



# Open Science Challenges in N. Macedonia

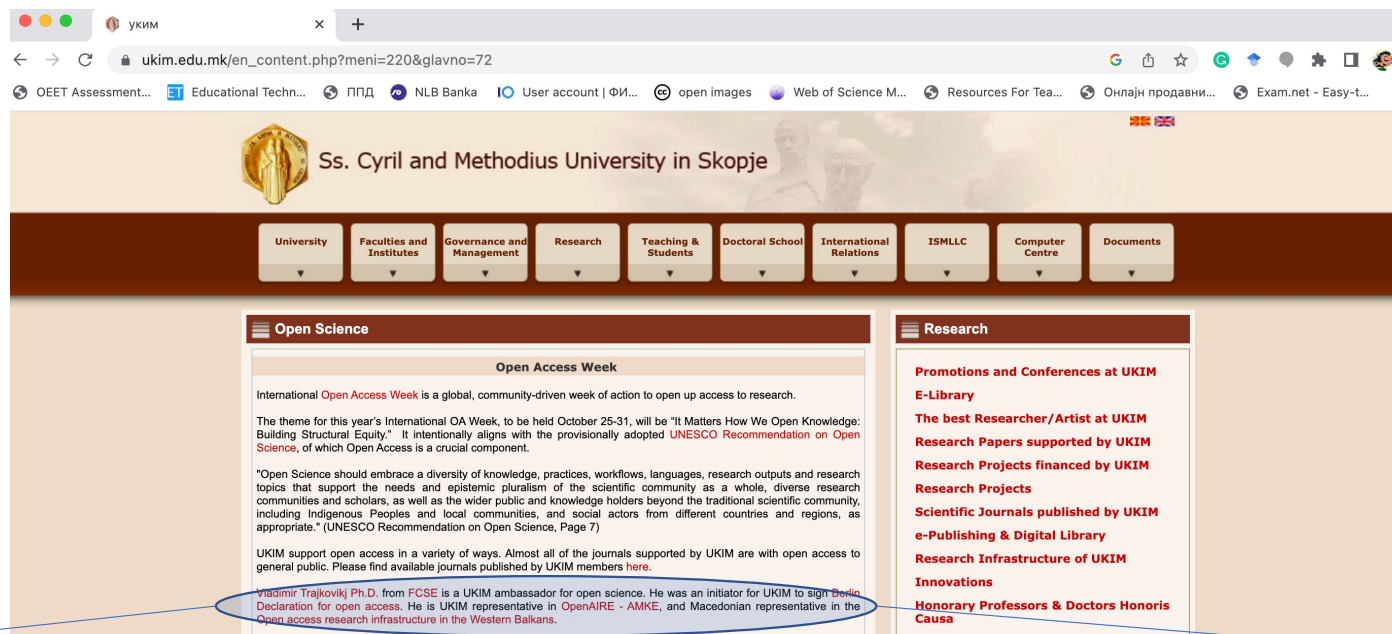
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SCIENCE AND ENGINEERING**

*Open Science Days, Belgrade, 3rd November, 2022*

# Why me?



**Vladimir Trajkovikj Ph.D. from FCSE is a UKIM ambassador for open science. He was an initiator for UKIM to sign Berlin Declaration for open access. He is UKIM representative in OpenAIRE - AMKE, and Macedonian representative in the Open access research infrastructure in the Western Balkans.**

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# Additional persona



- Young researcher (PhD or MSc Student)
- Has heard about open science and check wiki page on it
- Considers to use open infrastructure for some experimentation
- Is interested to publish open access paper preprint
  - Can not afford gold access
  - Wants to share data and software but does not know how

# Topics

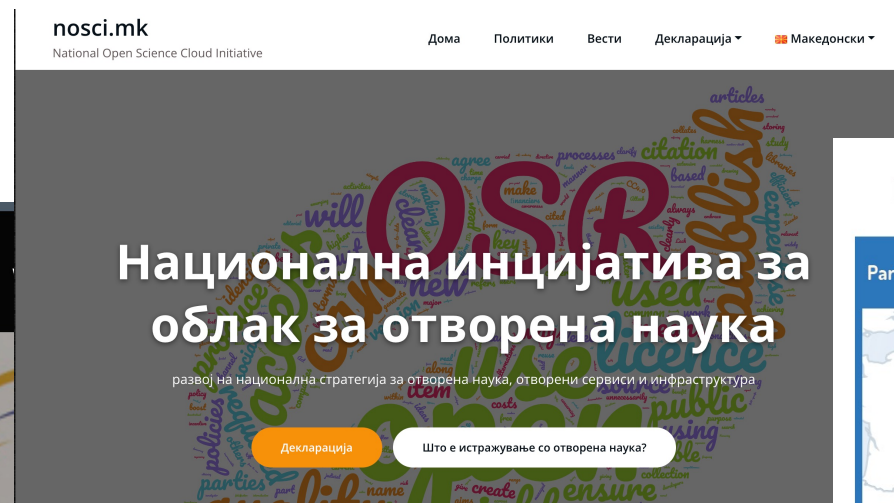
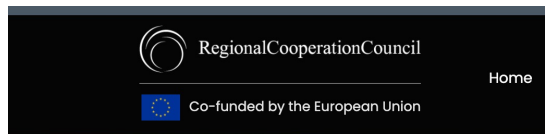


- *Formal Perspective*
  - *Open access policy at the national level*
  - *Open access policies at the institutional level*
  - *Open access infrastructure*
  - *Open science education, open science awareness, open science at personal level*
- *I will really talk about: Open science challenges*

# Open access policy at the national level



Initiated and Supported by:



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# Open access policy at the national level



*Current status:*

*Protocol for open access to  
research infrastructure is  
adopted by government of  
R.N. Macedonia in 2020*

A screenshot of a Google search interface. The search bar contains the text 'отворен пристап до истражувачка инфраструктура'. Below the search bar, there are navigation options: 'Сите', 'Слики', 'Кarti', 'Видеа', and 'Повеќе'. The search results show approximately 19,800 results in 0.39 seconds. The first result is from 'mon.gov.mk' with a PDF icon, titled 'Протокол за отворен пристап до истражува вата ...'. The second result is from '360stepeni.mk' titled 'Утврден текстот на Протоколот за отворен ... - 360 степени'. The third result is from 'mia.mk' titled 'Утврден текстот на Протоколот за отворен пристап ... - МИА'. The fourth result is from 'ni4os.eu' with a PDF icon, titled 'отворен пристап до истражувачки инфраструктури'. Each result includes a brief description of the document's content.

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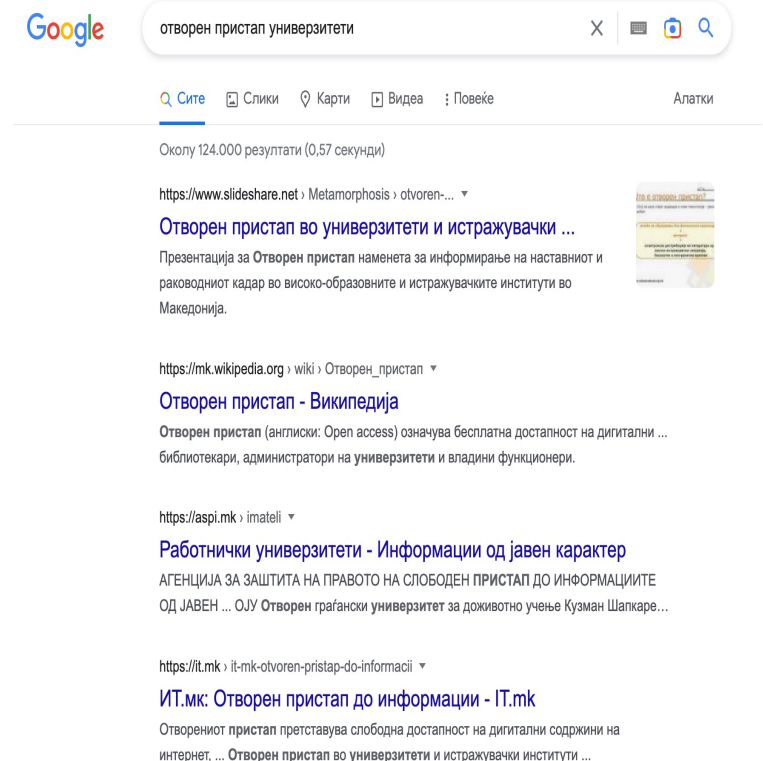
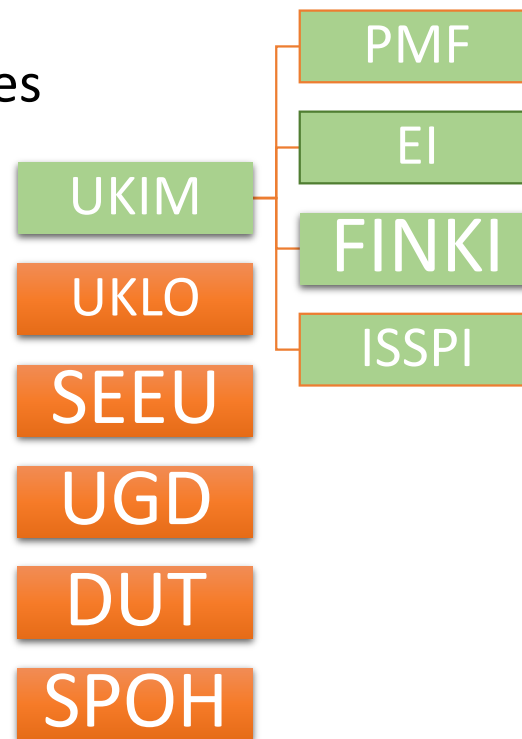
# Open access (policies) at the institutional level

## • Repositories

- Educational resources
- Publications
- Data
- Services
- Software

## • Support

- Declarative
- Organizational
- Financial
  - Project based
  - Internal funding
  - Personal Funding



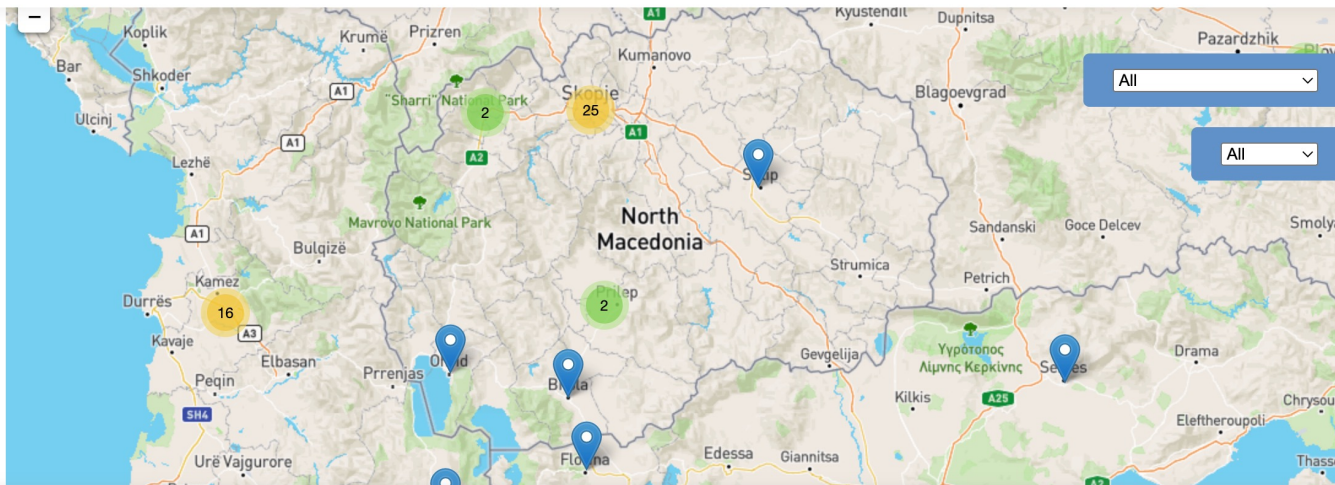


# Open Access Infrastructure Resources Stakeholders Map



<https://ni4os.eu/survey-results/>  
[https://ni4os.eu/os-stakeholders-map/  
10.5281/zenodo.3722929](https://ni4os.eu/os-stakeholders-map/10.5281/zenodo.3722929)

PROFILE EOSC IN THE REGION ACCESS TRAINING EVENTS MEDIA CORNER NI4OS VS COVID19 CONTACT US



- No specific contact info
  - Address available
  - Web page easy to find
- No info about resources
- No info related to policies

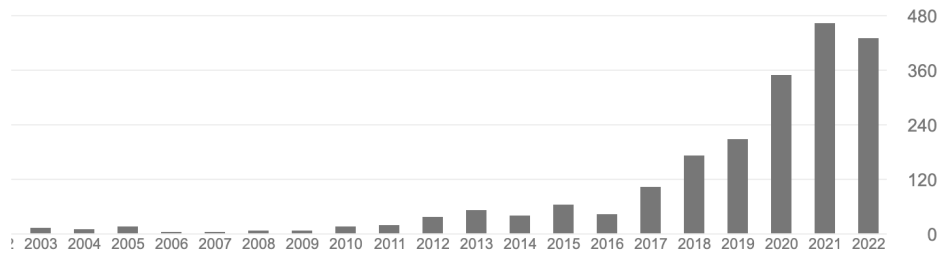
This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish. [Cookie settings](#) **ACCEPT**

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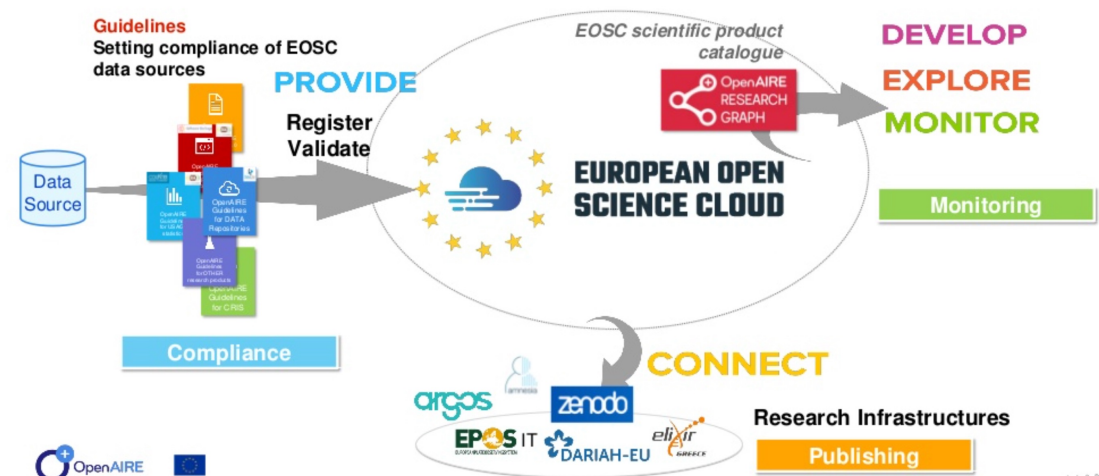


# Why Open Access on Personal level?

Citations per year



## OpenAIRE services in the European Open Science landscape



# Why open access on institutional level?

- Small Countries Universities
  - Visibility
  - Cooperation
  - Attracting Finance



# But...

- There are still (senior) professors that think open science is equal to fake publishing
  - The current trends with some publishing companies does not help
- The information shared with PhD and MSc students is not institutionalized
  - Some professors speak about it on courses on Research, but most do not
  - There are efforts to use open university repositories but using “forced” approach
  - Most of available tools are limited (e.g. only papers) still not really user friendly (e.g. limited export options)
  - Gate keeper based approach is dominant
    - You have to know specific person
    - You have to be involved in specific project
- There is no “beyond declarative” easy findable useful practical information
  - When searching you will find news info, local tutorials on global tools, but not practical information about “first individual step on your path to open science in your local faculty”

# Compared to others...



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# What can be done? (Personal view)



- Not only top-down approach
- Reduce gate keepers' approach
  - Provide practical and financial, not only declarative support
    - use existing projects to “open” open access
- Include open access principles in PhD and MSc studies
  - Establish open access journals for PhD students
  - Discuss alternative digital publishing that includes open data
    - E.g., Jupiter
- Include open science indicators in the academic advance evaluation process
  - Open access to papers and data
  - Open reviews
- Consider similar conditions for management position in academia

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# Summary of current open science challenges (Personal view)

- At the beginning of the path
- From declarative to practical institutional support
- Project based support should go beyond awareness phase
- Gate keepers should be used to support not suppress



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