



Interview with Andrew Carlick, Managing Director of DBD Limited, May 2011.

Have you heard of the YGN and all the activities we do?

Yes, although there's so many activities that you do I can't keep track of them all! I've been on the YGN website a number of times and it is impressive, especially for a voluntary organisation that's paid for through subscription. A year ago when I looked at the website it wasn't nearly as populated as it is now. We're very keen at DBD Limited to be more involved with YGN.

How did you get involved in the nuclear industry?

When I was in college, part of the course that I did focused on the nuclear industry, which was quite unusual in itself at that time. It was this nuclear part of the course, combined with engineering and a full year of radiochemistry, which really sparked my curiosity. On the basis of that, I then decided to find out more about the nuclear industry. I applied for a number of jobs when I finished college, nuclear and non-nuclear. I got offered a job with BNFL and I decided to take it.

There was always a ribbon of interest about what was happening with the wastes from the UK's nuclear arms programme in the 1950s. I was really intrigued by what was happening with the legacy waste and the surrounding issues, as it wasn't published at the time. Wanting to know more about the nuclear legacy drove me to pick the BNFL offer over others. I wondered if I might be able to help with the legacy waste issues and that's how it started!

What is your current role and how does it make an impact on industry?

I'm the Managing Director of DBD Limited. Our two most challenging projects that are currently ongoing, outside of the defence sector, are Evaporator D at Sellafield and SDP at Sellafield.

In terms of our impact, DBD solved the most difficult problems associated with process engineering on the Evaporator D project as part of the Costain team. It was our DBD team that put together a solution for the most difficult problems on the project and are now leading what will be the biggest process engineering project commissioning team for 15 years (Evaporator D commissioning team).

The team on SDP are deployed on the most technically challenging problems on the project. This means we're having a huge impact on the most difficult areas to solve, by applying a lot of experience and knowledge to develop a solution.

The big impact is the deployment of experience in an optimal way; we feel we put the right people onto projects.

How do you see the nuclear industry changing over the next 10 years and where do you see the biggest growth area for new recruits?

We've been talking about nuclear new build for a number of years. Key gates opened in latter part of 2010 and there was affirmation by the new coalition government that nuclear is going ahead. Others are the utility tariff rate for electricity generation, planning permission and GDA.

I think it has now got to a position where nuclear new build will happen. If it does, we're talking in the region of £4.5billion per reactor. That dwarfs anything that Sellafield and Aldermaston are doing and is this is clearly going to be the big growth area. Skills will be needed; process engineers, C, E&I engineers and mechanical engineers will be required mostly in the detailed design area. This could be a fantastic opportunity for young graduates, to start their career in the detailing of reactors and its support services, waste management stores and radwaste stores.

Whilst this is going on, there will be jobs created elsewhere because there'll be a sort of vacuum effect I think. If there are two plants going on at the same time over a seven year period that's nearly £10 billion being spent in that time! There will no doubt be opportunities for young engineers. They will



just have to decide whether to focus on legacy wastes/current reprocessing operations and the defence area like I did, or go for the new build opportunities.

What impact, if any, do you see the new build programme having on the decommissioning programme?

There are reactors going up in China, the Middle East and the former Soviet Union and there is a risk of a mass exodus of UK expertise from decommissioning to nuclear new build. I don't know how NDA, for instance, is provisioning to correct that imbalance. Personally, I think that's a massive risk to hazard reduction at Sellafield and Dounreay.

The UK is now increasing the programme for research and development- how do you think we can develop to become an international centre for excellence in this area?

This is a significant issue for me. I feel there is a lack of investment in R&D in this country. Since BNFL was broken up the R&D group has changed a lot. Whilst there's now some investment in high temperature treatment processes for treating wastes, this used to be led by BNFL in the 80's and 90's. Compared to what it was, in my view, it's very little.

What does your company do to encourage an educational programme in schools?

We do some work via YGN but we know there is much more we can do. We have links with Newcastle University, which is where some of our graduates have come from. In terms of schools and colleges we need to be getting in there early and giving students options. We have been to careers fairs and I'm open to suggestions about how we can programme events throughout the year.

How would you convince a student or graduate to join your area of expertise?

Certainly, if it's about our company, you've got to tell the truth. As an SME, it's a different sort of atmosphere to that of the larger companies. We're a faster pace than large companies because we are growing our business and we then emphasise the positives about it. You get lots more in a small company in terms of accountability and you also get the biggest chance of working with, some of who I consider to be, the best guys in the country!

I'd also emphasise that, in terms of the sector, it's going to go through unprecedented growth. We haven't seen this growth for 30 years, not since Sizewell B was being constructed at same time as THORP, Vitrification Lines, Encapsulated Product Store 2, Evaporator C, Magnox Encapsulation Plant and the Nine Acre Site. All this happened in a period of 10 years and it's about to happen again.

What does your company do to attract and retain younger staff?

As a company this is one of our strengths. We attract people by, as previously mentioned, being honest about the pace of work, the challenge and accountability within our company. We retain them by keeping our people occupied with challenging assignments, because when people get bored that's when they start looking around. Our challenge as managers is to keep our people challenged!

We have good diversity within our small company; we have a mentoring scheme and a graduate scheme. There's opportunity, a real chance to get stuck in and see the fruits of your labour. You get the chance to work with some very talented people such as the chief engineer and other key leading individuals. It's a chance to push yourself and be pushed whilst having support from people who know what they're talking about as they've been there and done it. Opportunities like that don't come along every day. In a larger company, you wouldn't necessarily have access to the likes of a chief engineer.

One of my founding passions, when I started DBD, was to put people on jobs where they enjoyed it and where they showed enormous talent for solving problems. We've also built up the culture in this company where people can talk to us about their ambitions and areas they would like experience of



working in. It's a very open door policy and one of the values of DBD is centred on communication and listening and respecting other people's points of view.

What do you think is the best advice you can give a younger member of the industry?

Be patient, learn as much as you can about your own discipline first and keep talking to your peers and anyone who is working for/with you and your customers. Find out how you're doing in terms of the quality of your work. Once you've nailed that, then you can think about moving on, in terms of upwards if you like, with your career.

Serve the apprenticeship first. Don't try and run before you can walk. For someone ambitious it's difficult, but you need to take your time.

Are all your younger staff members of the YGN?

I think most are.

How can we support you and how can you support us in the future?

Give us lots of notice about YGN events so we can support them e.g. by providing speakers/technical guidance. I'm committed to providing time for employees to help at seminars and events and to speak at events. YGN could consider forging links with the Constructing Excellence forum and the Major Projects Association forum. YGN could also learn from other sectors and give to other sectors.