



## COMPETENCE-BASED EDUCATION AND TRAINING: BE AWARE OF YOUR RISKS!

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### EDITORS NOTE

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### Introduction

Knowledge, competence, role-awareness, and a strong sense of responsibility are the keys to the effective workings of a corporate emergency response organization (ERO). But what exactly do the people in the response and crisis organization have to know and be able to do? What is 'the norm'? A statement: to secure an adequately equipped and trained emergency organization, simply describing tasks and roles won't get you there; you need a solid, substantive foundation with a risk and scenario analysis and a competence-based framework. Start at the beginning, be aware of your risks!

The majority of the corporate emergency and crisis organizations is designed with Emergency Response (ER) as focus. Chemical companies in the lower and higher Seveso-categories often have solid First Responder teams or corporate fire services. Healthcare institutions often emphasize emergency response teams with a large medical component. The big common

denominator for all those types of emergency organizations is that knowledge and competence are the benchmark for a properly functioning emergency organization, but companies often struggle with the question of how to determine what type of organization is needed and what demands that organization should meet. That requires customization per corporate branch, even per company.

### Design of a Corporate Emergency Response Organisation

An emergency response organization brings together people, materials, vehicles, personal protective equipment and information. Usually, the emergency response organization should be able to deploy at any given moment at an extremely fast rate: 0 to 60 in 3 seconds. So the design of an adequate ERO deserves some thought on the following issues:

- Risks and impact analysis;
- Design of the emergency response organisation;
- Roles and cooperation

with partners;

- Tasks and responsibilities.

With these four consecutive process steps, it should become clear what performances the emergency organization should be able to provide and what members of a corporate emergency response organization should know and be able to do.

### Risks and impact analysis

To establish an integral, competence-based education and training framework for a corporate emergency response organization, companies should get back to basics; the threat and risk profile of the company. Which unplanned and unwanted events can disrupt the work processes, what issues can lead to incidents and accidents, how do the credible and normative scenarios usually unfold, and which interests of the organizations are under threat when that happens? When a company knows its risk profile and has made visible what impact that profile has on the business continuity, choices can be made to protect people, environment



and assets, and with that the deployment need and equipment of the emergency response organization.

## ERO-design and stratification

An important step leading to competence profiles is determining the basic structure, or basic stratification, of the emergency response organization. The structure of an emergency response organization is often a four-layer model:

- **Level 1:** Execution of emergency service tasks by Emergency Response Officers, First Responders or fire service and security teams at an operational level;
- **Level 2:** Leading emergency response teams designed for the ERO by for example ERO shift leaders, fire service team leaders, security team leaders and control room leaders;
- **Level 3:** Coordination of multiple ERO-teams and fine-tuning with external emergency services by calamity- coordinators, corporate emergency service officers, company representatives or incident commanders;
- **Level 4:** Providing environment/stakeholder management to safeguard strategic organizational interests by management teams or boards of directors and their supportive staff.

Acknowledging such a basic stratification when designing an emergency response organization is an incredible help in developing a competence-based framework. It helps pull the focus to the expectations of every role in this structure, and simultaneously sketches the interpersonal relationships and dependencies in the internal emergency organization and

the connection to the structures of the external governmental emergency services.

## Roles and stakeholders

Every company should appoint the roles in the emergency response organization that are necessary for managing risks. If the ambition of an organization is limited to meeting the legal standards of the Working Conditions Act, then basic respondents are enough: people who fulfill the basic set of tasks of firefighting with small extinguishing materials, First Aid, alarming, evacuating, and guiding and informing external emergency services. People who, like OSHA states, fulfill that emergency service set of tasks defensively, or risk-avoidant. If specific risks occur, First Responders might be necessary. A Seveso-company with a solid corporate fire service has a more offensive unit, and also fulfills the role of Company Representative or Incident Commander.

The necessary competences to fulfill a role in the ERO are strongly dependent on the safety philosophy of a company and on how little or many stationary fire safety measures are present. Working with roles in a four-layer structure adapts well to the deployment of governmental emergency services. There too they have such a stratification. So the described roles in the ERO and the connection to and coordination with the governmental services have a big influence on the competence-based framework of an emergency response organization.

## Tasks and responsibilities

Finally, dividing the tasks and responsibilities to the people of the ERO. Roles that require other competences than that daily activities of the workers. Being competent for the regular

operational, staff or chief function does not automatically mean that you are competent for a role in the ERO, in which action is often required under stressful circumstances and outside of the regular office hours. Properly describing competence profiles in terms of tasks, responsibilities and authorizations is essential in determining what officers must know and be able to do at the abovementioned levels.

## From competences to function profiles

When the risks and scenarios are known and the choices for the foundation and the design of the emergency response organization are made, the tasks to be executed can be translated into roles, people and their function profiles. The described process steps are essential in developing and designing a corporate emergency response organization that fits the risks and types of incidents. That way, a fitting system can be set up for becoming and staying competent, in which responders only take on that knowledge and acquire those skills which are actually necessary to properly perform the tasks set out for them. For example by making the choice: yes to firefighting with stationary monitors and grab rescue, but no to firefighting in buildings or deployment in gas

suits; that way a competence profile can be drawn up for this specific emergency responder, which stipulates the attainment targets for the necessary knowledge and skills.

Which competences belong to which role? Though a framework can be universal, competence profiles are always tailored to the organization. There are norms for competences for general emergency service work, but no norms for competences for specific roles in an emergency response organization. Competences should follow the core of the four layers: emergency service workers at level 1 should be competent to perform first aid and deployment tasks and work with gear and PPE, team leaders at level 2 should be competent to lead, prioritize and organize team-safety. Level 3 has competences for coordinating an incident, weighing interests and collaborating with stakeholders like governmental emergency services and the competences at level 4 consist in large part of decision-making in crisis management and communication with internal and external stakeholders about the crisis management strategy.

## Framework conditions

To properly fill out the competence-based education



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of officers in an emergency response organization, a few framework requirements should be met:

- There should be a distinction between the proper method of competence-building: through a theoretical or practical method, a Virtual Reality method/computer simulation or a method with realistic practical circumstances on training grounds. Each level and position has its own mix;
- In the practical circumstances of the training grounds, three positions should be combined that do not and cannot be incorporated into one: the instructor/teacher, the assessor and a safety officer. Every officer has their own education tailored to their role;
- The availability of a registration system is indispensable. For each person, you should be able

to track their acquired competences and see which competences are up to date with adequate training, and which competences have become rusty and require some attention. Such a registration tool should not be seen as an "accountability tool for failures" but as a "motivational tool for personal development";

- Competences should be built from objective and verifiable criteria, which should mark clearly when someone has or has not mastered the competence;
- Competence profiles cannot be voluntary. They are not only the basis for targeted performance in a certain role, but also for safe deployment of the emergency worker and their team. That means that someone who is (temporarily) insufficiently competent does not fulfill the role for which those competences are required.

Sane employment policy protects people and provides them with the possibility to regain their competences and catch up on their backlog ASAP.

### Becoming and staying competent

The competence profile and the role-descriptions tied to that are the input for designing the process steps toward becoming competent. For every person a competence-based 'proficiency-plan', in which is stated which theoretical and practical skills they should possess and based on which criteria that knowledge and know-how is tested. And with what frequency, because a one-time education or training does not cut it. Knowledge and skills should be kept up to date and moreover, should be periodically adapted to changing insights and new techniques and tactics.

The underlying message of the described step-by-step model

is: don't think too lightly about developing and designing an education and training system. It costs time, money and energy to safeguard that a corporate emergency response organization is tailored to the specific risk-image and that the officers are sufficiently equipped with materials, knowledge and skills to perform and deploy effectively. However, it costs more money if a calamity shows that people are not (sufficiently) competent to execute their role, which caused a small incident to escalate. Corporate sectors in the industry can join forces, for example by drafting a collective 'refinery' or 'tank storage' competence-based framework, based on corporate processes and the accompanying risks. But in the end, it's the local choices and considerations that determine the education and training framework.

## NEWS FROM JOIFF ACCREDITED TRAINING PROVIDERS - JAHEZIYA

The Catalyst congratulates Jaheziya Training Provider, Abu Dhabi, who during Q 4 2018, underwent a robust audit and was awarded JOIFF accreditation.



*Presentation of Certificate of JOIFF Accreditation  
Left to right: Chris Lawson, Manager, Training - Maritime & Offshore Jaheziya, Humaid Khalifa Al Hajeri, Head of Training Unit, Gerry Johnson JOIFF Director, Alec Feldman JOIFF Director*



*Pressurised fire prop in Jaheziya*



# H2K FOAM SCHOOL 2019

April 1-5



JOIFF



For the 4th year in a row, H2K and Dr. Sthamer organise an international Foam School at the training centre in Vernon France. The Foam School is an interactive blend of theory, workshops, demonstrations and practical firefighting. Instructors from H2K and foam manufacturer Dr. Sthamer provide the 5-day JOIFF accredited training program focusing on new developments and insights on foam systems, firefighting foams and polar solvents.

The training is specially designed for those who have to deal with or have responsibility for emergency response in case of large-scale flammable liquid firefighting but also for insurance company personnel and fire engineers to gain more insight into fixed and mobile foam systems.

The unique setting upon a former refinery site with all its utilities transformed into well-equipped industrial training and testing objects, offers ideal scenery for this internationally oriented industrial firefighting event.

For more information and our online registration form, please go to:

[www.h2k.nl/trainingen/foam-school](http://www.h2k.nl/trainingen/foam-school)

