

# The Global Safety Database as an objective metadata platform for the worldwide analysis of road safety approaches on the way to Vision Zero.

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# Motivation of the Global Safety Database

## Purposes

The objectives of the **Global Safety Database** (GSD) are...



...the research, characterization, and objective evaluation of national and international data sources in the field of traffic and vehicle safety.

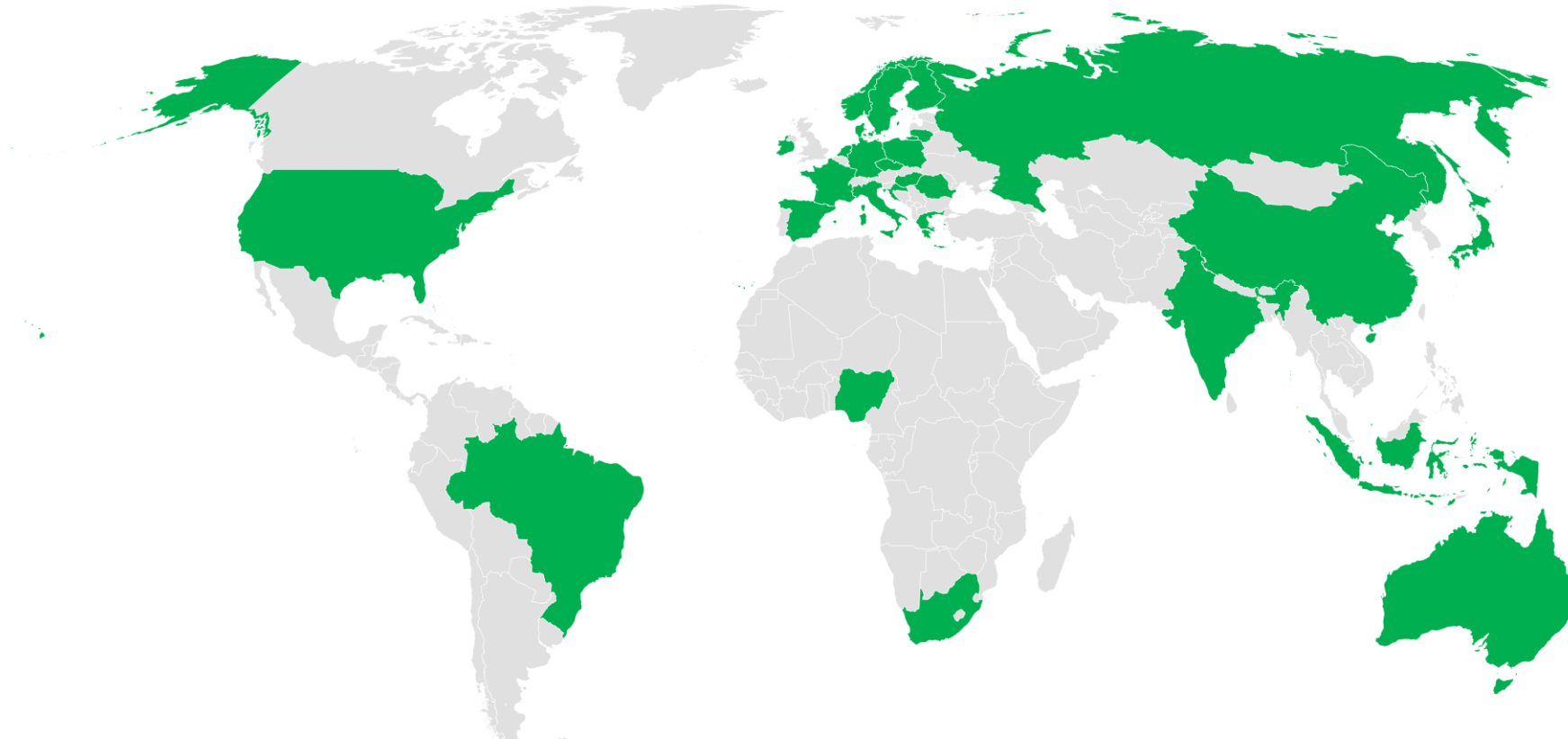
The GSD includes...

... a **web-based meta database** with a dynamic usability.

... an **objective evaluation method** on the data sources.

# Researched countries for the GSD

## Overview

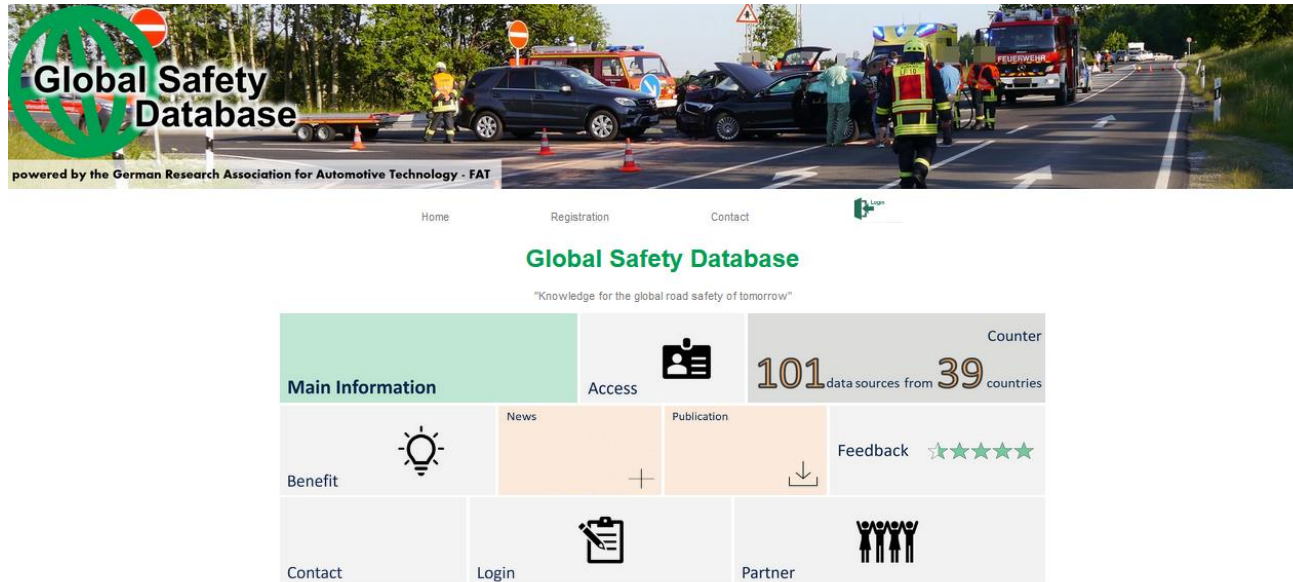


*Total number of data sources*

**101**

# Usage and access to the Global Safety Database

Live Demo



<https://www.global-safety-database.com/>

- The GSD is **dynamic** and can be extended through adding more data sources and more questions to include more stakeholders (e.g. legislative bodies, authorities, associations, universities, or consumer protection organizations)
- The GSD is **accessible to everyone** and **continuously improved** through the supervision of the steering committee.
- The GSD is an **essential tool** to foster the **worldwide harmonisation** of traffic accident databases through sharing expert knowledge.





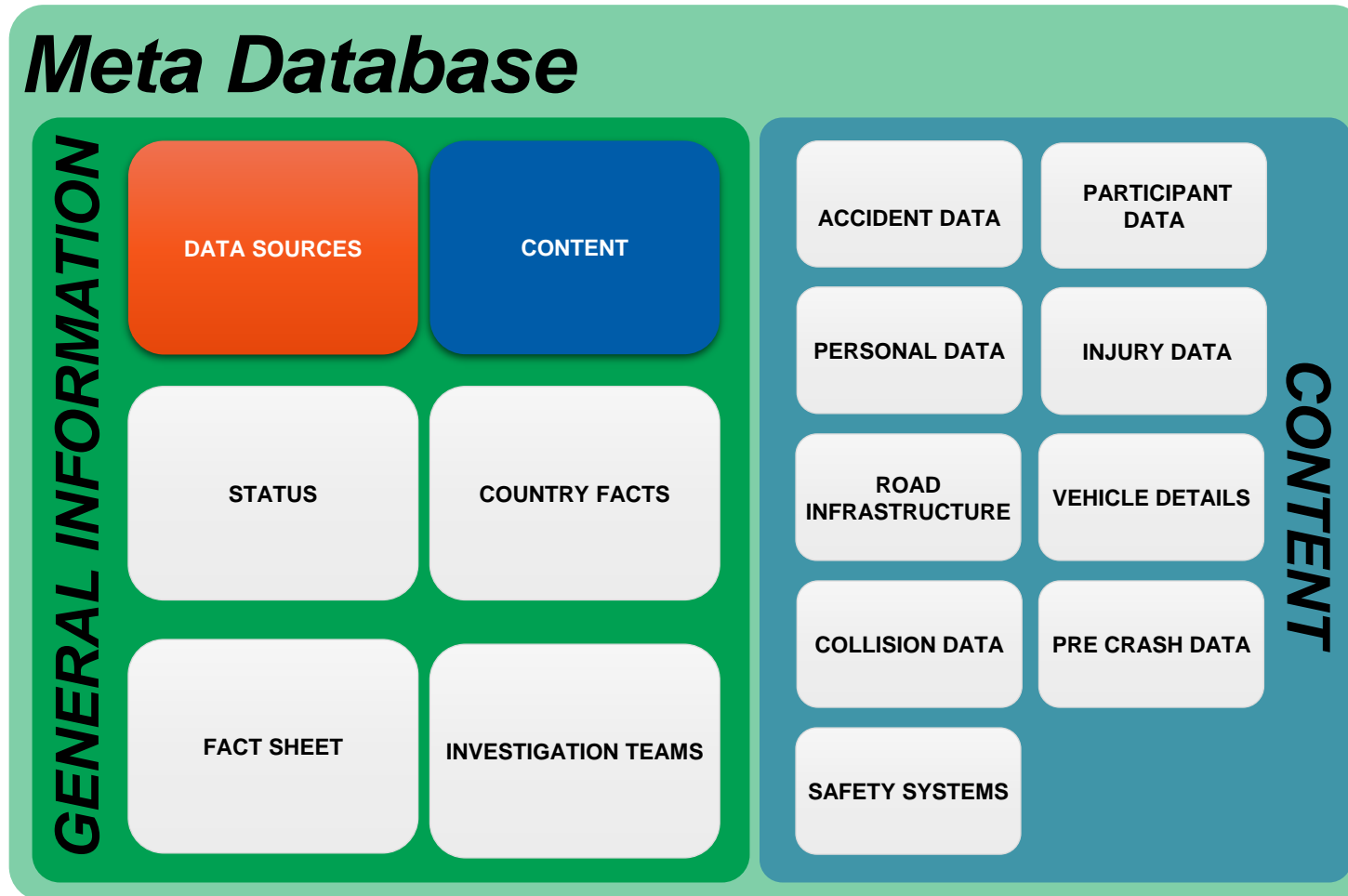
**THANK YOU  
FOR YOUR ATTENTION**

Mr. Michael Wagner

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# Conception of the meta database

## Structure



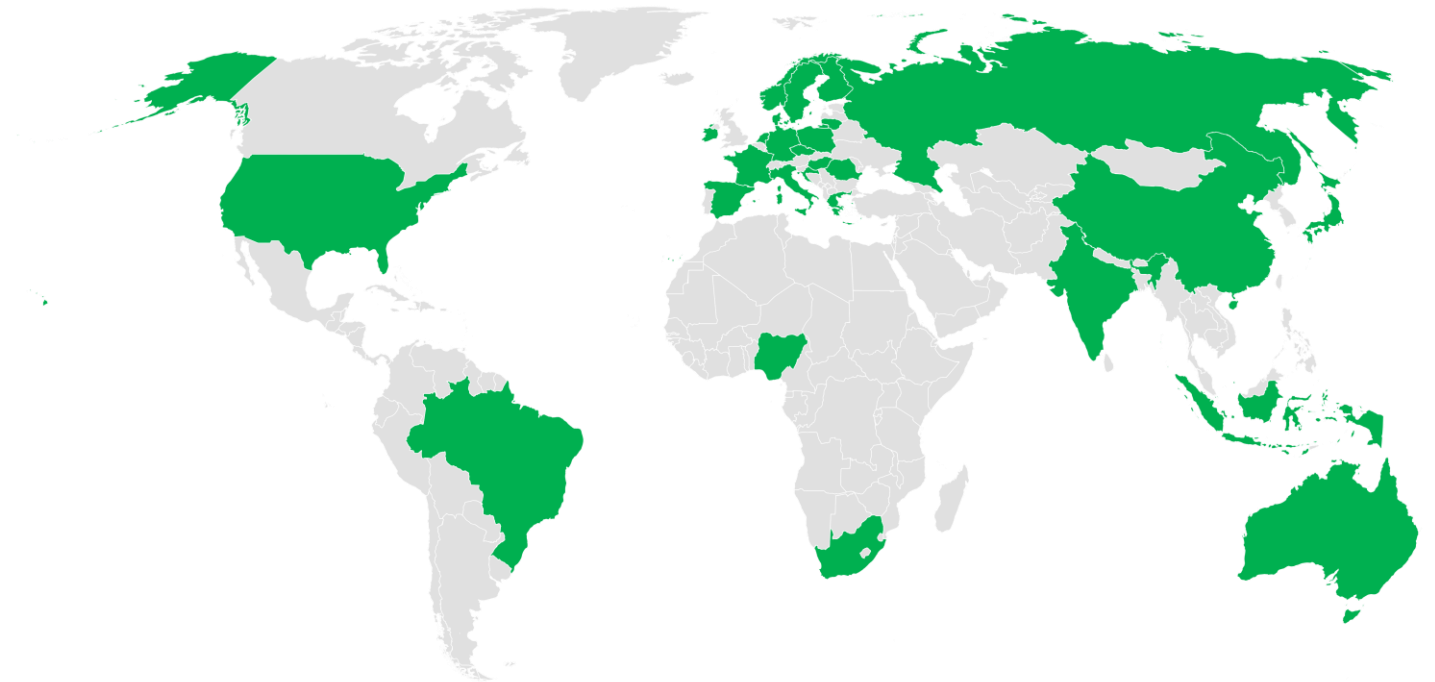
- 15 data tables directly linked by one Source\_ID per data source
- 237 variables are included
- Parameter coding
  - Available
  - Not available
- Codebook included

# Conception of the meta database

## Content

## Researched countries by road accident databases

- |                   |                  |
|-------------------|------------------|
| 1. Australia      | 15. Italy        |
| 2. Brazil         | 16. Japan        |
| 3. China          | 17. Lithuania    |
| 4. Croatia        | 18. Netherlands  |
| 5. Czech Republic | 19. Nigeria      |
| 6. Denmark        | 20. Norway       |
| 7. Finland        | 21. Poland       |
| 8. France         | 22. Romania      |
| 9. Germany        | 23. Russia       |
| 10. Greece        | 24. South Africa |
| 11. Hungary       | 25. Spain        |
| 12. India         | 26. Sweden       |
| 13. Indonesia     | 27. USA          |
| 14. Ireland       |                  |



*Total number of data sources*

**101**



# Methodology of the objective evaluation

## Background

For the development of a methodology to evaluate the meta database, a questionnaire from the German automotive industry on road safety challenges was created.



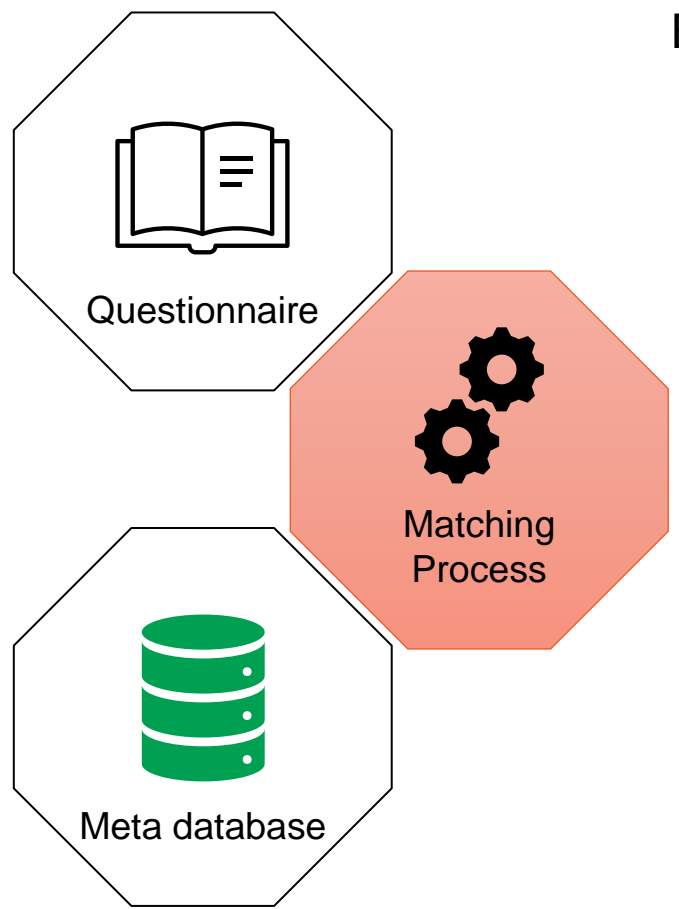
The questionnaire includes **130 questions**

Each question is inventoried and coded in binary codes on the same variable set as the meta database.

It can be distinguished between visible (public) and non-visible (private) questions.

# Methodology of the objective evaluation

## Matching process



## Example

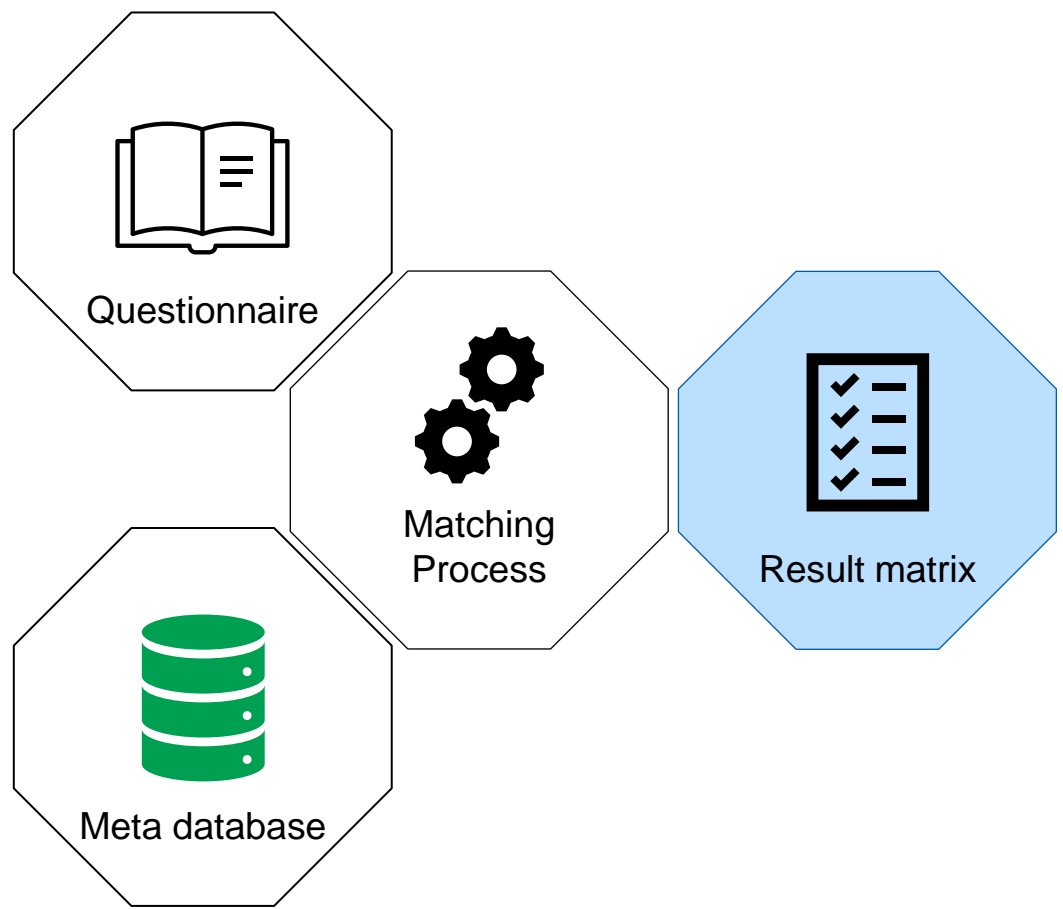
Question_ID	Variable_1	Variable_2	Variable_3	Variable_4
1	1	1	0	1

Source_ID	Variable_1	Variable_2	Variable_3	Variable_4
1	1	0	1	1
2	1	1	1	1
3	0	1	0	1
...				

 Match

# Methodology of the objective evaluation

## Result matrix



Question_ID	Source_ID 1	Source_ID 2	Source_ID 3
1	2/3 = 66%	3/3 = 100%	2/3 = 66%
...			

The result is a dynamic matrix that indicates the percentage of the variables covered in each data source to answer the question.

# Governance of the Global Safety Database

## Organisational chart

