



# In At The Deep End



**A motley crew from points all over the globe assembled in Singapore for a week's dredging course run by the International Association of Dredging Companies (IADC) – DPC's Asia Editor JIM WILSON took part and this is his very personal take on the event...**

It was indeed a motley crew and that's what struck me about the students on the course – their diversity, including customers and suppliers to the dredging industry along with contractor employees.

Some had years of commercial experience, but little dredging knowledge; others were trainee dredgers with no significant work history. And there were men and women from every continent on Earth.

## LECTURE OVERVIEW

So on to the course, which was split into lectures, a couple of mini-workshops and one big tender submission exercise.

The lectures could roughly be

classified into groups under the labels 'equipment recognition', 'operational how-to', and 'contract-commercial'. Lectures were delivered by professionals involved in the industry and each lecture was informative, with good slides displayed on a big screen.

"In the beginning," senior lecturer Bert van Gent told me, "we worked with overhead sheets with handwriting. When we moved to PowerPoint it was great. But we always kept the sheets because we didn't trust the software!" he chuckled.

The material was organised in such a way that a lot was delivered in a short period and that required sustained concentration. The material delivered, although quite appropriate for the

beginner level of the students, was also quite detailed.

I never quite realised how many different kinds of silt, sand, mud and rock there are...

Lectures ran every day of the week, with most taking place on Monday and Tuesday and the load lightening a little mid-week and very light at the end of the week to allow the students to prepare for their tender bids.

Overall, the lectures were extremely well organised, detailed, with clear explanations and, very happily, lots of breaks which aided concentration. Although the lecture load was heavy, this was sensible as such a large amount of material had to be delivered.

Offsetting them were workshops



**Well organised – Bert van Gent**



**Co-ordinators and lecturers Kees Peerlkamp...**



**...Ruud van Maastricht and...**



**...Tom Foster**



**IADC deputy secretary general René Kolman and**



**...project manager Frans-Hermann Cammel**



**"We can't do that!" – Elzevir Gelderbloem**



that were both educational and a lot of fun. On the first day, after a heavy lecture load, swapping from being a passive receiver of information to being an active participant was a welcome change.

### WORKSHOPS

Students were divided into companies – north, south, east, west, central and middle – then given a scenario to analyse, complete with maps, text and data. The

task was to figure out how many different kinds of dredging projects were available in a given area.

It really helped people pull out of the ‘first-day slump’ by getting their brains working on a challenging project.

The second group task *really* got the delegates working. A scenario to reclaim a small area for a quayside was presented, but the delegates had to play opposing roles, ranging from an ecologist for an environment ministry to a port director – who was also the project promoter. This was a whole heap of fun and gave real insights into the politics of projects – I wandered around the groups to get a bit of an idea of what was going on.

In one group I found an ex-master of dry bulk ships who naturally gravitated toward the role of pilot and wanted a deeper, and therefore safer, port access channel. “You can’t do that,” I overheard him say to a colleague as he stabbed the table with his finger, “it’s not safe!”

Group dynamics were as interesting as they were varied: some were quite collegial and congenial, others simply left it up to the port director, while yet others adopted a very hard-headed commercial approach. Some improvised like crazy, adding fictitious legal codes, inventing environmental impact assessments and generally made it up as they went along!

### TENDER TROUBLES

And so on to the tender which saw students grouped into their ‘companies’ to tackle an assignment to mine sand to reclaim a container terminal behind a quay wall.

A whole heap of data – in graphic, tabular and text form – was given to the companies. Relevant data was scattered through the documents and it was up



Dredging Tender Evaluation board at work

Photos: Jim Willison

to the students to find out what was relevant and what was not.

Site soil investigations revealed corals, silt and mud along with good clean sand – in hard to reach places or, in the case of a nearby lake, buried under silt heavily contaminated by industrial output from a city up-river.

A quick analysis by our group revealed that the most economic place to dredge for sand was in the contaminated lake. We came up with a plan to place the contaminated silt in nearby disease-ridden swamps and cap it with clean sand.

A good plan, we thought, as it got the sand for the reclamation, solved the local health problem of the swamps and created a silt trap for future contaminated sediment pouring into the lake from the river.

An opportunity then presented itself to buy extra borehole data, so we did. And I was delighted – there was heaps of sand right in front of the reclamation area. But my colleagues were less impressed: “We can’t do it, we’ll undermine the quay wall!” asserted Namibian Ports Authority engineer Elzevir Gelderbloem.

“Meh, we’ll be fine, we’ll just have to be careful,” I said, with all the confidence of someone who doesn’t really know what he’s talking about.

But the tender board soon stopped my foolish notions at the pre-bid meeting. “Dredging in front of the quay wall is not allowed,” it was declared. Blast! And curses!

### RESULTS

I had to duck out of the exercise at this point, but the rest of the students were slogging away with their calculations. By Thursday afternoon – with the clock ticking – most groups were putting together their tender bids until late into the evening and there was an atmosphere of intense concentration.

Friday morning came and passed, with a final short lecture that was essential in helping students work out final details for their bids. And then that was it – 2pm, bid submission deadline.



Tender bid winners Team West with René Kolman (rear right)

The tender board (the lecturers) took the bids away for an hour for analysis while we were treated to a guest lecture on the effects of dredging on coral reefs by Tom Foster of DHL.

But we were all on tenterhooks just waiting for the tender board to return and announce both the results of their analysis and the winner.

### FINALLY...

Details of every bid were flashed up on screen and broken down into component parts for our benefit. Common mistakes?

- ◆ Inputting the wrong numbers while getting the basic calculation right
- ◆ Forgetting to take account of bulking
- ◆ Forgetting the mobilisation costs.

Others made more comical errors. “One team decided to sail in a straight line,” declared Van Gent, putting on his most serious face... “right over a sandbank! Your hopper will be grounded on every trip. Maybe that’s company policy?” he quipped.

In all, it was a good natured round-up of the daft errors only newbies can make. OK, so they forgot the mobilisation costs; OK, they awarded themselves an enormous profit margin of 25%. But at \$20.5M they had the lowest bid and they could, in theory, pay the mobilisation out of their whacking great profit. Plus they submitted all the documentation in the proper way and didn’t make any huge errors that couldn’t be compensated.

So they were adjudged the winner. And no, it wasn’t my team – so well done to Team West!

More info at [www.iadc-dredging.com](http://www.iadc-dredging.com)