

The Engineering Contribution to Global Water Security – Invitation to submit evidence

Outline

The Institution of Civil Engineers, The Royal Academy of Engineering and the Chartered Institution of Water and Environmental Management are preparing a report on the contribution that engineers can offer to the issue of Global Water Security. The report has been requested by Professor John Beddington, Chief Scientific Adviser to HM Government and Head of the Government Office for Science.

The ICE, RAEng and CIWEM have established a Steering Group, Chaired by Prof Peter Guthrie from Cambridge University, to research and produce a report, due for publication in April 2010. The expert group also includes Mike Woolgar (Atkins), Michael Norton (Halcrow), Mike Haigh (Mott MacDonald), Jean Venables (Association of Drainage Authorities), Prof Roger Falconer (Cardiff University) and Chris Binnie.

The Steering Group for this project would like to invite you to submit written evidence to support the preparation of this report.

Background

Water security presents a growing threat in many parts of the world. The International Water Management Institute estimates additional water demand of around 30% by 2030. Along with the demand for food and energy, this huge increase in the demand for water is a consequence of a global population set to pass 8bn by 2030.

Until recently water has not had the prominence it deserves internationally and although mentioned in the Millennium Development goals, the focus was purely on water supply and sanitation with no mention of water as a resource.

Political issues, such as the trans-boundary management of water, economic complexities regarding the true value of water and lack of social awareness of the amount of water we each consume must be tackled if global water security is to be understood and managed in a more efficient and equitable manner.

Shortages of water will be further exacerbated by rising global temperatures; therefore, the effects of climate change on Global Water Security must be considered as part of water management.

Water use in both the agricultural and non-agricultural natural environment has to be dealt with, as do the true effects of human behaviour on water resources. The quantity, quality and location of water are of paramount importance when

addressing the issue of Global Water Security. Access and intermittency are two serious concerns and must be confronted if the problems of global water security are to be highlighted and addressed.

Outcomes

The findings from this call for evidence will be used in conjunction with expert advice to inform a joint report by the ICE, RAEng and CIWEM under the banner of 'Engineering the Future.' This report will be delivered directly to John Beddington and will be used to inform government, industry and society of the Global Water Security issues that exist and the solutions that engineers can offer.

Submitting Evidence

The following questions are a guide to the nature of the inquiry and have been provided to stimulate thought on Global Water Security. They are not comprehensive and we encourage contributions on all aspects of this subject.

- What does water security mean and what impacts are understood to result globally, regionally and nationally from pressures on supply and demand of water?
- How do you see these issues changing or worsening over the course of the next 20 years?
- How can water security be managed during periods of intermittency such as flooding and drought?
- What do you believe are the principal barriers and constraints to resolution of water security issues?
- How can human intervention, management or infrastructure mitigate the threats from global water security?

Submissions should include evidence which is clear, factual and referenced, and where relevant, refers to best practice.

The ICE, RAEng and CIWEM are inviting written submissions of no more than 3,000 words from interested parties.

Organisations and individuals interested in making written submissions are invited to do so by Friday 29th January 2010.

Oral evidence sessions will be held on Monday 25th January 2010: further announcements will be made in due course.

Submissions should be sent by e-mail to gwsevidence@ice.org.uk and marked "Global Water Security Inquiry". If you wish to post your submission, it can be sent to:

Andrew Wescott
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One Great George Street
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We would also be very interested in existing reports or studies that you feel we should consider as part of this project.

Further Information:

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