

**CTIF HazMat Commission Operations Working Group
22nd March, 2014.**

1. Opening

2. Roll call of members

Ilpo Tolonen, Roman Sykora, José Barreira Abrantes, Bojan Hrepevnik, Eszter Taskó-Szilágyi, Zdzislaw Salamonowicz, Erny Kirsch, Martin v. d. Watering, Ove Brunnström

3. Minutes of the last meeting (42nd CTIF HazMat Meeting in Luxemburg)

Gone through all the topics from the last meeting. All accepted the Minutes.

The suggestion of the WG is to convince CTIF to find some money every year to translate one guideline from one of the countries into English that proved to be or could be important for the other countries. **Roman** will ask Tore if there will be any possibilities to get some money for selected documents to be translated into English.

4. LNG situation

Roman: three accidents, well described in the papers

1. No. 1512: leakage of LNG in a factory, unexpected, took for days, the gas flows through an electrical pipe far away into an other building normally without gas in it, the gas was ignited by an electric spark, there were two causalities because of the explosion, they had no detection systems, there has to be min. safety standards if we work with LNG, there has to be detection systems, for all buildings connected with the LNG facility and alert of personnel is needed, there should be an inspection program for these facilities, and also criteria for safety analyses, have licensing for the people who work in the plant (dangers, fire and emergency tools, training exercises, etc.). There was also problem with the water supply, they need supplementary (secondary) supply systems. Detection system of LNG: according to regulations: they have to be located properly, tested and calibrated regularly. Giving information for the office in charge of these faculties, if there is an accident who is injured, hospitalization, information on the segment of the pipeline system out of service, if there is gas ignition anywhere or relevant damages, or damage over 5000 Euros.
2. No. 3911: Leakage in an LNG storage on shore, 4 workers died, damage was 18.400.000 Euros
3. No. 19815: road accident with LNG involved, took place in the afternoon on a road near a city, LNG approx. 56 m³, 85% was liquid, accident occurred because of the speeding of the driver, the tank turned over and fell on its left side, there were flames immediately between the cabin and the trailer with no smoke, after a few moments the fire reached the tires, and there was a small explosion, black smoke appeared. Witnesses saw clouds with white smoke, and about 20 min. after the accident, the tank exploded. BLEVE. Driver was killed, 14 others injured. Nearest victim was located about 200 meters away, two persons had suffered burn injuries. Heat radiation was about 16kW/m³. Lessons learned: human failure (speeding), they used isolation on the LNG tank that was combustible, the outer layer was Al that should be replaced with steel.
4. No. 21934: leakage from spherical tank from industry, capacity of 400 m³. Cause of accident: worker who made dehydration, the valve was open and frozen, they evacuated 2 primary schools and 15 houses nearby. The leakage caused cloud on 6

km². Firefighters were cooling tank with spraying water. After 1,5 hours they closed the valve. None injured, people went home the next day. Why were they using water? Heating?

5. No. 22277: Accident with a truck tank. Truck tank turned over. There was a very minor leakage by the valve, which the transport company stopped in 0.5 hour. None injured. The transport company arranged an other truck tank and LNG was pumped over into this. The road was closed for 10 hours.

Netherlands: (More information on all of the followings at the next meeting)

- Information Protocol from Unified Firedepartment presented by Martin. He will translate them into English for us in 2 months.
- Dick has translated the general LNG Card from the Netherlands.
- Teaching and learning materials for firefighters are done in the Netherlands.
- Test with measurements for LNG
- Big tests with trucks before September
- Exercise ground will be built in Rotterdam (ready for summer)
- Fire region Zeeland exercise ground will be made
- Initial guideline for ships will be prepared

Comparison of Tokeva LNG and fire from Sweden:

- Same distances for gas/vapor leakage (100 m), liquid leakage (300 m)
- Main information on what to and not to do are the same in Tokeva and Swedish doc. (LNG accident on the road)
- Generally they are almost the same
- Some information need to be updated

Ilpo:

- Ilpo made some corrections in the Swedish document (printed in blue)
- WG agreed to do some work at home between meetings (Ilpo and Ove make the draft to complete the document with instructions for first responders), the delegates are over viewing it. We are planning to be done, to create a complete document for the next meeting.

5. Other matters

No other matters