



Northern Ireland
Assembly

Committee for Regional Development

OFFICIAL REPORT (Hansard)

Water and Sewerage Services Bill:
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Division, Welsh Assembly Government)

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techniques but, when we've built them, nobody will take on responsibility for managing them in the future". They were asking if government could break that logjam and produce legislation to ensure that they could use those new lower-cost techniques — when I say "new", they have been around for a long time and a lot of them are quite traditional — by making sure that drainage schemes could be designed to proper standards and adopted and maintained into the future. So, it was a strong push from homebuilders that was behind the putting together of the provisions in the Flood and Water Management Act.

We worked quite hard to look at where best to place that responsibility. We looked particularly at what had happened in Scotland, where the SuDS approach had been embedded in Scottish Water's mandate. Frankly, we were very concerned at what we saw, because there seemed to be constraints on the sorts of techniques that could be used. As a consequence, many of the sites that I am familiar with in Scotland ended up with very traditional drainage, with a pond put in at the end. In some cases, it was a bit of a bomb crater, really. The pond was not delivering what we expected from the SuDS approach, which was a far wider range of benefits. We talked about those benefits this morning, including amenity, recreation, biodiversity, and health. All those things, which you can gain from a well-designed drainage system, were not coming from the stuff that we saw in Scotland.

We carried out a consultation on who should take on that responsibility. That was a DEFRA/Welsh Government consultation. The answer that came back was the same from everyone we asked: "Not us". Nobody wanted to step forward and take on that responsibility. The water companies did not want to do it, the Environment Agency did not want to do it and local authorities did not want to do it, so we had a full house; nobody wanted to take on that responsibility. In part, for some, it was because they were uncomfortable about the technical requirements of maintenance in the future, and, for some, it was about whether it could be properly funded. After some lengthy deliberations and taking account of what we had seen in Scotland, the decision was taken to draft the legislation on the basis that local authorities would take forward the approval and adoption process. You are in a slightly different position in that you have a water company with a different remit. It is not a profit-making organisation like the water companies in most of England and Wales. You are familiar with the model that we have here in Wales. It may well be that looking to the local authorities is not necessarily the obvious option for you; you may well want to look at the water company. However, for us, looking at the situation in the round, we felt that the SuDS work fitted best with the responsibilities that we were giving to local authorities for local flood risk management. Their highways responsibilities, parks departments and recreational responsibilities all seemed to fit together with what we were aiming to achieve in a sustainable approach to drainage.

We sat down with Daniel Greenberg and instructed him on what we wanted from the legislation. We developed a mechanism that would ensure that the local authorities would have the opportunity to review any proposals from a developer to make sure that they were buildable, maintainable and not overly burdensome on the local authority. That is the application process that we put in place, and the local authority, on the other side, would then take on the adoption of those things once they were built.

We saw that as a way of breaking the logjam so that developers would have some certainty about the standards that they should be building to. They would know that their proposals were being checked and approved and, if they built it as approved, they would be guaranteed that there would be adoption. The developers were really keen to have all those arrangements. They said to us that they quite liked doing SuDS drainage for new developments but that getting them adopted resulted in a lengthy and protracted negotiation between various partners, and they were losing money during the entire time those negotiations were going on. Developers were not able to sell houses or build them, and they are all about banging the house in, getting the money and moving on to the next site, so any delay was costing them money. Therefore, what we were aiming to do in the 2010 Act was to deliver that certainty of adoption for them.

There have been changes in England since then, and they have not really managed to get to the bottom of how to take it forward. We pulled out of the detailed consultation on that about five years ago because we were uncomfortable about the funding for long-term maintenance. We felt that there was no certainty about how long-term maintenance would be funded. The local authorities could be left without a clear funding stream, and we were having difficult discussions with Treasury about how that could be done. They were determined that it should not be regarded as taxation and, to be honest, we have never really managed to get to the bottom of that. So, for the last few years in Wales, we have been looking at how we could break what is now our logjam, which is about how we get to the situation where there is a clear funding stream in place for the local authorities to take on the responsibility for SuDS.

In order to try to keep a little bit of momentum and move things forward, earlier this year we published a set of standards for sustainable drainage, which we are putting on the table, if you like, as voluntary standards that show to developers and local authorities what we expect from a sustainable drainage system. Those standards are based on ones that we jointly developed with DEFRA back in 2008 and 2009, and which DEFRA has put to one side, but we have taken them forward and developed them to better reflect the needs of Wales and give us something that will fit in with our overarching responsibilities for sustainable development, health and well-being, and natural resources management. All of those are key themes for the Welsh Government. I was not going to go through those in any detail, but the important thing in the standards is that they have a one-page summary of what we are looking for in a sustainable drainage system. The sorts of things that we are looking at are managing the water close to source, keeping the water on the surface as far as possible, or managing it in the surface layers, and trying to keep it out of pipes, but not saying that you cannot use a pipe system. We think that you have to use all the elements of SuDS and try to balance all the different objectives that we are setting in some sensible and credible way for anyone in development.

The challenge for engineers will be that no solution that they develop for one site will necessarily work for another. They will have to come up with something imaginative that is designed to fit each set of circumstances. I think that, if you were an engineer, it would be quite exciting to accept that challenge, but a lot of engineers would rather just have something from a software package or something that they can take down off the shelf. The thought is often, "This is the pattern we used before; this is what we always do."

The key thing is that there are six standards, and none of them is more important than the others. The standards look at where the surface water goes, and it is about trying to keep the surface water out of the sewers. That is the sort of thing that you saw in Llanelli yesterday. It is about controlling the rate and volume of water coming away from the site and replicating, as far as possible, what was going on at the site before it was developed. That is known as replicating the greenfield state.

The aim is to manage and protect water quality, which is impacted by surface run-off from urban areas. You heard today during the Greener Grangetown presentation that the green elements of SuDS are designed to improve water quality and to protect the local environment. Just as importantly, however, the other standards try to ensure that you get an amenity benefit from what you do. They are designed to maximise the amenity benefit, the biodiversity benefit and ensure that your design can be built, operated and easily maintained. Those six standards have to be considered equally by the designer. Our expectation is that somebody who is checking a design will look to see that it delivers against each of the standards. Our vision is that new developments in Wales will take on a much greener aspect. They will be far more pleasant places to live; places where people want to live rather than places where they can afford to live, if you follow me.

There is an example of a very successful retrofit at Augustenborg in Malmö, Sweden. A local engineer, Peter Stahre, drove through some really innovative retrofitting of sustainable drainage in a quite rundown suburb, where mostly migrants lived — on average for no longer than six months, because they were moving out as soon as they could. After they solved the flooding problem in the area by retrofitting the drainage system with SuDS, and made it a much greener and more pleasant place to live, suddenly people were living there for two, three or more years. It was a far more desirable place to live; it was not somewhere that people wanted to get away from.

I am a water quality expert; that is my background. It is important that we take water quality into account, but I do not want to see people flooded, and much of this is about people. It is about the health of the public, mental as much as physical, because there is nothing worse than being flooded and then living in constant fear of being flooded again. That has severe mental health impacts. Living in a greener area is good for your mental and physical health. You can also improve air quality by putting trees and green areas into densely populated urban environments. If you use things like green roofs on buildings, you can help to reduce the cost of heating and air conditioning while greening up the local environment in very densely developed urban areas. *[Interruption.]* Sounds like we have to go back to school.

The Deputy Chairperson (Mr Lynch): That is the Division Bell. It sounds different from ours.

Mr Chatfield: To sum up, I have been trying to work on our guidance and standards for Wales, but they will never be comprehensive in providing, if you like, a whole manual of all the things that you can do. We have been working with the Construction Industry Research and Information Association to produce a third edition of 'The SuDS Manual', which contains all the techniques with an explanation of what each offers and how you can use them. The Welsh Government have made a contribution

towards getting that completed, and it is due to be published next week, with a launch in Parliament on the 12 November. I can provide links for that so that you have the background. However, it is very thick; it is not really something for Committee reading. I mention it so that you know that there is a whole range of technical detail out there that engineers and designers can call on.

Many of the techniques are not new. I have been working on this for more than 20 years, and some of the techniques are the sort of things that our Victorian forefathers were doing. They are not new; they are just things that we have forgotten about in our haste to develop new drainage systems.

I think that I have covered most of the headline stuff that I wanted to talk about.

The Deputy Chairperson (Mr Lynch): No doubt other issues will come out during questions, Phil. Thank you for that. Our visit yesterday was very informative and valuable. When you look at something in reality, it is different from reading about it in a brochure or whatever. We saw it; it rained when we were there and that demonstrated it. You need champions to promote this. People will be resistant to change, as we know. You mentioned what happened in Malmö. How important do you think that champions are in this concept and in bringing in SuDS generally?

Mr Chatfield: The regulator, Ofwat, did some work on that because it is keen for the water companies to look at the SuDS approach to retrofitting, which is what you saw yesterday. It asked its consultants to look at international examples of where sustainable drainage had been taken forward and, in every case, there was a local champion. There was somebody in every country who had really driven the change forward locally. Having a local champion is really beneficial.

We talked yesterday about some of the things that you can do in rural areas. There is a guy in the Republic called Rory Harrington who has done a huge amount of work on how you can use the sustainable drainage approach in rural areas, and that has been quite influential in the way that people have looked at farm drainage in Ireland. You need people who will tackle head-on those in highways departments and drainage engineers who do not want to change from what they have always done. It is very challenging. A roads engineer, for example, will typically have directed his roads drainage into the sewer system, and it will be quite a challenge for him to take this on.

The Deputy Chairperson (Mr Lynch): Before I bring in other members, I want to ask about the set of standards that you published. Did you go out and meet the construction industry and talk it through those standards?

Mr Chatfield: In the consultation process, yes. We have engaged with local authorities and homebuilders for a long time. Much of the technical background also sits in 'The SuDS Manual'. The two things have been going along hand in hand. We held the public consultation, and we are now going through to the final stage of agreeing what the standards should be and publishing those. They will still sit on a voluntary basis. I met representatives of Constructing Excellence in Wales yesterday, and we will be running a series of workshops throughout Wales to explain further what we expect from the standards. We recognise that it is a kind of sticking plaster. We have somebody who is starting with our team next year who will be challenged to go out and solve the problem of the funding so that we can implement schedule 3. Schedule 3 to the Flood and Water Management Act 2010 is the way to do it, and his charge will be to find the way through that challenge of funding.

Mrs Hale: Thank you for your presentation, Phil. You caught my imagination at the beginning when you said that water is an asset, not a problem. When we change our ideas around to thinking that way, we realise that it is oil from the sky and we are absolute mugs to waste it. We need to manage it in the best way possible. My constituency of Lagan Valley is predominantly rural, like many in Northern Ireland, as you are well aware. There are lots of farms in my area where there may be accidental spills. How do you see the SuDS management scheme treating those spills, which may cause pollution and pose a risk to residents?

Mr Chatfield: It is about designing farm drainage so that it provides the maximum amount of protection. There are all sorts of things that you can do, such as enlarging ditches and putting reed beds into them to treat the water all the time. For example, if you have cattle on site, there will always be some run-off from the yard. That is the sort of thing that Rory Harrington has been doing in the Republic. The Environment Agency published some guidance on rural SuDS a couple of years ago — I will send you a link to it — which has lots of good ideas about how to tackle the problems that sit around agricultural pollution. You, presumably, are looking at things like the diffuse pollution problems that you get, as well as the big incidents. There is a big focus on getting nitrates and phosphorus out

of the water at the sewage works. You need to make sure that agriculture is doing its bit. The SuDS approach can help you to do that.

Mrs Hale: How will farmers pay for it? Is there a financial incentive from government or perhaps something from the European Parliament such as the single farm payment? Farmers might be a bit cross at me for saying this, but they would have to fund some sort of system, and I cannot see farmers wanting to pay for that out of their own pocket.

Mr Chatfield: That is quite a difficult question to answer. *[Laughter.]*

Mrs Hale: It is.

Mr Chatfield: It is a very topical question here as well. Farmers have a responsibility to make sure that they are not causing pollution, and the Government need to look at how they want to balance what they want from agriculture against what farmers are trying to get. Farmers are very reluctant to change. My experience is that farmers do not like to spend money. I have been on farms where it would have taken tuppence ha'penny to fix a roof gutter and stop the silage lagoon overflowing, but they have not spent it, with the result that the silage lagoon has overflowed. It is always a challenge and, of course, farmers will always respond. They always follow the money, don't they? Farmers will traditionally follow the money.

Mr Cochrane-Watson: Thank you for your evidence today, Phil, and for your very informative tour yesterday. I want to thank you and our staff for putting it together. So far, the trip has been very informative and educational.

My question ties in well with Brenda's. She talked about the farming community, but I want to take it a wee step further. The schemes that we looked at yesterday are on public amenity ground, and you hinted at the issue of the adoption of schemes. There are two issues that I want to ask about, adoption being one of them, but I want to talk about the planning process first.

I hope that the 11 super-councils in Northern Ireland have planning powers. They are evolving with what I would term local area development plans. There is an excellent opportunity, if there is guidance, for new developments to be built a lot more quickly and in tandem with the planning application so that developers are not reluctant and frustrated. However, they would need confidence that what they are putting in place, at a level of expense, will be adopted by someone. I do not think that a developer wants a long-term liability. I am really curious about that. Brenda talked about the farming community but, in other schemes, would councils have the responsibility or is it down to central government? Brenda identified a pollution situation on a farm but, in the case of other amenities, who would potentially have to bear the liability?

Mr Chatfield: For the maintenance in the long term?

Mr Cochrane-Watson: For the maintenance in the long term and the reinstatement, perhaps following a problem with a spillage or whatever.

Mr Chatfield: If you have your ownership and adoption clear, whoever has taken on the ownership and adoption will follow through on that. If you have had a pollution incident, the usual principle is that the guy who owns or operates the facility will fix it but will go back to the polluter to make sure that the polluter pays. In England and Wales, if you have a pollution incident, the environmental regulator, which is the Environment Agency or Natural Resources Wales, will seek to recover the cost of cleaning up from whoever caused the pollution.

I am trying to think about how you would manage this, because it is not a situation that we have now. However, if you were to get an oil spill, for example, in Grangetown, and it went into one of those areas, it would be for the local authority to make sure that it was brought back up to standard, because it is its asset. It might then want to see whether it can find someone to put the blame on and recover the cost from.

Mr Cochrane-Watson: Currently, it is a local authority; it is the local council.

Mr Chatfield: You have the option. You are looking, for Northern Ireland, at how you might do it. In the 2010 Act, we made sure that our Minister had the option of designating whomever he wants to be

the SuDS approving and adoption body. It could be your environmental regulator that approves and adopts, because it might have drainage functions. Here in Wales, for example, Natural Resources Wales has the environmental protection role and the drainage role. You could say therefore that it would sit with our environmental regulator. You could sit it with the water company or the local authority, or you could create an entirely new company to do it for you. You have a far better opportunity to think through those options in Northern Ireland, because you have a single water company and a single regulator. You are already going through a major restructure of your regulatory roles for drainage and the environment, so you can make it work in whichever way you want, I think.

Mr Dallat: Thanks for your presentation and all your help.

If you were in charge of the scheme back in Northern Ireland, I would have no problem with that. I would say, "Rip on, Phil". However, we are going to try to sell this to people who probably have barely heard of SuDS, and they certainly have not been to Cardiff to see it in action. How do you change a whole culture that, as you said, has been about pushing water up pipes, where you can actually see the thing disappear? The one thing that struck me about the scheme that we saw yesterday was all the stuff over the years that goes down through the membranes. Is there ever a day when they need to get cleaned out? Who would take responsibility for that?

Mr Chatfield: If the local authority has adopted those assets, it is the local authority's responsibility, in the fullness of time, to maintain them and remove the sediment. You may have missed it this morning, but one of the designs that Ian showed you was of what he described as a sunken garden. It had a little bit at the front that was designed to catch the sediment. The intention is to ensure that all the sediment collects in one area where it is relatively easy to remove rather than have it spread over the whole thing and block it up.

This goes back to one of my standards. Standard 6 is about designing for maintenance and ensuring that you have a programme. The standard states that the designer must not just design a system but hand over a manual that explains how you maintain it. Maintenance could be things that you need to do on a weekly basis, an annual basis or every 20 years, but it should all be part of the package. When you get a system handed over, it should not just be a case of, "Well, here's the system". It should be a case of, "Here's the system and here's the maintenance schedule, and here's what you do if there's an emergency or an oil spill". That should all be part of the design standard. It is certainly in our standards that that should be there.

Mr Dallat: Phil, that is extremely useful. It was something that I was struggling with. I think that you mentioned six principles.

Mr Chatfield: Six standards.

Mr Dallat: Six standards. You also emphasised — I can understand this from what we saw — that there is not something on the shelf that you can take off. Everything will be different. Would it be complex to entrust somebody to design the system, complete with manual, which is then handed over to someone else, who will take responsibility for it for perhaps 25 years?

Mr Chatfield: Or more. This operation has a number of different levels. If you are talking about, as you heard this morning, aspirations for tens of thousands of houses to be built by volume developers in this part of Wales, those volume developers will have experts to hand who will be well versed in the techniques and who, once you set the standards, will be able to do that. However, many of our builders in Wales are small-scale guys, and I think that that is very similar to the way in which things are in Northern Ireland. They are putting in four, five or 10 houses. They are doing not big developments but much smaller ones.

We recognise that those people need help to do something that is actually pretty simple, and we think that complying with the SuDS standards for those sorts of sites is also pretty simple. There are lots of basic techniques that you can use on almost every site, and we are planning to produce a guidance sheet, perhaps two to four pages long, that will say to small developers, "Follow this guidance. If you can make sure that you have permeable paving for the car-parking area and the road area, you will have complied with all that we are requiring of you for sustainable drainage". We want to make it very simple for people to see what they need to do in order to comply. We are going to end up with a SuDS manual that is four inches thick, and there is no way that we have any expectation that those small-scale developers will want to look at that.

For most of the small-scale developments in Wales, what are people going to do? They are probably going to put in a little garden, and most of them will put in a drive and a little road, which will be adoptable. If they do those with permeable paving, or if they put swales down the side of them, they are probably going to be doing everything that they need to do for that small development. They will have matched what the run-off was from the site beforehand, be looking after quality and be getting a bit of amenity benefit. If you can get them to put in trees, that might be an extra plus. However, we need to keep it as simple as possible for those smaller guys, and we want to try to do that.

The Deputy Chairperson (Mr Lynch): Yesterday, Phil, we talked about trust — the breakdown of trust and getting the trust of everybody when consulting. How important is that?

Mr Chatfield: Trust is essential, because, if the developers do not trust the local authorities or whoever is doing the approvals process, and if the people who are buying the houses do not trust the systems, or if you are doing retrofitting, which we saw in both the cases that you went to look at, you can very rapidly fall into something that becomes a political football.

You asked just now about how you take this forward. If I am being honest, you need a champion who will take it forward at a political level. It needs people at a political level to show leadership, because, if that happens, it soon focuses the mind of your officials and that of the people who are delivering the services to the people of Northern Ireland on a daily basis. A bit of leadership is needed. Our Minister is keen to see sustainable drainage taken forward, and that is what is driving my boss to make sure that we have a resource in place next year to make that happen. Therefore, it needs that political leadership as well as technical champions — for example, the Institution of Civil Engineers (ICE) — which can show leadership for the engineering profession. Trust is absolutely essential.

The Deputy Chairperson (Mr Lynch): Phil, unless members have any other questions, on behalf of the Committee, I want to thank you —

Mr Cochrane-Watson: May I ask one?

The Deputy Chairperson (Mr Lynch): Certainly.

Mr Cochrane-Watson: Is there any legislative stipulation for developers for private developments on greenfield and brownfield sites? Do they have to comply?

Mr Chatfield: At the moment, they do not have to. It is in our planning guidance on drainage and flooding — technical advice note (TAN) 15 — but it is not a statutory requirement.

Mr Cochrane-Watson: It is voluntary.

Mr Chatfield: If we can get the funding issue sorted out next year, we will go to the Minister with the options and ask him, "How do you want to take this forward? Do you want to make this schedule 3 to the Flood and Water Management Act? Do you want to make it statutory?". At that point, if he agrees to it, it will become statutory.

The Deputy Chairperson (Mr Lynch): I thank you on behalf of the Committee for your evidence and the valuable information that we have gained over the two days. We have a small gift for you, Phil.

Mr Dallat: I hope that it is sustainable.

The Deputy Chairperson (Mr Lynch): It is sustainable, yes. *[Laughter.]* It is from the Assembly, and I hope that the Assembly is sustainable. *[Laughter.]*

Mr Chatfield: Thank you very much. That is really kind.