



dRural

Open Call 2 for Mirror Regions

Annex 1: Open Call Text



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 101017304.

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1. Introduction

This document provides guidance information regarding the dRural Open Call 2 for Mirror Regions, focusing on applicants who wish to provide them within dRural. Including this document, all associated Annexes must be read carefully for the submission of an application.

dRural overall goal is to co-develop and implement a digital solution **based on the exploitation of data from existing service platforms** that deliver multiple **innovative services** to rural citizens while creating opportunities for economic growth and quality of life improvements. As such, **the project aspires to become the service marketplace of reference for European rural areas.**

dRural will build a service marketplace for rural areas and communities that will be demonstrated in four pilots in rural regions of Europe, namely:

- Extremadura (Spain),
- Dubrovnik-Neretva County (Croatia) and
- Region Gelderland Midden (Netherlands).

Each of these settings is called a **Regional Demonstrator**.

dRural will also cover developments in Mirror Regions. These regions will be selected through the Open 2 Call for Mirror Regions. This document will cover relevant information related to this call.

1.1. What is a mirror region?

A mirror region is a region outside the consortium, that will replicate (mirror) dRural platform in their own geographies. In this project, a mirror region will be represented by public or private entities (local promoters, local associations, local innovation hub, NGOs, chamber of commerce, non-profit foundations, municipalities, cities halls, SMEs, etc.) that will play the role of a regional promoter to provide rural services to region or improve to current provision of services will be selected through the Open Call 2 for Mirror Regions.

This call aims to recruit and engage key stakeholders from rural regions non-represented within the consortium with the task of deploying dRural platform and a marketplace in that new region. This will enable the expansion of the dRural concept, demonstrating its benefits and impacts beyond the current consortium coverage. The funding, programme scope and duration are summarized in table 1.



Table 1: Summary: dRural open call for mirror regions scope and benefits

Strands	Work to be done	Number of awarded beneficiaries	Funding granted per provider	Time for implementation
Mirror Regions + developers	<ul style="list-style-type: none"> • Set up dRural platform • Attract service providers and end users. • Build the ecosystem of end- users, developers, providers 	4 projects	60.000€ Single application 120.000€ Consortia application	7 months

1.2. Expected impacts of the Open Call 2

The **overall goal** of the dRural Open Call 2 for Mirror Regions is to boost the innovation and development of rural regions by stimulating, coordinating and engaging new stakeholders to the dRural project that can provide added-value services to citizens and business in the regional demonstrator and at the same time improve the technical capabilities and technology offer provided by dRural platform.

For this, dRural project has planned an Open Call 2 with the objective of:

- Engaging new external stakeholders into the dRural ecosystem.
- Helping to tune and adjust dRural platform through additional inputs and tests.
- Benefit rural areas (mirror regions) by increasing the services available and meeting the specific needs of rural businesses and rural people. This will create a “networking effect” on the platform, attracting more users and service providers, and maximizing the chances of services sustainability after the project ends.
- Creating new market openings in mirror regions, making it possible for newer and smaller players to enter the market and create value.
- Simplifying future rural solution development for Mirror Regions by bringing together data and analytical functionalities, thus addressing this barrier more completely over time.
- Providing technical requirements to dRural Platform.
- Testing and validating dRural Platform in a large variety of real-life scenarios bringing real benefits to stakeholders and general people located in Mirror Regions.

The open call overview and the detailed rules are described in Annex 2 – Open Call Guidelines – Open Call 2 for Mirror Regions.



2. Background information on dRural project

2.1. The problem

Depopulation is the new normal in rural regions all across Europe. The quality of life that a village offers does not seem to outweigh structural problems caused by demographic change and years and years of institutional abandonment. Talent drain, lack of services and deficiency of transport infrastructures are some causes that lead to the decrease in the number of inhabitants. With characteristics like low population density, geographical – and institutional – isolation, precarious economies based on farming and lower levels of income, some rural regions consider depopulation as their new reality. The benefits that they enjoy such as lower living costs, more space, less pollution etc. are outweighed by several dramatic structural problems: fewer job opportunities, lack of infrastructure and a modern transport network, degradation of basic public services like schools and healthcare facilities, absence of entertainment options and cultural offering, and so on.

2.2. Concept

The overall goal of dRural is to “co-develop and implement a digital solution that delivers multiple services to rural citizens while creating opportunities for economic growth and quality of life improvements”.

To do this, the project envisions the dRural platform as an open, web-based technological development composed of the following components:

- **The dRural Platform interfaces**, that allow interaction with the Core Meta-platform in an Open standardized way through its Open API, features a developers site in order to be able to exploit the Core Meta-platform capabilities and includes a Marketplace, where services are exposed to the end users through the dRural user interface.
- **The dRural Core Meta-platform**, which enables interoperability, analytical processing, and data storing on the solution.

A high-level conceptual vision of dRural platform is reproduced below:

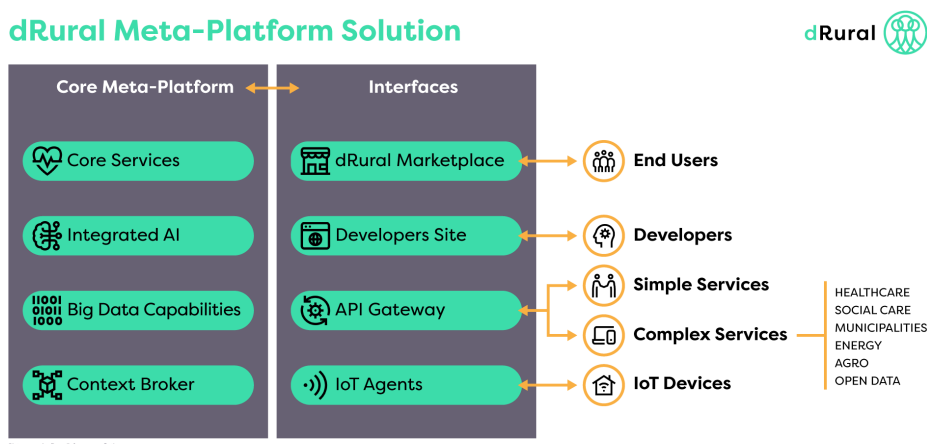


Figure 1 Visual representation of the dRural platform



2.3. dRural Simple vs. Complex services

The dRural solution (platform and marketplace) targets two types of services: **Simple Services** and **Complex Services**. Service providers (the supply side of the platform) of any type expose their offering through services that are later accessed by end-users (the consuming side of the platform) through the marketplace User Interface (UI).

In a nutshell, the **Simple Services** are provided by small businesses and sole entrepreneurs, suppliers of services on the dRural marketplace, while the **Complex Services** integrate external data platforms to build new services through the Core Meta-platform (and thus expected from organizations with more resources to build them). Both of them are offered through dRural marketplace and the only difference between them from a provider perspective is the level of complexity of the service, e.g. whether only booking a service or if the exchange includes other data exchanges and information. The available components for the development of the service in each of the categories also vary.

2.3.1. Simple Service delivery model

Simple Service Providers have access to four major logic components offered as part of dRural marketplace in order to design and offer their service through it:

- **View:** explains the service. Includes text, photos, ratings, messaging and other contact options, etc. It is the first 'step' to be displayed once the user clicks on the card in the grid. It is compulsory to fill in order for the service to be published.
- **Booking:** enables the identification of available slots in a calendar and the selection of one of them to book the service on a concrete date/time.
- **Payment:** enables the service payment (e.g. via credit card, PayPal, etc).
- **Rate and review function:** enables users to provide feedback on the service after it has been consumed.

Customization of these services by the service provider is done via a wizard and it mainly targets small businesses (MSMEs sole entrepreneurs with registered VAT numbers) with the objective to extend the reach of their services to new potential clients through Service Process Innovation and digital channels. The creation process of a simple service does not require technical knowledge or development capabilities, just basic digital literacy skills.

In order to define and publish a Simple Service into the mirror region platform marketplace, a Wizard assistant based on templates will be used. A Simple Service Provider fills the related information/data in each selected step to customise it to its concrete offering. Once the template is completed, the service is published in the regional marketplace, and end-users can access/interact with it. A Simple Service Provider can create several services inside its shop and can have several shops, with different types of services.

A Simple Service allows the user to navigate the platform and browse, compare and require basic services through the interface, such as booking an appointment. It does not require any particular customisation or significant efforts to be elaborated.

Examples of Simple Services:

- Specific Hairdresser in a village (specific Shop) to be booked. (**Arena: Social care**)
- Bike rental business with only one shop (Simple Provider, Simple Shop); Only one resource (Bikes to rent); Stock of 20 bikes available to be rented. (**Arena: Tourism**)
- A clinic or health care centre that wants to publish the availabilities (doctors, exams, etc.) and have them booked and paid; (**Arena: Healthcare**)



- A professional / business is willing to sell products or services (e.g. the local food marketplace). (**Arena: Local Food Systems**)

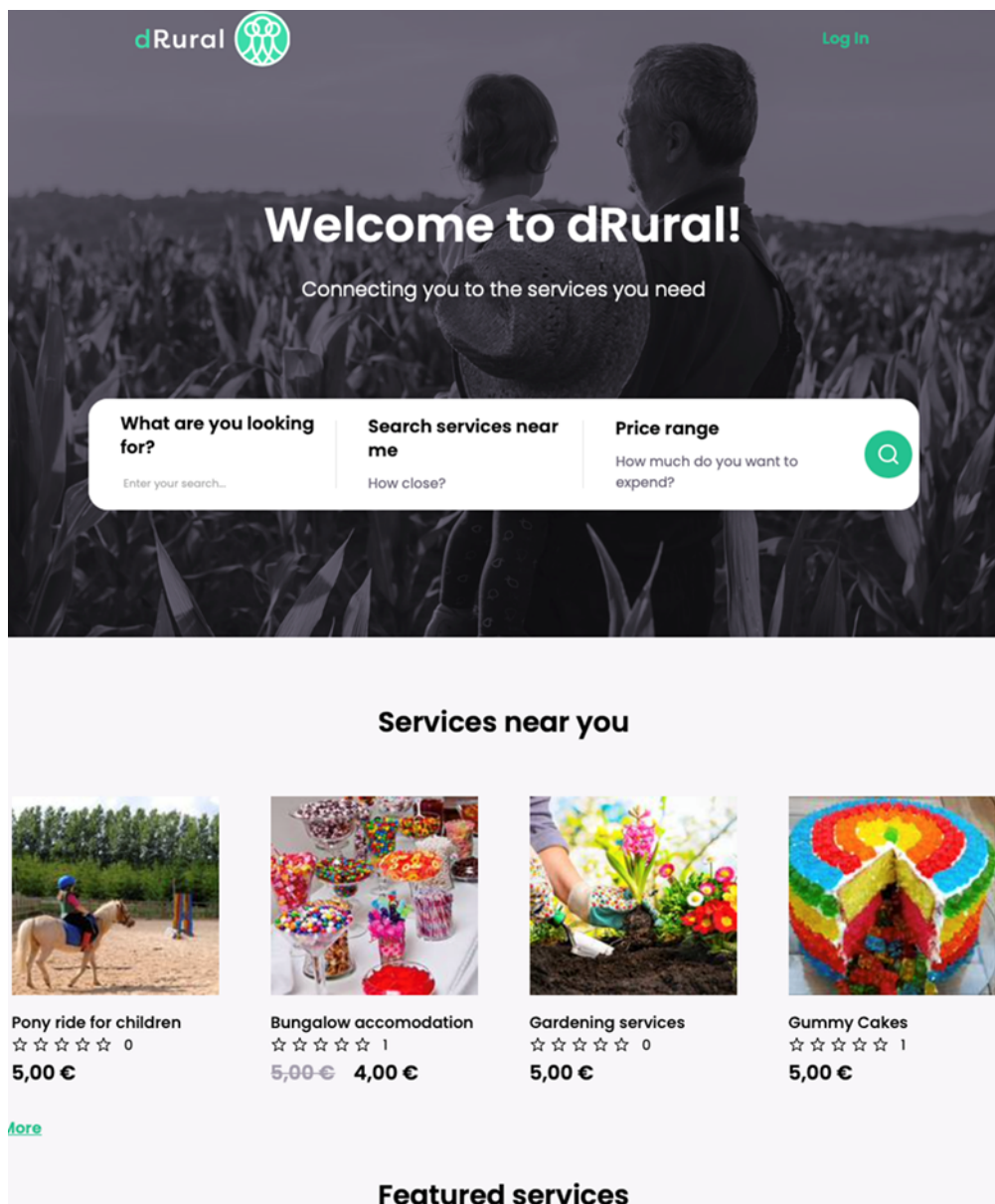


Figure 2 Snapshot from the dRural marketplace

2.3.2. Complex Service delivery model

Complex Services - unlike the Simple Services - require an ad hoc development. Through an **SDK (Software Development Kit)**, Complex Service Providers have access to more powerful components such as Big Data, AI for recommendations, Gateway to external platforms, IoT Agents, Brokers, etc. These components allow them to design and implement a richer set of services covering almost any need that they may have for making available new services to their customers.



By definition, a dRural Complex Service is any service interacting with an external data platform provider through the **dRural Open API** for the exchange and integration of external data and/or services.

It has to be noted that the development of a Complex Service requires a higher amount of funding than a Simple Service, plus development capabilities/skills in order to be able to benefit from all the features that the dRural platform offers.

Examples of Complex Services can be:

- A food producer that wants to offer its products to the consumers, and at the same time uses the platform to find and hire a logistic and transportation service provider, to offer an end-to-end service;
- A chamber of commerce that offers services to build or check the solidity of a local business, and needs an elaborate data analytics dashboard to monitor the impact of its initiatives in the territory;
- A regional large healthcare provider, maybe a National Health System, that needs to integrate the electronic health record with the “caring capacity” in the territory in order to plan resources, and maybe coordinating with the local transportation system or with social care/volunteers;
- A food district that uses IoT devices to monitor the soil and the plants, and then pays taxes and permissions directly to the regional authorities through the Platform.

These services cannot be simply sold and purchased since they imply a certain degree of customization or integration between the service provider, external platforms and the dRural Platform.

2.4. dRural strategic arenas

Six strategic Arenas have been identified for dRural, in which the regions’ platform strategies and Complex Services are being developed. The Arenas further provide the backdrop to a set of illustrative marketplace experiences for the dRural marketplace development and frame the key objectives and results by region. The Arenas help to shape coherence between the different service offers on the platform and the overall narrative of the platform strategies of the regions.

As mentioned, the strategic arenas are of the regions already involved in the project. Mirror regions can fit within the same arenas or propose new arenas, not covered by the project. Any arena is welcome, already covered or not.

The five Arenas are listed below, together with the regions actively working in one or several arenas and the illustrative marketplace experiences that guided the dRural Marketplace development. Find out more at <https://drural.eu/open-calls/>.



Table 2: Five strategic Arenas identified for dRural

Arenas	Description	Regions
Health and Social Care	This arena is concerned with the Health and Social Care in the rural areas. The focus is on connecting health care actors and complementary services, as well as orchestrating the social and health care systems as a whole, from those who aspire to work in the industry to those aiming to find the right care worker to meet one's own needs.	<ul style="list-style-type: none"> • Dubrovnik-Neretva • Gelderland-Midden • Extremadura
Tourism	This arena refers to the tourism sector in rural areas as a whole, from offering listings of activities to do, places to stay, and what to visit, making these places and services more visible to book, pay and rate. In addition, selling and buying local products and providing professional services, such as guided tours, can be linked to this Arena.	<ul style="list-style-type: none"> • Dubrovnik-Neretva • Extremadura
Local Food Systems	This arena meets the needs of buying and selling locally produced food, connecting food producers to end-users in improved ways, including an external marketplace connected to dRural. In the dRural project, more focus will be on solving the logistics and distribution through peer transport services (see Transport and Mobility Arena).	<ul style="list-style-type: none"> • Dubrovnik-Neretva
Business Development	This arena is concerned with local Business Development, hence how companies can have access to targeted services such as developing new professional skills for business owners, being informed about the available business development options, book, pay, and rate services, while having the possibility to seek for mentors and professionals to grow and reach other markets.	<ul style="list-style-type: none"> • Dubrovnik-Neretva • Extremadura
Transport and Mobility	<p>This arena is an all-round exploration of transportation options, not only intended for citizens, but also for local public authorities and other entities looking to improve the local transport and mobility arena.</p> <p>The arena encompasses different potential entities, such as taxi services, one-off/subscription services for Peer-to-Peer ridesharing and vehicle rental (not only cars), business owners needing distribution and logistics services and/or certified drivers and/or vehicles for their employees, and, finally, private citizens willing to drive or provide unused vehicles in exchange for compensation.</p>	<ul style="list-style-type: none"> • Dubrovnik-Neretva



2.5. dRural regional marketplaces

The marketplace of each regional demonstrators is described below, including the examples of Complex Services provided so far, and the priority 'Arenas' defined for the open call.

Table 3: Extremadura regional marketplace

Extremadura (Spain)	
Region information	https://drural.eu/regions/extremadura/
Region marketplace	https://dehesarural.es
Arenas	<p>Health and Social Care, Tourism.</p> <p>Our mission is to improve the quality of life for citizens in rural areas and strengthen the vision of rural areas as places to live, work and enjoy, fighting against depopulation and emptied Spain. We do this by connecting them to a wide spectrum of public and private services offered in rural areas.</p> <p>Within the Open Call, we start building the marketplace focusing on the area of wellness, health and tourism.</p> <p>For the Simple Services, activities need to be offered in the community of Extremadura, covering multiple domains.</p> <p>For Complex Services, value needs to be added to the current available tools and platforms preferably in several domains and areas within Wellness and Health.</p>
Complex Services provided so far	<p>Shared Care Service by Adiper. A trusted registry of care providers with a quality stamp that serves a rural community. The platform helps to coordinate care between nearby families to share the cost of transportation and reduce the minimum number of hours needed per family to access affordable care.</p> <p>Expanded functionalities of Tourism Office platform through IoT provided by Los Santos de Maimona City Council. Further digitizing the management of public spaces to allow pilgrims and tourists to - besides booking and paying for the space - be also able to enter through a smart lock and thus conclude the process autonomously. Over time, the tourist will have access to increasingly complementary services.</p> <p>Standard report for potential entrepreneurs provided by Chamber of Commerce Cáceres. Improve decision-making for existing companies in the province, as well as to new companies or entrepreneurs who need an analysis of target markets with the intention of developing their activity in the province. It entails the creation of standard or customised reports, which include information such as geographical (but still related to the Cáceres), time or other specific indicators.</p> <p>Standard report for potential entrepreneurs provided by Chamber of Commerce Badajoz. By means of connection with an external component, to provide its users with a scorecard module (to be developed on Microsoft technology) which, using input data from csv, excel, Open Data files and data belonging to the dRural user base, is processed/transformed and visualised in said component, offering the most advanced analytical functionalities.</p> <p>Expanded functionalities of public healthcare information platform provided by FUNDESALUD. The service will extend functionalities to private services currently provided by the public healthcare information platform online and allow patients to book and manage appointments, as well as accessing relevant information related to their situation in their personal space.</p>



	The integration of health professionals' calendars and tracking of availability makes the booking experience seamless
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Table 4: Dubrovnik-Neretva County regional marketplace

Dubrovnik-Neretva County (Croatia)	
Region information	https://drural.eu/regions/dubrovnik-neretva/
Region marketplace	https://drural.hr
Arenas	Health and Social Care, Tourism, Local Food System, Transport and Mobility.
Complex Services provided so far	<p>Ride sharing service for goods provided by TERA: the sellers or distributors of food products (esp. Locally produced mandarins), get the ability to organize the distribution and optimise the transportation.</p> <p>Rural-urban transport services provided by City of Metkovic: the Complex Service helps to “platformise” transport services currently coordinated by phone, direct contact, or e-mail (with an initial focus on hospital trips for elderly and/or disabled citizen).</p> <p>Monitoring of people ’ s movement through wireless access points provided by Dubrovnik Neretva County: tracks the movement of people to different areas and cities by using wireless access points located in public spaces of select cities. The data gathered is refined and visualised to create heatmaps and reports that are then harnessed by Local Businesses and Policy-makers.</p> <p>Holistic booking system for service providers provided by Health Care Metkovic: a holistic booking system for Health Care Metkovic that allows patients to book and manage appointments, as well as access relevant information related to their situation in their personal space. The integration of health professionals' calendars will make the booking experience seamless.</p>

Table 5: Region Gelderland Midden regional marketplace

Region Gelderland Midden (Netherland)	
Region information	https://drural.eu/regions/gelderland-midden/
Region marketplace	https://samenkwiek.nu
Arenas	<p>Health and Social Care, e-Government.</p> <p>Our mission is to improve the quality of life for citizens in rural areas. Within the Open Call, we start building the marketplace focusing on the area of elderly and chronic conditions.</p> <p>For the Simple Services activities need to be offered in Gelderland-Midden, preferably Lingewaard, covering multiple domains.</p> <p>For Complex Services value needs to be added to the current available tools and platforms preferably in several domains and areas.</p>
Complex Services provided so far	dRural services' referral analytics tool provided by Health Valley and Pact care. This Complex Service provides an overview of the referrals done towards dRural service providers. Via this service, payers (health insurances



and/or regional municipalities) can monitor the level of collaboration across the different lines of care and specialties present in dRural.

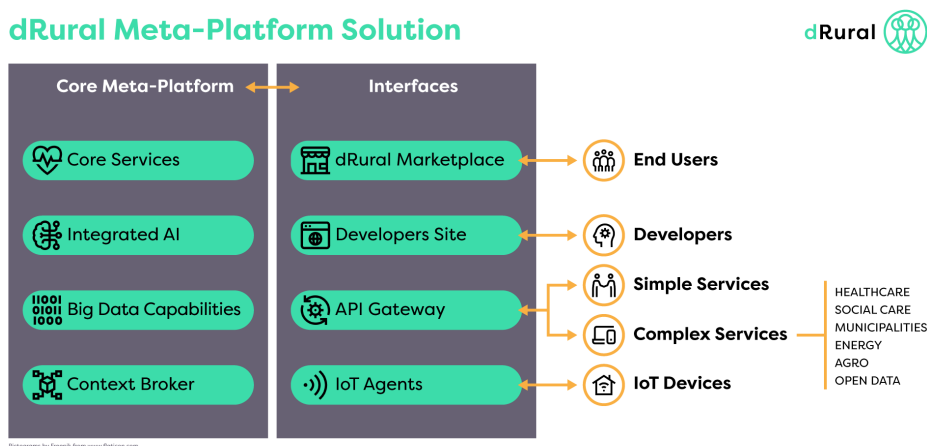
Recommendation engine for dRural activities/services provided by Rijnstate. This Complex Service offers the user (a healthcare provider, health coach, or patient) an AI-based list of recommended social and/or welfare services using the Positive Health questionnaire's score. This allows healthcare providers/health coaches and patients to find a set of best matching service providers with minimal effort (e.g. for hospital specialists, during the routine 10/15min appointment, there is no time to search and review all providers in detail). The quality of the matching between supply and demand is improved over time as the platform gathers more (anonymized) usage data.

Regional health and welfare overview provided by Gemeente Lingewaard. This service allows comparing regional (health/welfare) needs versus the offering of social and welfare services within dRural. This comparison entails coverage, variety of services provided, as well as accessibility (e.g. waiting times), data on regional welfare and health status indicators (e.g. prevalence of mental conditions within the region).

Reporting tool to capture the impact of activities/services provided by Stichting Welzijn Lingewaard. This Complex Service consists of a reporting tool that summarizes the usage, reviews, and (health and social) impact of the activities/services offered by a dRural service provider (e.g. by SWL). Serves as a reporting instrument for the service providers present in dRural, which could be used for three main purposes: 1. Report: the data is used for accountability to third parties who finance projects or activities; 2. Learn: The service provider could offer multiple services or differentiate within a service. The tool could provide data to see the effectiveness and the provider could adjust; and 3. PR/marketing and communication: data and graphics could be used by service providers to advertise activities.

2.6. dRural Platform - Technical Specifications

dRural Platform is a technology solution composed mainly of two blocks, the interfaces and the Core Meta-platform, that provides capacities for advanced functionalities.



dRural Platform is an Open Web based technological solution that can answer in a broad manner to the needs expressed by dRural stakeholders (users, ecosystem, business and ethics perspective) based



on State-of-the-Art technologies, Open Standards and incorporating compatibility with the MIMS LivinIN.EU requirements.

It has to be noted that the Core Meta-platform part of dRural platform builds on FIWOO, which is an existing background platform from dRural partner EMERGIA based on FIWARE technologies resulting from several years of research and development. All interfaces interacting with FIWOO are fully standardized and compliant to Open Standards so that dRural platform remains fully open and interoperable and vendor lock-in is avoided. However, is part of dRural is proprietary software and awarded projects do not have access to the code, only are able to interact with it.

Apart from the Core Meta-platform, other major components in the dRural Platform implementation are its Marketplace (through which the Simple and Complex Services are advertised and offered), its Open Interoperable API and its SDK for external developers.

2.6.1. dRural Platform deployment model

Deployment of dRural Platform in a hosting infrastructure entails two major components:

- a) Marketplace deployment. Current supported environments are: AWS, Azure and Self-hosted. The dRural technical team takes care of the installation in case AWS choice is selected.
- b) Core Meta-platform and rest of components. In this case only AWS environment is supported for the solution deployment. The awarded projects in regional demonstrators are bear the costs related to the deployment in AWS while the dRural technical partners deploy the solution can cater for its maintenance. It is not possible to access the code or the deployment blueprint of the solution in this case.

2.6.2. MIMS in dRural

dRural Data Model and MIMS requirements that are supported in dRural Platform through its Open API Gateway are introduced in this section. They ensure compliance to standards and avoid any future vendor lock-in. OASC is the European organization behind the development and adoption of MIMS. Since OASC is at the same time a technical partner in dRural project, it is also the partner in charge of the design, development, integration and testing of the MIMS adoption in dRural Platform.

MIMs (Minimal Interoperability Mechanisms) start from what cities need to develop a local data ecosystem. They permit answering the raised question by cities decision makers: 'What are all the basic building blocks needed to enable a city to set up an effective data-sharing ecosystem?'

Although they are currently under development, the ten MIMs are collected in the following table



MIM	Subject	Name
MIM1	Context	Context Information Management
MIM2	Data Models	Shared Data Models
MIM3	Contracts	Ecosystem Transactions Management
MIM4	Trust	Personal Data Management
MIM5	Transparency	Fair Artificial Intelligence
MIM6	Security	Security management
MIM7	Places	Geospatial information management
MIM8	Indicators	Ecosystem indicator management
MIM9	Analytics	Data Analytics Management
MIM10	Resources	Resource Impact Assessment

Figure 3 Existing MIMS

These 10 MIMs are designed to cover what is needed for a local data ecosystem from an interoperability point of view. However, since they are currently being defined and they currently represent the avantgarde in smart cities data standardization, most of the MIMs are not yet available. More information about their specification and development status can be found at the MIMS main site from OASC¹.

MIMs do not impose specific standards or specific Open-Source implementations. It is important to understand that the MIMs are such so, MINIMAL interoperability Mechanisms setting practical capabilities and technical specifications for data and services interchange.

dRural consortium is continuously working in the integration and compliance to the MIMS requirements in its interfaces. The Silver release of dRural Platform planned for March 2023 showed basic interoperability. The gold release for December 2023 featured more mature implementation. Awarded winners will have always access to the latest validated implementation of the MIMS in dRural Platform.

2.6.3. Additional technical specifications

Selected projects will have access to all training materials, manuals and support generated in the frame of dRural project.

At the time of the proposal drafting, it is not required a very detailed technical specifications of the interfaces and end points that will use the solution, however the concepts and capacities to be used from the Core Meta-platform should be sufficiently clear.

If considered of interest, the Fiwoo technical manual (on which the Core Meta-platform is built upon) is available at <https://drural.eu/wp-content/uploads/2022/10/Fiwoo-Users-Manual.pdf>

¹ <https://mims.oascities.org>



3. Additional information

3.1. Open Call additional material:

The Open Call for Mirror Regions will be supported by:

- **Annex 1: Open Call Text for Mirror Regions**, that provide information regarding the Open 2 Call for Mirror Regions for the respective applicants
- **Annex 2: Open Call Guidelines for Applicants**, that set out the guidelines for participation in the dRural Open Call 2 for Mirror Regions for respective applicants. It also includes the eligibility and evaluation criteria.
- **Annex 3: Application Form for Mirror Regions**, application form available at www.f6s.com/drural-mirror-regions-oc/apply, with questions that need to be addressed by the applicants.
- **Annex 4: Declaration of Honour**, which declares that all conditions of the Open Call 2 are accepted by the applying entity's legal representative (only for winners of the Open Call)*.
- **Annex 5: Declaration of Conducting Business**, which evaluates the status of the entity applying for the Open Call for Mirror Regions (only for winners of the Open Call 2)*.
- **Annex 6: Bank Account Information**, which collects information on the applicant's bank account where the dRural payments will be transferred to (only for winners of the Open Call 2)*.
- **Annex 7: Model Subgrantee Agreement for Mirror Regions**, that the successful regions will be requested to sign (only for winners of the Open Call 2)*.
- Frequently asked questions & answers published at the community feed (www.f6s.com/drural-mirror-regions-oc2/discuss)

*These documents serve as a reference. The Subgrantee Agreement that will be given to the winning applicants will be finalized during the contracting phase.

3.2. Contacts

The dRural consortium will provide information to the applicants only via the F6S blog, so that the information (question and answer), will be visible to all participants.

More info at: www.drural.eu

Apply via: www.f6s.com/drural-mirror-regions-oc2/apply

F6S support team: support@f6s.com

Online Q&A: www.f6s.com/drural-mirror-regions-oc2/discuss

For extraordinary communication need, please contact the dRural team at: druralproject@f6s.com

