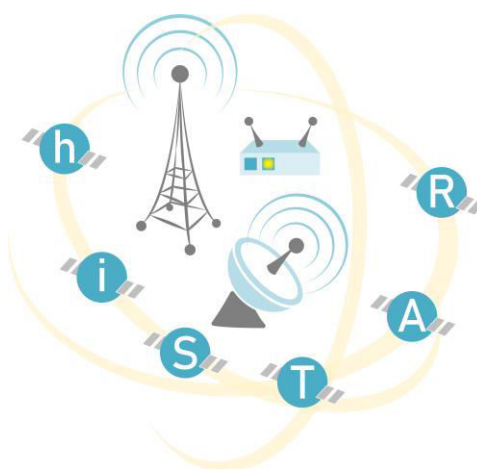


Hybrid Integrated Satellite and Terrestrial Access Network



D7.3: Final report on dissemination and communication activities

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D7.3: Final report on dissemination and communication activities



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EXECUTIVE SUMMARY

The hi-STAR project addresses one of the most critical challenges for the next generation wireless networks, which is integration of non-terrestrial networks with terrestrial 5G network. The general objective of the project is to develop flexible framework for integrated terrestrial 5G and Low-Earth-Orbit (LEO) satellite networks, where traffic management is performed with assistance of newly developed artificial intelligence methods.

This deliverable is a result of the work done in the context of WP7 Subtask T7.1 – Website, communication channels and project dissemination materials, WP7 Subtask T7.2 – Publishing results at journals and conferences and WP7 Subtask T7.3 – Organization of workshops. While in the deliverable D7.1 is presented description of developed project website and project dissemination and communication plan, the deliverable D7.2 presents Mid-term report on realized dissemination and communication activities in the first period of the project (M1-M18). Consequently, this deliverable D7.3 provides the Final report on dissemination and communication activities in the second period of project (M19-M39, project was extended by 3 months) and represents an update of D7.2 deliverable.



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ABBREVIATIONS

AI	Artificial Intelligence
F2F	Face to Face
IoT	Internet of Things
KPI	Key Performance Indicator
LEO	Low-Earth-Orbit
PCE	Project collaborative environment
WP	Work Package



SECTION 1 - INTRODUCTION

The initial work carried out in WP7 Subtask 7.1 is summarized in the first deliverable D7.1 presenting work done by the end of M1 of the project (description of developed project website and project dissemination and communication plan). Deliverable D7.2 Mid-term report on dissemination and communication activities is extension of D7.1 and summarizes realized activities on dissemination and communication activities in the first period of the project (M1-M18) in the context of WP7 Subtask T7.1 – Website, communication channels and project dissemination materials and WP7 Subtask T7.2 – Publishing results at journals and conferences. Consequently, deliverable D7.3 is Final report on dissemination and communication activities in the second period of project (M19-M39, the project was extended by 3 months) and represents an update of D7.2 deliverable.

This deliverable is structured as follows: In Section 2 dissemination strategy is presented. Target groups and dissemination activities are defined. Section 3 defines dissemination materials and activities (project branding, dissemination materials, contribution and participation in events, awards) and dissemination channels (web site, social networks accounts and other channels) are demonstrated. In Section 4 programme and project-internal dissemination activities are explained. Section 5 concludes the document.



SECTION 2 – DISSEMINATION STRATEGY

To enhance the impact and improve the exploitation potential of the action, a global dissemination strategy has been tailored from the early stages of the project. The goal of the dissemination strategy is to foster the dissemination of the hi-STAR results to the targeted communities, in order to attract different types of potential stakeholders, such as scientific and technical communities, businesses, policy making bodies, academic institutions and users (professional and general public).

Dissemination was stimulated both at consortium level and partners' level, and was revolved around the following methodology:

- Define what will be disseminated; the dissemination “products” and when (during and after the project).
- Identify the target groups for dissemination.
- Establish the appropriate source for the dissemination activities (in terms of roles and responsibilities).
- Raise public awareness about the project achievements through the most suitable means for communicating with the respective target groups.

Besides, hi-STAR consortium communicated specific findings during the course of the project, via publications in local and national journals or paper submissions to conferences and workshops.

The dissemination created interest and interactions between the Consortium and interested parties. The activities ensured that the different target groups are addressed in an appropriate manner. The results of hi-STAR should garner interest in several specific communities. In particular the external stakeholders to be targeted were:

- **Scientific Communities** that focus on for instance 5G networks, satellite communications, artificial intelligence, information theory, FPGA programming, software defined networks, and Internet of Things research.
- **Technical Communities** who are interested in the methodologies and tool prototypes developed in the area of 5G networks, satellite communications and Internet of things.
- **Business Entities** who would like to use the project results to develop products and services based on end-users needs, applications of artificial intelligence in 5G networks and on Internet of things technologies.
- **Policy Making Bodies** such as ITU and 3GPP.
- **General Public**, in particular those who have experience with 5G and satellite networks, IoT use and engaging in technology development projects.



Dissemination activities were performed during the whole life-cycle of the project, together with a regular review of their effectiveness, in order to allow modifications and adoptions according to the current project life-cycle stage. The main foreseen activities were:

- Publication and promotion on the project website and social medias;
- Promotion of the project;
- Face to Face (F2F) meetings;
- Dissemination of project leaflets and other promotional material;
- Organization of presentations, workshops;
- Publication of a scientific paper in the conferences and the journals;
- Video elaborations to promote project scope;
- Newspaper articles and interviews.

These activities could be categorized as primary and secondary dissemination mechanisms described below.

Primary dissemination mechanisms

The following is a sample of the primary dissemination mechanisms which were utilised by the hi-STAR project, that are more dynamic and can be easily distributed to wider public:

- **hi-STAR Website:** The project web portal, with the latest project results was a key element of the communication strategy.
- **Social Networks:** Creation of profiles and dissemination of information and engagement in crowdsourcing through social networks such as Facebook and LinkedIn.
- **YouTube video:** Promoting project ideas and results through YouTube video.
- **Newspaper articles, TV interviews:** Press releases was used to disseminate hi-STAR project results to wider audience.

Secondary dissemination mechanisms

The secondary dissemination mechanisms which were utilised by the hi-STAR project, targeting more specific audiences, were:

- **Participation at Conferences and Workshops:** These events were important in disseminating hi-STAR results and getting inputs to the project's strategic actions from interested stakeholders.
- **Publications, Presentations, Posters:** The hi-STAR partners identified suitable events to disseminate the projects results. This was via presentations and posters, and included industrial and scientific events, conferences, workshops, invited presentations.
- **hi-STAR A4 flyers:** An A4 flyers and factsheet were used as an inexpensive way to promote hi-STAR project in conferences.



SECTION 3 – DISSEMINATION MATERIALS AND ACTIVITIES

This section presents the dissemination material that were created and planned activities that were undertaken by hi-STAR partners from the beginning of the project.

3.1. HI-STAR LOGO

The hi-STAR Logo was created to provide the project with a clear visual identity. hi-STAR Logo is shown on the Figure 1.



Figure 1: hi-STAR Logo

3.2. HI-STAR WEBSITE

A project website is designed, set up and was continuously updated throughout the project duration. In order to follow and complement identity of the project defined by hi-STAR logo, the same colors are dominant also in the web site. The project web site is located in <https://hi-star.etf.bg.ac.rs/>. The web site was regularly updated with the public results and deliverables of the project as well as with news, agenda, events and articles about project results. As an initial contact point for both general public and hi-STAR users and stakeholders, the project website presents an overview of the work being carried out by hi-STAR.

The web site contains the following information:

- **Home** - the home page of the project contains the project overview.
- **Objectives** - contains the main project objectives.
- **Consortium** - links to the all project partners are given and companies that provided letter of support to the project.
- **Deliverables** - contains all publicly available deliverables of the project.
- **Publications** - contains all publicly available publications of the project.
- **Workshops** - contains info about conducted workshops.
- **News** - project news are presented here and related events where partners were participated and where plan to participate.
- **About us** - contains info all project participants.

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Besides that, the following information about the project is provided on the Home page:

- Project info
- Contact
- Links to the social networks

Project info

Start date: 01.01.2022.
End date: 31.12.2024.
Budget: 273,703.81 EUR
Estimated effort: 111.3 PM
Call identifier: IDEAS
Project number: 7750284

Contact

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hi-STAR project overview

Hybrid Satellite-Terrestrial Network

The area of communications experienced a quantum leap with invention of new radio 5G standard, enabling improvement of existing and development of new life-changing services (like intelligent transportation systems or IoT). Encouraged by recent advances in satellite communications, especially related to low-earth-orbit satellites, research community has been considering ambitious strategy of building universal communication network (6G), which will integrate satellite communication links into 5G ecosystem.

The hi-STAR project is one of pioneering projects in the area, with ambition to propose and analyze potential of intelligent hybrid integrated satellite-terrestrial network architecture, solving currently open problems related to traffic distribution between terrestrial and satellite parts of the network. We aim to propose innovative traffic control module based on artificial-intelligence principles, implemented at user terminal and network gateway, with ability to choose the best radio access channel for a user, among several available terrestrial and satellite communication links. Our approach relies on the statistical communications and information theory and software defined networks.

An outcome of the project will be a hardware implementation of hybrid user terminal (HUT) (with integrated 5G and satellite transceivers) that steers user's traffic, with respect to available bandwidth, measured channel state information, user terminal velocity and gained user's past experience. The proposed solution will provide better user experience, measured in terms of higher service accessibility and quality of service. By integrating HUT within connected vehicles or drone-assisted sensor networks, a network operator will benefit from wider coverage for the existing services, as well as ability to provide new services. Business opportunity analysis will be conducted for selected use cases and business models will be developed in collaboration with network operators.

Figure 2: hi-STAR web site

3.2.1. GOOGLE ANALYTICS

In order to get a better understanding of the usage of the hi-STAR project website, it was registered with the free Google Analytics facility. This enabled powerful reporting on the website access statistics, giving a very clear picture of information such as:

- How many users are visiting the site;
- What links and pages are most popular;
- What websites users are coming from;
- Where visitors are coming from geographically.



Google Analytics helped the consortium to determine the effectiveness of its web tools and targeted dissemination activities.

Here we were not collecting any IP addresses, nor any other data related to the web site visitors. We were extracting only information about the number of hi-STAR web site visits in the observed time interval.

3.3. HI-STAR PROJECT POSTER/ROLL-UP

The Project poster/roll-up is created in an A1 format to present the project and its expected achievements. It contains:

- a box describing the “project at a glance”, containing the main features of the project, such as number of months, funding, etc...;
- the logo;
- the list of partners;
- explanation of what hi-STAR is, project main objectives and expected contributions.

Poster is presented in the Figure 3.

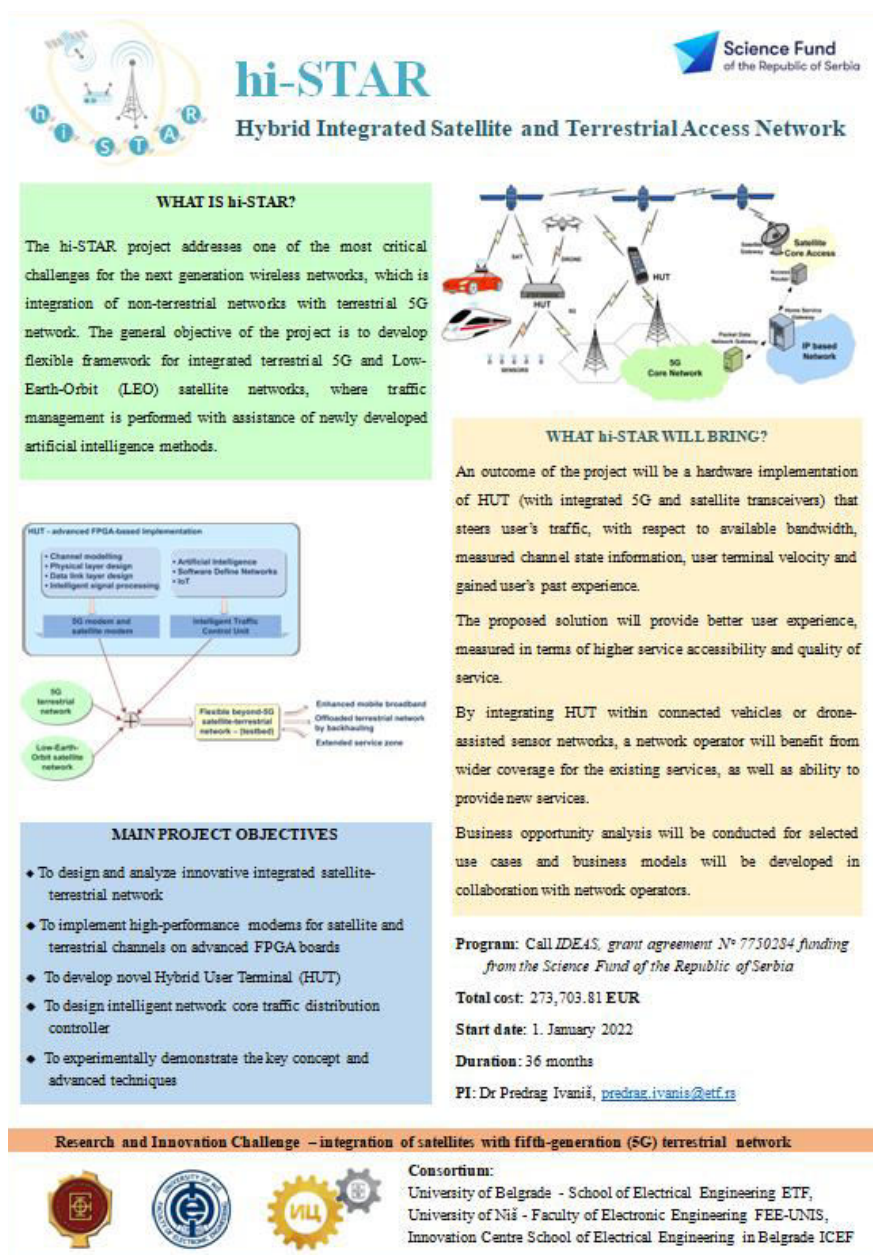


Figure 3: hi-STAR project poster

3.4. HI-STAR FACTSHEET, FLYERS

The Project Factsheet (Figure 4.) contains the following information about project:

- a box describing the “project at a glance”, containing the main features of the project, such as number of months, funding, etc...;
- the logo;
- abstract, keywords;
- the list of partners;

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- explanation of the hi-STAR challenge, project main objectives and concept (approach);
- target users and their needs.

It was created to be printed in an A4 format and represents a major dissemination tool, as it was used in all the events attended by partners of the hi-STAR project.

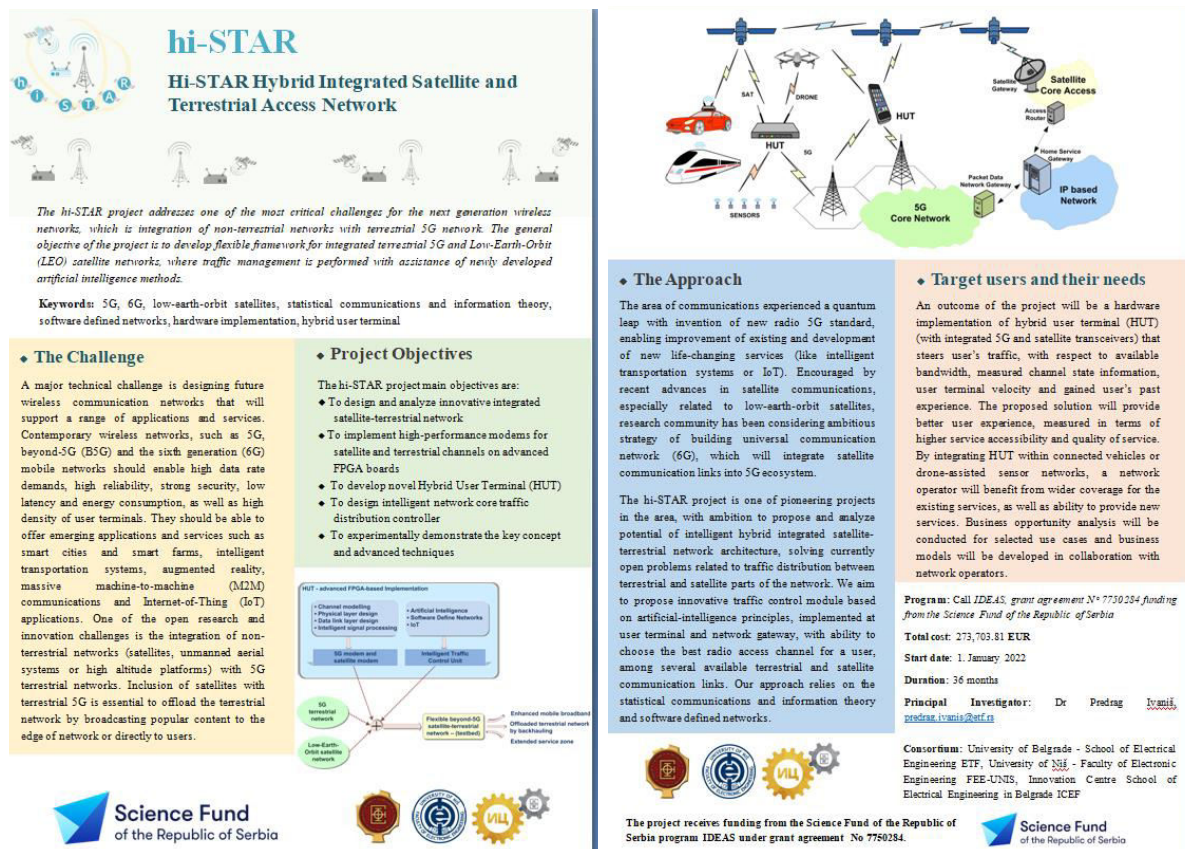


Figure 4: hi-STAR factsheet

3.5. HI-STAR VIDEOS

A film about the project motivation, objectives and results was created. This video is available on website <https://hi-star.etf.bg.ac.rs>. It can also be viewed on YouTube (<https://www.youtube.com/watch?v=syk95v1J2uU>) and LinkedIn (https://www.linkedin.com/posts/hi-star_activity-7325183111875424256-KQYw?utm_source=share&utm_medium=member_desktop&rcm=ACoAAAQ0IIBXtn15ImcN5lnxzOXcKwk6KBtv3M).



3.6. TEMPLATES

Project templates have been generated for presentations (.PPT) and deliverable reports (.docx). In this way the hi-STAR visual identity including the logo became recognizable and project visibility was further expanded. Project presentation was created.

3.7. SOCIAL NETWORKS

Hi-STAR actively used social networks to promote the project activities, news, and results. The following social network profiles (Facebook and LinkedIn) were set-up at the very beginning of the project including public information about the hi-STAR. These profiles were regularly updated during the project lifetime and related KPIs were monitored. Twitter account was also created at the beginning of the project, but due to the change of Twitter ownership and usage, subscription and privacy policy, we decided not to use this social network for dissemination.

3.7.1 LINKEDIN

A hi-STAR LinkedIn group <https://www.linkedin.com/company/82260202/> has been created. A hi-STAR group on LinkedIn allows registered users to maintain a list of contact details of people in the area of 5G/AI/Satellite communications/IoT. The contact network consists of direct connections, the connections of each of their connections and also the connections of second-degree connections.

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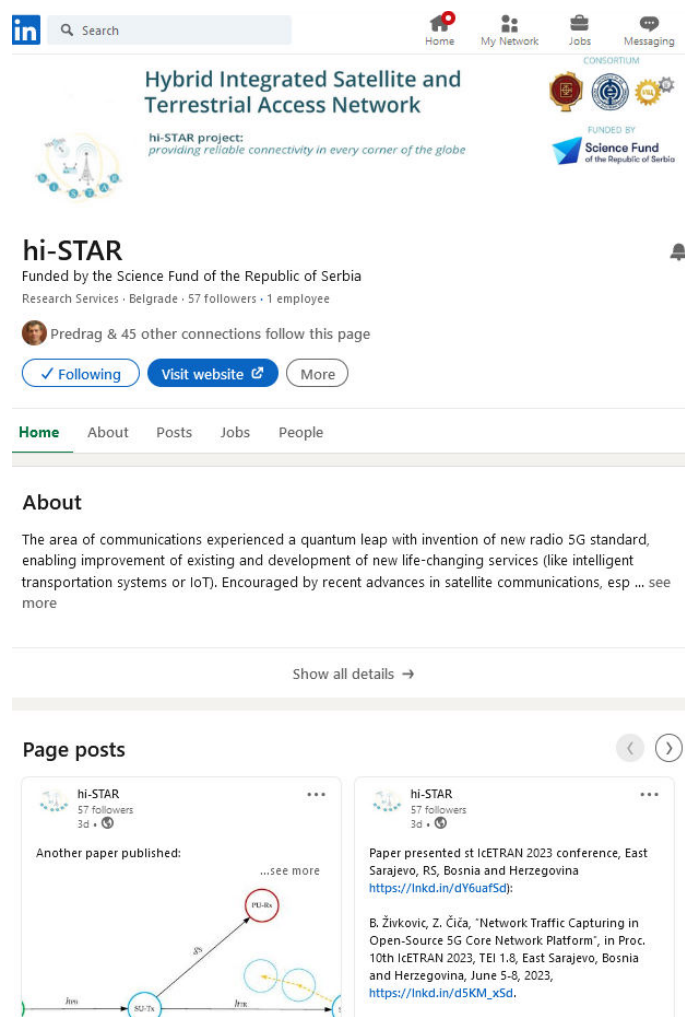


Figure 5: hi-STAR on LinkedIn

3.7.2. FACEBOOK

Hi-STAR project has a Facebook profile <https://www.facebook.com/hiSTAR2022> which aim is to promote the project ideas and enable crowdsourcing through social networks. In this way different stakeholders can be notified of certain events, or different ideas can be targeted at certain groups which are already present on the Facebook. Also, the personal hi-STAR open group on Facebook allows adding other users as members, and exchanging messages, including automatic notifications when members update their profiles.

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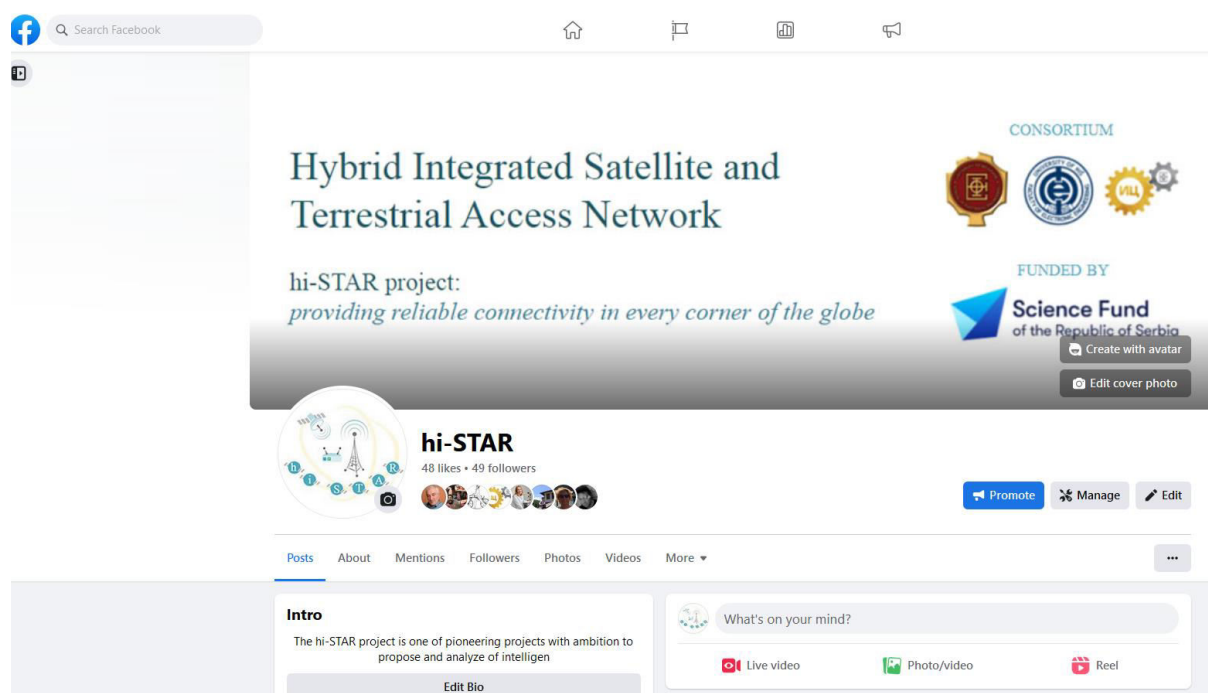


Figure 6: hi-STAR on Facebook

3.8. NEWSPAPER ARTICLES, TV INTERVIEWS

When there is significant progress in the project, a powerful means to reach out is to get interest from the press, usually via a newspaper articles and TV interviews. ‘

Vesna Blagojević, a member of our project team, gave an interview to the national television broadcaster, Radio Television of Serbia (RTS). During her guest appearance on the RTS program, she discussed the importance of satellite telecommunications and the opportunities they offer to end users. The interview also covered international regulations governing the use of frequency ranges for satellite systems, as well as Serbia’s position within this framework.

The corresponding video is available at the following link:

<https://www.youtube.com/watch?v=NBneUX5RBjU&t=124s>

3.9. DISSEMINATING KNOWLEDGE

This section contains the dissemination activities carried out during the project and was constantly updated during its lifetime. It contains information on the organization and the participation to events, papers and contribution to conference and journals, chapters in books etc.



3.9.1. PUBLICATIONS (BOOK CHAPTERS, JOURNALS, SCIENCE CONFERENCES)

Table 1 : Book chapters, Journals, Science conferences

Event	Contribution	Participants	Date
1. MDPI <i>Entropy</i>	Journal article: "Suspicion Distillation Gradient Descent Bit-Flipping Algorithm"	ETF	April 2022
2. IEEE Communication Letters	Journal article: "Adaptive Gradient Descent Bit-Flipping Diversity Decoding"	ETF	October 2022
3. MDPI <i>Axioms</i>	Journal article: "Estimation of Truncation Error in Statistical Description of Communication Signals over mm-Wave Channels"	FEE	October 2022
4. Mathematics	Journal article: "Error Probability of a Coherent M-Ary PSK FSO System Influenced by Phase Noise"	FEE	January 2023
5. MDPI <i>Drones</i>	Journal article: "Capacity Analysis of Power Beacon-Assisted Industrial IoT System with UAV Data Collector"	ETF	February 2023
6. MDPI <i>Sensors</i>	Journal article: "Performance Analysis of Wirelessly Powered Cognitive Radio Network with Statistical CSI and Random Mobility"	ETF	May 2023
7. MDPI <i>Sensors</i>	Journal article: "Outage Analysis of Unmanned-Aerial-Vehicle-Assisted Simultaneous Wireless Information and Power Transfer System for Industrial Emergency Applications"	ETF	Septem. 2023
8. MDPI <i>Entropy</i>	Journal article: "On the Effect of Imperfect Reference Signal Phase Recovery on Performance of PSK System Influenced by TWDP Fading"	FEE	Septem. 2023
9. MDPI <i>Entropy</i>	Journal article: "Capacity Analysis of Hybrid Satellite–Terrestrial Systems with Selection Relaying"	ETF	May 2024
10. MDPI <i>Electronics</i>	Journal article: "Neural network SNR prediction for improved spectral efficiency in land mobile satellite"	ICEF,ETF	Septem. 2024

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	networks"		
11. MDPI <i>Entropy</i>	Journal article: "Generalized Adaptive Diversity Gradient Descent Bit-Flipping with a Finite State Machine"	ETF	January 2025
12. MDPI <i>Electronics</i>	Journal article: "Secrecy Analysis of LEO Satellite-to-Ground Station Communication System Influenced by Gamma-Shadowed Ricean Fading"	FEE,ETF	January 2025
13. MDPI <i>Sensors</i>	Journal article: "Secrecy Outage Performance Analysis of Wirelessly Powered IoT System with Randomly Moving Receiving Nodes"	ETF	February 2025
14. IEEE <i>Access</i>	Journal article: "Scalable 5G NR Rate-Matcher and Rate-Dematcher for Efficient Use in FPGA Accelerators"	ETF	February 2025
15. MDPI <i>Electronics</i>	Journal article: "Distributed AI-Driven Simulation Framework for Performance Evaluation of Hybrid Satellite–Terrestrial Network Access "	ETF, ICEF	March 2025
1. 9th International conference on Electrical, Electronic and Computing Engineering, IcETRAN 2022	Conference paper: "Reliability of Earth - Space Links under Deep Fades with Interleaved Reed - Solomon Codes"	ETF	June 2022
2. 9th International conference on Electrical, Electronic and Computing Engineering, IcETRAN 2022	Conference paper: "On Pulse Shaping for Generalized Faster than Nyquist Signaling with and without Equalization"	ETF	June 2022
3. 9th International conference on Electrical, Electronic and Computing Engineering, IcETRAN 2022	Conference paper: "Effect of Phase Noise on Error Probability of MPSK Receiver over TWDP Channel - Simulation Study"	FEE	June 2022
4. 57th International Scientific Conference on Information, Communication and Energy Systems and Technologies (ICEST 2022)	Conference paper: "Outage Probability of Mixed Satellite RF / Terrestrial FSO Cooperative System"	FEE	June 2022
5. 13th International Symposium on Communication Systems, Networks and Digital Signal Processing (CSNDSP 2022)	Conference paper: "On the Secrecy Analysis of Satellite-Terrestrial Communication Link over Gamma-shadowed Ricean Fading Channels,"	ETF, FEE	July 2022
6. 13th International Symposium on Communication Systems,	Conference paper: "Multidimensional LDPC-coded signal	FEE	July 2022

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Networks and Digital Signal Processing (CSNDSP 2022)	transmission over TWDP fading channel"		
7. 2022 30th Telecommunications Forum (TELFOR 2022)	Conference paper: "Profiling of GNU Radio DVB-S2X transmitter using multi-core CPU and hardware accelerators"	ETF	Novemb. 2022
8. 22nd International Symposium INFOTEH-JAHORINA (INFOTEH 2023)	Conference paper: "The method of generating shadowed Ricean fading with desired statistical properties"	ETF, FEE	March 2023
9. 22nd International Symposium INFOTEH-JAHORINA (INFOTEH 2023)	Conference paper: "Survey of Network Selection and Vertical Handover Techniques in Heterogeneous Wireless Networks"	ICEF, ETF	March 2023
10. 10th International conference on Electrical, Electronic and Computing Engineering, IcETRAN 2023	Conference paper: "Performance analysis of land mobile satellite-terrestrial systems with selection relaying"	ETF	June 2023
11. 10th International conference on Electrical, Electronic and Computing Engineering, IcETRAN 2023	Conference paper: "Outage Performance of Mixed Shadowed Ricean/TWDP Relayed Assisted Link"	FEE, ETF	June 2023
12. 10th International conference on Electrical, Electronic and Computing Engineering, IcETRAN 2023	Conference paper: "Network Traffic Capturing in Open-Source 5G Core Network Platform"	ETF	June 2023
13. 23rd International Conference on Transparent Optical Networks (ICTON 2023), Bucharest, Romania, 2023	Conference paper: "Effect of Pointing Errors on BER Performance of Multidimensional LDPC-Coded OAM Modulation with Direct Detection over Turbulent FSO Channels"	FEE	July 2023
14. 12th International Symposium on Topics in Coding (ISTC 2023), Brest, France, September 4-8, 2023	Conference paper: "Learning to Decode Linear Block Codes using Adaptive Gradient-Descent Bit-Flipping"	ETF	Septem. 2023
15. 16th International Conference on Advanced Technologies, Systems and Services in Telecommunications (TELSIKS 2023), Niš, Serbia, October 25-17, 2023	Invited conference paper: "Overview of Network Selection and Vertical Handover Approaches and Simulation Tools in Heterogeneous Wireless Networks"	ICEF, ETF	Octobar 2023
16. 16th International Conference on Advanced Technologies, Systems and Services in Telecommunications (TELSIKS 2023), Niš, Serbia, October 25-17, 2023	Conference paper: "Performance of Handover Execution in Satellite Networks with Shadowed-Rician Fading"	ETF	Octobar 2023

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17. 11th International Conference on Electrical, Electronic and Computing Engineering, pp. 1-5, Nis, Serbia, June 3-6, 2024	Conference paper: "A Numerical Method for Estimating Error Rate Performance of MPSK System influenced by Fisher-Snedecor Fading"	FEE	June 2023
18. 14th International Symposium on Communication Systems, Networks and Digital Signal Processing (CSNDSP), pp. 7-11, Rome, Italy, July 2024	Conference paper: "A Method for Generating Random Process Having Given First - and Second-Order Statistics Over FSO Channel"	FEE, ETF	July 2023
19. 2024 32th Telecommunications Forum (TELFOR 2024)	Conference paper: "A Simulation Model for Generating Time Variant Gamma-Shadowed Ricean Fading Samples"	FEE, ETF	Novemb. 2024
20. 2024 32th Telecommunications Forum (TELFOR 2024)	Conference paper: "Optimization of the iterative decoding algorithms for irregular block codes"	ETF	Novemb. 2024
21. 2024 32th Telecommunications Forum (TELFOR 2024)	Conference paper: "CNN and LSTM Neural Networks for spectral efficiency improvements in LEO Satellite networks"	ETF	Novemb. 2024
22. 2024 32th Telecommunications Forum (TELFOR 2024)	Conference paper: "Multi-Connectivity Framework Based on Open-Source 5G Network Core"	ETF	Novemb. 2024
23. 2024 32th Telecommunications Forum (TELFOR 2024)	Conference paper: "Performance Measurement Testbed for Hybrid Access Based on Multipath Transport Layer Protocol"	ETF	Novemb. 2024
24. 2024 32th Telecommunications Forum (TELFOR 2024)	Conference paper: "Distributed Simulation Framework for Assessing Multipath Transport Protocols"	ETF	Novemb. 2024

3.9.2. CONFERENCES & WORKSHOPS

Table 2 : Conferences & Workshops

Dates	Event name	Contribution	Partners involved
28.2.2022.	COST Action CA19111 "European NEtWork on Future Generation Optical Wireless CommUnication	Project presentation	FEE

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	Technologies (NEWFOCUS)", 4th Management Committee Meeting, Thessaloniki, Greece.		
16.3.2023.	22nd International Symposium INFOTEH-JAHORINA (INFOTEH 2023)	Project presentation	ICEF
10.5.2023.	Second ICEF workshop - Presentation of scientific research work	Project presentation	ICEF
26.10.2023.	16th TELSIS 2023, Niš, special session "IoT Applications in Modern and Emerging Technologies"	Project presentation	ICEF/ETF/FEE
15.11.2023.	Christian Doppler Laboratory Workshop "Digital Twin assisted AI for sustainable RAN", TUW, Vienna, Austria	Project presentation	ICEF
4.4.2024.	Internal workshop forum of Wireless Communication, TU Wien, Vienna, Austria	Project presentation	ETF/ICEF
4.6.2024.	Online lecture for engineers employed at Telekom Srbija, Belgrade, Serbia	Project presentation (150 participants)	ETF/ICEF
26.11.2024.	2024 32th Telecommunications Forum (TELFOR 2024) – Organisation of project special session	Project and paper presentation (20 participants)	ETF/FEE/ICEF
17.12.2024.	Final workshop with industrial companies. Exploitation the outcomes of the project to transfer knowledge towards an industry.	Project outcomes presentation and knowledge transfer (35 participants)	ICEF/ETF/FEE



Figure 7: hi-STAR project presentation on Second ICEF workshop

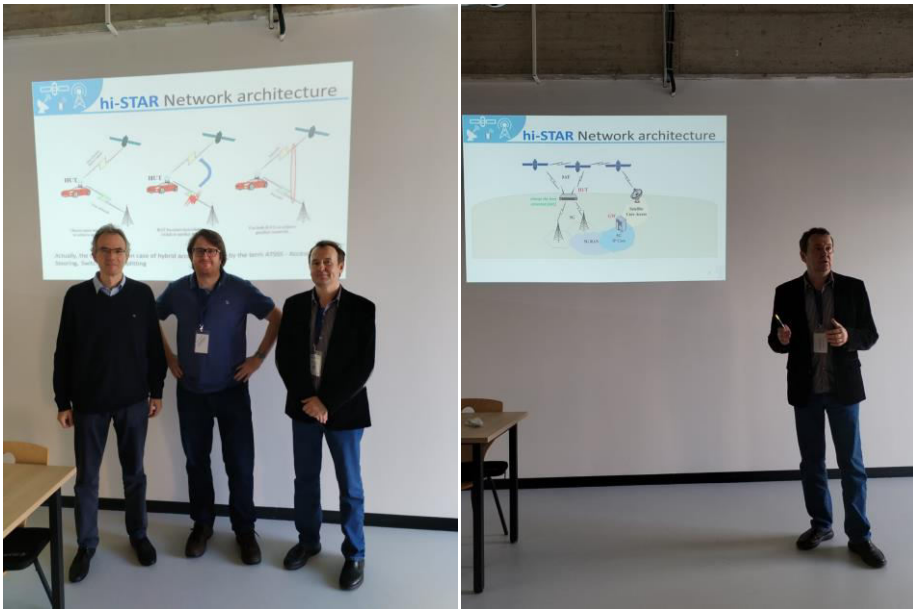


Figure 8: hi-STAR project presentation on 16th TELSIS 2023



Figure 9: hi-STAR project presentation on "Digital Twin assisted AI for sustainable RAN"



Figure 10: hi-STAR project presentation on "Internal workshop forum of Wireless Communication"

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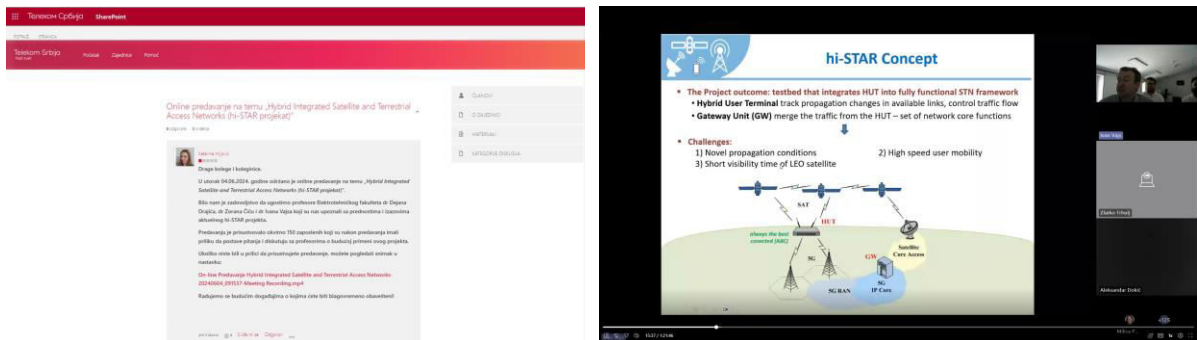


Figure 11: hi-STAR project presentation on “Online lecture for engineers employed at Telekom Srbija”



Figure 12: hi-STAR project presentation on 32nd TELFOR 2024



Figure 13: hi-STAR project presentation workshop with industry



3.9.3. AWARDS

1) IcETRAN 2022 - Award for the best paper

Our paper, presented at the IcETRAN 2022 conference:

S. Brkić, Z. Čiča, A. Radošević, Đ. Sarač, P. Ivaniš, "Reliability of Earth - Space Links under Deep Fades with Interleaved Reed - Solomon Codes," in Proc 9th IcETRAN 2022, TEI 1.5, Novi Pazar, Serbia, 6-9 June 2022,

was selected as the best paper presented in the Section of Telecommunications.



Figure 14: IcETRAN 2022 - Award for the best paper

2) IcETRAN 2023 - Award for the best paper

Our paper, presented at the IcETRAN 2023 conference:

J. Milojković, P. Ivaniš, V. Blagojević, S. Brkić, "Performance analysis of land mobile satellite-terrestrial systems with selection relaying", in Proc. 10th IcETRAN 2023, TEI 1.2, East Sarajevo, Bosnia and Herzegovina, June 5-8, 2023,

was selected as the best paper presented in the Section of Telecommunications.



Figure 15: IcETRAN 2023 - Award for the best paper

3) IcETRAN 2023 - Award for the best paper

Our paper, presented at the IcETRAN 2023 conference:

B. Živkovic, Z. Čica, "Network Traffic Capturing in Open-Source 5G Core Network Platform", in Proc. 10th IcETRAN 2023, TEI 1.8, East Sarajevo, Bosnia and Herzegovina, June 5-8, 2023,

was selected as the best paper presented in the Section of Telecommunications (young researchers).



Figure 16: IcETRAN 2023 - Award for the best paper (young researcher)



4) Award for the best journal paper in the area of Telecommunications

Our paper, published in the Sensors journal:

A. Cvetković, V. Blagojević, J. Anastasov, N. T. Pavlović, and M. Milošević, "Outage Analysis of Unmanned-Aerial-Vehicle-Assisted Simultaneous Wireless Information and Power Transfer System for Industrial Emergency Applications", Sensors vol. 23, no. 18, paper no. 7779, September 2023,

was selected as the best paper in the area of Telecommunications published in scientific journal in year 2022/2023.

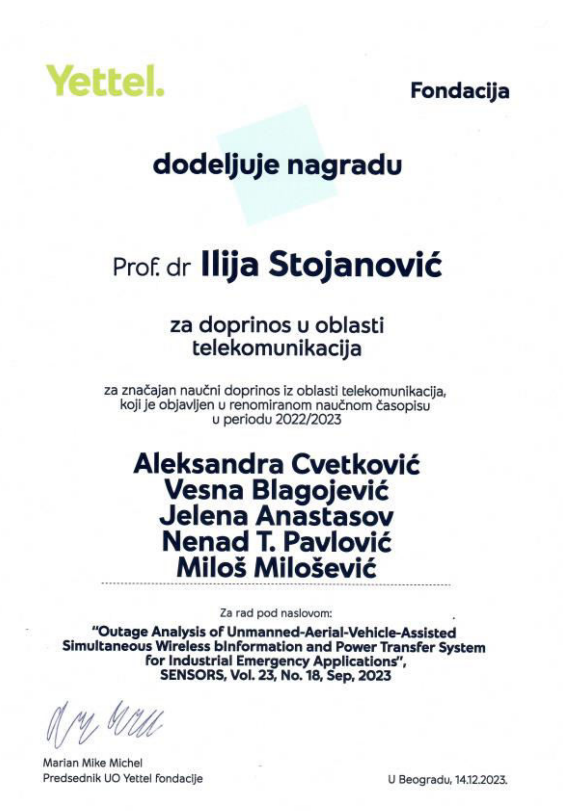


Figure 17: Award for the best paper in the area of Telecommunications published in scientific journal in year 2022/2023

3.10. WP7 KPIS

A set of key performance indicators (KPI) has been established and presented in the table below, including measurable objectives. The project outcomes were regularly analysed by the Principal Investigator and WP7 leader from the KPIs perspective to monitor the success of the project. When the results are not positive, a backup solution was taken into consideration and implemented. Table 3 shows the KPIs and measureable objectives of the WP7:

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Table 3 : hi-STAR WP7 KPIs table

Dimension	KPIs	Target	Current status
Subactivity 7.1. (monitored quarterly)	Yearly growth rate of visitors on the website	>100%	M1-M12: 577 visits M13-M24: 1392 visits (growth 114% to M1-M12) M1-M24: 1969 visits M25-M36: 4365 visits (growth 355% to M13-M24)
	Average duration of website visits	2 min	M1-M36: 6334 visits 2 min, 21 sec M1-M39: 6756 visits 2 min, 20 sec
	Number of followers of hi-STAR Facebook page per year	30	122
	Number of posts on hi-STAR Facebook page per year	15	60
	Number of connections on LinkedIn per year	30	116
Subactivity 7.2. (monitored bi-yearly)	Number of posts on LinkedIn page per year	15	49
	Number of followers on Twitter per year	20	N/A. This KPI is not monitored (this social network is not in usage).
	Number of Tweets mentioning hi-STAR per year	15	
	Number of published papers at JCR indexed journals/book chapters	15	15
	Number of conference papers	18	24
	Number of technical solutions	9	0
	Total number of citations	200	92
	Average Increase of h-index per team member in percentage	30	15
	Number of novel PhD courses	2	0
	Number of PhD dissertations	3	1
	Number of proposals for new EU projects	1	0
	Number of new partnerships	1	2



	Number of new spin-offs in Serbia	1	0
Subactivity 7.3. (measured in Y3)	Number of participants on the workshops	50	55

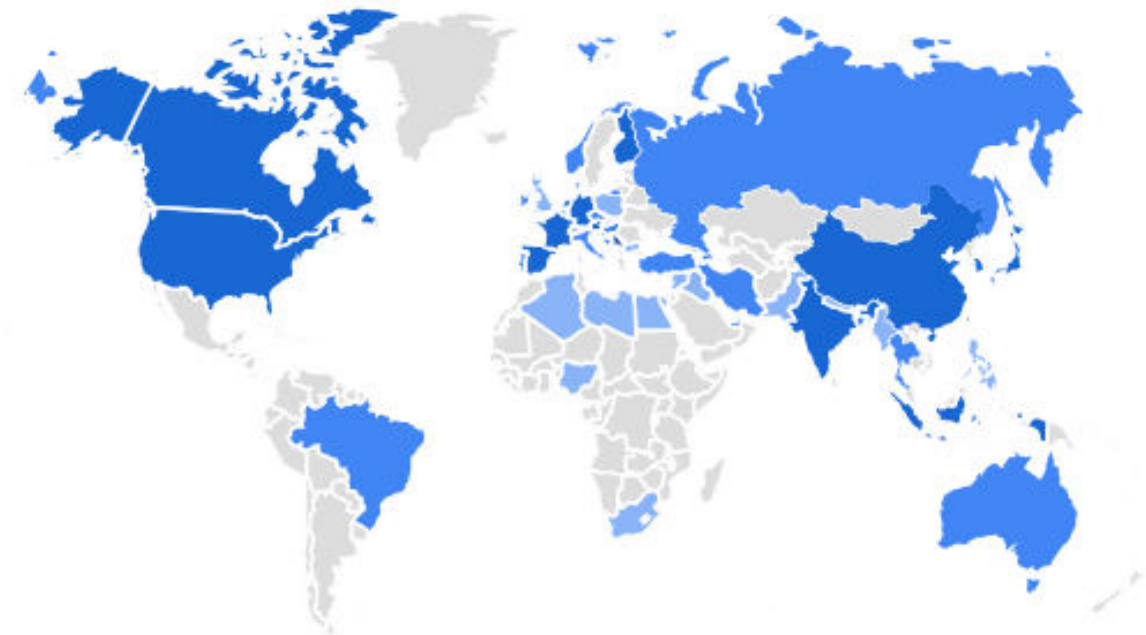


Figure 18: Visitors of web site by country

KPIs for Subactivity 7.1. are fully succeed. In the Figure 18. are shown visitors of web site by country.



SECTION 4 – INTERNAL DISSEMINATION ACTIVITIES

4.1. FACE-TO-FACE MEETINGS

Face-to-face meetings and conferences are an integral part of the communication strategy. Face-to-face meetings were decided on a case-to-case basis. We strive to hold them back to back with other meetings and events.

4.2. REGULAR ONLINE MEETINGS

Additional net meetings were organized if and when useful, as a suitable way to reduce travel costs and to exchange information about the progress within single tasks.

Microsoft Teams, Zoom, or similar, were used for e-meetings. The currently used e-meeting tools (and links for joining meetings) are sent to partners well in advance to meetings.

Plan for meetings: once a month on the second Thursday of each month. The meeting schedule is decided by the Principal Investigator, based on a Doodle poll filled in by partners.

4.3. PROJECT FILE REPOSITORY

Google Drive for Deliverables and other confidential documents is used as project file repository. Public deliverables are also available on hi-STAR web portal.

4.4. MAILING LISTS

To avoid unnecessary mailing messages, senders carefully select the recipients to the narrowest audience possible.

The distribution list hi-STAR@etf.bg.ac.rs is reaching out to all partners. Mailing lists are defined in the spread sheet on mail lists and committees which can be found in google drive.



4.5. HI-STAR PROJECT HANDBOOK

Internal confidential document “hi-STAR Project Handbook” was created. The overall purpose of this document including its supplements is to support the accomplishment of project objectives and targets. The targeted readers are all project participants.

The document provides key information about project objectives, plans, working procedures and project organisation. It also describes best practice in project management.

The content of this document is structured as follows:

- Definition, scope and basic facts about project
- Commitment and objectives
- Work-plan
- Financials
- Working procedures
- Organisation
- Project collaborative environment (PCE) and tools
- Naming & coding standards
- References



CONCLUSIONS

This document D7.3 Final report on dissemination and communication activities is an update of D7.2 Mid-term report on realized dissemination and communication activities in the first period of the project, and summarizes realized activities on dissemination and communication activities in the second period of the project (M19-M39, project was extended by 3 months) in the context of WP7 Subtask T7.1 – Website, communication channels and project dissemination materials and WP7 Subtask T7.2 – Publishing results at journals and conferences, thus providing a full report of all activities during the project lifetime (M1-M18). Presented materials were continuously reviewed and updated throughout the project lifetime.