Emergency Responder Perspective for the 21st Century

Albrecht Broemme
Technisches Hilfswerk, President
Albrecht Broemme

- 1974: Volunteer THW & Firefighter
- 1977: Career Firefighter (Berlin)
- 1992: Berlin Fire Brigade, CFO
- 2006: German Federal Agency for Technical Relief (THW), President
- 2016: Special Envoy of the German Federal Government for Implementing the Statement of the European Union with Turkey on Migration
Civil Protection in Germany

A decentralized system

Federal Ministry of the Interior
Berlin

- responsible for national civil defence & protection of the population
- supervising respective offices and agencies

16 federal states responsible for disaster protection

THW German Federal Agency for Technical Relief

BBK Federal Office of Civil Protection and Disaster Assistance

www.thw.de
Actors in Civil Protection

Army Police THW  F.D.  Red Cross
THW

- Founded in 1950 as a **Federal** Agency
- Within the Federal Ministry of the Interior
- 80,000 Volunteers
- 800 full time only
- Annual budget of 180 million EUR (2010) = 140 million GBP
- THW = “civilian engineers”
Volunteers & full staff
THW’s Mandate

Civil Protection & Disasters

Outside Germany on behalf of the Federal Government

Local Emergencies on request of local authority: Police, F.D., Municipality, ...

www.thw.de
Local Volunteer Section

- Home base for the volunteers
- Rooms for training lessons
- Command centre
- Catering room
- Dressing rooms
- Washrooms & Showers
- Garages for trucks and cars
- Repair room for equipment
- Storage room for equipment
THW: Technical Help Worldwide

North- & South America:
First Mission: 1960 in Chile
40 Missions & Projects in 17 Countries

Africa:
First Mission: 1960 in Morocco
184 Missions & Projects in 33 Countries

Asia:
First Mission: 1954 in Korea
237 Missions & Projects in 35 Countries

Europe:
First Mission: 1953 Netherlands
1443 Missions & Projects in 34 Countries

Since 1953: 1.920 Missions & Projects in 120 Countries
The Fire Service

- ... is loved by everybody
- ... but nobody knows what we do.
  - Just waiting for the next run?
  - Inform people how to avoid fires.
  - Teach how to behave in case of fire.
Aims of the Fire Service

- Protect People & the environment & things – part of every city’s safety
- Prevention rather than Intervention!
- Develop Risk Management & Fire Safety Engineering
- Develop a “Fire Safety Mainstream”
Fire Fighters – a world wide family:

- 2.0 million Fire Fighters in EC
- 1.2 million Fire Fighters in Germany (40,000 Full Time Fire Fighters)
- 40,000 Fire Fighters in U.K.
- 18,000 Fire Fighters in Sweden
- 1.4 million Fire Fighters in US
Data Collection Agencies

- World Health Organisation (WHO)
- EUROSTAT (European Commission)
- World Fire Statistics Centre, Geneva
- National Agencies, Dept of Interior, ...
- National & international Organisations (CTIF, DFV, vfdb, ...)
Fire Death Statistics (WHO 2002)

- Denmark 56
- Netherlands 66
- Finland 74
- Sweden 138
- Germany 506
- UK 595
Results of the statistic (1)

- Each year, approximately 4,000 people die from fire in the EU.
- More than 100,000 people are injured.
- Most of the fire deaths are at home.
- Almost every fire death is because of smoke.
Results of the statistic (2)

- The data base within Europe is not harmonised.
- Depending on the country, statistics include those persons who died by fire on scene or within 24 hours or within 4 weeks.
Results of the statistic (3)

- Obviously, strategies to prevent fire deaths are working better in some countries than in others.

- Besides all statistics: we should avoid any child, any man or any woman to be killed by smoke or fire.
Fires kill because of ...

- a lot of toxic, black and hot smoke
- the heat up to 800 °C or more
- the fast development within a few minutes
European TV after 2 minutes
... after 7 minutes
... after 9 minutes
... after 10 minutes
Sofa Test Burn (1)

- German Model
- November 2003
German sofa after 1 minute
German sofa after 2.5 minutes
German sofa after 4.5 minutes
German sofa after 6 minutes
German sofa after 7 minutes
Sofa Test Burn (2)

- UK Model
- November 2003
UK Sofa ignition
UK sofa after 2.5 minutes
Upholstered Furniture Fire Safety Standards in UK

- Scientific Analysis shows:

- Since the introduction of the UK fire safety regulation, some 800 lives have been saved.
Key Questions for Fire Fighters:

- Why did people die in this fire?
- How did the fire start?
- What made the fire a fatal fire?
- Are there any learning points?
Why ...

- do we accept fatal fires in historic buildings, e.g. in the famous Library of Weimar (Germany), which caused irreplaceable loss?
- are there still famous libraries without a water mist sprinkler system or another system to suppress or to extinguish fires?
Why ...

- are many kindergartens protected by alarm systems at night, when the children are out,
- but most kindergartens have no smoke alarms to protect the children when they are in?
Why ...

- do we have a worldwide accepted system to explain the comfort of a hotel by the number of stars?

- is there an existing European standard for the safety of hotels, but nobody accepts it?
Key Answers after fatal fires:

- too high fire load
- too late fire detection (no smoke detectors, delayed call of "112")
- no fire extinguishers, no sprinklers
- people behaved completely wrong
Key Advices:

✓ Have operating smoke detectors!

✓ Be clever: in case of a fire ...

- **in** your flat: leave your flat - shut the doors – call “112”

- **outside** your flat: stay in – keep doors closed – call “112” – wait at a window for the Fire Brigade
Comic: What to do in case of a fire
Fire Safety Strategies

1. More fire prevention in private homes
2. Education & information
3. Detection of smoke & fire
   -> INTELLIGENT smoke detectors
4. Extinguishing systems
   -> EASY handling!
5. Effective fire service
   -> COST effective?
What has to be done?

- Reduce the number of killed or injured people by smoke or fire
- Reduce fire loss – 1 % GNP is too much
- Claim to take the best level for safety regulations in the EU / worldwide
- Cancel all restrictions against the above goals
Partnership approach

- Fire Services & Politicians (local, MP, MEP)
- Scientists & Developers
- Governmental Organisations & NGO’s

► **Our perfect ideal:** Protect & save lives, property & environment
Exercises, exercises, ...

- on local level
- state level
- Including Fire Service
  Ambulance Service
  Police
  Civil Defence
  Press / Media / Social Media
New risks in future

- Hydrogen instead Gasoline
- Climate protection vs. Fire Safety e.g. external Insulation of Facades
- More Skyscrapers – why?
- More Megacities
- World wide spread of risks e.g. Pandemic
- Dependency on Power Supply!
Thank you – keep in contact

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