

Arwin van de Zande, Hazmat Officer of The Hague and District ("Haaglanden" in Dutch) Fire, tells Gwyn Winfield about the power of the network

# Network fire

Holland has always been a composite country; whether the Spanish (or Austrian – depending on the Habsburg weathercock) Netherlands or the United Provinces, it has been a country of many parts. So, to a certain degree, it still is today – while Amsterdam is the capital, you have to take yourself south down the A4 motorway to The Hague if you want to find the seat of government, monarchy and multinational headquarters. Here you find not only the trappings of power, but also the attendant services – police, fire and ambulance – that are needed to protect and sustain them.

The fire service is the lead service for hazmat and CBRN in the Netherlands, and The Hague and District Fire service is one of the premiere CBRN response units. As well as being the seat of government, The Hague is also host to a range of laboratories – not only the well known TNO lab in Rijswijk but also big petrochemical labs and the warehouses of Holland's second largest export – flowers. While the latter might seem a rather idiosyncratic export for a first world country, it is a major support to the Dutch economy (as it historically always has been) and as such even has its own fire brigade to prevent fire damage. Hazmat Officer Arwin van de Zande has a major portfolio of high-value targets in his vicinity, and it is due to these that The Hague and District response is as polished as it is. "Nine years ago there was a rapid investment and intervention into chemical defence," said Mr van de Zande. "In the city of Delft we started co-operation with industry, TNO and the University of Delft, and we created three rapid intervention teams – Delft, Zoetemeer, and The Hague. These were then used as a model for the rest of the Netherlands.

"We do some of our chemical training using ammonia in Sweden and the UK, as we are not allowed to train in The Netherlands with chemicals; this is a problem, as we would rather it was closer. The Hague and district might



The Hague and District Fire have a robust approach to mass decontamination ©Hague and District Fire

only be a small part of the Netherlands but it has a million people, which is approx 1/16th of the total population; we have the major motorways and also a large percentage of the petro-chemical labs that use toxic chemicals. Five-to-six years ago, after the Iraq war, we started to build our CBRN defence package within the Ministry of the Interior; we created the mass-decon units and became well equipped and trained in Rotterdam, Amsterdam, Groningen, Apeldoorn, Eindhoven and The Hague."

## Leading with fire

The Netherlands relies on the fire service to be the initial responder for all chemical and radiological attacks; after that the specialist units from the Institute of Public Health (RIVM) and the National Forensics Institute (NFI) will attend to be able to quickly provide a silver standard identification on scene through their mobile labs and

teams. As such, the fire service is the major agency to enter the hot zone, while the police – with the exception of small specialist teams – and ambulance services lack the equipment and training to enter the hot zone. This forces a large number of tasks onto the fire service, and means the fire fighters need to be able to do rapid triage and prioritise patients out of the hot zone for treatment. While triage of wounded people is not a regular occurrence for the fire service at other scenes, for CBRN incidents it does require a better understanding of medical symptoms. This is compounded by the fact that the fire service is responsible for all mass decontamination, including non-ambulatory decon. "This is a problem in the Netherlands," said Arwin van de Zande. "We are the major hot zone responder; the other agencies have little to do in there. For example, the ambulance service only deals with

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clean people in the warm zone, so we need to be able to prioritise, get them through decon and into medical help. We have to rescue and decon them and then hand them over. This can result in some tough decisions; for example we prioritise those who are still responding to us and moving – we take them out first, while the ones who look the worst are dealt with last. Currently we are the only ones able to do this task; the ambulance service does not have the training and equipment to enter into the hot zone, so once they want the job and fund it then we can hand it over to them. Currently we are the only ones who can work with breathing apparatus.”

While there are specialist forensic teams to go into the hot zone, their speed of deployment is likely to be behind that of the fire service, so what level of forensic understanding is there – not only of the agent used but also about how to ensure the evidence doesn't become trashed? “Evidence is done by the police and NFI, so categorically that is not our task and TNO and RIVM have their own teams for agent analysis and while we can do some of them it is so much better,” said Arvin van de Zande.

“We have some forensic protocols, but the main thing is saving lives,” he continued. “On our every day job the police complain that we are destroying evidence, and this balance between lives and evidence is hard. We are listening to their complaints and are being trained to deal with this, but it is difficult as our tasks are different. We are doing fire investigation now, which the police used to do, so that is helping and now we are getting closer together so we can co-operate better. The mass decon unit was bought by the Ministry of Interior just for the fire service, and we always ask as a group – The Hague, Amsterdam, Rotterdam, Groningen, Apeldoorn and Eindhoven – to bring in ambulance and police as they also have to deal with it.”

## Asset light, co-op heavy

his close co-operation is part and parcel of the Netherlands' response; a shortage of assets (when compared to some US states, for example) forces them into close co-operation and interoperability. While the arrival of the military is

usually seen at best as an unnecessary encumbrance, or at worst as turning a disaster into a crisis, the Netherlands' civil responders view their new military partners with enthusiasm. “The military now has co-operation with the Ministry of the Interior, which is good, so their role will also encompass homeland security, as well as operations,” said Arvin van de Zande. “After the first few hours, when our resources are becoming over-stretched, we will hand over to and integrate with the military. They will come with specialised equipment and we are working with them to integrate it; it is not finished but we are getting there.”

The Netherlands is an interesting concept of CBRN defence; usually there is a three-tier system of: first responders, lightly equipped and close to the scene; secondary responders, heavily equipped and tasked to respond; and third responders, highly equipped and trained specialists removed from the scene. Previously the civil response in the Netherlands has focused on the first and third strata, so even the “second tier” specialist hazmat crews are not encumbered with as many chemical detectors as those in Paris, London or Washington DC (relying on Draeger tubes, detector paper and ECAM). But they have brought the third tier closer to the scene and improved their reaction times – reinvigorating the reachback concept. When the new CBRN Company from the army is added as the second tier – as the specialists are not able to manage the incident – they will also have the sustainment part. What is most important about this is the organic way that it has grown; by having these close links between first and third tier responders, and by deploying scientists into the hotzone, they have improved co-operation and understanding and broken down service rivalries. Bringing an outside force – the military – into the scene has not upset the “balance of power” between the three emergency services, so hopefully there won't be a new bout of turf warfare. There is never a perfect system; you can only ever do the best with what you have, and the Dutch response model will be useful for those countries that do find themselves light on assets.



*The Hague and District Fire was one of the pioneering teams in the Netherlands that started the Rapid Intervention Teams*  
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