

27th Meeting of the International Traffic Safety Data and Analysis Group (IRTAD)

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National road accident statistics: worldwide practices for personal data protection

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Hellenic Statistical
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Background and Objective of the Study

- Personal data protection is a very important issue
- Road accident statistics data should not reveal the identity of people involved
- Countries have applied various practices worldwide for data protection
- **Objective of the study**
 - Investigation of the worldwide personal data protection practices for national road accident statistics



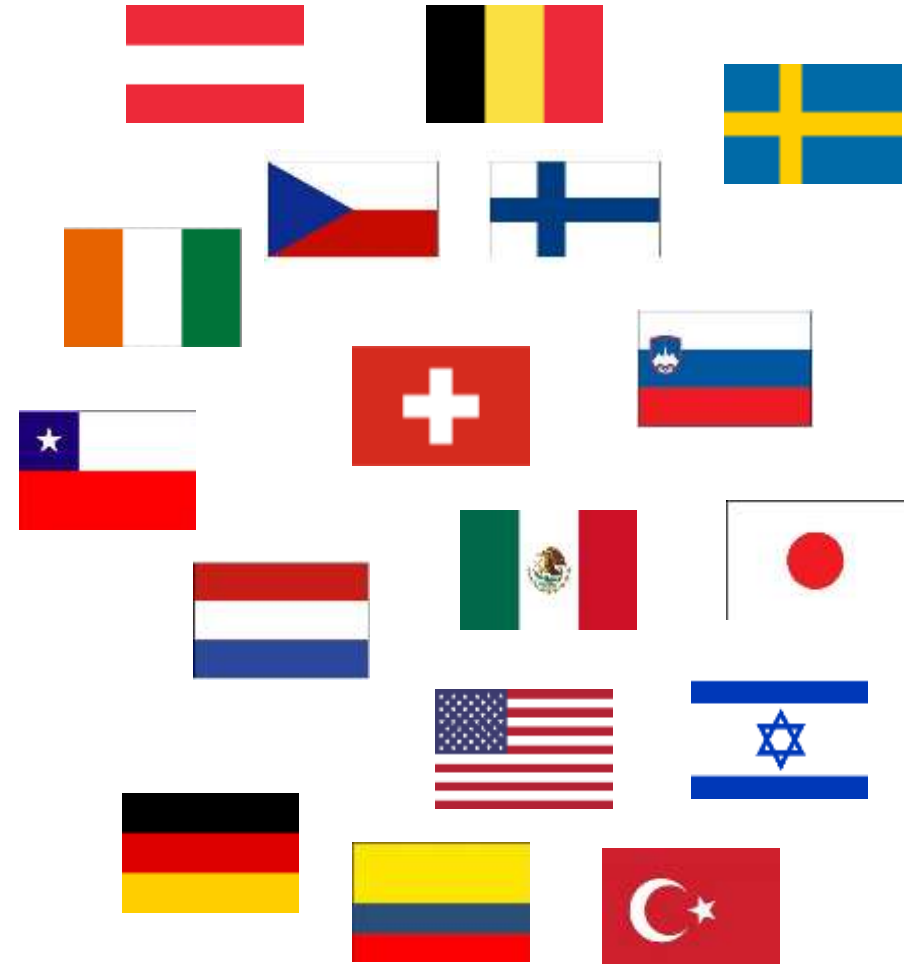
Survey – General Information

- The Survey was carried out by:
 - National Technical University of Athens
 - Hellenic Statistical Authority
- Participants
 - 18 IRTAD Countries



Survey - Participants

- 10 European countries
 - Austria
 - Belgium
 - Czech Republic
 - Finland
 - Germany
 - Ireland
 - The Netherlands
 - Slovenia
 - Sweden
 - Switzerland
- 8 Non-European countries
 - Canada
 - Chile
 - Colombia
 - Israel
 - Japan
 - Mexico
 - Turkey
 - USA



Data collection

- 5 questions:
 1. National Organization producing and disseminating national statistics on road accidents
 2. National Organization maintaining the national data
 3. Protection of personal data
 4. Restrictions of the data provided to the end users (accidents/persons/vehicles)
 5. Additional practices for personal data protection



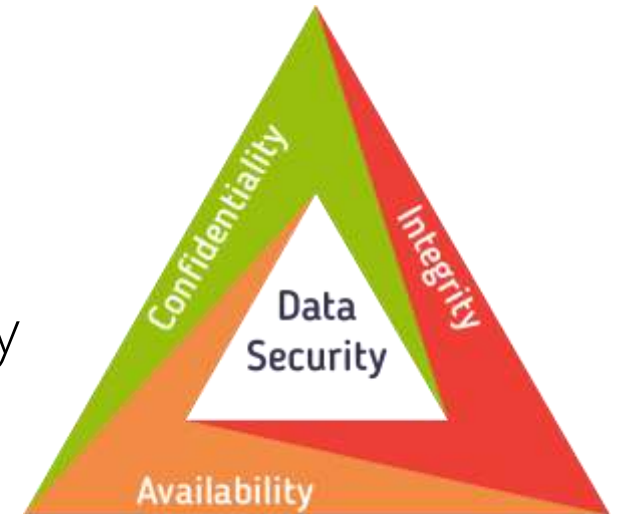
1&2. Organizations responsible for the data

Country	Organization producing and disseminating the national statics on road accident data	Organization maintaining the national data file with disaggregate road accident data
Austria	Statistik Austria	Statistik Austria
Belgium	Statistics Production: National Statistical Institute Dissemination: Vias Institute (Federal road-safety institute and AWSR (Wallonian road safety institute)	National Statistical Institute
Canada	Transport Canada	Transport Canada
Chile	Police and National Road Safety Commission	Police and National Road Safety Commission
Colombia	The Road Safety Agency	The Road Safety Agency
Czech Republic	The Police	The Police
Finland	Statistics Finland, Finnish Transport Agency	Statistics Finland, Finnish Transport Agency
Germany	The Federal Statistical Office (Statistisches Bundesamt)	Data Maintenance: The Statistical Offices of the Federal Countries The Federal Highway Research Institute (BAST) receives all data files for accident research purposes
Ireland	The Road Safety Authority (RSA)	The Road Safety Authority (RSA)
Israel	Data upholding and analysis: National Road Safety Authority Dissemination: The Central Bureau of Statistics	Central Bureau of Statistics and the National Road Safety Authority
Japan	National Police Agency	National Police Agency
Mexico	National Institute of Statistics and Geography	Local transit agencies of each municipality
The Netherlands	Rijkswaterstaat (The National Highway Authority)	Rijkswaterstaat (The National Highway Authority)
Slovenia	Statistical Office, Police (Annual Police Report)	Police
Sweden	Swedish Transport Agency, Transport Analysis	Swedish Transport Agency
Switzerland	Swiss Federal Roads Office	Swiss Federal Roads Office
Turkey	Statistics Production: General Directorate of Security and General Command of Gendarme Statistics dissemination: Turkish Statistical Institute	General Directorate of Security and General Command of Gendarme
USA	Data compilation: 50 States and District Of Columbia Dissemination: National Highway Traffic Safety Administration (NHTSA)	National Highway Traffic Safety Administration (NHTSA). Individual States collect motor vehicle crash data for their States



3. Protection of personal data

- All countries have established legal framework for protecting personal data included in the road accident databases
- Exception → Austria
 - no personal data is included
- Special case → Ireland
 - In serious collisions, it may be possible to indirectly identify a person and this possibility means the data can only be pseudo anonymized



3. Protection of personal data

Country	Are the statistical data collected by the Police protected by a clause of personal data confidentiality
Austria	No personal data are included in the injury accident data set.
Belgium	Yes, only a limited number of institutes have access to the disaggregated data. Researchers have to sign a non-disclosure contract .
Canada	Data considered as personal or confidential is not sent to Transport Canada or removed. There is also a Data Sharing Protocol with the provinces and territories
Chile	Yes, the personal data is protected by the Personal Data Confidentiality Act (number 19.628 of 1999)
Colombia	The data is delivered in an aggregate manner and for no reason at the microdata level
Czech Republic	Yes, they are protected (before all personal ID, name and vehicle number plate).
Finland	Yes
Germany	Yes
Ireland	Yes. The RSA has a statutory remit to distribute such information and statistics relating to road safety and the functions of the Authority as per the Road Safety Authority Act, 2006 .
Israel	Yes. The identified data is maintained by the central bureau of statistics only .
Japan	Yes
Mexico	The data reported by the police does not take personal data , only general data of the accident.
The Netherlands	Yes. The data is provided according to law to Rijkswaterstaat for use and dissemination with/within the Road Safety Database . The data does contain privacy sensitive datafields and is “processed” in a secluded environment by authorized staff
Slovenia	When Police is sending data to other organizations (like Statistic Office, Traffic Safety Agency etc.) they never sent personal information .
Sweden	Yes. The data is protected by a “ statistical privacy ” statement in the Public Access to Information and Secrecy Act. People working with road safety have to sign a secrecy agreement
Switzerland	Yes. A data protection contract is required for raw data and for aggregated data disclosing individual information
Turkey	Yes. Statistical data collected by Police is protected in compliance with Personal Data Protection Law .
USA	Yes. Crash data containing personally identifiable information (PII) is protected by a variety of federal and State laws .



4. Restrictions of the data provided to the end users

- Minimum number of cases (accidents/persons/vehicles) allowed to be contained at the statistical tables provided to the end users
- Two cases
 - data without time and place (location) specification
 - data with time and/or place (location) specification
- Most of the countries do not apply any minimum standard



4. Restrictions of the data provided to the end users

No minimum standards specified

- Austria
- Chile
- Colombia
- Czech Republic
- Ireland
- Slovenia
- Switzerland
- Canada
- Japan (statistical tables with consideration)
- Germany
- Sweden (but minimum of 3 cases per cell in the future)
- USA
- Mexico



4. Restrictions of the data provided to the end users

Countries with specific restrictions

- **Belgium**
 - Minimum number of 3
- **Finland**
 - 1 accident or 1 killed person (without time and place specification)
 - Individual road accidents, free for everybody, with a limited number of data (with time and/or place specification)
- **Israel**
 - Minimum number less than 5 (if no identifying data of the involved persons are included)
- **The Netherlands**
 - Age groups are used instead of concrete age
- **Turkey**
 - Every road accident is contained in the statistical table as the number of accident is 1 and the number of person and vehicle can be at least 1.



5. Additional practices for personal data protection

- In most countries the data provided to the end users do not contain any personal information
 - **Belgium:** it is not allowed to provide disaggregated data to the end user
 - **Canada:** any confidential or personal data is removed
 - **Chile:** Vehicle license plate is not given
 - **Germany:** the statistics do not contain any personal data
 - **Ireland:** data as license plate number, make or model of the vehicle, vehicle insurance, name address and tax compliance are excluded.
 - **Israel:** identifying data is not provided
 - **Slovenia:** no personal data
 - **Switzerland:** personal data are not included in the dataset



5. Additional practices for personal data protection

- Other practices
 - Austria: end users are exclusively experts
 - Colombia: there is a data policy but is not officially approved yet
 - Finland: data are provided only for research purposes
 - Mexico: official institution protecting personal data (National Institute of Transparency)
 - The Netherlands: National Privacy Authority
 - Turkey: Turkish Personal Data Protection Law
 - USA: Privacy Act and Health Insurance Portability and Accountability Act (HIPAA)
- No other practices are applied
 - Czech Republic
 - Japan
 - Sweden



Conclusions

- National Organizations and Institutions worldwide are responsible for producing analyzing and maintaining road accident statistics.
- All countries are considering seriously the data security issue in the field of accident statistics
- Laws have been established and practices are applied towards this direction
- Restrictions are applied to accident data, in terms of the information the end users receive



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