

Regulation, Research and Renewal – An Environmental Perspective



Report on SUT Perth Branch Evening Technical Meeting
Wednesday, 14th October 2015

By Afton Galbraith, Perth Branch Committee Member

The program for the October ETM was specifically aimed away from the traditional “Oil & Gas” subsea topics and into the diverse and highly interesting marine science, regulation and environmental fields. This departure from the norm yielded an engaging evening, opportunities for fresh questions and sincere appreciation from the audience.

The evening, held at the Parmelia Hilton, was opened by SUT Perth Branch Chair, Julie Morgan and chaired by SUT Committee Member Afton Galbraith from Subsea Engineering Associates. Three presentations were made around the core theme of the Marine Environment, all presentations can be downloaded at http://www.sut.org/event/perth-evening-technical-meeting-5/?tribe_event_display=past&b=556

First to present was Carissa Aitken an Environmental Specialist from the National Offshore Petroleum Safety & Environmental Management Authority (NOPSEMA). Often removed from the day-to-day activities of the subsea engineer, NOPSEMA plays a crucial role in overseeing permitting, consents and safe operations of our offshore resources and facilities. To be able to hear directly from Carissa was a special treat for all involved. The topic of the presentation was “Subsea, Environment & Decommissioning – A Regulatory Context” in which Carissa outlined some of the recent experiences of subsea decommissioning and also how the Authority was positioning itself for a predicted increase in this area. With many ageing facilities in Australian waters and a general downturn in the return on production, this was a timely discussion. Key messages from the Authority were that the process for reviewing decommissioning plans and activities is in place, well understood and largely based on a pragmatic approach balancing the needs of the asset holder, the environment and future stakeholders. Also key is the need to engage early with the Authority to ensure plans align with the latest regulations and have the best chance of timely approval.

Next to present under a theme of marine science was Prof. Charita Pattiaratchi from the School of Civil, Environmental and Mining Engineering and the Oceans Institute at the University of Western Australia. Prof. Charita's whirlwind presentation took the audience deep into the realm of Oceanographic Drift Models, from the underlying theory, to the modelling techniques and finally out into the diverse range of possibilities this branch of science can support. Recent advances in modelling techniques and the availability of new breeds of super-computers has resulted in users from a broad range of marine science disciplines seeking the assistance of Prof. Charita and his team. The audience was treated to a range of modelling case studies, from coastal erosion and deposition modelling, to prediction of oil spill drifts, connectivity and patterns in the marine ecosystem and finally, how the science has assisted in the location modelling for the missing MH370 airplane in the Indian Ocean. With a clear passion and deep understanding of his work, this presentation by Prof. Charita was engaging and interesting for all present.

Completing the series of presentations under the environmental theme was Toby Roe the Engineering Manager at Subcon International Pty Ltd. Subcon was founded in Perth within the traditional oil and gas network and has now expanded into related marine and coastal fields with significant success. Toby's presentation was based around the science, drive and practice behind the deployment of many new artificial reefs in Australian waters. These reefs are being deployed to enhance marine ecosystems, provide recreational fishing opportunities and dive sites. Central to the design of the reef modules which are unique to Subcon, are the hydrodynamic modelling inspired shapes promoting uplift which attracts fish, access for divers and a safe approach to offshore lifting and deployment gained from years of exposure to the oil and gas industry. Being able to diversify into related industries while maintaining the typical offshore discipline and approach to safety has provided significant benefits to the coastal communities in Australia and to the environment.

It was a pleasure to have 3 diverse presentations under the central environmental theme and a pointer that more evenings like this will be held in the future. Participation from new members of the Underwater community will enhance our Society and deliver complimentary knowledge for all to share.

Special thanks are extended to the sponsor for this evening, Subcon and to the SUT Perth staff for their organisational skills which contribute greatly to the spirit of the Perth Subsea community.