Assisting the disaster response after the Great Eastern Japan earthquake & tsunami 2011

Interviewer:  
Gareth Byatt – Principal Consultant, Risk Insight Consulting

Interviewee:  
Andrew Gauci – Managing Director, Lendlease Japan

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Andrew,

Thank you for taking the time to talk with me about the experience of you and your Lendlease Japan team in helping the massive disaster relief effort that took place in the wake of the devasting Great Eastern Japan earthquake and tsunami that struck the East Coast of Japan on 11\textsuperscript{th} March 2011.

The tsunami reaches Miyako City, North East Japan: image credit – Reuters
Gareth: How did the team at Lendlease Japan assist the relief effort in the immediate aftermath of the devastating tsunami of March 2011? I understand that, amongst other activities, your office in Sendai, North East Japan, was used as a base for the Australian, New Zealand and Canadian governments' emergency and consular aid programs.

Andrew: It's important to give some context to our operations in Japan, so that you can see how we were able to help with the massive relief effort. Lendlease has been working in the Telco sector in Japan since 2002. We are the specialist of Project Management & Construction in the Telco sector, managing the construction of telecommunications towers and the network for our clients. To date, we have completed more than 200,000 towers across Japan. By the time the tsunami struck, in March 2011, we had installed more than 70 thousands of towers across the country, including the North Eastern area where the tsunami occurred.

In March 2011 we had 70 people in Sendai. When the tsunami happened, and when we first found out about it, the very first thing we did was to check if our people were OK. Fortunately, they were, though this took time and effort. After the tsunami the mobile phone network went down so we couldn’t just phone people on their mobiles.

The Japanese government quickly set strategic priorities to be restored on a number of services – including power, water, and the mobile phone network. From our position in the Telco sector in Japan, we had a role to play in helping this strategic and national infrastructure priority for one of our clients. We rolled up our sleeves and got to work in the Sendai area.

It was important to appreciate the situation immediately after the tsunami struck. The highways out of Tokyo to the North East area were closed to the public – only the military, emergency services and inter-governmental teams such as the national government and staff of foreign embassies were allowed to use them. We were allowed to use the highways since we were part of the emergency services relief effort.

I remember travelling up from Tokyo to Sendai in a minivan on a deserted highway, which was broken up in many places, with the Australian Embassy staff plus people from a few the Canadian & New Zealand Embassies. These Embassies used our office in Sendai to locate, debrief and help their nationals get back to their home country via Tokyo. For me, it was such a huge relief when I arrived in Sendai to see that our staff up there were safe.

The client appointed us as a contractor for the network reparation work in the Sendai area. We set about quickly establishing our project operations centre in Sendai. One of the first things we had to do was to determine where the damage had been caused to existing mobile network sites, and how severe it was. Many telecom tower sites along the coast had gone down. Some had been completely ripped out of the ground and destroyed, others were damaged to different degrees of repair. The mountainous and undulating geology of the area had a big effect. In many areas, the tsunami was funnelled through valleys, which exacerbated the amount of damage it did.
There were two main areas of focus for us:
1. Help to build a temporary mobile telecoms network
2. Aim to get the permanent mobile telecoms network back up and running within 6 weeks

Getting the temporary (and emergency) network up and running meant creating short-term fixes – towers built using scaffold and antennas.

We already had experts in particular fields of telecoms all across the country, due to our extensive experience in the sector. We made sure that we could bring the best people into the project team in Sendai. After analysing and agreeing what needed to be done, we selected the experts from our nationwide team all across the country and brought them all in. Many of our project team stayed there for 3 months or more to complete the work.

Gareth: How did you go about the actual telecoms restoration work?

Andrew: It was a challenge. Because the mobile phone system was taken out of action by the tsunami, we had to build a temporary phone system from inland towards the coast. We would work towards the coast, whilst always maintaining an emergency network in operation.
Gareth: It must have been important to have clear and regular contact with, and support from, the Lendlease Head Office in Sydney.

Andrew: Definitely. The support from our Head Office was vital to us being able to play our part in the disaster relief efforts.

We discussed with senior leadership in Sydney the risks of us being involved in the relief work and everyone agreed that it was the right thing to do. Having discussed our plan of action with them and taken on board their valuable feedback to this plan, we quickly set up regular meetings with the senior leadership in Sydney. We had an open communication channel with them which was really important. There was no panic. I would provide an update, our view of the risks. We had a rigour to report regularly and to discuss things with our senior leadership back at HQ, which worked really well. We explored the risks and agreed actions to implement. They supported specific activities we undertook, such as our planning and evacuation procedures which I mentioned earlier. There was a strong level of trust by our senior leadership to allow ourselves as a local team to work – with everyone focused first and foremost on safety.

Gareth: It must have been dangerous work, for a host of reasons. What were some of the things that you had to do to ensure, as best you could, the safety of you and your team?
Andrew: For sure, there were many safety considerations to take into account. As you know, safety is built into the DNA of Lendlease, it is at the heart of everything that we do. Clearly, we needed to ensure that the areas where the towers were located / destroyed were safe to work in.

There were some major “outside of the norm” factors to bear in mind with this disaster management work, for example:
- The Fukushima nuclear power station, at 80-90km from Sendai was, at that point in time, a serious issue and a major concern.
- Major aftershocks continued for some days after the massive 9.0 magnitude earthquake and tsunami of 11th March, and these were very unsettling.

The Japan Self-Defence Force had given all emergency services teams, including ourselves in Lendlease, rules to follow for safety, hygiene and the like.

All along the coast, we put in place our safe work procedures, including adhering to the emergency warning procedures from the Japan Self-Defence Force. If there was a tsunami warning or an earthquake threat, alarms would go off and we would make sure we cleared the areas / did not go into them.

The Lendlease team maintained good communication with embassies that also provided good awareness of the overall situation.

We set up an emergency team, with experts in various fields (safety, wellbeing, etc). Obstacles were thrown up on a daily basis. In the early days of our work we assessed the situational risk level for ourselves every 3-4 hours.

We made sure that we had a solid Personnel Evacuation Plan in place, rehearsed and ready to be put into action at a moment’s notice. Lendlease puts a lot of effort into resilience and major incident planning, and this was a situation when we needed to ensure we had a solid and robust plan in place.

For example, our plan included:
- We tracked our people’s movements and ensured we could contact them at any time, which everyone fully supported in the spirit of safety.
- We had buses on standby, so that if there was a requirement to evacuate (for example, due to an escalating concern at Fukushima), we could evacuate everyone immediately (this included making sure that we had an adequate supply of fuel for the vehicles… I’ll come back to the importance of fuel supplies later).

Some of the challenges we faced (with safety being of paramount importance to us) included:
- Access to many of the areas we had to reach to rebuild the network was difficult. In this North East part of Japan, mountain ranges often tumble down to the sea, and the terrain is undulating. Many access roads, often small farm tracks, were in a bad state of repair, or at the least, very muddy and hard to get through. You could smell oil and the impact of the tsunami in the area.
- One of the biggest challenges we had to deal with was a lack of fuel. Emergency services and the Japan Self-Defence Force were struggling for themselves with this too and obviously they had to prioritise things for their needs. There was initially no fuel to run generators to run the temporary (and emergency) phone networks, or drive cars to get to the sites. We went through a fuel procurement process. Our 9 offices around Japan procured fuel from various suppliers and transported it to us in Sendai (including using large plastic tanks for its transport and storage once there).

- One thing we learned was that to run an operation like this you need good, detailed and large-scale maps of the entire country to find out where access roads are (for example, many farm and back roads are not included on smaller maps).

- Another issue I remember was obtaining good, healthy food. Initially we were living off chips, chocolate and packaged food. We started to get good and healthy food brought up by our teams coming in as soon as we could, which was most welcome.

- Also, most hotels had no running water for a while. And they were not easy to get into, since they were in demand by lots of people helping with the relief effort (bearing in mind that many buildings had been destroyed or rendered inoperable). During day, our staff would take it in turns to use the showers we had in our hotel rooms.

We would assess daily what we have, what we don't have and what we need. Because we had several offices around the country, we were able to utilise our network to get things brought in (insofar as it was possible).

Gareth: What about your ability to sleep in this challenging situation?

Andrew: It was a challenge, with the accommodation as it was, and aftershocks literally moving the ground beneath us. Some of our staff lived in Sendai, and their houses were not usable. Many of our staff were staying in the emergency centres that were set up for the local population. I remember, for the first two nights up there, those of us who came up from Tokyo slept in our office in sleeping bags. There were lots of aftershocks which was quite unnerving.

For sure, it was a stressful environment, but we did sleep due to tiredness.

Gareth: Communication with lots of different relief teams who were up there must have been important as well.

Andrew: That was certainly the case. For example, the New South Wales (NSW) State government sent an emergency services team up to a small fishing town called Minamisanriku, which was one of the many places that was devastated by the tsunami. The NSW State government organised for their team to get to Sendai. From Sendai we helped them to get to Minami Sanriku – about 30-40km away. Since we were already part of the relief effort in the general area we were able to organise their transportation and we helped the Australian embassy arrange accommodation for them.
As I mentioned earlier, our office in Sendai was used by the Australian Embassy as they located Australian nationals in the impacted areas. They would drive into the area, bring them to our office, debrief them and arrange for them to travel to Tokyo and onwards to Australia.

**Gareth:** The work you all did up in the Sendai area in 2011 after the tsunami was clearly very tough and hard work, and your efforts have clearly helped the community in a tremendous way. I understand that Lendlease Japan continues to actively contribute to the rebuilding of Minamisanriku which as you mentioned just now was one of the most devastated towns struck by the tsunami and is still undergoing a long period of recovery.

*Photo of Minamisanriku after the tsunami, 2011: image credit – AFP*

**Andrew:** Yes, through the Lendlease Foundation we continue to support the rebuilding efforts. Such devastation takes time to heal in every way.

Every couple of months since the tsunami, our team visited the area and we carried out many volunteering activities. We continue to do so to this day. Initially our focus was helping to clean up farms, repair fishermen’s nets and the like. We also organised and held shows and entertainment to people who had lost their houses, especially elderly people who were in temporary houses. We became to be known as “the people in blue”, due to the bright blue T-shirts that we all wore. We brought food, treats, games. Our support continues to this day, in different forms of helping the community.

We also collaborated with ANZ Bank, who funded a library and education centre in the town. Lendlease Japan offered to design and manage the construction on a voluntary basis. It was called the Koala Kan (the Koala building).
Gareth: Looking back at the way you assisted the relief effort after this tragic event, what are some of the lessons that you learned. I’m thinking about it from the perspective of an international business that operates in many locations around the world, which may find one of its offices having to deal with the aftermath of a catastrophic natural disaster, in some way?

Andrew: Panic occurs when there is no plan – so have a good plan.

For any international organisation operating in many locations around the world, I would say: have a good working plan in place, walk through it with your people on a regular enough frequency and ensure you are ready to use it at a moment’s notice. Understand what the real “panic points” could be and address them in your plan. Have a structured approach. That’s how the military prepare.

Through this experience, we learned that the fact we had a plan in place prior to this terrible event occurring, and that people knew what the plan contained (it did not sit on a shelf, never to be looked at) ensured that we were prepared, and we were able to respond effectively as a result. These events can be overwhelming experiences to witness. Planning for them makes it easier to deal with.

We knew how to find our people, we had a Situation Team that quickly came together to head the recovery efforts. We knew our key points of contact in Lendlease internally in the APAC region and Corporate.
Part of the plan is ensuring there is a clear communications line to senior leaders in your organisation, who may be far away (or travelling), to authorise and facilitate actions to be taken. We knew how to work and liaise with key external contacts as well (the Embassies, etc).

We didn’t have satellite phones at the time in case the mobile network went down. We now do. We also have large-scale detailed maps of the whole country. We know where to find fuel and food if it is in short supply.

It’s important to ensure that as people change roles in an international organisation, and new people come on board, we retain knowledge about our experiences of key events. Don’t lose your corporate memory. Individuals who understand these issues can drive the processes and plans that should be in place, and ensure they are properly communicated so that you are ready to respond if such a significant event occurs.

Thank you very much for your time, Andrew.