

Partner Search Form

Sustainable Urbanisation Global Initiative (SUGI)/Food-Water-Energy Nexus

Applicants looking for project partners can generate a “Partner Search Form” describing the profile of the organization they want to collaborate with. Applicants looking for project partners can also publish their ideas in the [LinkedIn group](#). The completed partner search form can be sent to the Call Secretariat who will publish it on the JPI Urban Europe website and on the LinkedIn Group as well.

Send the filled in form to: magnus.brink@iqs.se

Date: 2 February 2017

Section 1 – I am looking for:

A partner for my project

A project to join (PREFERABLY!)

Section 2 - Call Information: which topic(s) do you address?

Topic 1. Robust Knowledge, Indicators and Assessments

Topic 2. Multi-level Governance and Management of the Food-Water-Energy Nexus

Topic 3. Managing Potential Strategies and Solutions to address emerging Risk and Tradeoffs at the intersection of Sustainable Urbanisation and the Food-Water-Energy Nexus

Section 3 - Your Organisation

Organisation name and location: University of Maribor, Faculty of Electrical Engineering and Computer Science (UM FERi), Maribor, Slovenia

Contact person: David Podgorelec

E-mail: david.podgorelec@um.si

Website: <https://gemma.feri.um.si/>

Description of the organisation:

The Laboratory for Geometric Modelling and Multimedia Algorithms (GeMMA) at UM FERi has rich experience in massive geometric/geospatial data processing, data fusion, pattern analysis, predictive analytics, GIS, and visualization. It was engaged in ecosystems dynamics modelling, photovoltaic and wind potential estimation using LiDAR data, optimisation of buildings' design regarding solar potential, LiDAR-based detection of power transmission lines, biomass assessment, and data mining analytical engine development. GeMMA is also involved in realization of the Slovenia's Smart Specialization Strategy through its participation in preparing action plans for strategic development and innovation partnerships in the fields of smart cities and circular economy.

Section 4 - Free Keywords:

Computer science, Earth observation data processing, spatio-temporal analytics, machine learning, data fusion, GIS

Section 5 - Project Description

a) We would preferably **join a project** with already built idea, where our data processing skills and expertise would be recognized as complementary and necessary for its

completion. In addition to data modelling, which shall unify diverse data repositories and tools in different participating countries, we can offer development or adaptation of algorithms for pre-processing (alignment, filtering, segmentation, interpolation, decimation...) of (big) data from multiple sources, and particularly data fusion, analytics and visualization. However, as the Slovenian Research Agency is only funding the fundamental research activities (not the applied or the innovation/implementation ones) in SUGI, we cannot provide fully operable ICT services, but “only” novel methodological solutions (TRL 3-5) validated through user-defined pilot cases running on the prototype platform developed within the project.

- b) We could eventually **lead the project** if we do not manage to join one and, of course, if we manage to assemble an appropriate consortium. In this case, our fundamental research in big data processing (consisting of activities listed above) shall be in focus, while the domain specific data and knowledge shall predominantly provide input/output interfaces and activities i.e. data modelling inputs, pilot scenarios design, interpretation of results, decision & policy making.

Section 6 - Partner Profile Sought

Type of organisation:

We shall appreciate a consortium consisting of organisations of any type fulfilling the call conditions (companies, cities, municipalities, regions, consumers, NGOs, research institutions). Of course, we expect partners with expertise complementary to ours (without redundancy), where the consortium as a whole shall cover all aspects required in the call (including decision makers, policy makers and other stakeholders).

Required Skills and Expertise (if applicable):