

VEZILKA

NEWSLETTER

Issue #1 April–September, 2026

In this issue:

- 01 Message from the PM
- 02 News
- 03 Scientific achievements
- 04 Start-ups and SMEs
- 05 Events
- 06 Student activities
- 07 Verticals

Stay connected



@vezilka.ai



CONNECT
COLLABORATE
INNOVATE
TOGETHER

Editorial board

Biljana Risteska Stojkoska • Bojana Koteska Micevska

Technical board

Zivko Atanaskoski • Ema Pandilova • Andrej Petkovski



Vezilka



EuroHPC
Joint Undertaking



Co-funded by
the European Union



Republic of North Macedonia
Ministry of
Digital Transformation

01. Message from the PM

Six months in

Dear readers,

Welcome to the first issue of the VEZILKA newsletter.

We began VEZILKA on 1 April 2026 with a clear purpose: to help people and organisations in North Macedonia turn the potential of artificial intelligence into practical results. Our formal launch in June brought some 400 guests, including the Prime Minister and the EU Ambassador, marking VEZILKA's role as the country's National AI Factory Antenna and its place in the European network of AI Factories.



What has encouraged me most is our community's response. More than 80 colleagues at FCSE are contributing. Ten student positions drew 132 applications, and nearly 400 people registered for our first three public courses within six weeks. More than 50 organisations have requested direct AI support; nine in ten business applicants are SMEs or start-ups, and the first are already working with our teams. Our website has welcomed over 8,500 visitors, four times its annual target.

Behind these numbers are people ready to learn, organisations with concrete problems, and students eager to take on real responsibility. Their interest gives us both momentum and a responsibility to deliver.

This autumn our courses begin, and our focus shifts from laying foundations to putting them to use. If your organisation has a challenge AI could help address, submit an Expression of Interest at vezilka.ai. Our support is free of charge.

My thanks go to our co-funders, the EuroHPC Joint Undertaking and the Ministry of Digital Transformation, to the European Union, and to every colleague, partner and student contributing to VEZILKA. We are only at the beginning.

Prof. Dr. Dimitar Trajanov
Project Manager, VEZILKA

02. News

Project kick-off



The VEZILKA kick-off meeting brought EuroHPC, the Ministry of Digital Transformation, the full Steering Committee, work package leaders, project secretaries and vertical experts to the Faculty of Computer Science and Engineering (FCSE). The day was given over to the project's vision and scope, EuroHPC's expectations, alignment with national AI policy, a review of the work packages with their key performance indicators, and a frank discussion of the risks and administrative practices.

What VEZILKA offers businesses



At a members' briefing at AmCham North Macedonia, Prof. Dimitar Trajanov set out what the project offers companies: AI readiness assessment, prototyping, pilot support and mentoring, free of charge across all five strategic sectors. Companies apply by submitting an Expression of Interest.

The session was deliberately kept to fifteen participants so it could run as a working discussion rather than a presentation. Participants were also invited to contribute to doniraj.vezilka.ai, the national platform for building the Macedonian language corpus.



Vezilka



EuroHPC
Joint Undertaking



Co-funded by
the European Union



Republic of North Macedonia
Ministry of
Digital Transformation

VEZILKA launches as North Macedonia's National AI Factory Antenna



VEZILKA was formally presented in June in Skopje, bringing together the government, the academic community, the European Union, and the research and innovation sectors around a shared goal: a stronger AI ecosystem in the country.

Prime Minister Hristijan Mickoski described the project as the beginning of a process leading to stronger science, better economy, and more opportunities for young people. EU Ambassador Michalis Rokas marked North Macedonia's entry into the European network of AI factories. Coordinated by the FCSE with the Ministry of Digital Transformation, VEZILKA is co-funded by the EU through Horizon Europe and the EuroHPC Joint Undertaking.



Through its partnership with the Pharos AI Factory in Greece, VEZILKA gives researchers, companies, startups and institutions access to European supercomputing resources, AI tools and mentorship, including support for language models that work in Macedonian. The work is organised around five priority sectors: healthcare, energy, language and culture, public administration, and agriculture.



Vezilka



EuroHPC
Joint Undertaking



Co-funded by
the European Union



Republic of North Macedonia
Ministry of
Digital Transformation

03. Scientific achievements

Two open datasets from VEZILKA-supported research

DATA IN BRIEF · MAY 2026 · 1.9 IF

SolarMagix: a multi-station photovoltaic and weather dataset

Solar plants lose output to equipment faults, grid limits and weather, and catching problems early means knowing what the panels should have produced under the conditions they actually faced. This dataset merges telemetry from seven PV stations across North Macedonia with hourly weather data, cleaned and aligned into a single schema. It is built for training production-forecasting and anomaly-detection models, and it is openly available.

7

STATIONS

50

INVENTERS

1.2M

TELEMETRY ROWS

Andrej Daskalov, Marija Dimitrova, Tijana Atanasovska, Petre Lameski, Biljana Risteska Stojkoska, Eftim Zdravevski - FCSE and MAGIX.AI
doi.org/10.1016/j.dib.2026.112830

SCIENTIFIC DATA · 2026 · 7.2 IF

FoodBench: a question-answering dataset for food and nutrition

Language models handle food and nutrition poorly, and until now there was no shared benchmark to measure how poorly. FoodBench converts fragmented food data into question-and-answer pairs covering nutrient estimation, front-of-pack labelling and linking food terms to standard ontologies. Four widely used models were tested against it and all struggled, confirming that this domain needs models trained specifically for it.

7

TASKS

4

MODELS TESTED

66K

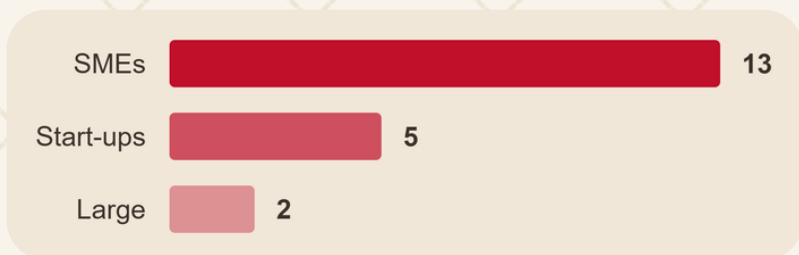
QA PAIRS

Tome Eftimov, Ana Gjorgjevikj, Matej Martinc, Gjorgjina Cenikj, Darko Sasanski, Riste Stojanov, Sašo Džeroski, Barbara Koroušić Seljak - FCSE and Jožef Stefan Institute
doi.org/10.1038/s41597-026-08079-1

04. Start-ups and SMEs

Nine in ten business applicants are small companies!

In its first six months, VEZILKA recorded 49 expressions of interest for direct AI support. Private companies represent the largest single block, with 20 applicants, narrowly ahead of the public sector with 19. More revealing, however, is the composition of that private-sector demand: 18 of the 20 applicants are SMEs or start-ups.



This makes SMEs and start-ups not simply one segment of private-sector demand, but its dominant component. Together, they account for 90% of all private-sector requests for direct AI support and, with 18 applicants, constitute almost as large a group as the entire public sector.

Their pattern of engagement is also distinctly different. Of the 87 training-only applications recorded, only 10 came from SMEs and two from start-ups. Training demand is instead concentrated overwhelmingly among public institutions and schools. Smaller companies tend to approach VEZILKA with a concrete technical or operational need: a solution to develop, specialised expertise to access, or computing resources required to implement an AI use case.

ARE YOU AN SME OR A START-UP?

Submit an Expression of Interest at vezilka.ai/services. Support covers AI readiness assessment, prototyping, pilot development and mentoring, free of charge. The expression-of-interest route is the door other small companies are already using.

Written by: Aleksandra Dedinec



Vezilka



EuroHPC
Joint Undertaking



Co-funded by
the European Union



Republic of North Macedonia
Ministry of
Digital Transformation

05. Events

September highlights

Two events are coming up before the end of September: one regional and industry-facing, one open to everyone. Come and find us.

**16-17
SEP**

10th Forum of Advanced Technologies Science and Technology Park Niš, Serbia

VEZILKA will be presented at one of the region's leading innovation conferences, held under the theme TechIntelligence: Transforming Industry for the Intelligent Age. Prof. Igor Mishkovski, WP4 lead, will join the Main Stage panel "AI Factories and EDIHs: Reducing the Risk of Innovation" on 16 September, alongside Serbia's AI Factory (ICEF), EDIH InnovationAmp and the Regional Cooperation Council.

The panel is an opportunity to set out VEZILKA's services and training offer to industry and SMEs, to position the Antenna within the Western Balkans AI Factory and EDIH ecosystem, and to strengthen cooperation with Serbia's AI Factory. The forum draws more than 1,200 participants, 200 companies and 170 speakers from over 20 countries.

**25
SEP**

European Researchers' Night 2026 FCSE, Skopje · 10:00–18:00

For one day, science leaves the laboratory: experiments, workshops, and exhibitions for all ages, running across Skopje, Bitola, and Shtip and organised by leading universities and research institutions under the Choose Science banner.

Visit the VEZILKA stand to meet the team, pick up materials and find out how to get involved in the project. At 14:00 at the FCSE Amphitheatre, join the panel discussion on research, innovation and the projects running at the Faculty of Computer Science and Engineering.

06. Student activities

Three bronze medals at the first European AI Olympiad



Four high-school students from North Macedonia, prepared with support from the VEZILKA project, competed at the inaugural European Olympiad in Artificial Intelligence in July. Three of them came home with medals.

EOAI 2026 ran from 14 to 19 July in Cluj-Napoca, Romania, bringing together almost 90 high-school students from 23 European countries. Over two competition days, participants worked through tasks in machine learning, model training and advanced algorithmic techniques.

Blagoj Rujanoski Stojanovski, Andrej Angelov and Todor Pljakov each finished with a bronze medal, with Anastasija Pecevska completing the team. They were prepared by M.Sc. Vladislav Bidikov and M.Sc. Dimitar Mileski from the Faculty of Computer Science and Engineering.

With the right preparation and tools, students from North Macedonia hold their own on a European stage.

Inside the team: student testimonials

As a third-year student at FINKI, it is a privilege to be part of VEZILKA. I learn something new every day and work with technologies and systems students don't always have easy access to.

I've had the chance to work on training large language models, on speech recognition, and on developing RAG systems. Each project took me deeper into a different part of artificial intelligence, and gave me experience that would be hard to get through self-study alone. Working on real infrastructure - how it functions and how it is actually used - gives me a much broader picture than I would get anywhere else.

The people matter as much as the work. The mentorship and guidance mean a lot to me, as does an environment where I feel free to ask, to share an idea, and to keep learning. Knowing that what we build here contributes to the future of artificial intelligence in Macedonia makes the work more motivating still.



Hristijan Gajdov,
student at FCSE

Even in my second year of studies, VEZILKA has been far more than work experience. It is a chance to be part of a team building something with a real purpose and the potential to last.

As the youngest member of the team, the trust placed in me meant a great deal. I was given real responsibility, and it is a privilege that part of it was the development of doniraj.vezilka.ai - a platform contributing to something I care deeply about: preserving and developing the Macedonian language.

I'm grateful to work alongside some of the sharpest minds in our industry. The mentorship and the open conversations help me see engineering problems from a different perspective, while the freedom to experiment lets me keep learning. Every project and every problem is gradually shaping me into a more independent and more capable developer, and helping me understand what kind of engineer I want to become.



Stefan Trajanovski,
student at FCSE

07. Verticals

VEZILKA's work is organised around five priority sectors. In this issue, we represent the health sector - a sector with large datasets, clear institutional need, and the most direct path from an AI proof of concept to something that changes how people are treated.

Health

Energy

**Language
& Culture**

Agri

**Public
Adm.**

01 BUILDING PARTNERSHIPS

We see strong potential in the health sector and we are establishing memoranda of collaboration with relevant health institutions. Stronger together for better health.

02 EXPLORING PROOFS OF CONCEPT

We are gathering interest and ideas for AI-demanding proof-of-concept projects inside health institutions, focused on real needs and high-value opportunities. From ideas to impact.

03 MOJ TERMIN AS A FLAGSHIP OPPORTUNITY

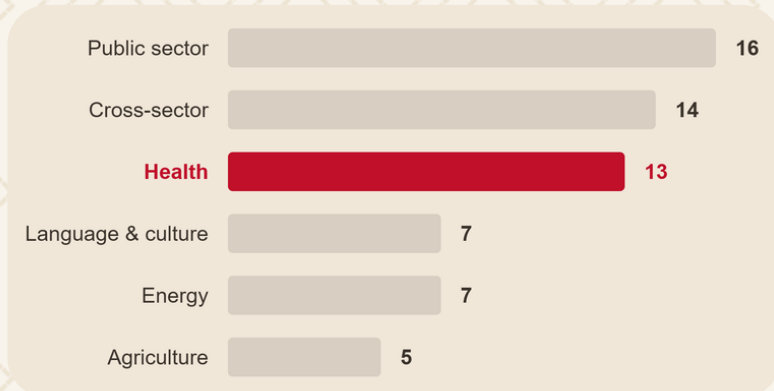
The most ambitious opportunity identified so far is transforming data from Moj Termin to enable its responsible secondary use for research, analytics and AI development. It has the potential to become a major long-term proof of concept and to create substantial value for the national healthcare and innovation ecosystem.

Real collaboration. Real innovation. A healthier tomorrow.

Written by: Monika Simjanoska Misheva

What health organisations are asking for?

Thirteen expressions of interest come from the health sector, making health the leading domain-specific vertical in VEZILKA's portfolio. The organisations behind them include public and private hospitals, laboratories and clinics, alongside digital-health companies whose platforms are already used by healthcare professionals and now want to make them smarter with AI.



A SECOND PAIR OF EYES

Turning medical images into support for the specialist reading them - flagging what deserves a closer look, without replacing the judgement of the person making the call.

A FILE AT A GLANCE

Years of scattered records turned into something a doctor can grasp at once. The information is already there; what is missing is a way to see it whole in the minutes a consultation allows.

PATTERNS CAUGHT EARLY

Finding what is hidden in clinical data, so that what is unusual surfaces while it still changes the outcome.

PAPERWORK THAT WRITES ITSELF

The time spent by doctors to type reports can be used for patients. Models that handle the Macedonian language properly are not available off-the-shelf.

None of this is science fiction. No single clinic can build alone these things: computing power, handling of sensitive medical data, Macedonian-language speech and text models, and a partner to say honestly whether an idea is worth pursuing. We are here to help!

Written by: Aleksandra Dedinec



Vezilka



EuroHPC
Joint Undertaking



Co-funded by
the European Union



Republic of North Macedonia
Ministry of
Digital Transformation

Turning
health data into
opportunities
for a healthier
society.

AI for a Healthier Tomorrow

Collaborate · Innovate · Create Lasting Impact

01 | Recognizing potential & building partnerships

We see great potential in the health sector and are establishing memorandums for collaboration with relevant health institutions.

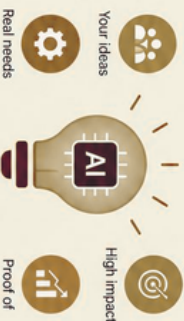
STRONGER TOGETHER
FOR BETTER HEALTH



02 | Exploring AI proof of concepts

We are collecting interest and ideas for AI-demanding proof-of-concept projects in health institutions, focusing on real needs and high-value opportunities.

FROM IDEAS TO IMPACT



03 | Moj Termin as a flagship opportunity

Transforming Moj Termin health data for responsible secondary use is a key proof of concept we are targeting, with the potential for long-term, high impact on healthcare, research and innovation.

HEALTH DATA TODAY.
BRIGHTER SOLUTIONS TOMORROW



Real collaboration.
Real innovation.
A healthier tomorrow.
