A public airing of some of the issues as the negotiations are taking place might be very useful from our perspective and that of the public.

Mr. Cian Ó Lionáin: I shall answer only one or two of the questions asked and then pass over to my colleagues. I will start with the last question on a future role for the committee and pick up on a few of the other comments made.

Other member states also have many questions about the proposals made. They are trying to understand why the Commission has gone beyond the WHO's recommendations. Initially, it stated that as this was the direction of travel, it might as well go ahead of the WHO, but that could present practical challenges on the ground. At the meetings of the working party in Brussels and the Council of Ministers, the process will evolve a lot. Therefore, there would be logic in coming back to the committee towards the end of the year to update it on how the process had evolved. From initial interactions in Brussels, I know that many questions are being raised.

On the risk-based approach, I will hand over to Mr. Colin Byrne who will talk about the technicalities. Perhaps the EPA might also like to contribute. There are other questions, but I will stop talking and hand over to Mr. Byrne.

Mr. Colin Byrne: On meeting the water standard in the directive, the focus is on treatment. It is an expensive end-of-pipe solution. What the directive is trying to do - it is very much linked with Article 7 of the water framework directive - is bring the focus back to the catchment areas, from where the water comes in the first place. A current issue identified in EPA water quality reports is pesticides. A small number of water supplies have been contaminated by pesticides. Clearly, that is the result of their use in land areas in the catchment areas. Essentially, the risk-based approach is trying to determine the risks within the catchment area, identify the problems such as pesticides and determine exactly where the problems arise. MCPA, for example, is a pesticide used to control rushes in damp areas. It is a question of trying to pinpoint those areas and engage with relevant stakeholders to adopt best practice in the use of such chemicals and, in turn, protect the drinking water source.

My colleagues in the EPA and Irish Water might want to add more detail.

Mr. Darragh Page: In its simplest terms, the risk-based approach involves determining whether there is something that might have an impact on the quality of drinking water in the catchment, treatment process or distribution network. Once it is identified, it is a matter of deciding what one is going to do to deal with the risk and ensure it will not become a reality.

On the Commission's interpretation, it has pushed the risk-based approach to monitoring and is not considering the wider risk-based approach. For example, it is requiring the monitoring of microcystin which is blue-green algae in all water supplies, even though it occurs only in supplies that originate from lakes. It cannot occur in groundwater. Therefore, there is an issue with how the directive has been written in that context.

Let me refer to some of the other questions asked in so far as they pertain to the EPA. As to why the Commission has opted for standards that are different from those of the WHO, we are really not clear at this stage. At the recent meeting many member states were quite surprised that the Commission had taken the approach it had. In fact, the WHO's representative made a point of stressing that the recommendations applied were not the WHO's recommendations. We are not quite clear on the reason. The Commission seems to have taken a precautionary approach with many of the standards and in including some of the standards that have been included. In failing to remove some of the ones where clearly there is no possibility of the presence of certain contaminants in the water supply, the precautionary approach has been taken.

A question was asked about the quality of drinking water in Ireland. The EPA publishes a report every year that examines all of the monitoring carried out by Irish Water and local authorities of private water supplies. What we have seen is that microbiological compliance is very high in the public water supply system. The level is 99.9% and the figure has improved dramatically in the past ten to 15 years. The level of chemicals compliance is relatively high, but we do have a problem with trihalomethanes, a disinfectant by-product of the reaction of chlorine with coloured water. We are seeing improvements, but it is still an issue. An issue will definitely arise under the directive if the standard for chlorate is put at 0.25. We will have significant difficulties in complying with the directive in using chlorate simply because of the amount of chlorine that needs to be used in treating surface water supplies. It is a particular problem in Ireland because we have the highest proportion of water which comes from rivers and lakes by comparison with any other European country. Most European countries use groundwater predominantly.

Mr. Seán Laffey: We are using a risk-based approach to water sources. We have carried out quite a number of studies in the past four years of the sources available to us. We firmly believe many of the chemicals about which we are talking are best controlled at source and on a catchment basis, rather than by allowing them to get to a point where we are required to treat for them.

I will talk a little about capital, but I will preface my comments by referring to the outcome if the draft proposal were included in law and all of the requirements were introduced exactly as they stand. If we had to deal with the chemicals listed, the ones that would come in as part of the raw water supply would, according to a quick calculation, require an investment of additional capital of between €200 million and €300 million. We would have to provide for tertiary treatment, which would probably require products such as activated charcoal.

Deputy Eoin Ó Broin: Is that an annual investment?

Mr. Seán Laffey: No. It would be a one-off cost of €200 million to €300 million to build

the capital infrastructure required. Depending on how often we would have to change the filter, operational expenditure could be as high as €100 million per year, in addition to what we are spending.

The Deputy asked whether the money would come from existing or additional budgets. We have not examined that issue. We are seeking to spend in the region of €650 million this year on capital infrastructure, which represents an historical high. We hope to maintain such a level of expenditure. On the supply chain and our own capacity, we find that a sum of approximately €650 million per year is comfortable for us. We do not propose to spend any more than that figure. There is never any difficulty with spending money; it is a matter of getting value from it.

Deputy Eoin Ó Broin: To follow up on that response, the figure goes up to €700 million or so the following year and settles at around €800 million to €900 million at the end of the period.

Mr. Seán Laffey: It does, but one is also looking at major projects which are ancillary to what we could call our day-to-day capital spending.

Deputy Eoin Ó Broin: Let us say the May 2019 deadline is met and that there is a transitional period. Is Mr. Laffey saying the issue is not whether the Government would give extra capital of €200 million or €300 million and then €100 million annually but the question of his organisation not having the capacity to take on the extra investment? Its capacity means that it would have to do it from within existing-----

Mr. Seán Laffey: At the moment, yes, but that is not to say one could not deliver the investment of €200 million or €300 million over three years.

Deputy Eoin Ó Broin: Would that mean, for example, that work to upgrade the 38 agglomerations that are falling foul of the urban wastewater treatment directive would take longer, or would pipe upgrades in the public water system take longer? I presume that would be a logical outcome.

Mr. Seán Laffey: If we had to take out €200 million or €300 million to meet the requirements of the directive, it would have an impact elsewhere, but we will obviously look at where our priorities lie.

Mr. Brian MacDonald: We have been embracing the risk assessment approach since 2002. We have a quality assurance system which allows us to identify potential hazards and take steps to eliminate them. It is in that regard that we see a weakness in the directive. While it is good in many respects in taking a risk-based approach to drinking water, as stated by Mr. Page, it is overly excessive in monitoring a lot of parameters. For example, there are 180 group water schemes with bore hole supplies, predominantly groundwater. The majority of the remainder use springs which produce very good water. Since 2007, taking account of all of the parametric analyses that have been made, we have been close to a figure of 100% for all of the chemical parameters. If we could use this evidence retrospectively such that we would not have to carry out certain tests, that would be a good starting point for us. One parameter which has not been yet mentioned and that will have a major affect is turbidity - dirt in water that comes from a pipe. The parametric value in that regard is one nephelometric unit. Under the proposal, water suppliers will be asked to produce it at a level of between 0.3 and 0.5. As Mr. Page pointed out, that means that we would not be able to use a slow sand filtration system anymore because in putting it through a slow sand filter it would increase the level upwards. That will require the installation of a filtration system in advance, even in a good spring or bore hole supply. We

have not costed the proposal, but it will be very significant. There is a need for a rethink on this issue. That said, we agree that there is a need for closer monitoring of turbidity as an indicative parameter. The Environmental Protection Agency has been preaching this for years. We are not afraid of monitoring. We believe it is good, but the monitoring proposed is grossly excessive and potentially crippling.

Deputy Eoin Ó Broin: What will be the cost of installing a filtration system in a small to medium-sized scheme?

Mr. Brian MacDonald: It depends on the raw water used.

Deputy Eoin Ó Broin: Can Mr. McDonald give us a ballpark figure?

Mr. Brian MacDonald: I cannot because there are many types of filter. If one was dealing with a full shaft system, major capital investment would be required. The level of capital investment would be smaller in the case of a single sleeve filtration system. It would only be by trial and error that one would know what filtration system would be required and that would require a fair degree of monitoring of turbidity.

Deputy Barry Cowen: I will try to be brief and not cover ground already covered. In the first instance, these are EU proposals. It is not a directive or a done deal. It was stated other countries had similar queries and reservations about what was being put forward. In any set of negotiations one does not expect to walk out at the point at which one walked in. May I take it that the Department will be co-ordinating a response which will be cognisant of all of the stakeholders for whom this issue is relevant?

On the associated capital costs for Irish Water, it is 20 years since the standards were updated. I would have thought there was an expectation that this was in the offing such that Irish Water, given its expertise, would have catered for it but so be it. I know that there are negotiations taking place on revising the service level agreements with local authorities and that cost savings are expected to be achieved. When everything is agreed between all of the parties, including the Department, Irish Water, the local authorities and the associated unions, any cost savings could be offset by Irish Water in whatever way it saw fit. However, the group water schemes do not have this option available to them. While their funding has been reinstated, there should be a commitment from the Government in advance of any agreement that it will meet any additional cost that may be incurred by them arising from this proposal. In the main, group water schemes are voluntary organisations and they will be challenged far more in this area than Irish Water. The Department should be mindful of that commitment and our expectation, as public representatives, that it will be stated, categorically and vehemently. We acknowledge that within the service level agreement which was rushed into some years ago there is a commitment from all parties to renegotiate it. As I said, nothing is agreed until everything is agreed, but there is an expectation on everybody's part that there will be cost savings in the event that the commitment period to 2025 is reduced to 2021. The negotiations are ongoing. The Department needs to come clean on the areas that will benefit from cost savings, or if it is solely the reserve of Irish Water, notwithstanding the challenge to meet the demands of an old and creaking system which is only being invested in to the levels one would have expected in the past ten or 12 years, rather than preceding decades.

As I said, this is only the start of the process. There is an expectation that there will be improvements in the quality of water that will arrive through the tap, which is only right and proper and we will support all efforts to do this. I would have thought the WHO recommen-

dations went as far as one needed to go. I do not see any need to go beyond them and neither does anyone we represent. This should be reflected in the negotiations and consultations with the European Union and I wish all involved every success. The committee is more than willing to provide any help or assistance required in the intervening months. We would welcome an update during the course of the deliberations such that we would not be hit with a sledgehammer come next May.

Senator Grace O’Sullivan: I apologise for not being present for some of the presentations, but I had to go to the Seanad Chamber for a vote.

My question is about the risk assessment approach and the steps being taken to address the synthetic polymers being found in water. We are becoming aware of new contaminants, particularly microplastics and microbeads, and the ability of toxins to attach to these beads of plastics passing through water. What steps are being taken to have filtration systems or other mechanisms to ensure the public is drinking high quality water, not water that is contaminated by the new beast, of which we have become aware through different publications in the United States and the United Kingdom? I would welcome any assurance the delegates could give in that regard in the context of this proposal. Also, what steps are being taken to ensure water supplies are of the highest standard?

Chairman: On the measures outlined in the proposal, do they go beyond what is required to meet the main elements of the proposal? Does the proposal respect national arrangements and legal systems and take account of regional and local factors? Article 13 relates to access to water. In the opinion of the delegates, has the Commission struck a balance between the article and the action which might be deemed to be necessary at EU level or is it best left to member states to take action? Is the proposal necessary at this time?

Mr. Cian Ó Lionáin: I will ask a colleague from the Environmental Protection Agency, EPA, to address Senator O’Sullivan’s technically focused questions. I will deal with the questions from Deputy Cowen. He is right that this is the start of a negotiating process. The challenge for Ireland as a member state is to balance in the best way possible the environmental and health outcomes with achieving the best cost-benefit outcomes such that we are not spending unnecessary money on stuff that will not achieve health or environmental benefits. With regard to co-ordinating that response, the Department has already had initial meetings with all the colleagues that are here. We want to talk to other potential actors that would have an interest in this, for example, the Department of Health. I have already mentioned An Fóram Uisce which brings under its umbrella environmental, industry, agriculture and consumers - the whole gamut of parties interested in water. With regard to support to the group water sector, the Department and the Minister provide strong and consistent support to that sector. The potential cost implications of these proposals, both for the group water sector and Irish Water, is at the forefront of our minds and of other member states. The reports that we are getting back from Brussels say that we are not alone in this and that many member states are raising these specific questions.

On the Chairman’s questions about whether the Commission is going beyond its powers with these proposals, our initial view is that it is probably not but this is something that will have to be teased out in the working party initially in Brussels, to ensure that there is no over-reach there. With regard to Article 13 and the proposals on access to water in public places, this is an issue that many other member states have raised too because there are the practical implications of it versus the desirability. We will definitely have to tease that out. I do not know if there are any technical aspects that Mr. Byrne might want to add to that.

Mr. Colin Byrne: There was a question about whether the proposal takes account of regional differences. It is very early days and we are still examining it but we would be concerned that that is not taken into account, particularly with the broad requirement for access to water, which could be quite different in southern member states compared to northern member states. There are some other aspects, as colleagues mentioned earlier. The monitoring requirement is quite onerous and we think there needs to be an element of judgment and balance in how the risk assessment is carried out.

Mr. Darragh Page: I will answer the question on microplastics. Some work was funded by the EPA in the past and some very recent useful work was done on microplastics as part of the BT Young Scientist and Technology Exhibition, looking at the levels found. We are effectively finding microplastics in almost all drinking water samples to some degree or another. The levels are relatively low. They are usually in the range of between one and ten microparticles per 500 ml. We have been looking around Europe to see what else is being done. A limited amount of research is being done around Europe but it is only looking at the levels of microplastics present. There has not necessarily been a huge amount of work done on the impact and health implications of it. The EPA is about to launch a new research call. A project that we have identified as one we would like to proceed in the next call is a project to evaluate the potential human health impacts of microplastics and nanoparticles. That call will be going out in April. We will start looking to see if we can get some research in that particular area. Microplastics are mentioned in passing in the directive but not in detail because the difficulty is that while we all recognise that microplastics are becoming an issue, the health implications have not been determined yet, so setting a standard is not possible at this time. It is something that most member states, if not all, are actively looking at.

Senator Grace O'Sullivan: To follow on, are any steps being taken with regard to a filtration process? The witnesses talk about stopping something at source. Is there anything that could be done to stop it from getting into the public system?

Mr. Darragh Page: Some conventional treatment processes will reduce the levels of microplastics. Irish Water might wish to answer that.

Mr. Seán Laffey: We monitor according to regulatory requirements and we do not monitor for microplastics at the moment. We do not test for it so we cannot offer any view on the efficacy or otherwise of our treatment systems at the moment. All we know from research is that microplastics, by their very nature, range from particles which are extraordinarily small up to ones which our treatment processes would catch quite easily. I would imagine that, across a range of sizes, our processes have different efficiencies.

Mr. Brian MacDonald: The NETLAKE project we were involved in was a co-operation in science and technology, COST, project done across Europe. A study was done on 20 lakes across Europe. One of our lakes, in County Monaghan, came in second worst with regard to microparticles. It is ubiquitous. We know it is in the environment. It will be an additional level of monitoring that we have to do this year that is not even included as part of the parameters. We have not been able to get somebody who can actually do it here yet. It is a worry for everybody. We are in the early stages and will take our guidance from the EPA.

Deputy Eoin Ó Broin: I have a question for the Department on the basis of what the witnesses have said with regard to the fact that the current draft may not be as sensitive to regional differences as it could be and that a level of assessment or monitoring might be required that might be greater than necessary in certain areas. Can I take it that the witnesses think the current

draft might have some subsidiarity issues that will have to be teased out during the course of the negotiations? Equally, on the basis of the queries about going beyond the WHO recommendations and testing for certain types of things that may not be relevant, would the witnesses be concerned that what is currently being proposed may not be proportional? Are those issues that the witnesses will seek to tease out in the negotiations? The other question arises with regard to enforcement. I take it that Irish Water is already working on the risk-based approach. If that becomes the norm everywhere and if, for example, there are problems at source with pesticides, some of which might have nothing to do with the operations of the water services provider but might come from agriculture or industry, who enforces that? If, at a subsequent stage, the State is found to be in breach, is that part of the conversation and what are the considerations there?

Finally, while it is slightly off topic but relevant, there has been some media coverage recently and we previously considered in the Joint Committee on Future Funding of Domestic Water Services the idea of a drinking water inspectorate, whether that is something located as an additional function of the EPA or independent. Should we now be talking about that in the context of this rather than having Irish Water or the local authorities as the only inspector of water supplies? Maybe it is a question for the EPA. Is this something that we now need to seriously consider as an additional piece of infrastructure to ensure compliance with standards?

Deputy Pat Casey: I have two brief questions. One relates to the reduction in lead standards. Maybe Irish Water could answer what percentage of the pipe network is currently lead. What is the timeframe it proposes to have the lead removed, regardless of the new standards coming in? I have a specific question for Mr. Page. He mentioned lakewater and algae bloom. We have had a number of issues with that in Vartry reservoir over the last years. We do not seem to be able to get a handle on it. Algae bloom nearly brought the supply to Dublin to a stop this year. We are not dealing with the current issues that we are facing either. That may be a point of interest.

Senator Jennifer Murnane O'Connor: I am coming in late from another meeting. I want to clarify what role local authorities will have in this. I know there are big plans. The last time we had Irish Water in, we were speaking about 2021. I welcome that the witnesses said the requirement to monitor water for new and emerging threats to the water supply is essential from a public health perspective. We know how crucial that is. The witnesses know how important it is. What will the role of local authorities be and how will the witnesses' organisations and local authorities work together? Will there be talks with local authorities, or what is happening? Legislation will probably affect local authorities. I know that in my local area, we have many old water pipes and massive issues with that. What do the witnesses plan for that?

Mr. Seán Laffey: To touch on the lead issue, Irish Water launched and was approved for a lead strategy in 2015. We are working away on that. As Mr. O'Leary outlined, our lead strategy was predicated on a two part approach. The first part was that we would look at using orthophosphate to reduce lead levels in properties to an acceptable standard. Then the long-term plan was that we would remove all lead. To reassure Deputy Casey, none of the Irish Water public network has any lead in it. All of the lead we are dealing with is on private property or in houses generally built before the 1970s. One of the main issues we have with reducing the lead standard to 5 mg per litre, which is an incredibly low standard of five millionths of a gram of lead per litre which is effectively zero, is that orthophosphate will not get one below that standard all the time so lead replacement is the only way to go. The other issue we are encountering is that modern brass fittings are between 5% and 7% lead and one will get the 5 mg per litre limit from the brass fittings even in new houses. We are talking about a limit which effectively means that

one can have no components in one's water distribution system which have any type of lead in them.

Chairman: There will be private property implications there.

Mr. Seán Laffey: Currently we are carrying out a lead replacement programme. There are parts of the country where we are shutting down backyard services and because we have no powers to enter readily onto somebody's private property and replace a lead connection we have been asking for permission. We have not been getting that permission in quite a number of places. We can only offer a service to remove the lead but we cannot physically go in and remove the lead from somebody's property.

Chairman: Does anybody else wish to respond on anything?

Mr. Michael O'Leary: A member asked about catchment management and who has the powers of enforcement. They would rest primarily with the local authorities but we work very closely with them. On the pesticide issue, for example, we work very closely with all the stakeholders such as the Department of Agriculture, Food and the Marine and the local authorities to try to eliminate the pesticides from the catchment. However, Irish Water does not have enforcement powers within the catchment. One of the concerns we have with the risk based approach is that we can identify the risk but we cannot deal directly with it. In terms of pesticides, however, there is very good cross-functional co-operation in addressing the issue with all the stakeholders.

Mr. Cian Ó Lionáin: On Deputy Ó Broin's comments, the more we tease this out, there certainly might appear to be proportionality issues and a question as to whether it is fair. In terms of whether there is a subsidiarity issue, that is something we have to determine by the middle of April when we have to send our comments back. We will take on board all of the comments here but there is still another piece of work to be done collaboratively on this. Regarding the drinking water inspectorate, as the Deputy said that is a little off topic so I am not in a position to comment on it.

Senator Murnane O'Connor had a question about the role for local authorities. There is an incredibly important role for local authorities in terms of collaboration and community engagement. My colleague, Mr. Colin Byrne, has been leading on the river basin management plan so I will ask him to comment quickly on that.

Mr. Colin Byrne: To supplement what Mr. O'Leary mentioned, we have a river basin plan which will be published in the middle of April and it sets out the collaborative approach that is being taken to protect drinking water sources. That involves collaboration between Irish Water, local authorities, the EPA and the Department of Agriculture, Food and the Marine, recognising that Irish Water's role does not extend beyond the boundaries of the treatment plant and that it is reliant on local authorities to enforce whatever relevant environmental legislation is in place if that is deemed to be a cause of the problem. Undoubtedly this proposal will bring the governance of drinking water source protection into more focus. While we have a good working arrangement in place for this river basin planning cycle up to 2021, I have no doubt that we will have to revisit this and look at the governance into the future.

Mr. Barry Deane: On the local authority role with the private group water schemes sector, the local authority is actively involved as the water service authority for the group water schemes sector and has been since the mid-1990s. A review is currently being carried out of the

best approach to deliver that service. Whether a shared service might be considered is a business case being examined at present. It is probably pertinent at this time when we are talking about the roles, particularly the monitoring and the water service authority element of it. It fits nicely in with that. The review needs to take account of it.

I should mention the work we are involved in with regard to source protection. While enforcement is certainly needed, in many cases we actively try to engage with the communities to try to get community buy-in. We are probably unique in that sense. The group water scheme sector is owned by the communities the schemes serve so we have been engaged with a number of projects. The local authority water and communities office, LAWCO, has been involved with a number of projects with us and we have plans for further projects in this area. We should try to create a behavioural change within the catchment rather than rely solely on the enforcement element. That will be a key issue into the future.

Chairman: I seek two quick clarifications. If private properties do not permit access to Irish Water, who is liable or in breach in that case? How are we going to gather the information on consumption levels in households?

Mr. Seán Laffey: Under the Water Services Act the home or property owner is responsible for the distribution system within the house. If a non-compliance occurs which is attributable to the system of the house as opposed to the public network for the water that is provided it is the property owner who is liable for that breach. Was your second question about offering consumption data?

Chairman: Yes. How would that be gathered and provided to households?

Mr. Seán Laffey: Currently, we have approximately 990,000 domestic meters in place and we read those on a quarterly basis. We can offer consumption data to those properties. There are approximately 500,000 remaining properties that are not metered. The best we can do at present is offer them what the average consumption would be for a property of their type. As was outlined by Michael O'Leary, there is also an issue with multi-unit developments. An apartment block is generally managed by management companies. We put a bulk meter on those properties but we do not meter individual properties. If that article is transposed into law there is an issue in that regard with us complying with it.

Chairman: As there are no further questions, I thank the witnesses for taking the time to attend and for the vast amount of information they have provided. I am sure this will be an ongoing situation. The committee will now go into private session.

The joint committee went into private session at 6.08 p.m. and adjourned at 6.55 p.m. until 9.30 a.m. on Thursday, 22 March 2018.