

JackDaw GeoAI in Bacău County



A Governance Question Meets a Concrete Answer

Across Europe, public administrations are moving past the question of whether artificial intelligence can support public services, and into the harder question of how it can do so responsibly, transparently and in a way that other regions can replicate. Bacău County, in north-eastern Romania, has spent the past year building a concrete answer to that question.

The practice was built through GeoEDUHealth Access – Bacău, a project implemented by MEDIA TREND SRL, the only Romanian company selected under the ENHANCE cascade-funding call of the Horizon Europe / PoliRuralPlus programme. Over roughly six months, the project validated the JackDaw GeoAI platform against real institutional data from Bacău County, across three public-policy domains: education, healthcare and road infrastructure.

Why Bacău County

With approximately 70% of its population living in rural areas, Bacău County is a demanding test environment for any accessibility-focused tool. Dozens of local public authorities are more than thirty minutes away from the nearest hospital, secondary school or administrative centre. Classical GIS analysis can map these gaps, but it depends on specialist expertise and produces static outputs that rarely translate directly into policy action. JackDaw was tested as a different kind of instrument: a platform combining GeoAI, geospatial datasets and natural-language interaction, built to let non-specialists ask direct questions of territorial data.

From Institutional Data to a Working Platform

The first phase of the project focused on data. Datasets were collected from four institutional sources - the Bacău County Council (administrative boundaries and road network), the County School Inspectorate (school locations and enrolment data), the Bacău Public Health Directorate (healthcare facility data), and OpenStreetMap (supplementary points of interest) - then cleaned, standardised and ingested into JackDaw through the Raven data catalog. A Python-based geocoding workflow using the Nominatim service located institutional data that existed only in tabular form.

The second phase tested accuracy. Twelve scenarios covering healthcare accessibility, educational planning and infrastructure prioritisation were run through JackDaw and benchmarked against equivalent analyses in QGIS using OpenRouteService isochrones. The comparison showed that JackDaw's spatial outputs were consistent with classical GIS analysis, while substantially reducing the time and specialist expertise required to obtain them — the central promise of the good practice: democratising access to territorial intelligence rather than replacing the professionals who already provide it.

Technical accuracy was only half of the validation. The practice was deliberately built around participation, tested through two stakeholder workshops at the Bacău County Council headquarters.

What Stakeholders Took From It

The workshops surfaced a consistent theme: the value of JackDaw was not the novelty of the technology, but its ability to make institutional data usable by people who are not GIS specialists. A representative of the County Council described the project as consolidating Bacău's position as a pilot territory for intelligent technology use; the AI/GIS lead on the project noted that platforms like JackDaw remove the need for a dedicated GIS specialist in every institution that needs spatial answers; and the Chair of the European Parliament's Committee on Regional Development, present at the closing workshop, pointed to the project as an example of how AI-based tools can help ground public investment decisions in evidence.

Transfer Potential for AI4Citizens

Bacău County is the first territory in Romania where an AI solution of this kind has been validated across education, healthcare and road infrastructure at once. For AI4Citizens, the transferable element is not the JackDaw platform as such, but the methodology behind it: identify a concrete accessibility problem, assemble trustworthy institutional data, benchmark the AI tool against an established method, involve the institutions that will use the results, surface limitations openly, and only then translate outputs into policy recommendations.

Conclusion

GeoEDUHealth Access – Bacău shows what an AI instrument can do under real institutional conditions. AI4Citizens is where the conditions get set for how such instruments should be governed, transferred and adopted responsibly across public administrations. Bacău County's contribution is to bring a tested, evidence-based case to that discussion - one built on real data, benchmarked results and two rounds of open stakeholder scrutiny - rather than a theoretical framework alone.

Andreea Raluca-Leru - representative of North-East RDA Romania (Brussels office) - framed the wider lesson precisely: Horizon Europe validates, Digital Europe deploys, and Interreg replicates - and a well-designed project chains the three together. That is the bridge this instrument is meant to build for AI4Citizens.