



National Technical University of Athens
Road Safety Observatory

www.nrso.ntua.gr

FIFTH UNITED NATIONS GLOBAL ROAD
SAFETY WEEK

6-12 May 2019



Save Lives

#SpeakUp

Open science in road safety



Katerina Folla

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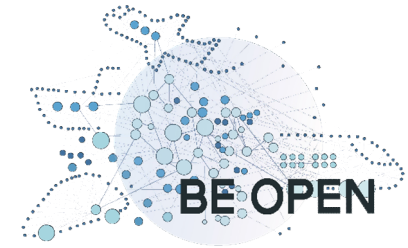
Together with:
George Yannis

Workshop:

**Digitalisation
and Road Safety
Research**

17
May
2019
at 14:00

The BeOpen project



- **Title of the project:**
European forum and oBsErvatory for OPEN science in transport
- **Partners:**
17 participants and 9 third parties
- **Duration of the project:**
30 months (January 2019 – June 2021)
- **Framework Programme:**
Horizon 2020 - The EU Union Framework Programme for Research and Innovation – Mobility for Growth



Participant	Country
CERTH	EL
TOI	NO
ECTRI	BE
VDI/VDE	DE
ATHENA RC	EL
OC	DE
FEHRL	BE
FIT	IT
NTUA	EL
DLR	DE
EATEO	CY
EURNEX e. V.	DE
WEGEMT	NL
UITP	BE
HUMANIST	FR
Konnekt-able Technologies	IE
Scipedia S.L.	ES



Background

- **Open Science** is a new approach to the scientific process, aiming to provide accessibility to all levels of research community and society, increase integrity and reproducibility of research.
- The rapid growth of **digital technologies** and new collaborative tools enable the vision of Open Science.
- In the EU, the **European Open Science Cloud (EOSC)** has initiated as a single point of access to all European research data, data services, tools and standards.
- Within this context, there is a need for promoting Open Science within the **transport research community**.



BeOpen Methodology

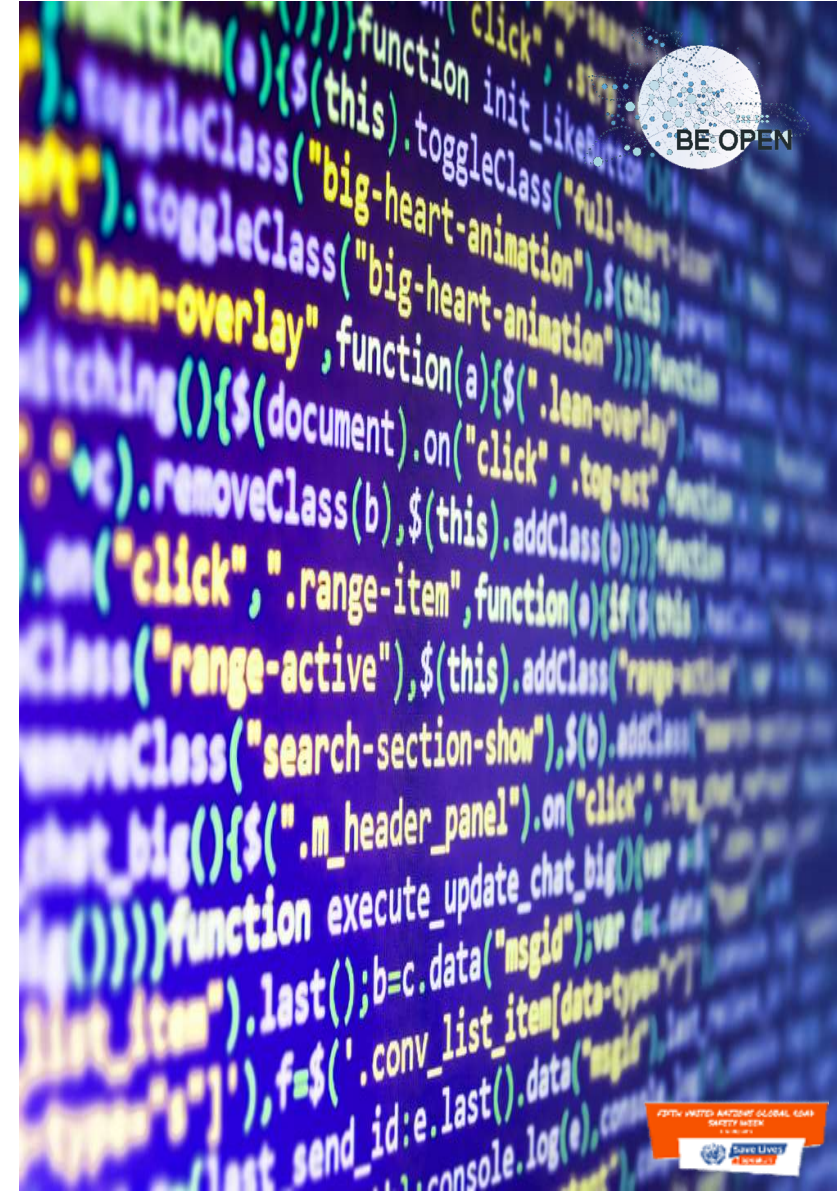


- Develop a **framework of common understanding**.
- Develop an **inventory of Open Science resources** (research outcomes, services and research data infrastructures) related to all transport modes.
- Set up the **TOPOS Observatory and Forum**, that will act as an evidence-based, community driven sharing of knowledge and experiences.
- Develop a **"Code of Conduct"** to provide the legal and ethical guidance needed to operationalize Open Science principles.
- Formulate a **set of guidelines** for decision making and planning.



TOPOS Forum and Observatory

- **TOPOS** will contribute to creating a solid knowledge base on the implementation of Open Science approach in transport research.
- TOPOS will contain two components:
 - **TOPOS forum**, which will capture the common practices of data stewardship in transport research.
 - **TOPOS observatory**, which gathers all research results (publications, data, software) related to transport research in Europe.
- The aim of TOPOS is to **empower research and industry communities** to develop Open Science solutions following the EOSC principles and under a commonly agreed Code of Conduct.



Open Road Safety Information Systems (1/2)



Road Safety Observatories

- [ERSO, European Road Safety Observatory](#)
- [OISEVI, Ibero-American Observatory](#)
- [African Road Safety Observatory](#)
- [Dacota, EC Project – Knowledge Centre](#)
- [NRSO – NTUA Road Safety Observatory](#)



Open Road Safety Information Systems (2/2)



Road Safety Decision Support Systems

- [SafeFITS, UNECE-Global Road Safety Model](#)
- [SafetyCube, EU Road Safety DSS](#)
- [iRAP, Road Safety ToolKit](#)
- [PRACT, CEDR](#)
- [PIARC, WRA Road Safety Manual](#)
- [US NHTSA/FHWA CMF Clearinghouse](#)
- [AustRoads Road Safety Engineering Toolkit](#)





Scientific and Social Impact

- During the last years, several Open Road Safety Information Systems have been developed, **adding significant value** to the quest for safer roads worldwide.
- The more developed Information Systems are associated with countries and regions with higher road safety performance and are a direct sign of **advanced road safety culture**.
- Road Safety Information Systems are key management tools for developing road safety capacity and **engaging stakeholders** (not only for providing scientific evidence but also for monitoring efforts).
- Making road safety research results more accessible contributes to **better and more efficient science** and provides greater evaluation by the scientific community.



Future Challenges

- Open Science could increase the current **great potential** of Road Safety Systems with:
 - more data and knowledge
 - broader geographical coverage
- **Global impact could be optimized** through:
 - a network of open science road safety systems
 - standardisation of data, processes and systems
 - evidence-based & customized best practice guidelines
- **“As open as possible and as closed as necessary”**: issues of personal data protection, confidentiality, IPR concerns etc. should be tackled.





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