

## EDITORIAL



**Safety Center Europe (SCE)** is a spin-off company of FPC and an answer to the growing demand of expertise

required in the field of emergency management.

SCE therefore focuses on supporting crisis management teams from an organizational perspective: public and private fire brigade structuring, advice on staffing, preparation of Emergency Response Plans, technology advice, business continuity planning, training, interim management, etc...

SCE will also provide supporting methods and Emergency Management software tools to support organizations before, during and after incidents.

With the launch of SCE we want to bring our clients know how in terms of structuring and running safety operations more efficiently. Depending upon specific project requests SCE can draw from a pool of resources ranging from communication specialists, training officers to incident commanders and security specialists.

With the SCE Times we want to inform you on a periodic basis of our activities, project, events and challenges. For more information please contact Xavier Criel.

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## CALAHAN Receives International Award in Orlando, Florida

**SCE is very pleased to inform you that the prestigious Partners in Preparedness Award, annually awarded by IAEM –International Association of Emergency Managers- was won for the first time by a project from outside of North America, namely CALAHAN.**

IAEM is a non-profit organisation with over 5000 members in 58 countries, uniting people of governmental institutes and industry, dealing with emergency management and planning.

The esteemed Award specifically acknowledges

those projects which stimulate the cooperation between the government and private sector, resulting in a more efficient and effective crisis management. CalaHan bridges the gap between government and industry with its added value of advanced methodology for emergency management

processes.

To collect our mutual Award, Xavier Criel and Ralf Bruyninckx were accompanied by Cathy Berx -Governor of Antwerp- and Bart Bruelemans - Emergency Manager of the City of Antwerp-, also representing the industrial project partners.

# SEVESO Companies

## Fire Brigade Capabilities Assessment

**When the fire brigade turns out, it is assumed that they are adequately equipped to respond to the most prevailing incidents. But what with larger industrial risks such as those imposed by SEVESO-companies?**

In Belgium, SEVESO companies pay additional taxes to government to finance additional means and measures required to protect the surroundings and the people living there. However, the distribution of those means is currently done according to metrics that are not necessarily risk-based.

Therefore, a study was undertaken upon request of the province of Antwerp, home to more than 100 SEVESO companies, to define specific requirements for additional firefighting means.

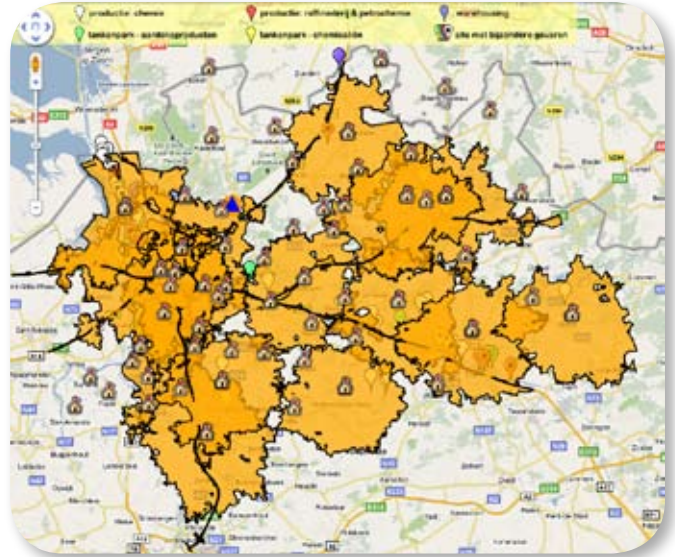
The project started from a plain level field not considering existing equipment or capabilities from the public fire brigades and companies. Purpose being to determine the maximum required capacity without making any assumptions on the existing situation.

### Methodology

In a first phase, all SEVESO-companies are subdivided in 5 categories. For each category, 3 governing incident scenarios (fire, toxic emission and explosion) are defined. Based upon time and task analysis, the required fire brigade capabilities in terms of manpower, equipment and response times are determined.

Based on the required response times, an optimal clustering of the companies and the number and location of fire stations to guarantee an adequate response is defined using GIS software.

It is obvious that the fire stations not only need to house the necessary equipment but also a staff that is well-trained from an operational point of view.



*Fire stations with arrival time of 15 minutes*

### CONCLUSION

The study defines the maximum required capacity of specialist firefighting equipment, including the optimal location with respect to intervention times, starting from plain level field in the province of Antwerp. Based on these results, further analysis is now required to account for existing capabilities of both public and private fire brigades. This will result into a framework that can be used as a basis for decision making to both government and private industry for acquiring specialist firefighting equipment and potential resource sharing.

Secondly, implementation of this risk based approach in other provinces throughout Belgium could lead to a more objective and transparent allocation of SEVESO funds based on the actual risk profile of the respective provinces.



*A Private-Public investment in specialised equipment: the BASF TurboJet.*

# NoKeos on YouTube and at the World Expo

The Calahan crisis management scenarios were put to the test during a large scale exercise at VOPAK in the port of Antwerp. Private and public emergency managers from multiple agencies collaborated through the NoKeos crisis management software.

A video with images from the exercise can be found on YouTube: search for 'Calahan Antwerp' or use this link:

<http://tinyurl.com/calahanvideo>

A short video will be shown in the mobility section of the pavilion and can be found on YouTube:

<http://tinyurl.com/calahan-expo>

The Belgian pavilion at the Shanghai Expo 2010 is built around a brain cell concept to symbolise the knowledge from our country. NoKeos is an excellent example of how knowledge is captured in software to support companies and government in crisis situations.



## Emergency Awareness Workshop: Hospitals in Russia

In March 2010 an Emergency Awareness Workshop was organized by the Russian office of IFC/World Bank, the Ministry of Health of the Chuvash Republic and Fire Protection Consultants (FPC) of Belgium.

The workshop was initiated as a result of serious concerns within IFC about the level of emergency preparedness at a health care facility owned by one of its clients, and the recent catastrophic incidents with multiple fatalities that have occurred within the Health Care sector in CIS countries, such as the Moscow Hospital Fire (2006) with 45 fatalities and the Hospital Fire in Kazakhstan (2009) with 38 fatalities.

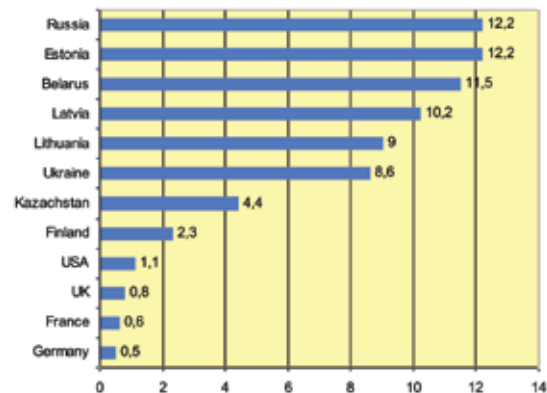
In each of the cases, fatalities were caused due to operational negligence (exit doors locked,

unprepared staff, uncontrolled storage of combustibles, etc.).

Therefore the main objective of the workshop was to raise awareness with simple examples and practical attention points that do not require considerable investments. The Workshop was received very positively by the management of several regional hospitals and the Ministry of Health in Chuvash.

### Fire Safety in CIS Countries

In general, CIS countries (former Soviet countries) perform poor when it comes to fire statistics. The table above shows the average number of fire deaths per 100,000 inhabitants for a number of representative countries throughout the world. Russia



Average number of fire deaths per 100,000 inh. (2006)

itself records about 18,000 fire deaths a year – 10 times more than the US. About 70% of fatalities occur in buildings accessible to the public.

Also little knowledge is available about life & fire safety within government/private industry once outside the large capital cities.

Therefore there is a need for :

- A better understanding about (fire) risks, statistical data, local fire safety requirements & cultural

behaviour with the eye on current & future investment programs in the CIS region

- Identification of gaps between local regulations vs. international codes & standards
- Knowledge transfer to local safety businesses (business incubation) and clients
- Improved awareness & practices in CIS Countries reflected in a decrease in number of fatalities and economical loss measured over a 5 year time period.

# Optimizing Emergency Management Organisations



During challenging economical times with changing business conditions and organisational requirements, management at industrial sites wants to assure that the impact on the safety risk profile is limited.

SCE & FPC support Lanxess Rubber in Antwerp to better align its Emergency Management Organisation (EMO) to these new requirements and organizational goals. The project started with an audit of the existing EMO and continued with the design of a new organisation. The analysis resulted into a leaner but much more effective EMO, better capable in handling small and large scale potential incidents on site.

One of the critical success factors is the assignment of an interim Fire Marshall provided by SCE to bridge the gap between intervention teams, the Crisis Management Team (CMT) and policy-makers.

As part of this entire transition process SCE & FPC also supported Lanxess Rubber with:

- Development of an Emergency Response Plan
- Preparation of practical pre-incident plans
- Development of training and exercise plans for intervention teams
- Organisation of CMT trainings
- Resource planning of intervention equipment
- Firewater distribution network analysis and testing
- Optimising the balance between investments in fixed systems vs. additional fire brigade staff

Pre - Announcement  
International Symposium

## Crisis Management at Large Industrial Sites & Ports

The large concentration of potential risks at industrial sites imposes specific challenges for operating companies and government agencies with regard to emergency management. Therefore, private and public sector emergency managers need to work together seamlessly before, during and after large incidents. At the Port of Antwerp, the 2nd largest petrochemical cluster in the world, a common emergency response method and technology is developed to align emergency management at these different organizations.

### “A Perspective for Executive Managers & Public Authorities”

The objectives of the symposium are to attract key executives and speakers worldwide to the Port of Antwerp and promote joint expertise within the field of crisis management. The symposium will be organised in joint collaboration with several public and private partners. We will keep you informed on further developments and provide more details on the symposium programme in our next SCE Times issue.

**SAFETY  
CENTER  
EUROPE**  
AN FPC COMPANY

Uniting the Public and Private sector  
in Emergency Management

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