

## Preparation for industrial fire services

# The power of public private partnerships

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The gas fire in Gellingen (2004), the complete burn down of 24 tanks on the tank storage facility of Buncefield (2005), the tank fires on Bonaire (2010), enormous fires at Chemiepack Moerdijk and Dow Farmsum in Groningen (2011), fire and explosions at Shell in Moerdijk (2013). Reality shows time and again that no single firefighting organization, whether corporate or governmental, is capable to singlehandedly handle a largescale (petrochemical) industrial fire.

Industrial firefighting requires specialized heavy-duty extinguishing equipment, intelligent planning, a robust and scalable response organization at the ready and large investments into education and training of personnel. To realize this, cooperation seems like a logical step. That way, costs and efforts are shared and the partners jointly secure effective and ready-for-battle industrial fire services for the collective.

Largescale industrial firefighting benefits from combat effectiveness, availability, specialization, and cooperation. And so port and industrial areas around the world have developed varying forms of cooperative agreements in the style of Mutual Aid organizations and public private partnerships. The Netherlands has a couple of these Mutual Aid organizations in which companies and governments work together. This setup is also called a Public Private Partnership (PPP). Industrial areas in Amsterdam, Delfzijl and Zeeland are searching for such an organizational form for local support.

What are the experiences and best practices in existing cooperative structures? Kappetijn Safety Specialists together with Joiff [non-profit organization for emergence services

management, red.] is mapping out the world of joint corporate firefighting organizations and investigating the effectiveness of the various models. Goal of the investigation: international sharing of knowledge for combat effective industrial fire services.

### **Mutual Aid and PPP**

There are different models for realizing a Mutual Aid. Sometimes, various companies will form an independent firefighting organization with a personal board in which all cooperating companies take part. Another possibility is that companies will financially contribute to a joint organization, but leave all the executive action and governance to one of the partners. For example, the biggest company with the best facilities. A third option is to buy specialized fire services form a commercial provider with collective financial means.

And then there is a fourth model that can be interesting, but which still raises questions internationally: PPP. Government and businesses work together in this to organize the fire services in a port or industrial area, but the fire services in the public area outside of the terrain borders are also arranged and executed. Public private partnerships are

generally known in many communal areas, but in the field of safety it is often still viewed with some skepticism. Is it possible to secure the safety of the industry when cooperating between government and companies? Practice proves that with a good collaborative agreement and clear tasks, responsibilities, and powers, a public private firefighting organization can be a very strong model. Even though the interests of the industry and the government are not in all cases the same. A very clearly public private partnership model for fire services can be found in Sweden, where the cooperation between government and business for the oil and gas industry and tank storage is legally mandated in regional contracts. Because of this strategic choice, the joining of forces for largescale fire scenarios is not dependent on the willingness to cooperate.

At various places in the Netherlands, large companies in ports and stakeholders at the government are still searching for cooperative possibilities. This also goes for Zeeland. In the past, Zeeland has used the appointment article in the law which mandates companies to uphold a personal corporate fire brigade. But the most optimal results are not achieved when everyone does their own thing. The optimal results are achieved when everyone does what they excel at, supply individual knowledge and want to invest with others in education and expensive material which is cared for together and can be used extensively.

There is no one blueprint for the joint organization of a firefighting organization. The best organizational format and the performance of the organization is dependent on the risk profile of the industrial area and the possibilities of the organization in terms of manpower and financial means.

Even more important is the level of ambition of the participating parties. Zeeland is in part similar to other areas in the Netherlands. It has clusters of Seveso companies, various

railyards and a large, open waterway with a lot of hazardous substance transport. Yet it is not possible to provide Zeeland with a blueprint. Because the province has, for instance, a large geographical spread of risk locations, which need to be accounted for when designing a solution.

The Netherlands has, small as it is, a large industrial infrastructure and knows various forms of Mutual Aid organizations, tuned to the needs of their areas. The port of Rotterdam has the Joint Fire Brigade; the port of Amsterdam has the tank firefighters of AMAS/AYMA. Moerdijk has the port- unit connected to the Safety Authority of Midwest-Brabant; South-Limburg has the Sitech fire brigade on the industrial site of Chemelot. And these are just a few. In most of the cases we speak of a form of PPP, which implies participation from both the government and the industry. Zeeland can look at best practices in other areas, but it will eventually have to come to its own best practice.

### **The Research Project**

What is the power of Mutual Aid and PPP? How effective are the realized models and what tasks do they perform? Or do partners also cooperate with, for instance, risk management, communication & education, training, crisis management, and even spatial organization? Knowing where and how power, knowledge, and knowhow in the field of industrial safety are best utilized; that is the goal of the international research project in collaboration with Joiff.

The research project is split into two phases. The first phase is an inventory of Mutual Aid organizations around the world. The second phase is an analysis of tasks, conduct, organizational structure & governance, education & training standards, financial control, and contribution models. Not to differentiate between 'good' and 'bad' organizations, because there is no such difference. As previously stated, the possibilities for arranging collaborations are

based on local and regional risk-settings and available means and ambitions of stakeholders. Not all port and industrial areas around the world are the same and the legal framework can also vary. In Belgium, for instance, a PPP with an independent legal entity is not possible, making it impossible for the government to participate in a collective corporate fire brigade. All while in their neighboring country, the Netherlands, PPP initiatives are quickly gaining popularity. And in Sweden such a Mutual Aid is even legally safeguarded.

The Research Project aims to share knowledge, so as to learn from each other and facilitate those organizations that are still searching for cooperative possibilities. The possibilities that Zeeland, Amsterdam and Delfzijl are still reviewing, might already be a great success (internationally). The geographical layout of Zeeland has already been tackled in various Mutual Aid agreements in the United States. By visualizing this, we can think of what might be possible locally.

The data generated by the investigation will be made available through a database, together with Joiff, so that all the members of this international industrial firefighting umbrella can profit from them. Various organizations in Amsterdam, Zeeland and Delfzijl are a part of Joiff, so that the availability is also secured for them.

We explicitly encourage organizations and people that want to contribute to the investigation to contact us. Even if you are not familiar with Joiff. Would you like to participate in the investigation or would you like more information, please contact us via the contact information given below. This subject will be one of the main themes during the Joiff conference on Malta in November of this year. The Netherlands will provide an introduction to this topic there.

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