Profile

Tom Newby has spent the last 14 years forging careers in two fields – structural engineering and humanitarian aid. His dual roles have seen him work in Bath, Haiti, New York, the Philippines, London and Nepal. He's now bringing his unique perspective to the Institution's Humanitarian and International Development Panel as its chair. Jackie Whitelaw went to meet him.



Tom Newby has been back in engineering for three months. For the previous five years, he had been in full-time humanitarian aid work in various leading management roles with one of the world's largest NGOs, CARE International UK.

Now happily based in London as an associate with BuroHappold, he's left behind a role overseeing responses to disasters

such as Typhoon Haiyan in the Philippines (Figure 1), the Nepal earthquake in 2015 and the response to the Syrian conflict in Jordan and Lebanon.

'I need to prove myself as a structural engineer again,' he says. 'One of the really nice things about engineering is that, having left it and done years in humanitarian work, a lot of the things I designed are still being finished. That is great for my own satisfaction and to still see myself as an engineer. But now I'd like to build more buildings.'

He also has a young family to bring up and roots to put down.

This is making it an easy switch from developing CARE's global emergency preparedness as the organisation's head of humanitarian and, latterly, interim policy director, to designing very high-end flats for a residential development in London.

Humanitarian challenges

Newby has brought with him not only his engineering skills, but also five years' worth of high-pressure management experience at CARE – of his own small team but also, on occasion, the hundreds of – usually local – charity staff, contractors and consultants that deliver the aid projects.

Along with that, he has experience of the good and bad in the aid world to share with industry and government, potentially via the Institution's Humanitarian and International Development Panel. And he can see a clear need for the UK to have a better response to homegrown disasters, more akin to that which has evolved in the aid world.

'As an engineer, you are always very aware of the consequences of your mistakes,' he says. 'Everyone makes them and you have to fix them, which is stressful. Now, being more senior now than I was when I last worked as an engineer, I have the extra level of responsibility for other people's work.

'That is where it's very different in humanitarian work. You often have only one engineer who is expected to do everything, whatever his or her skills. Understanding



Figure 1 Building award-winning housing in the Philippines



Opinion

Tom Newby



and responding to that has been useful learning for me.

The Humanitarian and Development Panel is developing guidance and a competency framework for engineers seeking to work in the sector. The controversies in the aid field are very much on his mind, and engineers thinking of getting into the sector, even on short-term contracts or as volunteers, should be very aware of them and what their response should be, he says.

One major scandal is the use of prostitutes by charity workers in Haiti, which is still very much in the news. 'That was not a unique situation,' he says. 'The exploitation of vulnerable people is endemic around the world and it's appalling. We are working to help the most vulnerable and it is hugely shocking to then exploit them."

The aid sector needs to get its house in order, he says, but the problem is not confined to charities, Newby points out. 'The private sector is a million times worse. It's a recurring problem of the powerful abusing the vulnerable.

'Engineers going into international aid work need to face up to the responsibility they take on. Have very high standards of behaviour, and call out abuse to protect others.'

The 'white saviour' issue is another one that engineers need to consider when providing aid. 'We are all very aware of it,' he says, 'and it is something to watch for. It's why I wanted to work on emergency response, because then we are there to provide extra capability and capacity, not take over. At CARE, almost all the staff are country nationals, including the senior staff. Much of the work of an international response team is to hire the right local staff for the ongoing response work.'

He points out that it's interesting that the UK provides significant support into overseas aid, but is pretty poorly set up to

"I WAS ALWAYS KEEN ON DOING THINGS WITH PUBLIC BENEFIT – THAT'S WHY I BECAME AN ENGINEER"

respond to homegrown disasters. 'That's the irony of the white saviour,' he says. 'We think the problems in other countries are easy to fix, without looking at ourselves.

'Look at the poor response to the Grenfell Tower fire, or the hurricane in Turks and Caicos - a British territory. What happens if there's a North Sea storm surge that produces devastating flooding? We don't have a domestic disaster management organisation. The USA has FEMA. We need one of our own, rather than the 10-plus bodies operating with little or no centralised leadership. There should be civilian management in place to prepare for disaster; at the moment we'll more likely end up relying on the army and the Red Cross in a major event.'

Competing passions

Newby studied engineering at Cambridge University and while there was one of the founder members of Engineers without Borders UK in 2001. He remained a trustee of the organisation for many years and has seen it develop from engaging students in humanitarian development to a formidable force promoting an understanding of aid work for engineers at all levels.

'I was always really keen on doing things with public benefit - that's why I became an engineer in the first place. Engineers without Borders became really popular very quickly and it took over my life. That was my route into humanitarian aid - where I learned how it worked.'

His route into BuroHappold also started





b) Leading local team

at Cambridge. Newby was a Happold Foundation scholar in his third year and spent two summer holidays with the consultancy in London. 'I was really excited by the interesting projects the firm does so applied to join when I got my degree. They took me on and I went to work in Bath.'

Throughout the general engineering course at Cambridge, he had always known he wanted to focus on structures. 'I like the things you can see and be proud of,' he savs.

Newby spent six years pretty much on one project, moving from graduate to senior engineer on the new rugby stadium at Lansdowne Road in Dublin - now known as the Aviva Stadium (Figure 2). 'It was very hard, complicated work, but the result is lovely. My one regret is that I've never been to a rugby match there, yet.'

He moved on to the London Olympic stadium for a year, but then the aid worker in him re-emerged in 2010. 'In the middle of everything I was doing, BuroHappold let me go out with Tearfund for three and a half months in the early response to the Haiti earthquake.' This was his first boots-on-theground experience and it got under his skin.

Even so, in complete contrast, his next

move was to New York with BuroHappold for two years involved in great projects in an amazing city. But just over a year later, he was offered a short-term contract with Habitat for Humanity to go back to Haiti to manage the construction of permanent housing (Figure 3).

He's full of praise for BuroHappold's flexibility in allowing him to feed his enthusiasm for aid work, but when the Haiti contract ended, the recession was in full swing and there were no opportunities to return to in London.

Instead, Newby landed at Expedition Engineering, where he designed the small Littlehampton Stage by the Sea – a project he's particularly delighted with.

Emergency response

At the end of 2013, though, he was offered one of the rare, full-time aid posts, at CARE International as global shelter team leader, and quit engineering to focus on humanitarian work.

'I started just after Typhoon Haiyan hit the Philippines and there was a huge storm in

"EMERGENCY RESPONSE IS FRUSTRATING. YOU NEVER FIX THINGS COMPLETELY"

India. I was back and forth between the two, helping to design projects to rebuild houses and hire the people to do it. There was only a small team of three in London. In a big response we hire hundreds locally.

'I was really pleased with the results of the rebuild, especially in the Philippines. The local people all over Panay and Leyte islands built 16 000 houses, each unique, and in keeping with the needs of the people living in them. They look beautiful and are a permanent legacy. The work won a World Habitat Award in 2017.'

Although the norm is to use local people in an emergency response, the Nepal earthquake was so big it needed the deployment of an international team. Newby was at a wedding when the quake happened and on a plane out to the country the next day. 'I landed in Kathmandu within 48 hours of the event, and in that situation you do go in and the emergency team takes charge. We had a large office there but few emergency people and all the staff were traumatised. CARE flew in about 30 people and we went out to see how to deliver shelter, water and sanitation.

'I was there for about six weeks, and we made a difference. But emergency response is frustrating. You never fix things completely.

'That's why coming to engineering is so good. I can see things through. It was a wrench to leave such a fantastic operation as CARE, but I'd been away from engineering for a long time and don't want to stop being an engineer.

'It's time to focus on that side of my career now.'

HAVE YOUR SAY

- To comment on this article:
- email Verulam at tse@istructe.org
- tweet @IStructE #TheStructuralEngineer

