Road safety: IRTAD 2011
ANNUAL REPORT

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Joint Transport Research Centre
Outline

1. The International Transport Forum at the OECD
2. The IRTAD Group and Database
3. Road safety in the last Decade in OECD countries
5. Reporting on serious traffic injuries
The International Transport Forum at the OECD:

- An inter-governmental organisation with 53 member countries focussing on transport:
  - China joined in 2011
- A think tank for global transport policy issues
- An annual summit of Ministers
Road Safety at 2011 Summit

eSafety Demonstration

Exhibition

VIP Cycling Tour

Children’s University
Seamless Transport: Making Connections

- Urban Connectivity: Improving the Door-to-Door Journey
- Rethinking the Last Mile: Urban Logistics
- Future Travel: e-Ticketing, Smart Phones, Data Sharing
- Creating Seamless Logistics
- Connectivity across Borders
- Smart Grids: Powering the e-Mobility Future
- Connections Between Modes: Road, Air, Shipping and Rail
- Connecting the Regions
IRTAD: the International Traffic Safety Data and Analysis Group

- Permanent working group under the umbrella of ITF and OECD
- 60 members from 33 countries

Mission
- World standard road safety database
- Networking for safety professionals
- Research: special reports
IRTAD MEMBER COUNTRIES
The IRTAD database

• Aggregated data, common definitions for 33 countries since 1970

• Progressively more countries. Twinning programmes with LMIC:
  – Argentina and Spain
  – Cambodia and the Netherlands
  – Cameroun (possibly with IFSTTAR, France)
  – Creation of the Ibero American Road Safety Observatory

• Road safety analysis tool for.
  – Safety performance monitoring
  – International benchmarking
Performance of OECD countries in the last decade 2001 - 2010

Change in fatalities 2010-2001

Cambodia: + 300%
Killed per 100 000 Population in OECD countries in 2010
Killed per 100,000 Population in OECD countries 2000 and 2010
Killed per billion vehicle –kilometres 2010
Killed per billion vehicle –kilometres 2010 and 2000
Ingredient for success

1. Political awareness
   - E.g.. President Chirac (France) in July 2002; Spain

2. Adoption of safe system approach principles
   - « Towards zero » progressively become the standard
   - Sweden and NL were pioneers

3. Adoption of road safety targets
   - ECMT and EC (-50%) targets
   - National targets

4. Road safety action plans

5. Regular monitoring
• Active and passive safety of vehicles
  – Passenger protection (EuroNCAP)
  – Electronic Stability Control

• Speed management
  – Automatic speed cameras
  – Section control

• Safer infrastructure
  – Expansion of Motorway network
  – Median barriers

• Young drivers
  – Graduated licensing

• Legislation
  – Demerit point systems
  – Random breath testing
  – Lower BAC level for young and professional drivers
Latest IRTAD data
Fatalities: 2010 compared to 2009
## Preliminary figures for 2011

<table>
<thead>
<tr>
<th>Country</th>
<th>Increase to +5%</th>
<th>Increase to +10%</th>
<th>Increase more than 10%</th>
<th>Decrease up to -5%</th>
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Decrease up to -5%  
Decrease up to -10%  
Decrease more than 10%  
Increase to +5%  
Increase to +10%  
Increase more than 10%

Some countries: more reduction in 3 years than in the preceding 15 years

Some explanations mentioned by countries

- Impact of the economic crisis
  - But very difficult to quantify it
  - Many factors to analyse: volume of traffic, composition of traffic, travel purposes, driving behaviours, employment, etc..

- Winter conditions in Europe

- Continuation of the positive trends

More analysis needed
2011 – 2020 UN DECADE OF ACTION
NATIONAL ROAD SAFETY STRATEGIES

• Based on Safe System approach:
  – Long Term Vision
  – Interim quantitative targets
  – Set of performance indicators to monitor progress
  – Action plan (5 pillars of the UN action plan)
# 2011 -2020 RS strategies: Vision and Targets

<table>
<thead>
<tr>
<th>Country</th>
<th>Vision/Strategy</th>
<th>Target/Goal</th>
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<tbody>
<tr>
<td>Australia</td>
<td>Vision Zero</td>
<td>-30 % fatalities -30 % seriously injured</td>
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<tr>
<td>Austria</td>
<td>Become one of the safest countries in Europe</td>
<td>-50% fatalities -20% seriously injured</td>
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<tr>
<td>Canada</td>
<td>« rethink road safety » to make Canada’s road the safest in the world</td>
<td>No target</td>
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<tr>
<td>European Union</td>
<td>Towards Zero</td>
<td>-50% fatalities</td>
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<td>Germany</td>
<td></td>
<td>-40% fatalities</td>
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<td>Netherlands</td>
<td>Sustainable safety</td>
<td>No more than 500 fatalities by 2020</td>
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<td>New Zealand</td>
<td>Safe systems</td>
<td>Several SPI</td>
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<tr>
<td>Norway</td>
<td>Vision Zero</td>
<td>-19% KSI</td>
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<tr>
<td>Spain</td>
<td>Vision Zero</td>
<td>Less than 3.7 killed / 100 000 pop -25% serious injuries</td>
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<td>US</td>
<td>Under preparation</td>
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</table>
Next priorities: addressing serious injuries

• Safe system= reducing fatalities AND serious injuries

• Much progress done on fatalities

• Need better injury record system:
  – To better assess the real number of serious injuries (underreporting and little information on severity)
  – To better understand the consequences of different crash types
  – To design adequate countermeasures

• IRTAD report: reporting serious traffic casualties
Reporting Serious injuries: recommendations of IRTAD

1. **Full picture of road crashes needed, to fully understand entire consequences of crashes and monitor progress**
2. **Need to collect information on serious injuries**
3. **While police data remains the main source of information, they should be complemented by hospital data**
4. **Data from emergency department might shed more light on road casualties.**
5. **Assessment of severity of injuries by medical professionals and not by the police officer at the scene of the crash**
6. **Medical staff should be trained to systematically classify injuries using International Classification of Diseases and to assess severity with indices (AIS, MAIS)**
7. **Other sources of data exist (insurance, forensic register..) to enrich main data sources**
8. **Linking police and hospital data: method exist : deterministic method or probabilistic method**
9. **Capture Recapture method + Linking police and hospital data useful to give fuller picture**
10. **Having an internationally agreed definition of serious injuries will help the research community**
    IRTAD proposes to define a ‘seriously injured road casualty’ as a person with injuries assessed at level 3 or more on the Maximum Abbreviated Injury Scale i.e. "MAIS3+"
What is the Maximum Abbreviated Injury Scale?

<table>
<thead>
<tr>
<th>Region</th>
<th>Injury description</th>
<th>Abbreviated Injury Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head and Neck</td>
<td>Cerebral contusion</td>
<td>3</td>
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<tr>
<td>Face</td>
<td>No injury</td>
<td>0</td>
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<tr>
<td>Chest</td>
<td>Flail chest</td>
<td>4</td>
</tr>
<tr>
<td>Abdomen</td>
<td>Minor contusion of liver Complex Rupture Spleen</td>
<td>2</td>
</tr>
<tr>
<td>Extremity</td>
<td>Fractured Femur</td>
<td>3</td>
</tr>
<tr>
<td>External</td>
<td>No injury</td>
<td>0</td>
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<tr>
<td>MAXIMUM INJURY SCALE</td>
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<td>5</td>
</tr>
</tbody>
</table>

Full report available at.
Conclusions

• Major progress achieved in OECD countries in the last Decade, and especially in the last 3 years
• Research needed to understand
• Situation much different in developing emerging countries
• Ambitious targets and programmes set for the Decade 2011-2020 based on Safe System,
• Need to monitor injuries
• Proposal for international definition: MAIS 3+

IRTAD Annual report available in the coming weeks, including detailed reports for each country.
Thank you

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