Projects Counteract (FP6) and INSECTT (Marco Polo)

Pragmatic approaches to enhancing security

Martin Burkhardt

UIRR, International Union of Combined Transport Companies
Shifting road traffic to rail: 11,000 truck-loads daily in 500 trains

5.9 mill. TEU/year
Terrorist threats must be taken seriously.

But we must take care that the military and civil measures taken to increase security do not assume proportions which show effects that terrorist attacks never could have had: namely to burden the world economy with costs and administrative barriers which could lead to a recession. Security risk must be put into perspective:

<table>
<thead>
<tr>
<th>Terrorist attack</th>
<th>Victims</th>
<th>Traffic victims (/year/country)</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York (9/11/01)</td>
<td>2997</td>
<td>41 975</td>
</tr>
<tr>
<td>Madrid (11/3/04)</td>
<td>191</td>
<td>5 840</td>
</tr>
<tr>
<td>London (7/07/05)</td>
<td>56</td>
<td>3 285</td>
</tr>
<tr>
<td>OECD countries</td>
<td>[ratio of] 1</td>
<td>[to] 390</td>
</tr>
</tbody>
</table>
Problematic holistic approach
- Basis maximum scenario: nuclear attack
- Missing Cost-Benefit-Analysis
- No comparison of efficiency of measures
- Costs of measures 48 billion EUR plus 36 yearly for EU
- Security measures = increase quality ⇒ free of charge ???

The approach of total securing of the supply chain and infrastructure is inefficient!

- Improve security on the transport network at its external borders (authorities)
- Proactive and coordinated approach of the intelligence service, police force and custom authorities
- Moderate general provisions for the economy
- Specific and targeted measures for “weak links” with financial solidarity by the community
Security recommendations

36 related to 4 fields:

1. Aims/approach
2. Risk analysis
3. Security plan
4. Training

Recipients

Public Authorities
Infrastructure Owners
CT operators
Rail / road operators
Emergency service

UIRR Recommendations on improving Security in Combined Transport

July 2007
Differentiation is essential

- Only priorities allow to balance benefits versus costs (including externalities)

- A prioritized, risk-based approach is a critical element to determine practical, affordable solutions

- Once the risks are identified, assessed and prioritized, relevant action plans can be developed to mitigate the risk
### Marco Polo Project INSECTT

#### Risk analysis

#### Vulnerability factors

**Sensitiveness**  
(Dangerous goods)

**Localisation**

**Existing measures**  
(security level)

#### Risk exposure scale

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</thead>
<tbody>
<tr>
<td><strong>Niveau 5</strong></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Niveau 4</strong></td>
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<td><strong>Niveau 3</strong></td>
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<tr>
<td><strong>Niveau 2</strong></td>
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<tr>
<td><strong>Niveau 1</strong></td>
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</tbody>
</table>

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Geneva, 15/01/2009
Theoretical model: matrix

<table>
<thead>
<tr>
<th>Location</th>
<th>ISOLATED</th>
<th>SENSITIVE</th>
<th>VERY SENSITIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goods</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NORMAL</td>
<td>I-(II)</td>
<td>I-(II-III)</td>
<td>I-(II-III-V)</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>A</td>
<td>H</td>
</tr>
<tr>
<td>SENSITIVE</td>
<td>I-II</td>
<td>I-II-III</td>
<td>I-II-III-IV-(V)</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>H</td>
<td>VH</td>
</tr>
<tr>
<td>VERY SENSITIVE</td>
<td>I-II-III</td>
<td>I-II-III-IV-(V)</td>
<td>I-II-III-IV-V</td>
</tr>
<tr>
<td></td>
<td>H</td>
<td>VH</td>
<td>VH</td>
</tr>
</tbody>
</table>
Marco Polo Project INSECTT
Awareness campaign and training

Security: our common objective
Sûreté: notre objectif commun
Sicherheit: unser gemeinsames Ziel
Security: una nostro obbiettivo commune
Cluster Of User Networks in Transport and Energy Relating to Anti-terrorist ACTivities (FP6 Coordination Action)

Recommendations for Energy, Passenger and Freight Transport

The User plays a key role

Targeted Studies
Use of Official Documents for Employment in the Surface Transport Sector

- Passport
- Driving licence
- ID card
- Birth certificate
- Proof of registration in your respective community
- Work permits
- Official Professional licences (union licence, organisation licence etc..)
- Police declaration upon past behaviour / record

Recommendations for EU and national legislation Information exchange, raising awareness and training for transport companies…
Targeted Study FT10

High Consequence Freight and establishing Security Zones in urban areas for Protection against Terrorist Attacks using Freight Transport to deliver Weapons

General Objective
- PROPOSE AN INNOVATIVE STRATEGY BASED ON PROBABILITY RATHER THAN POSSIBILITY

Scope
- Identify potential target areas based on their attractiveness to terrorist actions using freight transport as a means.
- Analyse threats & scenarios
- Determine the required level of protection and mitigation means
- Identify and map potential consequences of attacks to better understand the geographic extent of an urban security zone in terms of targets, damage and casualties.

Geneva 15/01/2009
Multi-criteria analysis (MCA) to establish attractiveness indices $[0,1]$ for potential locations.

**Assessment Criteria**
- Public Impact
- Economic impact
- Social and political impact
- Infrastructure
- News Worthiness

City scenarios - Brussels

- Target
- Exclusion
- Restricted
- Controlled
FT15 Communication structure in Freight transport

- A reciprocal system to exchange information and knowledge between LEAs (Law Enforcement Authorities) and Industry.

**Transport Industry**

- Incidents
- Suspicious actions, objects and people

**Authorities**

- Training
- ALERTS

Geneva 15/01/2009
- 8166 incidents, 1125 of them major incidents.
- Total loss value of more than €603m (excluding recoveries).
- Practical tool for analysis.
- Information from Manufacturers, insurers, and LEAs.
- IIS Google Earth Tools with colors for different types of incident and routes.

The TAPA IIS Alerts & Tools:

- Recovered Goods Database
- IIS Alerts Board
- SOCA Alerts
- Incidents Trends Alerts
Different safety and security levels per mode
road open access – rail access restricted

HDV dangerous goods – school

Combined Transport: check in - out
Comparative study necessary: Security Across Land Transport

Avoid that authorities require measures where easy to implement
Avoid that security measures distort competition
⇒ Risk based approach also across modes

Vulnerability assessment Criteria
- Sensitiveness (goods)
- Localisation
- Existing devices (security level)
- Context (alert level)

- Marshalling yards
- Stations
- CT Terminals
- Loading an unloading areas
- Parking areas

Static: stationery situations
Dynamic: traffic flow situations

Geneva, 15/01/2009
Conclusions enhancing security

- Exchange of best practices
- Share experience within transport industry
- Everybody must concentrate on his role and what he can contribute to enhance security
- Responsibilities of all actors in the transport chain and the authorities must be defined
- See safety and security in general to protect life, vehicles and freight
- Risk analysis for all modes and all actors
- Cost benefit analysis for all measures and taking both into account: safety and security