

# OpenAIRE collaboration with BE OPEN

## European forum and oBsErvatory for OPEN science in transport

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Athena Research & Innovation Center



OpenAIRE Week - General Assembly, Public sessions | Oct 16, 2020



# BE OPEN



**Duration: 30 months**

**Start Date: 01-01-2019**

*Call: H2020-MG-2018-SingleStage-INEA*

*Type of Action: Coordination and Support  
Action*

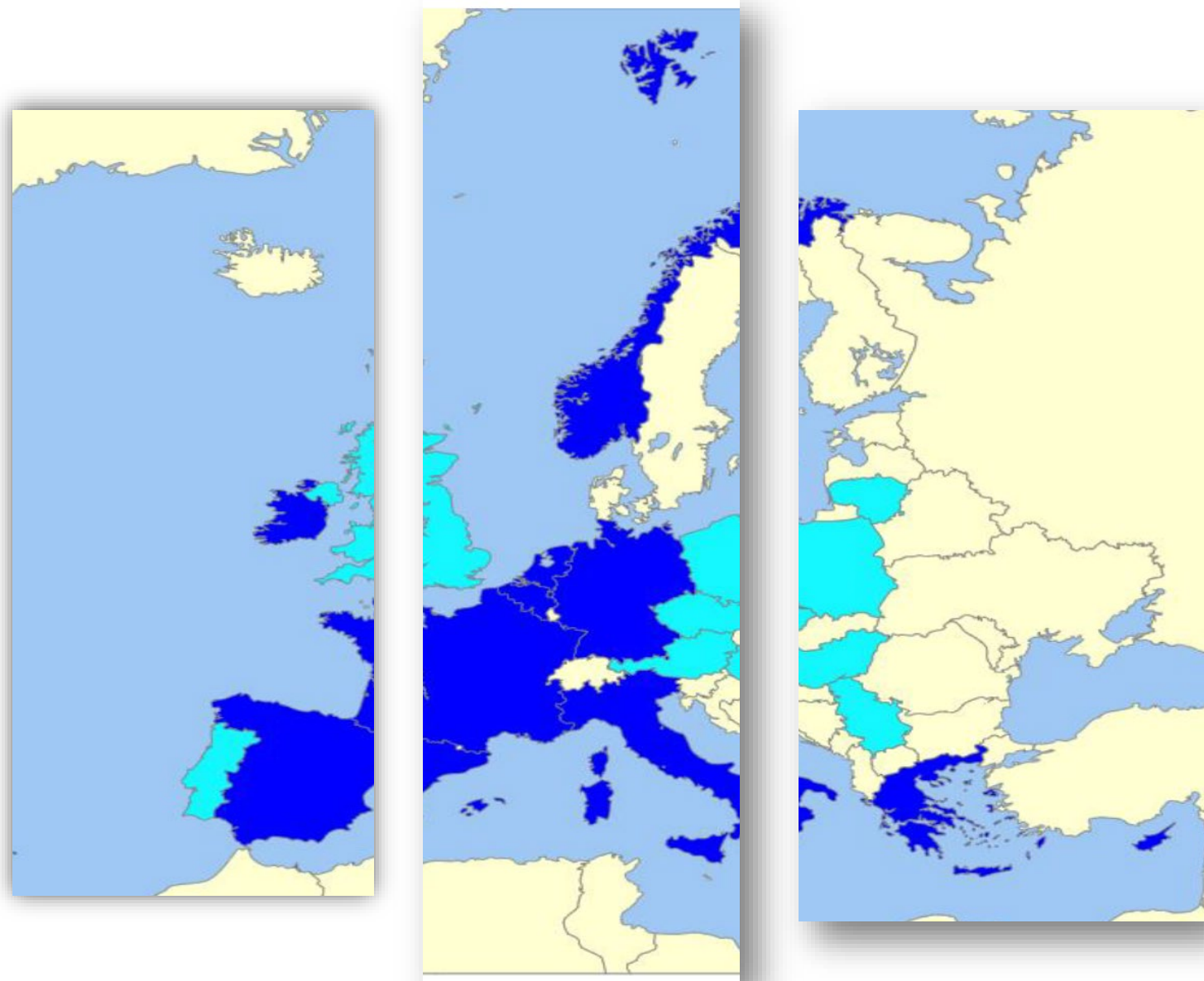
GA Number: 824323

Overall Budget: € 1,997,283.75

EU Contribution: € 1,997,283.75

# GEOGRAPHICAL COVERAGE

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- ✓ 17 partners
- ✓ 8 third parties
- ✓ 8 Work Packages
- ✓ 32 Deliverables

# CONSORTIUM & THIRD PARTIES

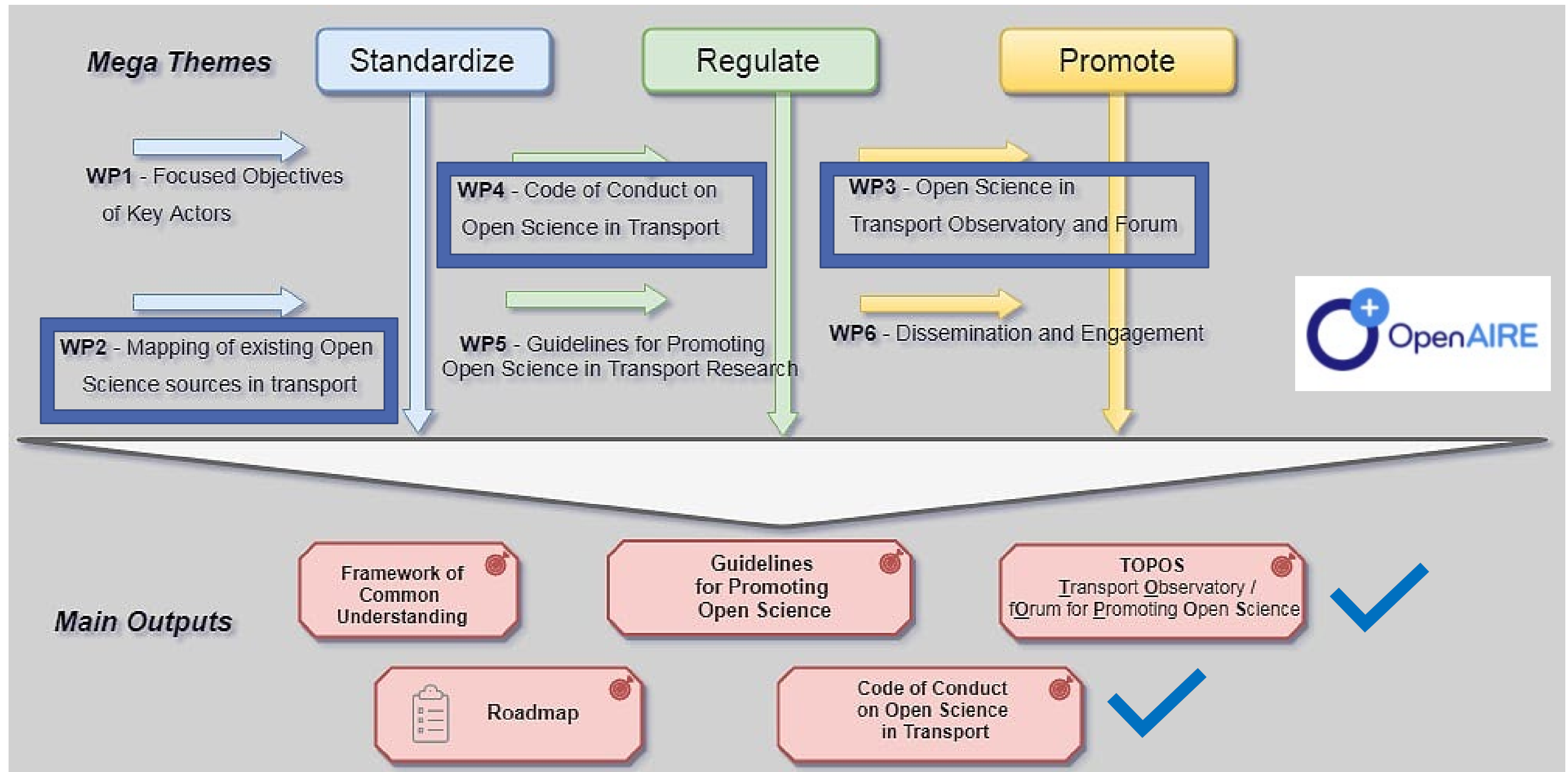


(Third Parties)

# TRANSPORT FORUM/OBSERVATORY FOR PROMOTING OPEN SCIENCE



# MEGA THEMES



# OpenAIRE for BE OPEN

- **Delivered the Be Open Research Gateway on Transport Research**
  - A single entry point for discovering research products available in the OpenAIRE Research Graph relevant to Transport Research,
  - available at <https://beta.beopen.openaire.eu> since October 2019
    - Initial configuration based on identification of relevant research products analysed from deliverables produced in WP1 & WP2
    - OpenAIRE supports domain experts in the consortium to fine tune the configuration
- Further developed and enhanced → TOPOS observatory for *organisations* (one of the two main user categories identified)

# Be Open Research Gateway on Transport Research



DEPOSIT LINK SEARCH ABOUT SIGN IN

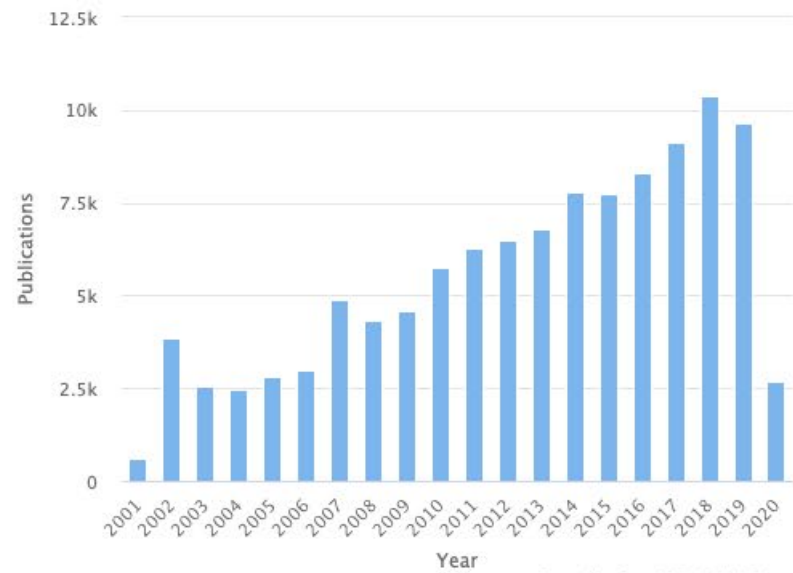
SUMMARY	PUBLICATIONS 127,684	RESEARCH DATA 3,275	SOFTWARE 37	OTHER RESEARCH 26,789	ANALYTICS
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## Publications

<b>39,215</b> Total	<b>1,336</b> Total linked projects	<b>34,580</b> Open access	<b>909</b> Closed access
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Publications per year



**Transport Research**

Research outcomes Search by title, author, abstract, DOI, orcid... **SEARCH** Advanced Search

SUMMARY	PUBLICATIONS 127,684	RESEARCH DATA 3,275	SOFTWARE 37	OTHER RESEARCH 26,789	ANALYTICS
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The Transport Research community gateway is supported by the EC H2020 BEOPEN project (824323)

Curated by: [Dr. Maria Tsami](#)

Created: 14-Oct-2019 Members: 7

Projects: 370 Content Providers: 21

Linked to 14 Zenodo Communities

Subjects

Green Transport, City mobility systems, Vulnerable road users, Traffic engineering, Transport electrification, Intermodal freight transport, Clean vehicle fleets, Intelligent mobility, Inflight refueling, District mobility systems, Navigation and control systems for optimised planning and routing, European Space Technology Platform, European Transport networks, Green cars, Inter-modality infrastructures, Advanced Take Off and Landing Ideas, Sustainable urban systems, port-area railway networks, Innovative forms of urban transport, Alliance for Logistics Innovation through Collaboration in Europe

[View all](#)





# TOPOS Observatory

<https://www.topos-observatory.eu/>

**TOPOS** **BEOPEN** **OpenAIRE** **Scipedia** **FORUM**

## OBSERVATORY

TOPOS Observatory aims to showcase the status and progress of open science uptake in transport research.

**TOPOS OBSERVATORY FOR ORGANISATIONS** **TOPOS OBSERVATORY FOR INDIVIDUALS**

## FORUM

TOPOS fOrum for national and European stakeholders – public and private - aims to exchange ideas and share best practices for operationalising Open Science principles in transport research.

**TOPOS FORUM FOR STAKEHOLDERS**

The BE OPEN project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824323.

# TOPOS Forum

<https://forum.topos-observatory.eu/>







The screenshot shows the TOPOS Forum website interface. At the top, there is a navigation bar with the TOPOS logo, a search icon, and links for 'Register' and 'Login'. The main content area is divided into several sections:

- Road** (green header): relevant to cars, trucks, busses, PTWs, etc.
- Air** (cyan header): relevant to helicopters, airplanes, jet aircrafts, etc.
- Rail** (orange header): relevant to vehicles which run on tracks (trains, trams, etc.)
- Water** (blue header): relevant to boat, ship etc., over a body of water, such as a sea, ocean, lake, river etc.
- Multimodal** (yellow header): the combination of different means of transport
- Cooperation at national and international level**: A post with a red 'A' icon, titled 'Support innovation and research in aviation sector to remain on the competitive level', dated 'Sep 2, 2020, 1:56 PM' with a 'read more' link.

At the bottom, there is a banner for the BE OPEN project, featuring the European Union flag and the text: 'The BE OPEN project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 824323.' Below this, it says 'TOPOS Forum • Developed by CERTH/HIT'.

# TOPOS Forum

<https://forum.topos-observatory.eu/>

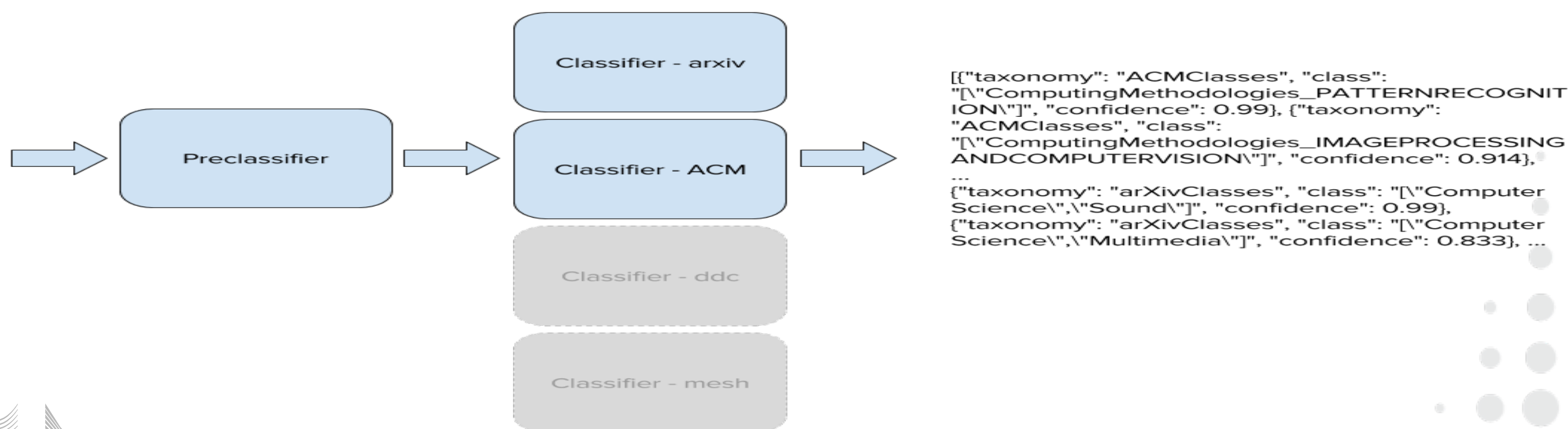
 <b>Legal/Regulatory</b> regulations, action plans, policy instruments, incentives etc.	 <b>Technological</b> new technologies and innovative actions applied for technological improvements, processes automation etc.	 <b>Transport planning</b> actions, plans and initiatives related to sustainable transport vision	 <b>Business modelling</b> actions and methods to earn revenues and achieve higher performance
		 <b>Socioeconomic</b> actions, plans and initiatives for achieving higher finance, better accessibility, higher level of service etc.	 <b>Environmental</b> actions, plans and initiatives to minimize pollutant emissions, greenhouse effect, noise pollution etc.



# OpenAIRE's Document Classification

- Mines the full text of publications in order to perform content-based classification using given taxonomies
  - arXiv
  - MeSH (Medical Subject Headings)
  - ACM
  - DDC (Dewey Decimal Classification, or Dewey Decimal System)

Audio information plays a rather important role in the increasing digital content that is available today, resulting in a need for methodologies that automatically analyze such content: audio event recognition for home automations and surveillance systems, speech recognition, music information retrieval, multimodal analysis (e.g. audio-visual analysis of online videos for content-based recommendation), etc. This paper presents pyAudioAnalysis, an open-source Python library that provides a wide range of audio analysis procedures including: feature extraction, classification of audio signals, supervised and unsupervised segmentation and content visualization. pyAudioAnalysis is licensed under the Apache License and is available at GitHub (<https://github.com/tyiannak/pyAudioAnalysis/>). Here we present the theoretical background behind the wide range of the implemented methodologies, along with evaluation metrics for some of the methods. pyAudioAnalysis has been already used in several audio analysis research applications: smart-home functionalities through audio event detection, speech emotion recognition, depression classification based on audio-visual features, music segmentation, multimodal content-based movie recommendation and health applications (e.g. monitoring eating habits). The feedback provided from all these particular audio applications has led to practical enhancement of the library.



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# Transport Classifier

- Taxonomy based on the latest (5<sup>th</sup>) edition of the “Glossary for Transport Statistics”
  - A. Railway Transport
  - B. Road Transport
  - C. Inland Waterway Transport
  - D. Pipeline Transport
  - E. Maritime Transport
  - F. Air Transport
  - G. Intermodal Freight Transport
  - H. Energy Consumption
  - I. Environmental Impact of Transport
  - J. Passenger Mobility
- No annotated/labelled large corpus of publications in transport research for training the classifier.
- Seed the classifier with publications and metadata from the Be Open Research Gateway.

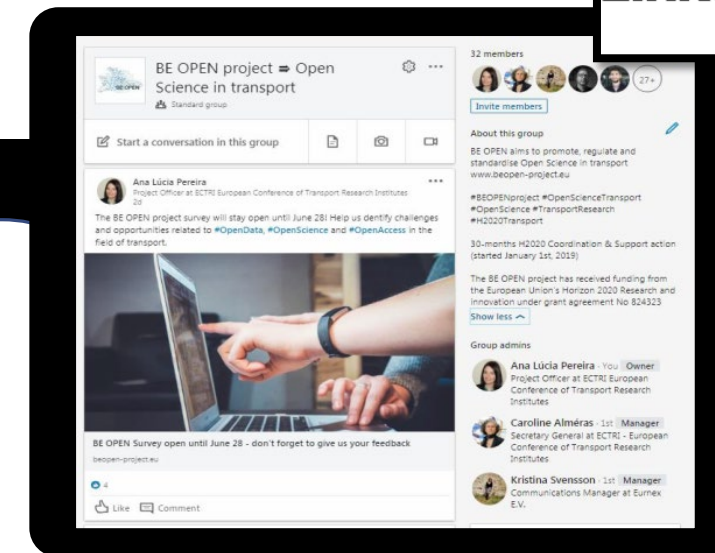


# BE OPEN ONLINE

<https://beopen-project.eu>



LinkedIn



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# Join our community



[beopen-project.eu](http://beopen-project.eu)



[@OpenScTransport](https://twitter.com/OpenScTransport)



[BE OPEN Group](#)



[Newsletter](#)



[BEOPEN community](#)



# Thank you!

**Harry Dimitropoulos (ARC)**

**Afroditi Anagnostopoulou (CERTH/HIT)**

**Attila Akac (CERTH/HIT)**

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