

WRITTEN EVIDENCE FROM THE INSTITUTION OF CIVIL ENGINEERS

The Institution of Civil Engineers is a UK based international organisation with over 75,000 members ranging from professional civil engineers to students, approximately 8,000 of whom live in Scotland. It is an educational and qualifying body and a registered charity. Founded in 1818, ICE has become recognised worldwide for its excellence as a centre for knowledge transfer.

ICE Scotland would like to thank the committee for the invitation to take part in this consultation and submit the enclosed comments for your consideration.

Summary

ICE welcomes the Water Resources Bill. We welcome the Scottish Government's efforts to maximise the value of Scotland's water resources through the Hydro Nation agenda. In scrutinising the Bill we suggest that committee consider the following:

- The Water Resources Bill is only one element of the Hydro Nation agenda. The Committee should consider the bill alongside other initiatives including the establishment of the Hydro Nation Forum and the discussion paper "Paying For Water Services".
- The bill commits the Scottish Government to reporting on its progress against the duty to promote the value of Scotland's water on a one off basis in three years. ICE Scotland recommends at least biennial reporting against the duties contained in the Bill.
- Similarly further work is required in identifying metrics and benchmarks against which the success of the Hydro Nation initiative can be judged. Ministers, with input from the Hydro Nation Forum should be asked to publish a transparent reporting framework.
- The licensing regime as envisaged by the Bill at present does not allow for sufficient ministerial oversight of water abstractions. A number of the proposed exemptions from ministerial oversight e.g. irrigation, introduce significant environmental risks and should be subject to scrutiny.
- The legislative distinction between Scottish Water's core and non core functions is a positive step. ICE Scotland welcomes this separation because we believe it provides Scottish Water with strategic clarity.

- The Hydro Nation agenda provides a platform for further development of the skills and capacity of Scotland's already world class civil engineering sector, opening up opportunities for the export of high value services. We believe greater emphasis should be placed on this aspect of the Hydro Nation agenda. This will require effective coordination of the resources of stakeholders including the Enterprise Agencies, Scottish Water and the Scottish Funding Council. In addition there would be value in providing greater scope for the Hydro Nation Forum to input into the allocation of the £9b core budget.

Part 1

Q1. Section 1 of the Bill proposes placing a duty on Scottish Ministers to take such reasonable steps as they consider appropriate to ensure the development of the value of Scotland's water resources. Do you consider these proposals to be sufficient to drive forward the delivery of the Scottish Government's aim of making Scotland a Hydro Nation?

ICE Scotland sees the provisions as sufficient legislatively and recognises that the Water Resources Bill (WRB) is only one part of the broader Hydro Nation agenda. Whilst the locus of the committee in this instance relates to the WRB the Scottish Government has set in motion a number of other work streams including but not limited to the "Paying for Water Services" discussion paper and the establishment of the Hydro Nation Forum (HNF) to advise the Cabinet Secretary. The WRB should therefore be seen in this context and not in isolation. A fully integrated approach to maximising the value of Scotland water resources is essential.

ICE supports the Hydro Nation agenda and the steps the Scottish Government has taken so far. Scotland does have an abundance of water and it would be remiss not to seek to capitalise on a plentiful natural asset whilst continuing to ensure good stewardship of its resources. We see other drivers such as climate change pressures in water stressed areas and the challenges associated with the future global energy mix as further underscoring the need to develop the value of Scotland's water and expertise in water management.

We look forward to working collaboratively with the Scottish Government and other stakeholders, including parliamentarians, over the coming years to support the Hydro Nation agenda, its internationalisation and the role it will play in supporting the export of Scottish civil engineering expertise and entrepreneurship.

Q2. What are your views on the proposal that Scottish Ministers should be able to direct public bodies to participate in the development of water resources?

The water industry in Scotland is highly regulated and largely within public ownership providing ministers with significant powers to direct public bodies. However, by explicitly including these provisions in the WRB the Scottish Government is able to provide clearer strategic leadership whilst providing key agencies such as SEPA and Scottish Water with

unambiguous objectives. ICE sees this leadership as essential to the developing the value of Scotland's water resources.

ICE is on record as being supportive of the current governance arrangements of the water industry in Scotland, recognising that the regulatory regime has driven significant improvement and investment in tandem. ICE therefore sees reinforcing these arrangements to promote the value of Scotland's water as key to the success of the Hydro Nation agenda.

ICE is particularly supportive of the provision to separate Scottish Water's activities between 'core' and 'non core' business to ensure that the overall standards of the company's key functions continue to rise as they have done over the past several years. This proposed delineation in law should also be helpful to Scottish Water, ministers and other stakeholders in terms of setting the company's strategic priorities over the next regulatory period and in achieving those priorities.

Q3. *Do you have any comments on the requirement for Scottish Ministers to report to the Scottish Parliament on these activities every three years? Is this sufficient to ensure that Scottish Ministers will be held accountable for meeting the duty placed upon them to ensure the development of Scotland's water resources?*

It is the understanding of ICE Scotland that the bill actually requires ministers to report to the Scottish Parliament not every three years but in three years (from the date the duty comes into force). If this interpretation is correct we do not believe that a one off report in three years is sufficient and that a duty should be placed on ministers to report at regular intervals. ICE Scotland recommends an amendment to the bill requiring ministers to report to parliament on a biennial basis with a possible sunset clause to prevent requiring the Scottish Government to report on the development of Scotland's water in perpetuity.

In relation to reporting progress to the Scottish Parliament ICE would like to understand more about what metrics and benchmarks the Scottish Government will report against. The reporting measures to be used need not be framed in legislation but it is important that some meaningful metrics and benchmarks are identified at an early stage. ICE Scotland therefore recommends that ministers, under advice from the Hydro Nation Forum, be given a duty to develop a clear reporting framework to enable all stakeholders to assess the progress of this initiative. More frequent reporting will also help promote a process of continuous improvement.

Part 2

Q4. *In your view is the new licensing regime necessary and will it offer the desired benefit of ensuring that the value of the water resources of Scotland are maximised for the people of Scotland?*

Please see ICE's response to question 6; we believe the new regime and the question of exemptions are best responded to jointly.

Q5. *Is the threshold set in the Bill for defining large scale abstractions of greater than 10 megalitres of water per day appropriate?*

ICE Scotland sees 10 megalitres as a reasonable de minimus threshold.

Q6. *Is the list of possible purposes by which a large scale abstraction may be exempt from requiring Ministerial approval, such as where an abstraction is carried out for the purpose of generating electricity by hydro-power, appropriate?*

ICE Scotland has some reservations in respect of the proposed licensing regime. We believe that a licensing regime is necessary and that all large scale water abstractions i.e. above the de minimus threshold identified in Question 5 should be subject to some level of consistent control and regulation.

ICE understands that in some catchment areas there are concerns that abstraction licences may be allocated but not utilised. The abstraction licence may then become a bankable asset should there be a change in the market e.g. if the area becomes water stressed.

ICE does not see the regime as envisaged by the bill at present as a sustainable approach to water resource management. All abstractions (over and above the 10 megalitres threshold) should be subject to some consistent level of control and regulation. Abstractions for the purposes of generating hydro power, irrigation, fish farming, operating a quarry or coal mine are all explicitly earmarked for exemption from ministerial approval yet all carry environmental impact risks and as such should be subject to ministerial decision.

Part 3

Q7. *What are your views on Scottish Water being given specific powers to develop its assets and support the generation of renewable energy?*

ICE is supportive of Scottish Water's efforts to develop its assets and the generation of renewable energy. The inclusion of specific powers can only help promote this work further.

ICE is clear on the desirability of a significant portion of Scotland's future energy needs to be drawn from renewable sources as part of the de-carbonisation process and meeting the 2020 Climate Change Scotland Act targets and therefore see additional investment in their development as welcome.

Q8. Are you content that the definition of core powers will provide sufficient safeguards for core water and sewerage functions against risks incurred by Scottish Water in pursuing non-core functions?

ICE Scotland is particularly pleased to see the Scottish Government give statutory recognition to Scottish Water's core and non core functions. ICE sees the core and non core functions as equally essential for Scotland's future. Similarly they are not mutually exclusive and the proposed distinction adequately differentiates between the two categories.

As we have highlighted previously in this evidence this distinction not only provides sufficient safeguards but should in fact give greater strategic clarity to Scottish Water to enable the company to perform both its core and non core functions better in the future.

Part 4

Q9. Do you have any views about the proposals to give Scottish Water new powers of entry and inspection of premises (other than a house) in relation to the quality of raw water?

ICE Scotland has no comment to make in this regard.

Q10. Do you have any views on how the proposal allowing Scottish Water to enter into agreements with owners or occupiers of land to undertake works to prevent the deterioration of water quality will work in practice and whether this is necessary and/or appropriate?

In principle, ICE supports collaborative arrangements with landowners within a catchment where this helps to deliver water management solutions which are cost beneficial to both society and the environment. For example, an agreement to implement a change in agricultural practice to control pollution at source reduces the need for disproportionately expensive investment in pollution control works elsewhere in the catchment.

Part 5

Q11. Are the new duties to be placed on landlords appropriate and do they raise any concerns?

ICE Scotland has no comment to make in this regard.

Q12. Do you have any comments on the proposed arrangements for the creation of a scheme setting out the terms and conditions under which a deemed contract for the provision of water is to exist?

ICE Scotland has no comment to make in this regard.

Part 6

Q13. Do you have any comments about the proposal granting Scottish Water powers of entry and inspection of land or non-domestic property in relation to passing substances and pollutants into the sewer network?

ICE Scotland has no comment to make in this regard.

Q14. Do you have any comments about the creation and enforcement of a new offence of passing, or permitting to be passed, fat, oil or grease into the public sewer network?

As referenced in our response to question 10 ICE supports arrangements which will help to deliver water management solutions that are likely to provide cost benefits. We consider measures that prevent difficult to treat substances from entering the sewer system in the first place as sensible.

Q15. Do you have any comments on the proposal to allow any one proprietor to carry out works to private sewage treatment works, such as septic tanks, to maintain and empty these shared assets without having to secure the consent of the other owners?

ICE Scotland has no comment to make in this regard.

Part 7

Q16. Are the proposals to create new water shortage and emergency water shortage orders proportionate and will they have the desired effect of dealing with temporary water shortages?

ICE Scotland endorses the Scottish Government's analysis that it is prudent to plan for the possibility of a drought event. Given the potential impacts climate change and population growth may have on the availability of water for domestic and commercial use this is sensible contingency planning but greater clarity regarding the definition of 'a drought event' is required.

Moreover water shortages can be caused by events other than drought for example flooding of water treatment plants. ICE Scotland is firmly of the view that building infrastructure resilience must be a part of a broader programme to ensure the security of water supply which encompasses both quality and quantity.

Financial Implications

Q17. Do you have any comments on the estimated costs associated with the Bill?

The accompanying documentation suggests the Scottish Government has allocated £3m per year for three years to support the development of the value of Scotland's water. Whilst ICE would like to see a greater investment we recognise that there are currently significant financial constraints on public budgets.

ICE Scotland would like to understand more about how the budget will be spent. Additionally we take the view that greater value to the Hydro Nation agenda will be achieved through effective coordination of the various other resources available from the Enterprise Agencies, Scottish Water and the Scottish Funding Council to drive the Hydro Nation initiative. ICE Scotland is particularly supportive of initiatives to support engineering employment, skills and development and knowledge growth. Whilst ICE Scotland understands that some of the budget is earmarked for funding the Hydro Nation Forum there is utility, above and beyond the WRB, to allow the HNF to input into how the allocated budget is spent.

Additional Comment – energy and climate change

ICE Scotland would like to make one further point in respect of the Water Resources Bill. We note that one of Scottish Water's major drivers is increasing water and waste water quality. Raising standards in this respect is usually achieved through high energy treatment processes which make achieving the 2020 Climate Change Act targets even more challenging. This tension between emissions reduction and driving up standards calls for a more balanced approach from Scottish Water and requires SEPA's attention. ICE Scotland would see the continued omission of this issue from the Bill as a missed opportunity which we would like to see addressed before the Bill receives assent.