



# ECTA WORKSHOP

## “Risk assessment for drivers”

### WORKSHOP 1 > Risk assessment in SQAS

#### Marc Twisk

**SQAS Manager, Cefic**



*Opening the practical workshop session on “Risk assessment for drivers”, Marc Twisk made it once more clear, that risk assessment is at the very heart and the start of safe operations. In order to make the right choices regarding equipment,*

*training, medical prevention etc, companies need to know the risks linked to products, traffic, handling. These risks are changing continuously and need to be reassessed regularly, just at the same pace as products, procedures, equipment and people change. Showing recent examples, Marc Twisk pointed out that many incidents and accidents could have been easily avoided, if risk assessment had been done adequately.*

Risk assessment has become an important part of Cefic’s core SQAS questionnaire. 71 % of SQAS assessed companies are in line with Cefic’s recommendations, scoring “Yes” at questions such as:

- Is there a process in place to assess and document potential SHE hazards and effects...
  - ...during start-up of new operations and activities
  - ...during change of operations and activities
  - ...on all products transported and handled
  - ...in order to control and mitigate all risks ?

The slightly lower score of 68 % of assessed companies are yet prepared to face security risks. According to Marc Twisk, the score reflects that security issues are new and not on everybody’s mind yet. Companies have to question themselves:

- Does the company conduct regular reviews of operations and an assessment of potential vulnerabilities?
- Are measures taken to reduce security risk?

#### Guidelines on correct risk assessment

Marc Twisk explained how to establish an assessment system to identify and reduce risks, draw a related action plan and conduct measurements over time to assess risks towards people, equipment, environment, products and the organisation overall.

Risk assessment is a step-by-step process to identify the hazards (products, circumstances), their probability, their impact and appropriate measures to avoid them:

- What are the hazards, what can go wrong?
- How high is the probability of hazards?
- What are the potential impacts?
- Which measures should or can be taken?

To successfully comply with Cefic’s SQAS requirements, companies need to:

- set up a documented system
- conduct risk assessments at regular intervals
- ...and any time when significant changes in operations or products occur
- list appropriate measures to mitigate risks



According to Marc Twisk, any method can be used, as long as it meets the purpose. But he would recommend using one of the standard methods, adapted by each company to the specific needs and circumstances:

- Risk matrix
- Method of Fine & Kinney
- Checklist
- Participative methodology involving drivers

## WORKSHOP 2 > OSHA's work on risk assessment

### Lorenzo Munar

#### European Agency for Occupational Safety and Health at Work (OSHA)



*EU-OSHA, the European Agency for Occupational Safety and Health is a tripartite organisation with representatives from EU27 governments, employer organisations and trade unions. Its main goal is to contribute to make European workplaces safer. OSHA identifies safety and health issues related to a changing world of work, coordinates research into new and emerging risks (European Risk Observatory Unit), identifies practical approaches (Working Environment Information Unit) and disseminates helpful information (Communication and Promotion Unit). More information about EU-OSHA: <http://osha.europa.eu>.*

On behalf of the Work Environment Information Unit of the Occupational Safety and Health Agency of the EU (EU-OSHA), Lorenzo Munar gave an insight in OSHA's risk assessment campaign and tools, with a particular focus on drivers in road transport.

In 2004, the European Commission identified a need to improve the implementation and the quality of risk assessment (RA), especially with SMEs. Previous research had shown, that RA tasks, documentation and supervision are insufficiently spread, that RA is often considered a "one-off" action and conducted superficially, identifying obvious and immediate risk and leaving psychosocial risks and work organisation factors out of its scope. Efficiency review of the measures taken appeared to be insufficient as well.

Consequently, OSHA set up a network based campaign: "Healthy workplaces campaign on risk assessment" in 2008/09, targeted at SMEs. As the Agency's capability doesn't allow to reach all of the 25 mio. SMEs in Europe, OSHA set up a partner scheme and invited pan-European or international organisations to support the Healthy Workplaces campaign as official campaign partners. ECTA, the European Chemical Transport Association, is now becoming partner of this campaign as member of the 3rd group of the 33 official campaign partners.

### Drivers, a group at high risk

Road transport is considered a high risk sector by OSHA. Drivers are exposed to physical high risks such as:

- Exposure to whole body vibrations and prolonged sitting
- Manual handling during loading/unloading
- Exposure to loud noise
- Inhalation of vapours and fumes
- Handling dangerous goods

Current trends do not improve their working conditions,

according to Lorenzo Munar. Just in-time management and traffic problems put more workload and pressure on the drivers' shoulders. Besides, the job is more monotonous than average jobs and offers less learning opportunities, although the need for proper training and education increased. According to Lorenzo Munar, better knowledge on EU road codes and languages as well as on new technologies should be provided.

Effects on the drivers' health are multiple. Occupational accidents are more frequent than in other sectors and put mainly men aged 25-45 yrs at risk. Besides road accidents, slipping, falling from heights, sprains due to (un)loading are the most frequent accidents. In correlation with age, a relatively high number of back-neck-shoulder problems have been registered. Fatigue, stress, hearing loss and asbestos related diseases complete the picture.

The Agency set up a database of links to good practice resources and ran case studies on "protection of heavy goods vehicle drivers". OSHA started to communicate and work with the sector, collecting good examples of programs to promote OSHA as well as reports on road transport occupational accidents and injuries which show "what went wrong and why".

Finally, OSHA is setting up an "Interactive Risk assessment tool" (IRAT) targeted at SMEs, who can't afford expensive RA tools.

### OSHA's Interactive Risk assessment tool

Initially developed by the Dutch TNO organisation, the IRAT is a simple interactive tool to be downloaded free of charge. Its purpose is to facilitate and promote RA by developing together with social partners a practical step-by-step tool. It should help companies and SMEs in particular, to demystify and put in place a RA process.

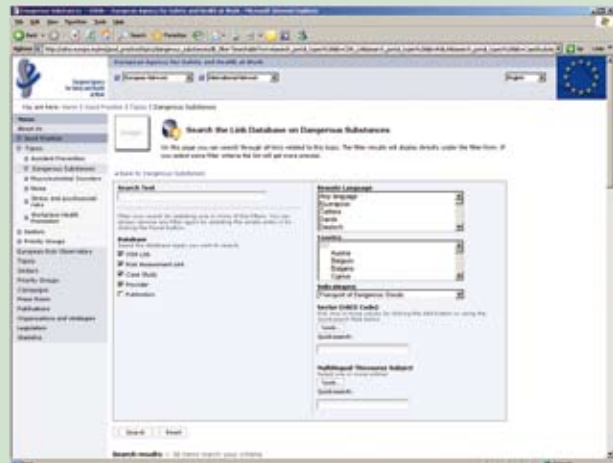
The targeted audience, Lorenzo Munar explained, are not only SMEs who want to carry out or complete their



RA, but also “our intermediaries such as social partners, associations and OSHA practitioners.” There is an evident pedagogical dimension to the tool, open to whoever is interested. OSHA chose a stepwise approach to facilitate progressive completion, using a checklist and an overview of topics, indicating progress as well. The internet tool will offer additional information on risk, legal references and equipment information whenever appropriate and linked to a specific question. Certain questions can filter out or hide subsequent questions or, on the contrary, activate subsequent questions and related information (explanations, images, hyperlinks). In case of special risks, room for legal references and a box of additional information is foreseen. Once the questionnaire is completed, a company report and action plan is automatically generated. The automatic action plan includes hazards, actions and it lists priorities. It can be updated at any time.

“We are only at the first stage”, Lorenzo Munar said, promising swift progress. As a next step, the TNO tool will be adapted for multilingual usage and translated in English. Other languages could follow, depending on interest from

national or other institutions. In close collaboration with the social partners, sectoral interactive assessment tools could be developed. In the meantime: “Keep in mind: healthy workplaces are good for you, and they are good for business”, Lorenzo Munar recalled the baseline of the EU Healthy Workplace campaign.



## WORKSHOP 3 > Case study: working at height at Loading/Unloading sites

### Huub Vergoossen

Manager European Transport Safety and Compliance, Sabic Europe



*Sabic is a Saudi Arabian chemical company with an annual production of 55 mio. Tons worldwide and employs 31 000 people. Polymer granulates stand for about 1/6 of Sabic's production and make Sabic Europe to one of the top three players on the Polyolefins market. [www.sabic.com](http://www.sabic.com)*

According to Huub Vergoossen risk assessment on loading trucks starts with visiting sites and closely observing configurations and operations at loading/unloading premises. He drew the audience's attention to falling from heights as the major cause of fatal or heavy injuries for workers. “One would think that this is related to working on roofs or scaffolding, but it occurs that 60 % of the major injuries result from falling from a height less than 2 meters”, he underlined. And no doubt, accidents of drivers falling from ladders and silos or containers *do* occur.

### Regulations

The European directive 2001/45/EC “Working at Height” provides that “any employer who intends to have temporary work carried out at height must select equipment affording



adequate protection against the risk of falls from height.” With the directive being transposed into national law, some countries provide more detailed obligations. German law, e.g. explicitly mentions compulsory usage of personal fall protection when activities are carried out on rail and road containers and bulk trucks. In the UK, the directive applies to all work at height “where there is a risk of a fall liable to cause personal injury”. In the Cefic-ECTA ‘Guidelines for safe loading and unloading of Freight Vehicles’, it reads: “the management of the site should provide safe conditions for working at heights including safe access to the top of vehicles.”

### **Incomplete Protection when Working at Heights**

Equipment for climbing and working on containers doesn't always guarantee safe working conditions. One of the most "dangerous" pieces of equipment, according to Vergoossen, were ladders built on containers. "They are very difficult to use and easily damaged by normal usage of the container" he knew from experience. They simply shouldn't be considered as safe means of access to the top of a container and Huub Vergoossen recommended, "eliminate these built on ladders from containers!"

### **Ladders provided by the site**

Current practice of providing a ladder to drivers to climb on and off the top of containers also holds various risks as well. At the top, often the space between the ladder and the container wall is insufficient to properly place the foot; often only the tip of the shoe is placed on the ladder. When moving onto (or off) the top of the container, a big step needs to be taken bearing the risk of pushing the ladder aside or away. Additionally, ladders often are not secured against slipping on the ground. Also shoes of the person climbing on the ladder can be slippery as well, especially in oily environment, and the surfaces of containers aren't clean either: rain, dirt, ice or granulate can add risk, not to mention the risk of stumbling when the container surface is not all even. Ladders on silo trucks often look fine, but the first step up from the ground level to reach the ladder is difficult.

### **Obstacles at the site**

Showing a picture, where the ceiling of the premises was too low and therefore hindering the person to stand upright on the container, Huub Vergoossen said: "It's a shame we even create such situations!" The worker is in high risk to bump his head or body against obstructing elements while handling sampling tools or unlocking manholes.



### **Handrails at the site**

Fixed handrails at premises do not always fulfil their purposes and can leave large unprotected gaps between the handrails and the transport equipment. When the truck is not positioned accordingly, they might even become an obstacle.

### **Multiple risks**

Observations have shown that the drivers themselves also make mistakes: wrong positioning of hands on the ladder or holding an item (glove, sampling tool) in their hands while climbing.

Sometimes equipment is designed in such manner that it becomes impossible to fulfil the task without taking risks: it is clearly unsafe standing on a smooth or a round surface of silos, stepping aside for opening, using excessive force or kicking to unscrew a lid, tools slipping away etc. Additionally, the suspension of the truck might respond to changing load weight and induce unexpected movements.

### **Measures taken**

"Frequency and impact are the key factors to evaluate risks and plan action accordingly", Huub Vergoossen concluded, considering that for each loading, the driver has to climb in average 4 to 5 times on the top. When falling from a height of 4 m, effects can be very severe. "Sabic therefore started with the implementation of fall arrest systems to be completed in 2009." The appropriate equipment includes a safety harness, a horizontal safety line, a self retracting life line and ladders to climb on containers. This way, workers are always secure when working at heights. "It is a 100% solution - but unfortunately it's not easy to do it every time", he acknowledged.

### **Case study : Risk Assessment Loading/Unloading Packed Goods**

After an incident that could have been fatal, Sabic conducted a RA on the loading operations of pallets with bags on a truck with side curtains and side loading. It turned out that the incident could have been easily avoided if the driver would have stayed in sight of the Fork Lift Truck operator, for instance on a spot next to his truck cabin.

Nowadays, when the truck driver is not on this spot, the Fork Lift Truck driver has instruction to stop immediately. Simple instructions like these can easily be promoted, according to Huub Vergoossen who recommended dissemination of Best Practices such as the ECTA-Cefic Guidelines on Behaviour Based Safety at loading/unloading. "At Sabic, we will promote change step by step", he explained. Implementing correct behaviour inside the company first, Sabic will then reach out to service providers and finally customers.

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