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# European forum and oBsErvatory for OPEN science in transport

**TOPOS Observatory and Forum Webinar**

**21/01/2021**

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**TOPOS Observatory for Individuals**

**Clara García González, Scipedia**



- Scipedia commercializes a **comprehensive and unparalleled solution** for the needs of open access / open data / open innovation / open science.
- Scipedia's solution **essentially integrates an advanced online publishing and data management platform within a collaborative social network.**
- Scipedia **offers publishing and data repository management services** (SaaS, Software as a Service) on the platform Scipedia.com and the possibility to build customized solutions for institutions (SaaS or hosted on your server).
- **Customized solutions** can be build on the following components: Scipedia Open Science Portal (SOSP) and Scipedia Open Publishing Platform (SOPP).



# SCIPEDIA

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- **Scipedia Open Science Portal (SOSP)** offers a flexible and reliable solution for creating/customizing institutional open collaborative platforms. It includes, among others, the following features: institutional profiles support, interface with institutional CRIS, management system for institutional, personal and community repositories (including big-data), support for profiles of communities or research projects, gamification tools, etc.
- **Scipedia Open Publishing Platform (SOPP)** offers a comprehensive solution for creating/customizing a corporative/institutional online publishing platform. It includes, among others, the following features: online journal management system, online edition tools, web publishing tools, import/export tools, basic social network services, management of personal profiles (including Google Scholar link), etc.

# What can Scipedia offer ...

## ... to Be Open?

EDIT ONLINE

DATASETS

VIDEO



LATEX



Google Docs

The screenshot shows a Scipedia document page with the following components:

- Document Title:** Traffic, Air Pollution, and Distributional Impacts in Dar es Salaam: A Spatial Analysis with New Satellite Data
- Authors:** Sumita Dasgupta, Sonik Lall, David Wheeler
- Document Information:** Published on 01/01/2020, Volume 2020, 2020, DOI: 10.1596/1813-9450-9185, Licence: CC BY-NC-SA license
- Document Score:** Views 0, Recommendations 0
- RE-IMPORT DOCUMENT:** Click the button below to re-import your document to: [RE-IMPORT]
- SHARE THIS DOCUMENT:** Facebook, Twitter, LinkedIn
- KEYWORDS:** AIR POLLUTION, HEALTH, POLLUTION EXPOSURE, SATELLITE MONITORING, SPATIAL ANALYSIS, TRAFFIC CONGESTION, VEHICLE EMISSIONS, VULNERABLE POPULATION

- Enriched web format + online editor:
  - text, references, links
  - Datasets,
  - video
  - ...
- Import from Word / LaTeX
- **Online (collaborative) edition**
- PDF viewer
- Linked to authors/inst. profile Information
- Indexing support (metadata)
- Keywords (tags)
- Categories
- DOI and doc. info
- Licence
- Other utilities:
  - Discussion forum
  - Revisions history
  - Share this document
  - Document score
  - Views / recommend.

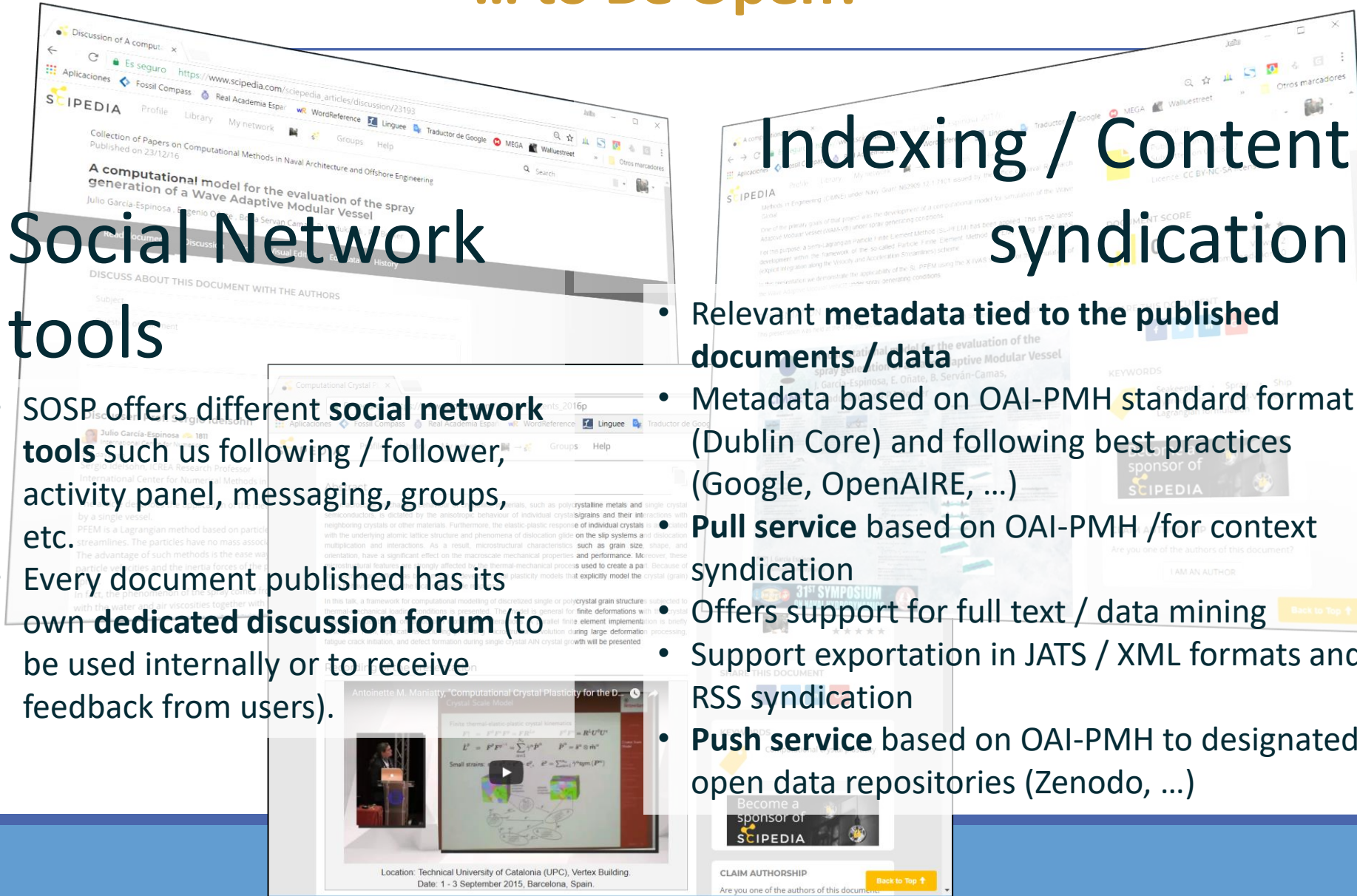
# What can Scipedia offer ... ... to Be Open?

## Social Network tools

- SOSP offers different **social network tools** such as following / follower, activity panel, messaging, groups, etc.
- Every document published has its own **dedicated discussion forum** (to be used internally or to receive feedback from users).

## Indexing / Content syndication

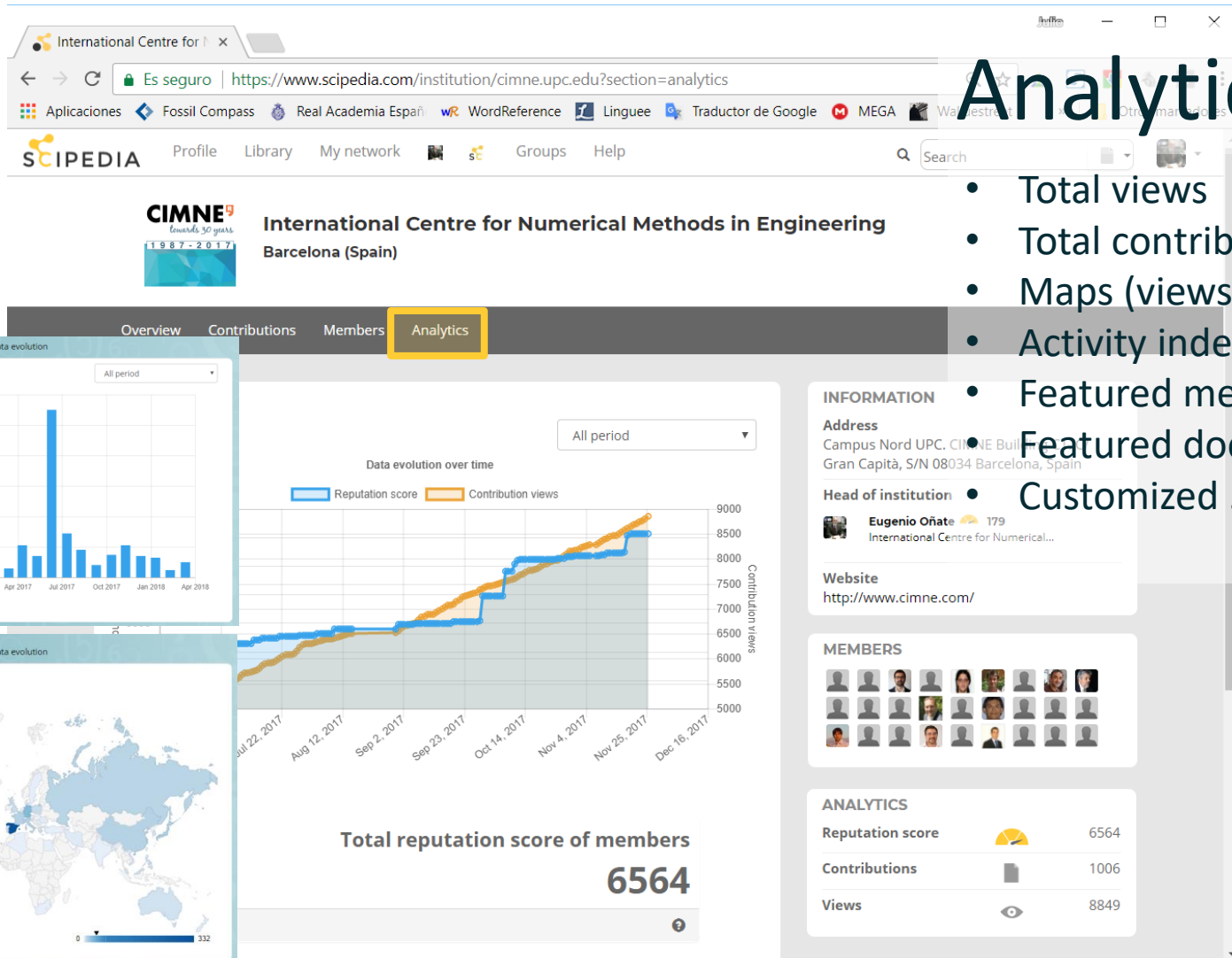
- Relevant **metadata tied to the published documents / data**
- Metadata based on OAI-PMH standard format (Dublin Core) and following best practices (Google, OpenAIRE, ...)
- **Pull service** based on OAI-PMH /for context syndication
- Offers support for full text / data mining
- Support exportation in JATS / XML formats and RSS syndication
- **Push service** based on OAI-PMH to designated open data repositories (Zenodo, ...)



# What can Scipedia offer ... ... to Be Open?

## Analytics

- Total views
- Total contributions
- Maps (views)
- Activity index (reputation)
- Featured members
- Featured documents
- Customized ...



# What can Scipedia offer ... ... to Be Open?

A few examples of Scipedia's (**online edition**) capabilities

1. Embedded **VIDEO**:

[https://www.scipedia.com/public/Garc%C3%ADa-Espinosa\\_et\\_al\\_2016a](https://www.scipedia.com/public/Garc%C3%ADa-Espinosa_et_al_2016a)

2. Embedded **VIDEO & EXCEL** spreadsheets:

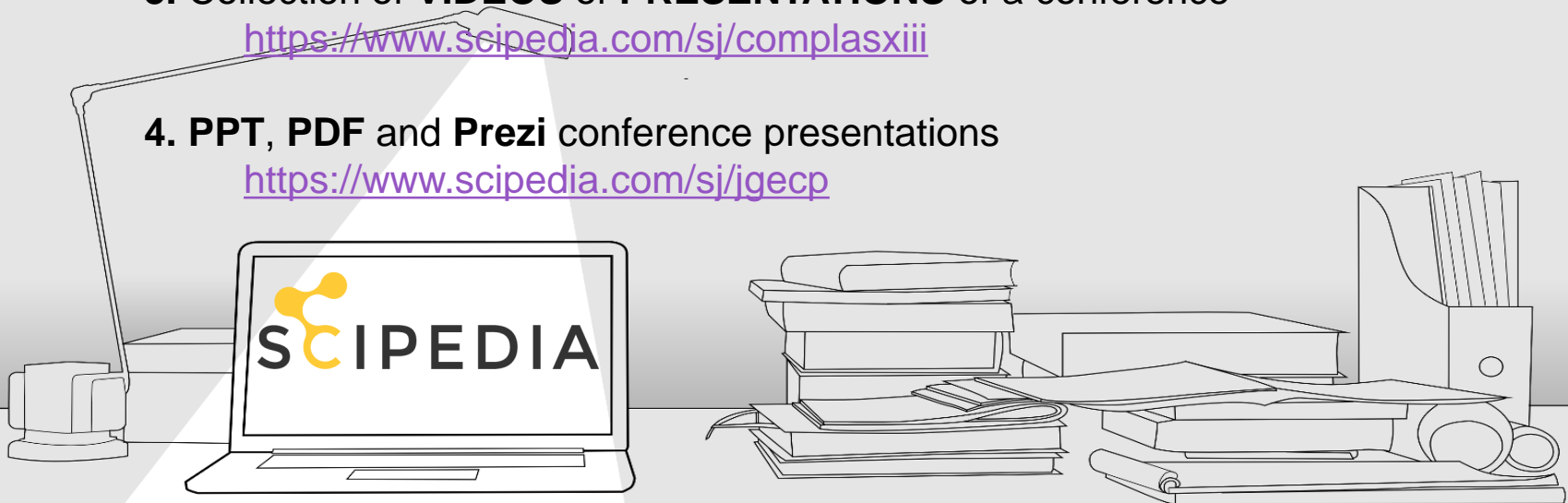
[https://www.scipedia.com/public/Guti%C3%A9rrez\\_Romero\\_et\\_al\\_2017a](https://www.scipedia.com/public/Guti%C3%A9rrez_Romero_et_al_2017a)

3. Collection of **VIDEOS** of **PRESENTATIONS** of a conference

<https://www.scipedia.com/sj/complaxxiii>

4. **PPT, PDF** and **Prezi** conference presentations

<https://www.scipedia.com/sj/jgecp>



# What can Scipedia offer ...

## ... to Be Open?

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**Scipedia offers a flexible, scalable and easily customizable solution based on the most reliable technology**

Web-service using the well-known LAMP software bundle (highly secure, the preferred solution for web development).

Document edition and management tools are based Mediawiki. Mediawiki achieves the best scalability through multiple layers of caching and database replication.

Database services are based on MySQL. MySQL, with more than six millions operating installations is the most popular data base, and used by leading organizations like Facebook or Adobe.

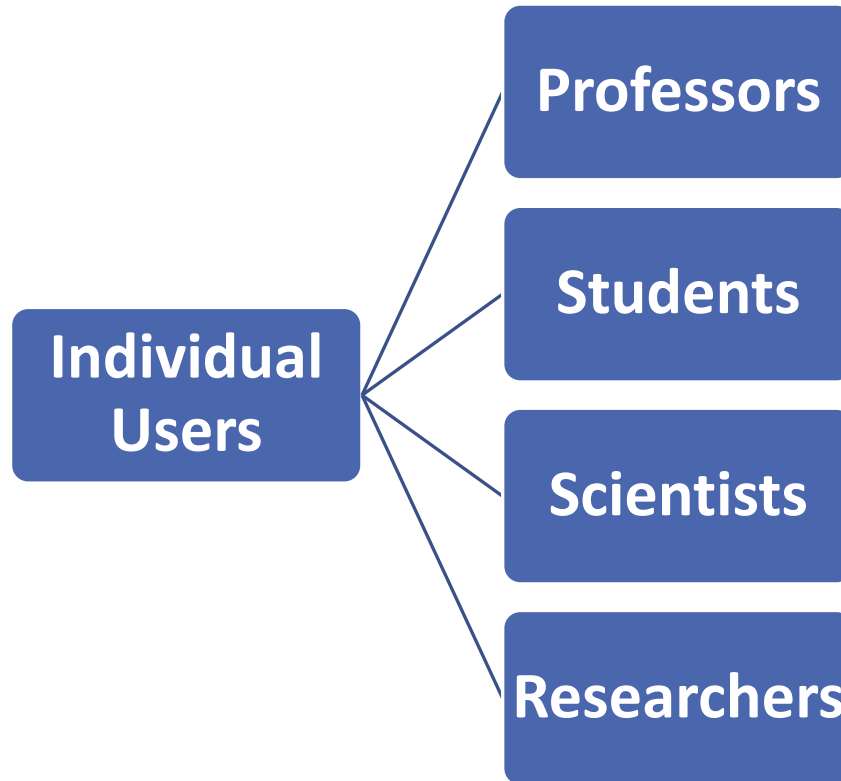
Offering SaaS services under AWS (S3, EC2, RDS)

- > 99.999% uptime service (n-balanced instances)
- geographic redundancy (duplicated database instances in different availability zones)
- 99.999999999% durability of stored data
- objects size up to 5 TB
- scalability: volume and number of objects practically unlimited.
- highly responsive to increased levels of traffic thanks to auto-scaling

# TOPOS Observatory for Individuals

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The TOPOS Observatory for Individuals is focused on individual users from the science and technology areas that are looking for sharing information.



# TOPOS Observatory for Individuals

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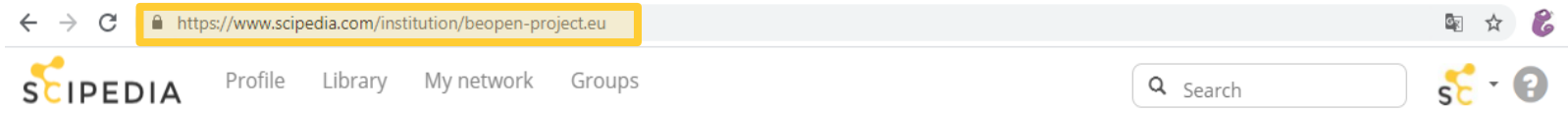
**Explore:** search and discover research products of any type in the field of transport research.

**Discuss:** add comments on published documents and datasets.

**Provide:** provide metadata, content or datasets.

**Link:** link a research result to its funding project through the project profile curator.

# TOPOS Observatory for Individuals



European forum and oBservatory for OPEN science in transport (BeOpen) 

## Open Portal

Overview Publications Members Analytics

**BE OPEN** aims to create a common understanding on the practical impact of Open Science and to identify and put in place the mechanisms to make it a reality in transport research. Achieving Open Access to publications, making their underlying data FAIR (Findable, Accessible, Interoperable, Reusable) and open where possible, and using open and collaborative processes and infrastructure via the European Open Science Cloud (EOSC) will be key factors in making transportation researchers share-reuse-reproduce science and in bringing such a critical sector closer to the society for enabling open innovation and citizen science.

Openness, transparency, fairness, reproducibility of science are key aspects around which BE OPEN will seek to establish the ground rules for the transport research communities, ultimately establishing a community of transport research organizations willing to work on the basis of a commonly agreed "Open Science Code of Conduct". To this end, BE OPEN has brought on board key transport and open science related communities in a two-fold action plan: to engage them in a participatory approach fostering a dialogue on Open Science (what exists, what should be done, how it should be done) among relevant stakeholders in Europe and around the world, and develop a detailed roadmap for the implementation of sustainable open science modules which include key practices, infrastructures, policies and business models, all taking into account the specificities of the transport research domain, and the use and integration of existing-infrastructures and the emerging EOSC initiative.

### INFORMATION

#### Website

<https://beopen-project.eu>

### MEMBERS



### ANALYTICS

#### Reputation score

385

#### Publications

1185

#### Views

175

- Customized layout / design
- Dedicated instance

(institutional URL)

• Home page

• Overview

• Information

• Linked to repositories

• Directory (members)

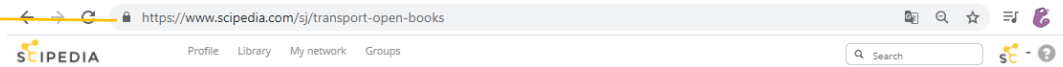
• Analytics

• Curation (edition, administration)

# TOPOS Observatory for Individuals

## Document/Data collections

Customized URL



Customized banner



Title / Scope

Collection of open chapters of books in transport research

The collection is a repository of open access books or open chapters of books on all aspects of transport research.

CONFIGURATION VOLUMES

DOCUMENTS	866
VIEWS	111
SCORE	5
SCORE PERCENTILE	100

Collection metrics / statistics

Search tools / Filters

Search [ ] All dates v Featured v

2020

Exposure of Belt and Road Economies to China Trade Shocks  
P. Bastos  
Collection of open chapters of books in transport research (2020), Vol. 2020, 20

Abstract  
The Belt and Road Initiative seeks to deepen China's international integration by improving infrastructure and strengthening trade and investment linkages with countries along [...]

0 READ EDIT

Traffic, Air Pollution, and Distributional Impacts in Dar es Salaam: A Spatial Analysis with New Satellite Data  
S. Dasgupta, D. Wheeler, S. Lall  
Collection of open chapters of books in transport research (2020), Vol. 2020, 18

Abstract  
Air pollution from vehicular traffic is a major source of health damage in urban areas. The problems of urban traffic and pollution are essentially geographic, because their [...]

0 READ EDIT

The ecological impact of transportation infrastructure  
S. Asher, P. Novotny  
Collection of open chapters of books in transport research (2020), Vol. 2020, 16

Abstract  
There is a growing concern about the ecological impact of transportation infrastructure. The [...] lead to environmental damage.

0 READ EDIT

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Contents

Submit new contents

Collection information

- First level for content organization
- Gives an own personality to the collection
- Offers different management/curation options

Categories

# TOPOS Observatory for Individuals

## Window display / Search engine

The screenshot displays the TOPOS Observatory search engine interface. At the top, the logo 'SCIPEDIA' is visible, along with navigation links for 'Library' and 'Groups'. A search bar contains the term 'Transport', and filters for 'All dates' and 'Featured' are present. Below the search bar, there are tabs for 'CATEGORIES', 'COLLECTIONS', 'DOCUMENTS', 'INSTITUTIONS', and 'PROJECTS'. The 'COLLECTIONS' tab is active, showing a grid of search results. Each result card includes a globe icon, a document count, a title, a description, and a 'VIEW' button. The results are as follows:

Document Count	Title	Description
0	Collection of Research Data in Transport	1 documents
51	Collection of open reports in transport research	318 documents
111	Collection of open chapters of books in transport...	866 documents
149	CM3-2017 - Computation and Big Data in Transport	5 documents
13	BeOpen project	1 documents
1309	Open Access Repository of the FIBRESHIP project	34 documents

On the left side, a 'CATEGORIES' sidebar lists various scientific fields with their respective document counts, such as 'Engineering, Civil (278)', 'Engineering, Marine (277)', and 'Transportation Science &... (12)'. The interface is clean and modern, with a dark header and light content area.

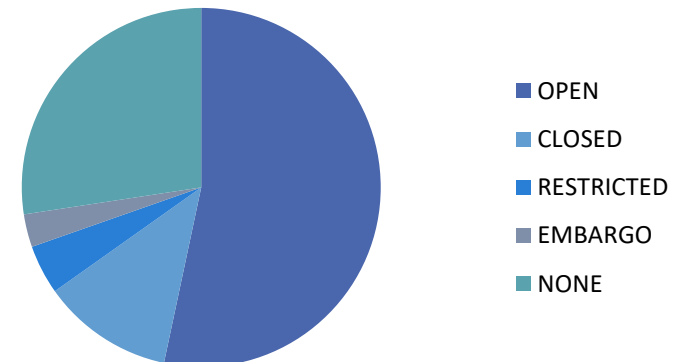
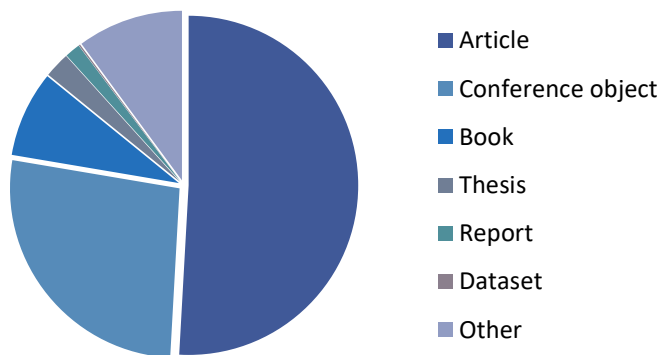
- Immediate access to content in multiple ways
- Full-text search engine (Solr)
- Any text search is performed in milliseconds through all the content, including title, abstract, full text, references, authors, categories and any additional fields defined.
- Content indexed by categories (scientific fields), keywords, authors and publications.
- Additional filtering utilities (such as dates, featured, most viewed, etc.)

# TOPOS Observatory for Individuals

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## Transport Research Contents

- Harvesting contents from OpenAIRE:
  - OpenAIRE Research Graph on Zenodo (JSON)
  - OpenAIRE Selective Access API
- Categories: article, conference object, book, thesis, report, dataset, other
- Access right: open, closed, restricted, embargo, none



# TOPOS Observatory for Individuals

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