

SESSION 5:

A TEST BED NETWORK AND TECHNOLOGY VALIDATION FRAMEWORKS FOR THE WATER SECTOR

Chair: Manjusha Sunil | Venue: Boardroom 1

The WRC in collaboration with the DST and other sector partners is spearheading the implementation of the National Water Research, Development and Innovation (RDI) Roadmap. A key aspiration of the Water RDI Roadmap is to ensure that emerging water technologies are deployed and taken up in practice. A critical facilitator in the effective deploying of new solutions is the testing and demonstration of new technologies and solutions at 'real-world' sites, followed by validation of the technologies through a national validation process. Technology validation is a crucial part of technology assessment and assessing a solutions' ability to control different water-related situations and potential hazards. The development of a technology validation framework will ensure the validation process is transparent, and will provide nationally consistent validation requirements for utilities, regulators and technology providers.

Against this background, the WRC commissioned two studies: (a) the development of a national register of test beds in South Africa, supported by the development and testing of suitable templates towards the launching of a web-enabled test bed network on a national scale, and (b) the development of a national technology validation framework and evaluation protocols for the local water sector. A single database will therefore contain a national register of test beds, as well as a national register of validated technologies.

The test sites or test beds where water technologies and solutions are demonstrated therefore, have enormous potential for ongoing learning between innovators and implementers and equally important, it allows for improved sustainability through ongoing testing and advancements. Test beds also present opportunities for students and researchers to engage with real world sites whilst learning about new technologies and developing solutions. The technology validation framework will provide national consistency for validation requirements for regulators, municipalities, water boards and technology providers.

This session will provide detailed information on the two projects, results obtained and next steps required. The session will conclude with a discussion on the outcomes of the two studies and opportunities for water sector partners to collaborate, leverage efforts, and advance a culture of innovation in the water sector.

PROGRAMME

Welcome and introduction		Manjusha Sunil (WRC)
11:00 – 11:30	A consolidated network of test bed sites	Marlene van der Merwe-Botha (Water Group Holdings)
11:30 – 12:00	Development of technology validation frameworks for the water sector	Chris Swartz (Chris Swartz Water Utilisation Engineers)
12:00 – 13:00	Discussion	