



This is the UN facility in Banda Aceh, Sumatra. It was established by Drastic in partnership with an organization called Pactec International. Photo courtesy of David Hoffman.

Quick deployment

The Disaster Recovery and Strategic Telecommunications Infrastructure Company (Drastic LLC), specialise in providing communications for the developing world. Helen Jameson speaks to Rob Longhurst, President of Drastic about their work and how communications are restored after a disaster has struck.

About Drastic LLC

DRASTIC LLC was formed in 2005. It builds on the experience gained by its founders in over a decade of providing data communications solutions for Relief and Development organizations in some of the most austere conditions on earth. Working within Pactec International, we started to install VSAT (broadband by satellite) systems to assist NGO's (Non Government Organizations) as they came into Afghanistan in the Spring of 2002. Bringing broadband internet to a country with virtually no communications infrastructure is hugely enabling! After around 100 such systems were installed, we began to consider the needs of organizations working in similar situations across the globe.

Question: Would you kindly introduce yourself and Drastic to our Readers?

Rob Longhurst: I'm Rob Longhurst. I am President of Drastic LLC. Drastic is a small company specialising in communication provision via VSAT and wireless networking in the developing world and we work mainly with humanitarian, aid and development groups. Disaster response is just a small part of what we do.

Question: Can you please tell us about Drastic's technology platform and why it works so well?

Rob Longhurst: There's nothing different to the platform we use for disaster response compared to any other deployment. We may use some slightly different equipment. Other than that we use iDirect technology over a network managed by SDN Global. We use

C-Band wherever we can. So we are just using mainstream technology.

Question: Once a disaster has struck, what is Drastic's initial reaction? How do you evaluate the situation and decide what communications are required and how that requirement will be met?

Rob Longhurst: The key to this is the fact that we do not make the decision to deploy or not to deploy. This is based on requests from partner organisations that we work with. We do not have the resources to deploy on our own. However, we have worked with many humanitarian organisations over the past few years. We have set up a network with over 100 GVF (Global VSAT Forum)-qualified installers who are normally residents in developing world countries anyway so they can give us a quick on-the-ground



assessment of what the needs are and we make the decision on whether we are going to deploy or not. They let us know what they envisage the local conditions to be and we can build a picture of what we need based on that.

Often organisations like Telecom Sans Frontieres will be there before us with highly mobile teams, usually using BGAN or whatever. We could deploy flyaway equipment that can be set up a lot more quickly but often the NGOs cannot afford to use the higher cost flyaway systems. In addition, while we are getting the equipment shipped, the situation often becomes a lot clearer and a centre of operations becomes established by the time we get there. This means that organisations can upgrade from a thinner pipe provided by things like BGAN to a fatter pipe that's fixed just as larger relief teams start pouring in.

Question: In these situations, the relief effort must move swiftly. How long does a Drastic solution take to deploy and what are the biggest challenges you face when deploying the equipment?

Rob Longhurst: That really depends on the logistics. For example, if we go back to the Asian tsunami the difficulty was actually getting the equipment from Singapore into Indonesia for the simple reason that the Indonesian government closed access to some of the airports for what they considered to be non-essential equipment. For some reason, they decided to categorise communications equipment as non-essential. We ended up having to try to get the Singapore military to fly our equipment in by helicopter. But alongside that you have problems like getting the stuff that you need. We needed to use a pole mount and we needed concrete for that. We had to ship this a couple of hundred miles cross country as local sources had been affected by salt water during the tsunami.

To answer the question though, we can deploy within about four or five days. But due to the confusion in a big disaster you would probably end up setting up in the wrong place if you did that.

Many of the aid agencies that are deploying are also taking at least as long to deploy as we will and so it's not such an issue. You could spend \$15-100,000 on flyaway equipment and have it set up in no time at all but that probably wouldn't be an appropriate way to do things for the people we work with.

Question: In a disaster situation, why is VSAT such an effective solution for the restoration of communications?

Rob Longhurst: Well assuming you are talking in a developing world context it would probably be because there isn't a viable alternative. RBGAN and BGAN have been

great in terms of portability but the throughput costs are pretty high and then it's fairly limited for larger user communities. Also, the local telecommunications infrastructure, if it ever existed, is probably destroyed and the other thing is that in a lot of these situations there are bottlenecks in terms of international connectivity so all the relief teams are coming in from North America or Europe and they want to communicate with those places. So even if there's fairly good communications within a country, very often the international bandwidth is a bottleneck and of course we bypass that completely with VSAT.

Question: Can you give a particular example of the work you have done in response to a disaster and what the outcome eventually was?

Rob Longhurst: I think very often people look at disaster response and disasters as detached events whilst in fact they are part of a journey of a country and a community from where they're at to hopefully a prosperous and more settled situation. Drastic tries to think long-term. We want to contribute not just to survival, even though survival is obviously vital, but also to the eventual independent prosperity and well-being of the local people. We think in terms of a planned transition from disaster response through development to expanding local businesses. We have achieved this and I think we were catalysts for that happening in Sumatra after the

tsunami. Our initial work in Sumatra was supporting UNOCHA and many relief agencies that were working around that area. But in six months we were able to transition communications to a local group who provided an Internet café for local people and we worked with them to develop the technology and their business model and that is now a pretty successful communications company which is run by local Indonesians and is profitable. To me that's a great outcome.

Question: Asia has seen many natural disasters over the past few years in particular. What will Drastic be doing over the next twelve months and where in particular are you active at present?

Rob Longhurst: As we're a small organisation I don't envisage opening offices here, there and everywhere. We prefer to put our efforts into developing local capacity through local partners. We don't have the ability to build up a kind of military-style rapid response. Working with not-for-profit partners is much better for us.

Building capacity into those organisations is what we have been working at the past couple of years. We run training and we run exercises from time to time and we support them however we can when an incident occurs. But we're not always focused in Asia and not just on disaster response. It's just one of a range of services that Drastic provides. ■

