Liability and Loss Prevention Open Forum - 16 September 2003

Port Security – Marine Insurance Worst Case Scenarios

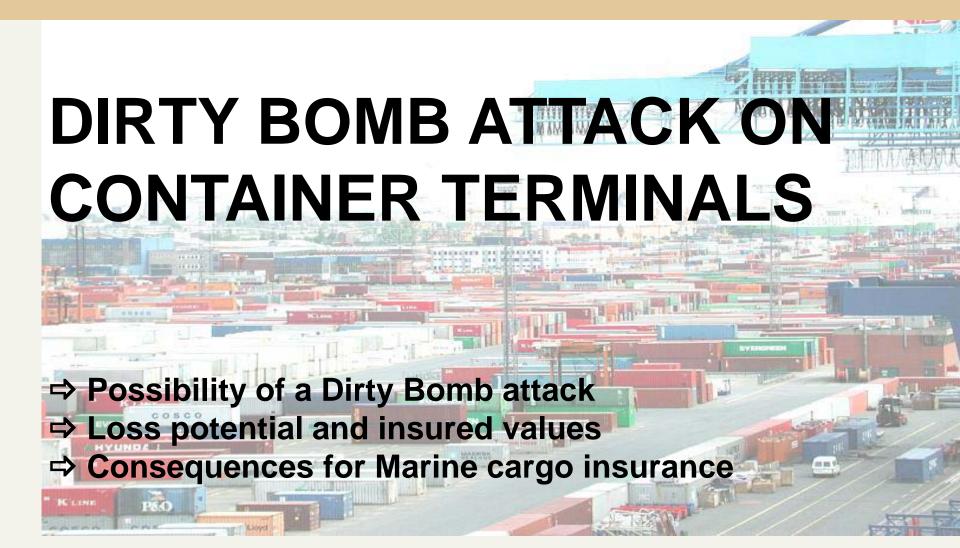
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Internal Study of Munich Re on technical and Marine cargo insurance aspects







Technical aspects:

What is a Dirty Bomb?

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How easy is it to make a Dirty Bomb?



How does a Dirty Bomb work?

- Primary Effect
- **⇒** Explosion
- Secondary Effect
- **⇒** Contamination

Tertiary Effect

⇒ Psychologic Consequences



Effect on containers

Loss potential

Decontamination



Governmental assessment and official warnings





Marine cargo insurance aspects:

- Primary effect
- ⇒ Impact of explosion and fire on containerized goods
- Secondary effect ⇒ Contamination of goods in ventilated containers
- Tertiary effect
- ⇒ Scenario 1: Biological attack goods are destroyed by public order
 - ⇒ Scenario 2: Biological attack goods are released after decontamination





Summary

- Spreading potential of a bio/chem bomb
- Manufacturing a bio/chem bomb
- Changed Maximum Possible Loss in cargo insurance

Thank you for your attention!

Dieter Berg

