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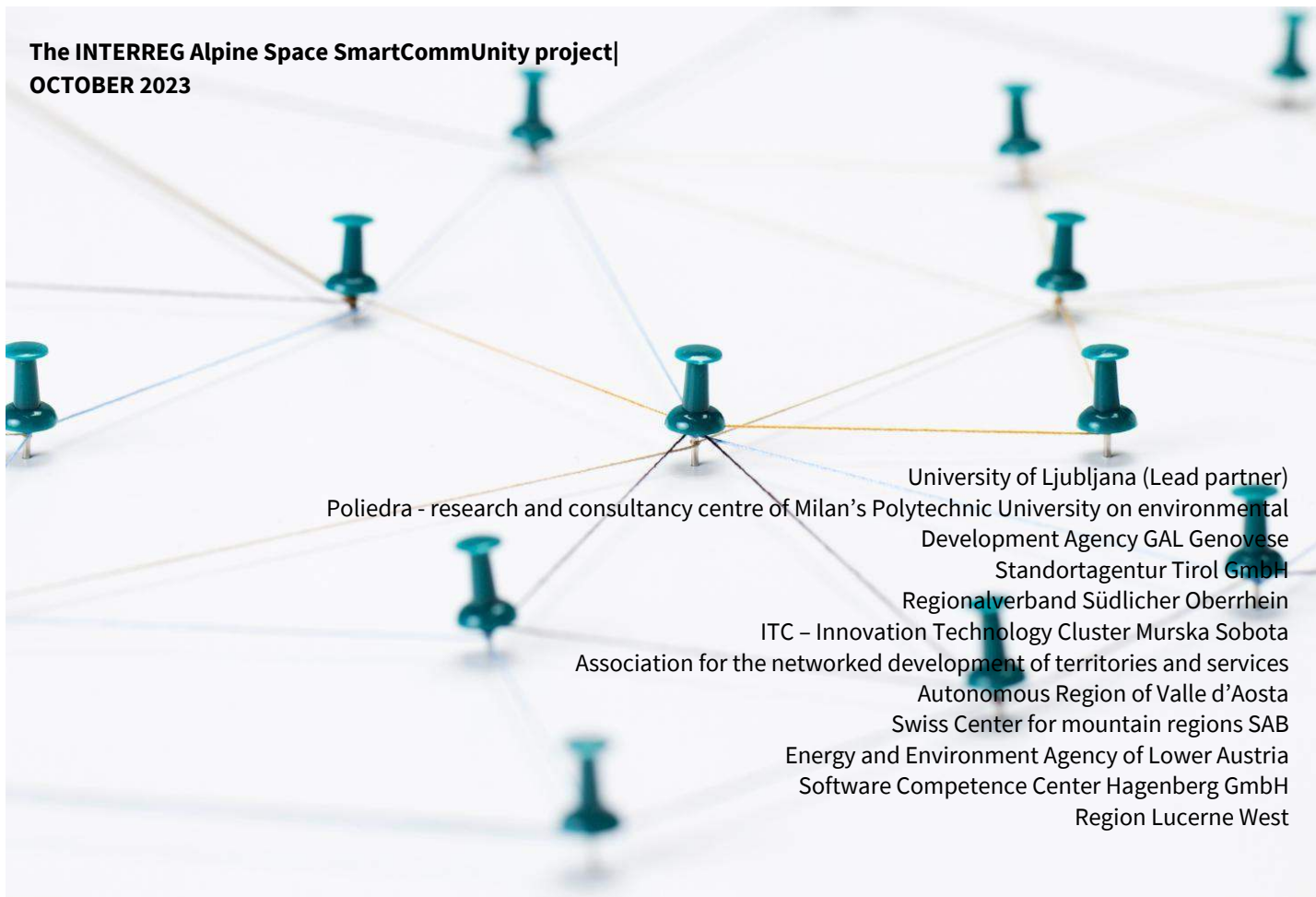
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Alpine Space

SmartCommUnity

REPORT | Structuring the work of LTAs and FTAs

**The INTERREG Alpine Space SmartCommUnity project|
OCTOBER 2023**



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Structuring the work of LTAs and FTAs

Report

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Abstract

This report provides an in-depth analysis of the structuring of the work in Light House Test areas (LTAs) and Follower Test Areas (FTAs), with accompanying glossary of the key terminology, developed within the project of the SmartCommUnity. Further, the methodology used in the report is explained as well, namely, the so-called Likert scale. The report concludes with the summary which provides a generalized approach to enhancing smart communities in Alpine spaces by using the smart community approach, characterized by working closely together with local communities to aspire to introduce the smart, sustainable and above all, inclusive digital transformation in rural areas.



Introduction and Report's main objectives

1. SmartCommUnity

Smart transition in rural and mountain areas is the idea that is gaining more acceptance and is being more widespread across Europe, especially after the COVID-19 pandemic. However, these areas are still lacking the same level of urban areas' attractiveness for employment and living, as well as the same level of public service provision, economic innovation capacity and awareness of their own assets and their potential, due to the digital gap, mostly caused by a lack of digital infrastructure, policies, skills, and competencies, which can lead to depopulation and economic downturn. Experiences from the Smart Villages project have underlined the need for developing necessary competencies and networks that enable utilizing digital technologies for rural areas, to advance their potential in understanding and using their assets. Path to creating resilient, smarter, greener, and more sustainable rural areas is through collaboration, networking, matchmaking and leading by example.

SmartCommUnity project aims at going beyond this scope of existing good practices, believing that the missing aspect in achieving an effective digital transformation of rural areas is the sense of belonging to an organized and structured community that can provide knowledge, develop tools, and effectively initiate dialogue to influence policy.

To achieve this, the project aims at creating such a network of rural areas, where they can influence one another and move together, for everyone to feel stronger, more motivated, and move forward in a structured way. Network consists of both more advanced areas - those that have already developed some smart solutions, found ways to utilize digital tools and technologies and support innovation and further advances in population digital literacy, and those that are less advanced - areas that want to improve their readiness and future resilience, through learning from existing practices and solutions already tested in rural domain.

Within the project, the work is being done with both types of areas, namely - lighthouse test areas (more advanced) and follower test areas, where follower test areas will be empowered to learn from more advanced, lighthouse regions using interactive and user-friendly digital technologies that improve transnational matchmaking and leading-by-example. To further accelerate smart transition in selected areas, the project is focused on creating regional and transnational links between lighthouse and follower test areas and on facilitating the capacity building, exchange of good practices on a community level and an activation of community resources.

The project of a SmartCommUnity consists of 12 partners coming from 6 Alpine countries (AT, CH, DE, FR, IT, SI) and is about building on the concept of Smart Villages towards a transnational integrated Smart Community in the Alps. Working with rural areas demands that project's concepts



are well understood in the communities, meaning that an adequate translation needs to be provided. In this manner, creation of a shared methodology is key, to ensure that the project's underlying methodology is properly applied.

1.2. Terminology and SmartCommUnity's approach

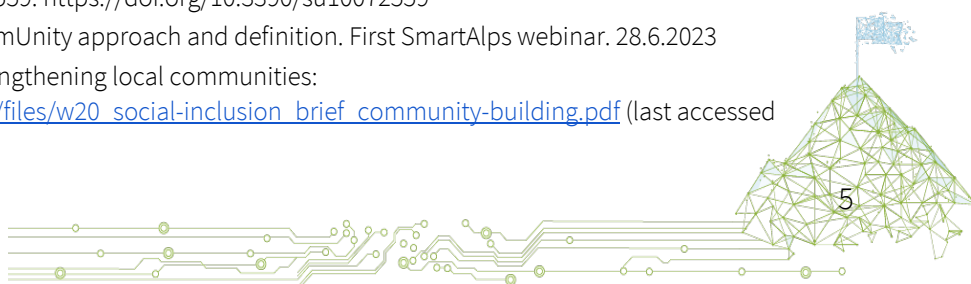
The project operates with the following key concepts:

- Smart Villages:** According to Zavratnik et. al. a Smart Village enables its inhabitants to make use of the contemporary technological and social achievements, while its infrastructures are still being developed in line with Sustainable Development Goals, offers an opportunity to efficiently deal with future of energy security and issues of local and circular economies (Zavratnik et al. 2018)¹. In relation to the SmartCommUnity project, Smart Villages was a 2018-2021 Alpine Space project that included 12+ Test Areas and contributed to creating the European discourse on smart and sustainable rural/mountain areas (Lentini 2023).²
- Community:** the project of SmartCommUnity aspires to move beyond the concept of a Smart Village. In this manner, the community concept highlights two interrelated aspects: the social dimension on one hand, and cultural dimension on the other hand. The concept of a community is otherwise emphasized by ENRD too in the context of strengthening local communities, integrating marginalized groups and new arrivals, improving cooperation among local stakeholders (ENRD 2023)³
- SmartCommUnity:** The working definition of a smart community is the following: *Smart communities are communities of people, in mountain or rural areas, that are proud and aware of their identity, their territory, their craftsmanship, their products and their close-knit social fabric, and that want to become active players in determining their own future, owning and driving the changes that the future, and any digital transition, may entail. Smart communities are open to innovate, to learn and to inspire, and to work holistically towards smart and green rural and mountain areas, that are lively and lived, that aim to become carbon-neutral and that can be or become attractive to live and work for all age groups.* Although, it is important to add, that the definition is currently in the process of testing in all the test areas.

¹ Zavratnik, Veronika, Andrej Kos, and Emilija Stojmenova Duh. 2018. "Smart Villages: Comprehensive Review of Initiatives and Practices" Sustainability 10, no. 7: 2559. <https://doi.org/10.3390/su10072559>

² Gianluca Lentini. 2023. The SmartCommUnity approach and definition. First SmartAlps webinar. 28.6.2023

³ Discussion Brief WORKING DRAFT: Strengthening local communities: https://ec.europa.eu/enrd/sites/default/files/w20_social-inclusion_brief_community-building.pdf (last accessed 12.10.2023).



- **EUSALP:** the Macroregional Strategy for the Alps is endorsed by the **European Council**. It addresses common challenges faced by a defined geographical area relating to **Member States and third countries located in the same geographical area** which thereby **benefit from strengthened cooperation** contributing to achievement of economic, social, and territorial cohesion (EUSALP 2023).⁴ Within the SmartCommUnity project, EUSALP will be further strengthened.
- **Smart transition:** Smart transition is about applying digital and other solutions, to enhance more empowered rural communities and new services, more local innovation, and new knowledge networks. Digital transformation and broadband service are prerequisites for smart transition,⁵ with technology and innovation acting as a catalyst for local growth—providing education and business opportunities, improving health and well-being and paving the way for community empowerment.⁶ Smart transition should be conceptualized together with the so-called smart development, which is not only about technological aspects, as **technology** and **technological solutions** should be understood as a **tool** to develop solutions and services, and **achieve sustainable living** via **community-centered** and **bottom-up approaches**. In this manner, **digital transformation** is a social and cultural process too, meaning that smart transition needs to guarantee place attachment⁷ and maintenance of local identity and heritage.⁸
- **Regional Stakeholder Groups:** Regional Stakeholder Groups (RSG) are a key part of the consultation and knowledge exchange process. They are informed of the project progress. RSGs are indispensable for creating a real, sustainable impact on local environments. Within the project, RSGs were created in all test areas to enhance development of local actions and support durability, ownership, and policy uptake.
- **Test areas (TA):** areas where activities for fostering smart transition are underway. The project of SmartCommUnity is based on two types: Lighthouse Test Areas and Follower Test Areas. A system of knowledge exchange both at transnational, national and local levels was created. Definitions of the two test areas types are the following:

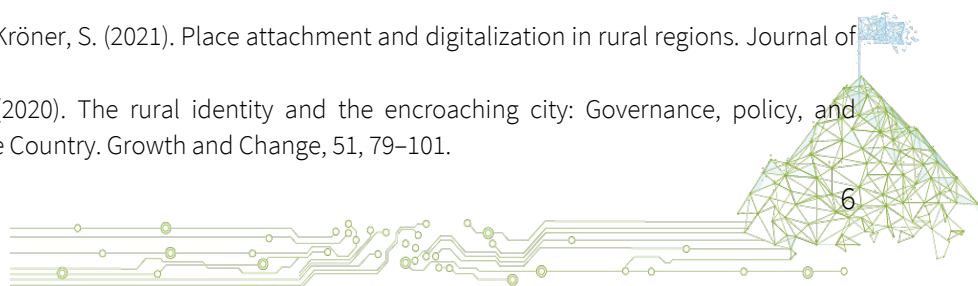
⁴ EUSALP: <https://www.alpine-region.eu/eusalp-eu-strategy-alpine-region> (last accessed 12.10.2023).

⁵ Albino, V., Beradi, U., & Dangelico, R. (2015). Smart cities: Definitions, dimensions, performance, and initiatives. *Journal of Urban Technology*, 22, 3–21.

⁶ Cowie, P., Townsend, L., & Salemin, K. (2020). Smart rural futures: Will rural areas be left behind in the 4th industrial revolution? *Journal of Rural Studies*, 79, 169–176; Visvizi, A., Lytras, M., & Mudri, M. (2019). Smart villages in the EU and beyond. Emerald Publishing Limited.

⁷ Birnbaum, L., Wilhelm, C., Chilla, T., & Kröner, S. (2021). Place attachment and digitalization in rural regions. *Journal of Rural Studies*, 87, 189–198.

⁸ Cowell, M., Eckerd, A., & Smart, H. (2020). The rural identity and the encroaching city: Governance, policy, and development in Northern Virginia's Wine Country. *Growth and Change*, 51, 79–101.



- **Lighthouse test areas (LTA)** can be defined as areas that have already made meaningful progress in embracing digital solutions, smart tools, and technologies to overcome challenges rural communities are facing. These areas are characterized by their innovation capacity, development of new business models and continuous advances in digital transformation that lead to successful community development and economic growth, due to the effective use of digital tools, mobilization of local talent and establishment of relevant dialogue with policymakers and stakeholders. Lighthouse test areas can set an example by demonstrating the benefits of digitalization through their own good practices, which leads to improved future resilience and overall quality of life.
 - **Follower test areas (FTA)** can be defined as areas in the early stages of smart transition, meaning that they need additional support in the implementation of smart solutions and mobilization of local potential. Need for improvement in these areas is recognized by local inhabitants and decision makers, who are aware of the potential of digitalization and are willing to pursue this path to increase their economic prosperity and local community welfare. Follower test areas can be empowered through collaboration, transnational matchmaking, and transfer of good practices from lighthouse test areas to grow their knowledge base and successfully implement digital tools and services to gain competitive advantage, increase innovation potential and engage local communities to pursue common goal of making the areas more resilient and more attractive.
- **Smart dimensions and methodology:** According to WEF (World Economic Forum), Fernández and Peek the term “smart” is about the use of digital technologies to enhance the quality of life, economic opportunities, and social well-being of rural communities.⁹ Otherwise, smart dimensions can be understood as a set of concepts that aim to improve the quality of life for individuals and communities. Within the project of Smart Villages, the following smart dimensions were identified: smart mobility, smart governance, smart economy, smart environment, smart living, smart people. However, it is important to add that these dimensions are not exhaustive but provide a good starting point for understanding what smart villages entail.

Within the project of SmartCommUnity, the identified smart dimensions were assessed by a Likert scale. The Likert scale is a unidimensional scale that is used to collect respondents' attitudes and opinions. Regarding the SmartCommUnity project, the assessment scale was the following: 1-Strongly disagree (or very low level or very bad), 2-Disagree, 3-Neutral, 4-Agree, 5-Strongly agree (or very high level or very good). Definitions of the smart dimensions are the following, together with described methodology content (all dimensions had an opportunity to add a comment):

⁹ [We must build smart villages and towns, not just smart cities | World Economic Forum \(weforum.org\)](#) (last accessed 15.10.2023) & García Fernández, Cristina, and Daniël Peek. 2023. "Connecting the Smart Village: A Switch towards Smart and Sustainable Rural-Urban Linkages in Spain" Land 12, no. 4: 822. <https://doi.org/10.3390/land12040822>



➤ Smart People

Smart People measures the participation of local citizens to the job market, the decision-making and the involvement in associations, and the education level of people. Examples of indicators include the number of associations, policies for promoting equal opportunities, level of schooling, overall employment, degree of political engagement, etc. The questionnaire of the project of SmartCommUnity measured the following content: 1. Depopulation and ageing; 2. Digital literacy; 3. Participation in meetings or assemblies of public interest? (bottom-up approach to decision making); 4. Active citizens in associations and organizations.

➤ Smart Governance

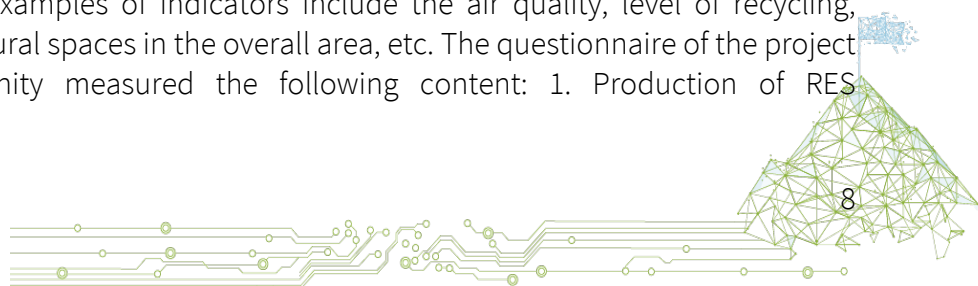
Smart Governance is related to the level of smartness of the governance systems, the penetration of green public procurement, e-governance, facilities to networking. Some examples of indicators include the number of electric cars used, the convenience of recycling policies, energy policies, etc. The questionnaire of the project of SmartCommUnity measured the following content: 1. Existence of an e-government administrative and fiscal services, organized and managed by Public Authorities?; 2. Involvement of citizens in decision making by the public authorities (top-down approach to participation); 3. Facilitation of partnership with private enterprises by public authorities; 4. The use of smart ways of communication to citizens, visitors by the public authorities.

➤ Smart Living

Smart People is related to the quantity and quality of services to the population in the area, and the degree of satisfaction in them. Examples of indicators include the level of criminality, the level of general services such as banks, post offices, and so on, the quality health care and social care services, as well as the quality and quantity of services to the elderly, etc. The questionnaire of the project of SmartCommUnity measured the following content: 1. The level of health and social care in a TA; 2. Coverage of the internet connection in TA; 3. Attractiveness of TA (basic services to the population (banks, post-offices, basic-good shops, bars & restaurants, pharmacies, educational services); 4. Existence of smart working in a TA.

➤ Smart Environment

Smart Environment involves measuring the quality of the environment in terms of air, water, and soil. Examples of indicators include the air quality, level of recycling, percentage of natural spaces in the overall area, etc. The questionnaire of the project of SmartCommUnity measured the following content: 1. Production of RES



(renewable energy sources) in a TA; 2. The use of RES in a TA; 3. Is TA working towards a zero-waste economy? 4. Citizens-awareness of natural risks in a TA.

➤ Smart Economy

Smart Economy is measured in terms of the presence of creative and innovative enterprises and business models in the area, level of employment and unemployment, level of economic attractiveness, penetration of ICT in the local economic system. Examples of indicators include the number and density of certified enterprises, number of young and women-led enterprises, the rate of business creation, the number of patents, etc. The questionnaire of the project of SmartCommUnity measured the following content: 1. Existence of tourist-dedicated apps/platforms in a TA; 2. Involvement of innovative/smart approaches for tourist activities in a TA; 3. Awareness of the potential negative impact of (mass) tourism on the environment; 4. Innovative character and the existence of innovative approaches in economic activities in a TA (i.e. digital technologies in farming, animal husbandry etc.).

➤ Smart Mobility

Smart Mobility is related to the quantity and quality of sustainable transport and mobility systems in the village. Examples of indicators include the number of non-conventional-fuel cars being owned or used, the presence of limited-traffic zones, the level and sustainability of public transport, etc. The questionnaire of the project of SmartCommUnity measured the following content: 1. Adequate public transport in a TA; 2. Existence of solutions to share means of transport in a TA; 3. Existence of an integrated transport platform for citizens/visitors in a TA? 4. Existence of a multimodal transport infrastructure available in a TA (train/bus and car sharing; train/bus and bike sharing ...).



2. Test Areas Info sheets

2.1 Test Area Communauté de communes du Guillestrois-Queyras

Test Area Region:

Région Sud Provence-Alpes-Côte-d'Azur

Map coordinates:

44.6616646,6.6497727

Main Characteristics:

The “Communauté de communes” of Guillestrois and Queyras is a French community of municipalities created in 2017, gathering 16 villages, with a population of more than 8200 inhabitants. It is characterized by the concentration of SGI's around two central towns: Guillestre and Aiguilles. The area is also attractive for its natural beauty and wilderness, with a regional nature park, remote valleys/satellites at the foot of Mont Viso. This proximity to Italy is also evident in the area's heritage (Mont-Dauphin, Château-Queyras, etc). Tourism is a strong feature of the region's economy in both winter and summer periods, with a lack of open services and activities in between seasons.

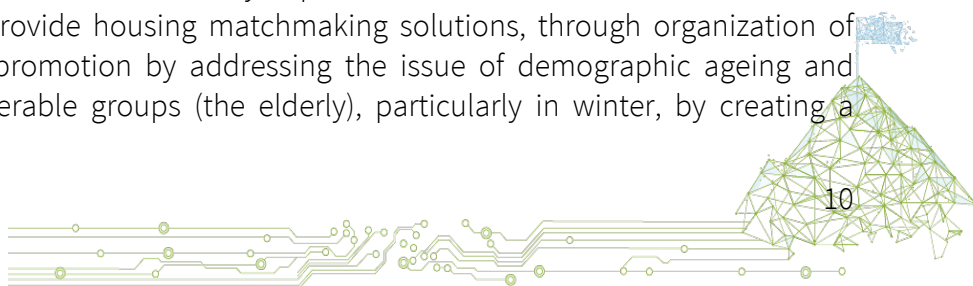


Main focus: Economic Development, Connectivity & Accessibility, Mobility

Challenges addressed:

- Governance and inclusion of the population in the decision making process;
- Housing and secondary residence (rate of 75% within some villages);
- Mobility;
- Digitalization and Access to SGIs;
- Demographic ageing.

Pilot Solutions: 1) Developing the economic attractiveness of the territory through an improved access to housing - the aim is to create a community of professionals and connect them with local homeowners and residents to provide housing matchmaking solutions, through organization of housing events. 2) Community promotion by addressing the issue of demographic ageing and preventing the isolation of vulnerable groups (the elderly), particularly in winter, by creating a



network of connected actors, sharing information, and organizing caring visits with the participation of young volunteers.






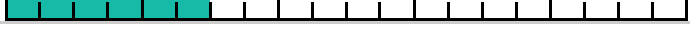

Smartness Dimension(s) addressed: Smart-people, smart governance, smart living, smart mobility.

Regional Stakeholder Group: Representatives and public officers from rural areas (municipalities/group of municipalities), providing regular input and support to the Test Area by sharing good practices, lessons learned, inspiration, in a spirit of co-development. The RSG have a direct impact on the achievement of goals by ensuring transferability and sustainability of actions.

End-users: 1) Owners of secondary residences, and housing professionals (associations, real estate agents), who will work together to create a network -supplier of housing solutions. 2) The elderly population, who will benefit from a network of professional careers for the elderly. End-users will enjoy improved access to information about the services provided and support in using them.

LTA/FTA Pair: Communauté de communes des Baronnie en Drôme Provençale and Communauté de communes of Guillestrois and Queyras

TA Smartness assessment by Smartness Dimensions

Test area priority	Smartness Dimensions (index [1..5])	Value	Visual
✓	Smart People	3,50	
✓	Smart Governance	2,75	
✓	Smart Living	2,50	
	Smart Environment	3,00	
	Smart Economy	3,50	
✓	Smart Mobility	1,50	
Overall Smartness Profile (%)		42,71	



2.2 Test Area Communauté de communes des Baronnies en Drôme Provençale

Test Area Region:

Région Auvergne-Rhône-Alpes

Map coordinates:

44.3555,5.12838

Main Characteristics:

The Communauté de Communes des Baronnies en Drôme Provençale was formed in 2017 by merger of the 4 Communautés de Communes des Baronnies (C.C. du Pays de Buis, C.C. du Pays de Rémuzat, C.C. du Val d'Eygues, C.C. des Hautes Baronnies). It's a vast, sparsely populated area, with a pre-Alpine topography and remarkable landscapes, renowned for its quality of life.



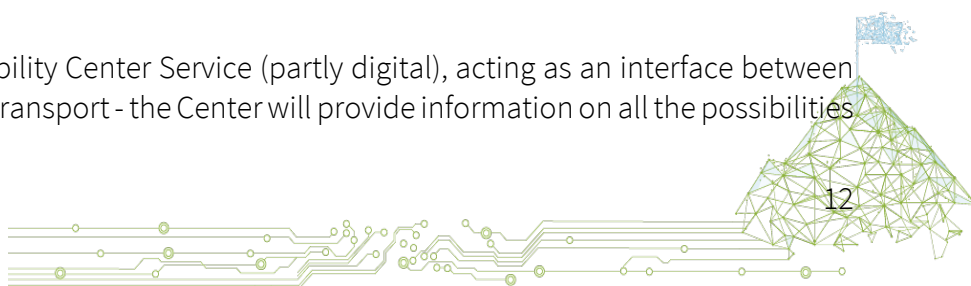
The region is characterized by the diversity of its produce, with sectors of excellence and quality recognized by a number of labels: winegrowing, olive-growing, aromatic and medicinal plants, fruit-growing, small spelt, truffles, livestock, etc. Local produce and gastronomy are promoted through several Protected Designations of Origin. With its low population density, mid-mountain topography, rich natural spaces and heritage, and mild climate, the Baronnies region is ideal for the development of tourist, sporting, and outdoor activities.

Main focus: Economic Development, Connectivity & Accessibility, Mobility.

Challenges addressed:

- Area surface;
- Modernization of governance;
- Mobility;
- Access to public health;
- Demographic ageing;
- Housing.

Pilot Solutions: 1) Creating a Mobility Center Service (partly digital), acting as an interface between users and public or collaborative transport - the Center will provide information on all the possibilities



for getting around, depending on time and economic factors, and would link shared/active/collaborative mobility via fluid intramodality, with a solidarity component for a fragile/poor public. 2) Development of a Mapping System to increase the visibility of the partners working on SGI's (especially in the field of health care).



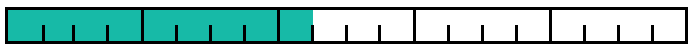




Smartness Dimension(s) addressed: Smart people, smart governance, smart living, smart mobility.

Regional Stakeholder Group: Representatives and public officers from rural areas (municipalities/group of municipalities), providing regular input and support to the Test Area by sharing good practices, lessons learned, inspiration, in a spirit of co-development. The RSG have a direct impact on the achievement of goals by ensuring transferability and sustainability of actions.

End-users: Multi-faceted target users: 1) The elderly, who need transport or access to information about existing services (shuttle bus, car pooling), 2) The young people, who want to get to the nearest train stations (Valence or Gap), 3) The tourists, who need access to information during their stay in the nature park, or 4) The employees, who need alternative transportation options for travel in the area. End users will benefit from an improved access to services.

LTA/FTA Pair: Communauté de Communes des Baronnie en Drôme Provençale and Communauté de Communes of Guillestrois and Queyras

TA Smartness assessment by Smartness Dimensions

Test area priority	Smartness Dimensions (index [1..5])	Value	Visual
✓	Smart People	4,00	
✓	Smart Governance	2,75	
✓	Smart Living	2,25	
	Smart Environment	2,25	
	Smart Economy	3,75	
✓	Smart Mobility	2,25	
Overall Smartness Profile (%)		57,50	



2.3 Test Area Green Point Living Lab

Test Area Region: Pomurje Region,
Slovenia

Map coordinates: 46.65816519569652,
16.163141737462734

Main Characteristics:

With an attractive location, bordering Austria in the north, Hungary in the east, and Croatia in the south, Pomurje region nurtures close ties with the neighboring countries in the fields of economy, development, and culture. It lies in the fifth European transport corridor, representing one of the most important transport routes in Europe. Modern railways and highways connect the region with Central European economic, transport, and logistics centers. Transport routes and infrastructure connections offer the opportunity for further investments in the field of industry, logistics, business zones associated service activities development, and nature- and people-related tourism.

It is the most suitable area for food production in the country, therefore particular attention is given to stimulation of agricultural production. Agricultural holdings of this region cultivate almost 13 % of all agricultural land in Slovenia and raise nearly 12 % of all livestock. The granary of the country produces almost one-half of the total wheat yield and nearly one-third of maize in Slovenia. Due to the spatial spreading of agriculture and production intensity, the pressure of this economical line on the environment is severe. Similar to the entire Slovene agriculture, Pomurje agriculture is characterized by the contradiction between the socio-economic and land structure in the rural area. Very closely connected to food production are gastronomy and tourism, which are also significant sectors in the Pomurje region.

The Green Point is a fully operational, largest, and most advanced regional short food supply chain, founded by farmers, involving more than 100 local farmers, food producers, and cooperatives, covering the process of production in a greenhouse and open-air fields, with logistics from own distribution center and different means of sales: gross sale, retail and online. The Green Point delivers food to citizens, public institutions (schools, kindergartens, elderly homes, hospitals, ...), and private organizations (HoReCa sector organizations). In 2023, Green Point SFSC became a Living lab (also ENoLL member), based on a Multi-Actor Approach involving input from the industry and technology providers, primary producers, food businesses, consumers, citizens, local authorities, and other actors, and promoted with a view to co-create innovative systemic solutions in support of food systems sustainability goals. The Green Point Living Lab implements innovative models and



technologies relevant to the Smart villages & Rural development concepts, piloting and demonstrating technological (blockchain, big data, ...), economic (circular economy, Food loss and waste, ...), and social (consumer participation, public awareness, food sharing, food locality, ...) innovations.

Main focus: Economic Development, Agri-food, and Mobility

Challenges addressed:

- Supply chain traceability and transparency and food safety;
- Reduction of food waste & loss and regulation of excess food;
- Reduction of greenhouse gas emissions.

Pilot Solutions: 1) Co-create a transnational community that will change both the practices and the perception of smart rural areas, through facilitating capacity building of the selected rural area, promoting existing digital tools and solutions, and developing innovative and interactive digital tools to promote the "smart transition" of Alpine areas, considering community and sustainability aspects. 2) Transfer some of the most successful practices from the past Smart Villages project, among which the practice from Pomurje region is the most popular in Slovenia.

The Pomurje region has successfully developed as a community and today it is proudly co-creating the transformation of food systems at European level, while at the same time enabling local stakeholders to participate in both supply and demand.

A real environment will be established in the LTA – the Green Point through Living Lab approach, with the involvement of consumers and other stakeholders in the process of co-creation, with the aim to include them in the testing of new technologies, services, and products. The following key topics for the successful transformation of food systems will be addressed:

- Short food supply chain ecosystem;
- Rural & Urban Food system development and resilience;
- Living labs in food systems;
- Supply chain traceability and transparency;
- Food safety;
- Alternative proteins;
- Circularity in food systems;
- Food loss and waste;
- Dietary habits and consumer behavior.

The transfer of good practices within the SmartCommUnity project aims to promote the smart transition in selected test areas (TAs) and to inspire new areas by creating regional connections between more advanced regions in a certain area – LTA, and followers – FTA, enabling capacity building, exchange of best practices in the community and lessons learned, and establishment of new communities. The planned activities include introducing the LTA Green Point Living Lab to other



regions (potential FTAs); conducting meetings and workshops with potential followers: identification of common challenges; defining RSGs in new regions - the building blocks of LLs; assisting in setting up living labs/Innovation hubs and establish collaborations and exchange of good practices.

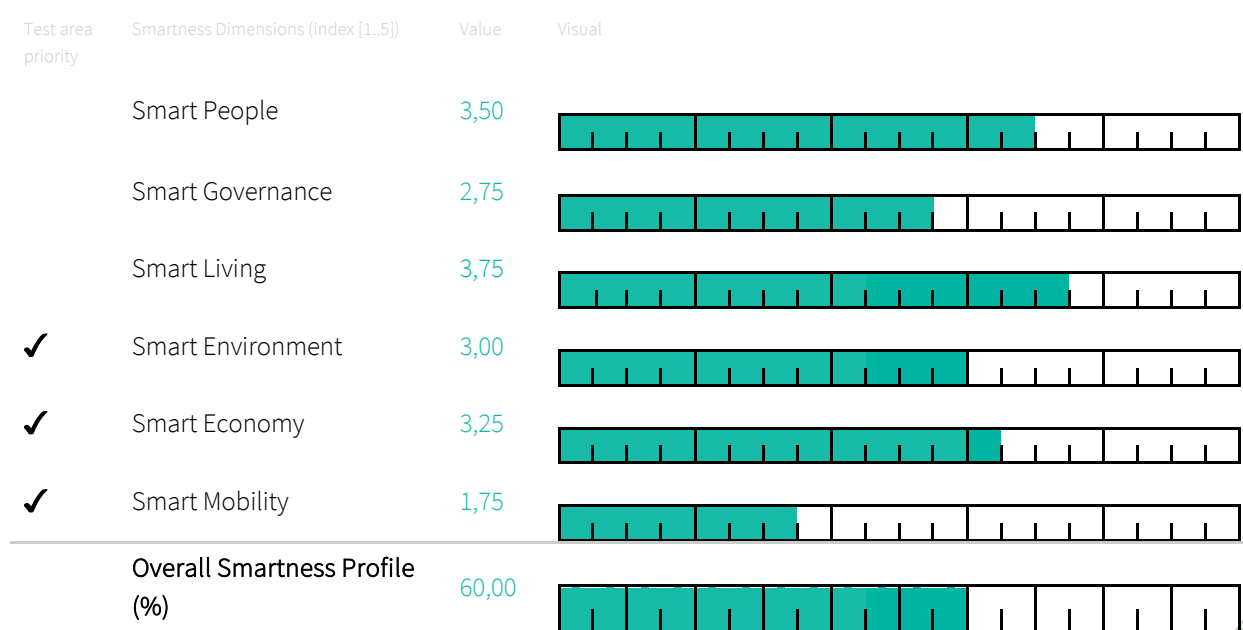
Smartness Dimension(s) addressed: Smart economy, smart mobility, and smart environment.

Regional Stakeholder Group: Local self-government and policy makers: municipalities, key ministries, chambers and development agencies; Knowledge institutions: universities, clusters, innovation junctions, development-oriented companies; Key actors in the field of food production and consumption: farmers and companies for the production of food products, public institutions (schools, kindergartens, homes for the elderly, hospitals, etc.), the HORECA sector (hotels, restaurants, catering, spas, etc.), utility companies for waste processing, etc.; Civil society and non-governmental organizations: residents (providers or customers), Murska Sobota Health and Development Center, food banks (food donors).

End-users: 1) Public institutions (schools, kindergartens, homes for the elderly, hospitals); 2) The HORECA sector (hotels, restaurants, catering, spa centers); 3) Civil society/customers; 4) Farmers and companies engaged to zero waste and circularity in the food supply chains – bioeconomy SMEs. All types of end-users deserve to know the origin of the food and the way it was produced or processed, and thus contribute to Food Safety, while bioeconomy SMEs deserve to get the opportunity to develop new business models in remote rural areas, and this way fight the brain drain. They all also deserve to live in healthy environment to which short food supply chains can contribute, but also efficient logistics and distribution channels.

LTA/FTA Pair: Pomurje Region and Podravje Region

TA Smartness assessment by Smartness Dimensions



2.4 Test Area Löffingen

Test Area Region: Südlicher Oberrhein,
Germany

Map coordinates: 47.89232598692292,
8.353152406304

Main Characteristics: The city of Löffingen counts 7672 inhabitants (2019) and is situated in the Black Forest area in Baden-Württemberg/Germany. Löffingen can be reached from Freiburg im Breisgau in about 50 km. The city has a dispersed settlement structure and consists of the high-altitude health resort Dittishausen and other five city areas namely Bachheim, Göschweiler, Reiselfingen, Seppenhofen and Unadingen. The area of the municipality is 8,803 ha, of which approx. 3,900 ha is forest and agricultural land.



In Löffingen, a so-called FTTC network was laid, in which fibre optic cables were laid up to the existing street distributors. Households located directly on the main lines can be connected directly to the fibre optic network on request, via a so-called FTTB connection (fibre to the building) or FTTH connection (fibre to the home).

Löffingen was the pilot municipality of RVSO in the Interreg-V project SmartVillages. Within the framework of this project, several "smart" projects have already been implemented and a digital strategy has been drafted. That is why Löffingen, as an LTA, is a role model for the FTAs Elzach and Winden im Elztal.

Main focus: Connectivity & Accessibility (connecting people electronically and promoting accessibility to Public Services)

Challenges addressed:

- Serving as a role model for successful digitization process, sharing of knowledge and best practices.

Pilot Solutions: Löffingen serves for the FTAs Elzach und Winden im Elztal as an example of a successful digitisation process. An exchange between the FTAs and Löffingen is to take place in the project.



Smartness Dimension(s) addressed: Smart- people, smart governance, smart living, smart economy, and smart mobility.

Regional Stakeholder Group: City administration of Löffingen and the RSG established during the SmartVillages Project.

LTA/FTA Pair: Löffingen and Elzach and Winden im Elztal.

TA Smartness assessment by Smartness Dimensions

Test area priority	Smartness Dimensions (index [1..5])	Value	Visual
✓	Smart People	3,50	<div><div></div></div>
✓	Smart Governance	3,75	<div><div></div></div>
✓	Smart Living	3,50	<div><div></div></div>
	Smart Environment	3,25	<div><div></div></div>
✓	Smart Economy	3,50	<div><div></div></div>
✓	Smart Mobility	3,50	<div><div></div></div>
Overall Smartness Profile (%)		70,00	<div><div></div></div>



2.5 Test Area Elzach

Test Area Region: Region Südlicher Oberrhein, Germany

Map coordinates: 48.184631323989464,
8.157931658132581

Main Characteristics:

The city of Elzach counts 7332 inhabitants and is situated in the Elz-valley which is part of the Black Forest area in Baden-Württemberg. Elzach can be reached from Freiburg im Breisgau in about 30 km or by train via the Breisgau S-Bahn. The city has a dispersed settlement structure and consist of five city areas namely Elzach, Katzenmoos, Oberprechtal, Prechtal and Yach. While the northern side of the Elz-valley rises steeply, the southern side is much flatter. In the year 2018 around 2144 people commuted out and 1300 commuted in the city of Elzach. Tourism has gained in importance in the Elz Valley in the recent years. Elzach is awarded as a “climatic health resort” and offers sports and leisure activities e. g. a network of hiking and mountain bike trails. Elzach has over 80 clubs from the fields of music, art, sport, and culture. Voluntary commitment is strong and has a long tradition. Elzach has a comprehensive school (school center) and two primary schools.



Main focus: Connectivity & Accessibility (connect people electronically and promote accessibility of Public Services)

Challenges addressed:

- Improvement of communication between the city administration and citizens; communication and networking between citizens;
- Digital applications (e. g. Informative videos) to raise the standard of living of older people;
- Digital applications (e.g. sensor technology for smart control of e.g. irrigation, level measurement);
- Integration and assistance for new citizens through the provision of digital easily accessible information;
- Digital help for family carers;
- Promotion of the local economy through co-working and innovation workplace and new forms of working.



Pilot Solutions: 1) Citizen App: A citizens' app will be developed to serve as a simple and user-friendly medium for communication between the city administration and citizens. Citizens will be able to use the app to submit enquiries or applications to the administration, e.g. via a digital registration for kindergarten and school places or a deficiency report. Conversely, the citizens' app will make it easier for the city administration to inform its citizens in a short, digital way. 2) Mobile youth work and services, aiming to provide young people with flexible services. This includes digital offers combined with physical spaces. In this way, young people are reached via digital channels and at the same time "non-virtual" meeting places are created. 3) Video tutorials/messages, primary aimed for older people to provide them with information that can increase their quality of life. "Elzach TV" can show good examples and tell stories about how change can be possible in old age (e.g. in the area of housing or mobility). 4) Digital "New Citizen Journey": Many people who are new to Elzach would like to get to know their new place of residence better. With the help of an app and/or QR codes, a digital guided tour with information for new citizens through Elzach will be offered. 4) Digital management for family carers: Family carers face the challenge of managing the care of their carers easily and efficiently. Digital tools will be used to provide a management service for these carers. 5) Sensor technology for street greenery: Urban trees and street greenery need to be watered regularly to ensure that they are supplied with sufficient water, especially during periods of low rainfall and in times of climate change. With the help of sensors installed on the trees or green strips, irrigation will be controlled according to need. 6) Co-working space: Working from a distance, so-called remote work, has increased in recent years. Instead of commuting, people also work at home. In addition, co-working spaces are gaining in importance. A co-working space will be established in Elzach, for example on the upper floor of the Ladhof. A booking app will be used to facilitate administration.

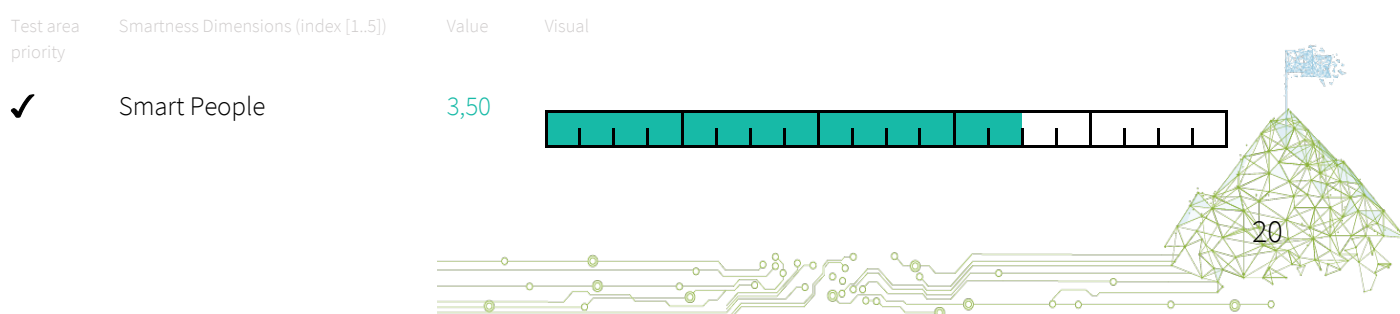
Smartness Dimension(s) addressed: Smart people, smart governance, smart living, smart environment, smart economy.

Regional Stakeholder Group: Representatives of local government (politics), interested citizens from municipalities (civil society), Entrepreneurs (economy).

End-users: 1) Elderly persons with mobility difficulties and with difficulties using digital applications. 2) Young people in need of a varied offer and a responsible approach to digitalization. 3) All citizens, to allow access to digital tools for everyone and connect them and bring them closer together, simplify their daily lives and save time, make everyday life safer and more environmentally friendly.

LTA/FTA Pair: Löffingen and Elzach and Winden im Elztal.

TA Smartness assessment by Smartness Dimensions



SmartCommUnity



2.6 Test Area Winden im Elztal

Test Area Region: Südlicher Oberrhein,
Germany

Map coordinates: 48.147764786218914,
8.045038158830643

Main Characteristics: The municipality of Winden im Elztal counts 2846 inhabitants and is situated in the Elz-valley which is part of the Black Forest area in Baden-Württemberg/Germany. Winden im Elztal can be reached from Freiburg im Breisgau in about 30 km or by train via the Breisgau S-Bahn. The municipality has a dispersed settlement structure and consist of two city parts namely Oberwinden und Niederwinden.



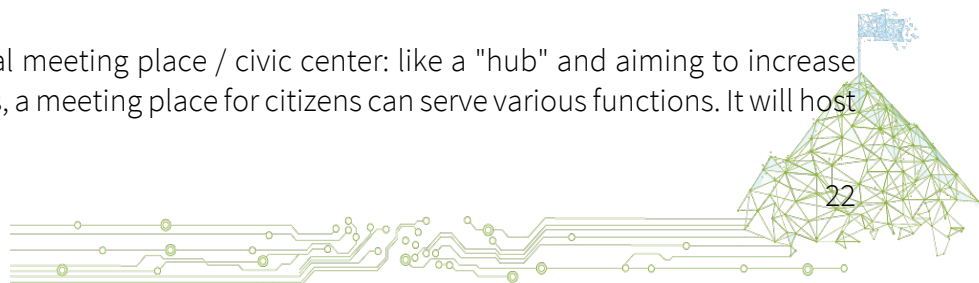
While the northern side of the Elz-valley rises steeply, the southern side is much flatter. Most of the working population in Winden commutes to work in the surrounding towns and municipalities. Tourism has gained in importance in the Elz Vallay in recent years. Winden im Elztal is awarded as a "climatic health resort" and offers sports and leisure activities e. g. a network of hiking and mountain bike trails. Winden has around 37 clubs from the fields of music, art, sport, and culture. Elzach has a primary school.

Main focus: Connectivity & Accessibility (connecting people electronically and promoting accessibility to Public Services)

Challenges addressed:

- Promotion of the local economy through the promotion of co-working and innovation workplace;
- Promotion of cultural offer through a community meeting space for citizens; Improvement of communication between the city administration and citizens as well as communication and networks between citizens;
- Improving knowledge and promoting digital skills, especially for older people;
- Integration and assistance for new citizens through the provision of digital easily accessible information;
- Expansion of the mobility offer through sharing options.

Pilot Solutions: 1) Multifunctional meeting place / civic center: like a "hub" and aiming to increase the quality of life in different areas, a meeting place for citizens can serve various functions. It will host



co-working and commercial activities, cultural events such as cinemas and dance evenings, it may be used as a place for learning and exchange. The goal is to create a physical place that also has interfaces to the digital world. The term "hub" represents this nodal function of different areas of life and formats. 2) Neighborhood platform: the platform/app will enable to disseminate regional information quickly and easily, such as information on cultural offers or requests and offers around neighborhood help (childcare, etc.). 3) Training opportunities (on digital media): People who have not grown up with digital media may need support to learn how to use them. This can be done through courses and open consultations. 4) Digital services offered by the administration: the services offered by the administration as well as the application process are mostly carried out in writing or through appointments in the town hall. To simplify these processes, the services will be digitalized. 5) Digital offers for new citizens: People who move to Winden are looking for links to local networks and contacts. They may need help with administrative tasks, especially if they are immigrating from another country. Mentors can be helpful in this regard, for example by supporting them with administrative tasks. They can also be provided with information on getting to know the place and making contacts. 6) Car sharing stations (possibly with app): There are already car sharing stations in Elzach. The aim is to make the car-sharing service accessible to windmills in the Elztal. Car-sharing can improve the quality of mobility in rural areas. People can make occasional journeys without owning their own car. 7) Ride-sharing app: A ride-sharing app was already tested in the municipality some time ago but was discontinued due to a lack of users. The idea is to test such a ride-sharing app again in a second attempt. Here, drivers and potential carpoolers can network and form carpool. The offer can be particularly interesting for people whose mobility is limited due to a lack of a driving license (e.g. young people, older people).

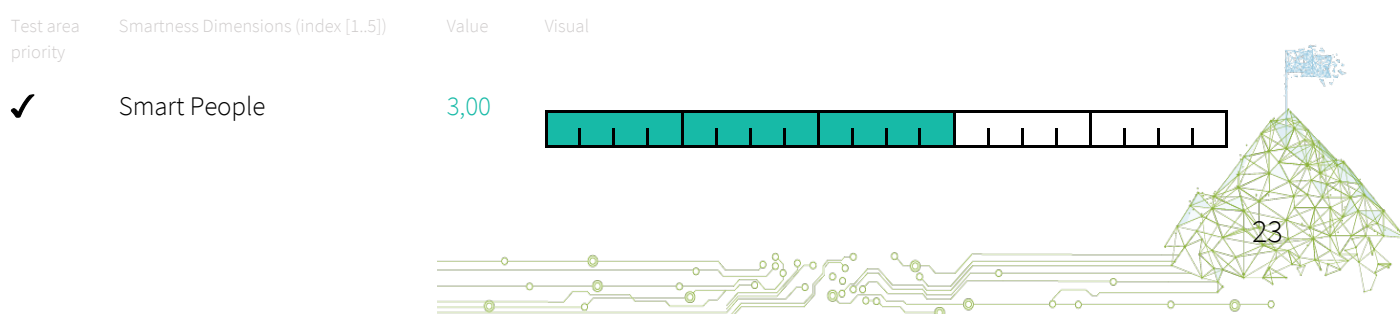
Smartness Dimension(s) addressed: Smart people, smart governance, smart living, smart environment, smart economy, smart mobility.

Regional Stakeholder Group: Representatives of local government (politics), Interested citizens from municipalities (civil society), Entrepreneur (economy).

End-users: 1) Elderly persons with mobility difficulties and who have difficulties with digital applications. 2) Young people so that they get a varied offer and a responsible approach to digitalization. 3) All citizens, to allow access to digital tools for everyone and connect them and bring them closer together, simplify their daily lives and save time, make everyday life safer and more environmentally friendly.

LTA/FTA Pair: Löffingen and Elzach and Winden im Elztal.

TA Smartness assessment by Smartness Dimensions





2.7 Test Area Lienzer Talboden

Test Area Region: East Tyrol

Map coordinates: 46.838014653268296,
12.68208483539605

Main Characteristics: The district of East Tyrol belongs to the federal province of Tyrol and is characterized by its geographically remote location from North Tyrol. The district capital Lienz can be reached by car from the provincial capital Innsbruck in about three hours, whereby one must either pass through the Felbertauern tunnel or detour via neighboring South Tyrol. In the past, the region Lienzer Talboden had to struggle with emigration. For this reason, measures for regional development are particularly important, also considering digitalization.



Main focus: Connectivity & Accessibility (connect people electronically and promote accessibility to Public Services)

Challenges addressed:

- Smart transition through real-time analysis of data collected from community buildings.

Pilot Solutions: 1) Establish a LoRaWAN network with gateways and sensors to collect, store and visualize community data. The pilot solution will enable smart transition through real-time analysis of data collected from community buildings and enable cost-efficient work and provide a better basis for decision-makers.

Smartness Dimension(s) addressed: Smart governance.

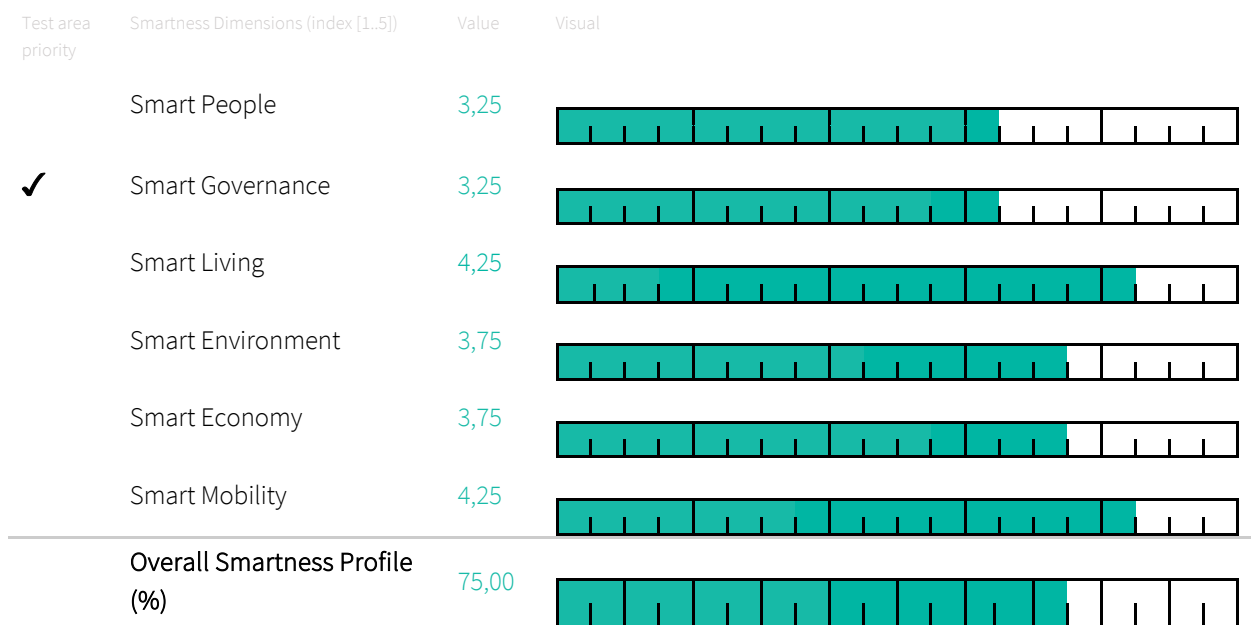
Regional Stakeholder Group: Mayors, employees, and residents of the municipalities Ainet, Amlach, Assling, Dölsach, Gaimberg, Iselsberg-Stronach, Lavant, Leisach, Lienz, Nikolsdorf, Nussdorf-Debant, Oberlienz, Schlaiten, Thurn and Tristach.

End-users: n/a

LTA/FTA Pair: n/a



TA Smartness assessment by Smartness Dimensions



2.8 Test Area KLAR!-regions Lower Austria¹⁰

Test Area Region: Lower Austria

Map coordinates: 48.10488385822602,
15.790482624868641

Main Characteristics:

Lower Austria is a diverse region in Austria characterized by its rich landscapes, from the lush Danube River valleys to the rolling hills of the Weinviertel wine region and the picturesque Wachau Valley. The region faces challenges such as preserving its historic sites and natural beauty in the face of urbanization and modern development. The Vienna Woods provides a haven of greenery and recreational opportunities near the capital city of Vienna. Agriculture and viticulture thrive in the fertile plains, while sustainable land use practices are crucial to maintain a harmonious balance between economic growth and environmental preservation. The Lower Austrian Alps offer breathtaking mountain vistas and outdoor adventure, presenting both opportunities and challenges for responsible tourism and conservation.



Main focus: Green infrastructure (developing ecological connectivity).

Challenges addressed:

- Heatwaves;
- Heavy rainfall;
- Ensuring water supply;
- Making forests climate-resilient.

Pilot Solutions: 1) The TA is already heavily affected by the consequences of climate change. In addition to further promoting climate protection measures, such as reducing greenhouse gas emissions, they must learn to cope with changing climatic conditions. This will be achieved through:
a) Strengthening the KLAR! Network, through regular meetings providing a platform for sharing experiences and receiving inputs from speakers on current topics. A newsletter will inform KLAR!

¹⁰ KLAR! Regions in Lower Austria: Waldviertler Kernland, Thayaland, Unteres Traisental & Fladnitztal, Bucklige Welt – Wechselland, Amstetten Nord, Amstetten Süd, Tullnerfeld OST, Gölssental, Südliches Weinviertel, Pielachtal, Kampseen, Waldviertler Hochland, Region Horn, Retzer Land, Wagram.



managers about current issues, possibilities, and events; b) Videos: "What is Climate Change Adaptation?" - introductory explainer videos will be created to provide the target audience with a clear understanding of climate change adaptation in Lower Austria, using various examples such as erosion, soil conservation, multi-use hedgerows, etc.; c) Best Practice Examples, to showcase successful climate change adaptation initiatives in Lower Austria, encompassing a wide range of areas and aspects of climate change adaptation (e.g., decoupling, stream restoration, multi-use hedgerows, biodiversity promotion, etc.); d) Project Implementation - Climate-Fit action guides present successful climate adaptation project implementations in KLAR! regions. Step-by-step instructions and relevant contact points are provided to motivate other municipalities, regions, or individuals to undertake similar projects and facilitate project initiation. Climate-Fit action guides can also be considered as brochures and cover topics such as soil decoupling, stream restoration, biodiversity and multi-use area promotion, stream shading, greening, retention basins, etc.; e) Expansion of Climate Change Adaptation Content - review and collection of texts from existing eNu websites and consolidation into the Climate-Fit web content. Numerous existing contents will be combined on a single channel to make them easily accessible to our test areas.

Smartness Dimension(s) addressed: Smart people, smart governance, smart living, smart environment, smart economy.

Regional Stakeholder Group: Local government officials who make policy decisions, community residents whose input shapes priorities, businesses and industries driving economic growth, and community organizations fostering social cohesion and cultural preservation. Effective engagement with these groups ensures balanced development, responsive governance, and improved quality of life for residents.

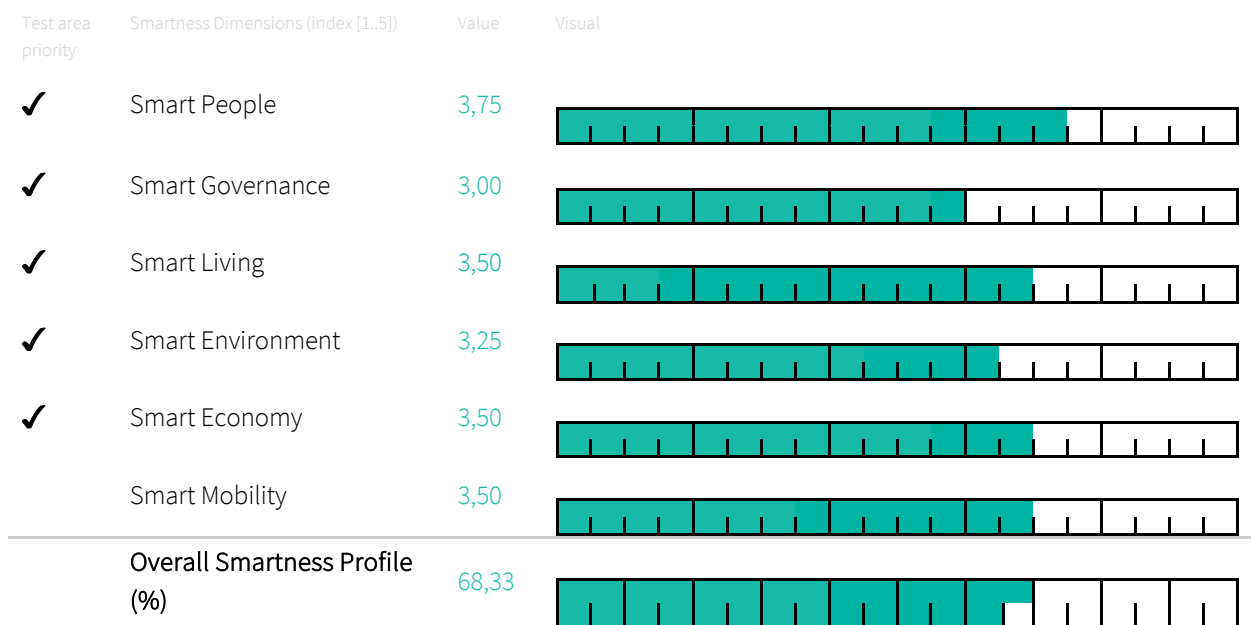
End-users: 1) All citizens of Lower Austria, as climate change has various impacts on the test regions in Lower Austria:

- 1) Temperature and Weather Extremes: rising temperatures can lead to heatwaves, affecting agriculture, human health, and energy consumption. Increased variability in weather patterns might also bring about more intense storms, floods, and droughts.
- 2) Agriculture: changes in temperature and precipitation patterns can impact crop yields and growing seasons. Certain crops may become less viable, affecting local agriculture, and potentially leading to shifts in what can be grown in the region.
- 3) Water resources: altered precipitation patterns can affect water availability and quality. Droughts can impact water supply for agriculture, industry, and domestic use. Conversely, heavy rainfall events can lead to flooding and soil erosion.
- 4) Ecosystems and Biodiversity: climate change can disrupt ecosystems and threaten local plant and animal species. Some species might migrate or struggle to survive, potentially affecting the region's biodiversity.

LTA/FTA Pair: The various regions learn from each other, especially the FTA's from the LTA's. This is achieved through regular meetings and reports from the regions.



TA Smartness assessment by Smartness Dimensions



2.9 Test Area Gran Paradiso National Park

Test Area Region: Valle d'Aosta Autonomous Region

Map coordinates: 45.7407199456375,
7.284815317768948

Main Characteristics: As the Aosta Valley is a mountainous region, it is difficult to provide adequate services and to maintain the population in the valleys, especially in the small villages, and to foster their economic development, particularly in tourism. New technologies offer an opportunity for the local development of territories, to populate/repopulate mountain areas through new jobs and professions that can be carried out remotely. This has given rise to the phenomena of remote work and digital nomads.



A further possibility is offered by technologies to develop the active participation of the population through citizen science and other e-citizenship activities.

Finally, technology can contribute to the digital transformation of local culture and identity by transmitting and at the same time transmuting local knowledge.

Finally, technology can contribute to the digital transformation of local culture and identity by transmitting and at the same time transmuting local knowledge.

Main focus: Natural Parks

Challenges addressed:

- Develop and test the Smart Community approach and how to exploit technologies to strengthen local Alpine identity, where there is a strong heritage/connection with the natural resources of the territory: the case of Communities living in National Parks (Lighthouse test area) and regional parks/protected areas (Follower test area).

Pilot Solutions:

The RSG discussed the main topics of interest for the TA in the Aosta Valley, which include:

- 1) "Workcation" for digital nomads: exploring new interactions between work and holiday time for workers and tourists, developing a concept for a new model of hospitality in natural and protected areas that favors the creation of new potential digital workers and the development of related coworking spaces;
- 2) Digital technologies to promote local products and their authenticity: explore the interaction between tourists/habitants/producers, promote and communicate local and



protected area products, exploiting digital technologies for the promotion, tracking and creation of short supply chains; 3) Active involvement in the protection of natural resources and Participatory Science: exploring the interaction between natural areas and their inhabitants to involve them in biodiversity protection and awareness-raising, e.g. through initiatives using apps for biodiversity monitoring (e.g. iNaturalist); 4) Community and cultural heritage: exploring the possible interactions between older and newer generations to defend and hand down the cultural heritage of communities through digitization supporting the elderly population in using new digital technologies and access to PA services; 5) Digitally connected shared spaces: to explore the possible interactions between physical and digital spaces and how it is possible to provide the population with places where on the one hand they can receive support for services and practices in digital mode, and on the other hand these places can also be points where innovative practices can be implemented.

Through a bottom-up approach, the WG has exchanged ideas and best practices involving the topics above by taking part in a thematic brainstorming. In the coming months, the WG will discuss the feasibility of different ideas, so that the RSG will be able to select one or more pilot solutions that may be implemented in the TA, according to the main priorities and needs identified.

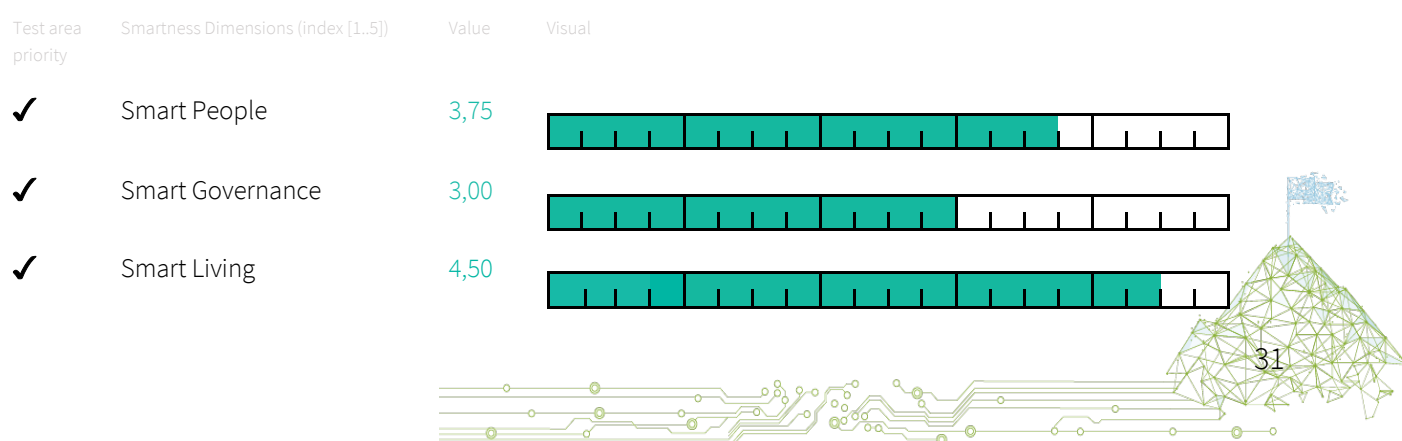
Smartness Dimension(s) addressed: Smart people, smart governance, smart living, smart environment, smart economy, smart mobility.

Regional Stakeholder Group: Mayors of delegates from the following municipality: Champorcher, Champdepraz, Fénis, Cogne, Valsavarenche, Rhêmes-Notre-Dame, Rhêmes-Saint-Georges, Introd, Villeneuve, Aymavilles, Unité des communes: Grand Paradis, Evancon, Mont Emilius, Mont Rose, director of the Regional Park of Montavic, Director of National Park of Gran Paradiso, Grand Paradis Foundation, Director of LAG Valle d'Aosta, University of Aosta Valley, Valle d'Aosta Autonomous Region

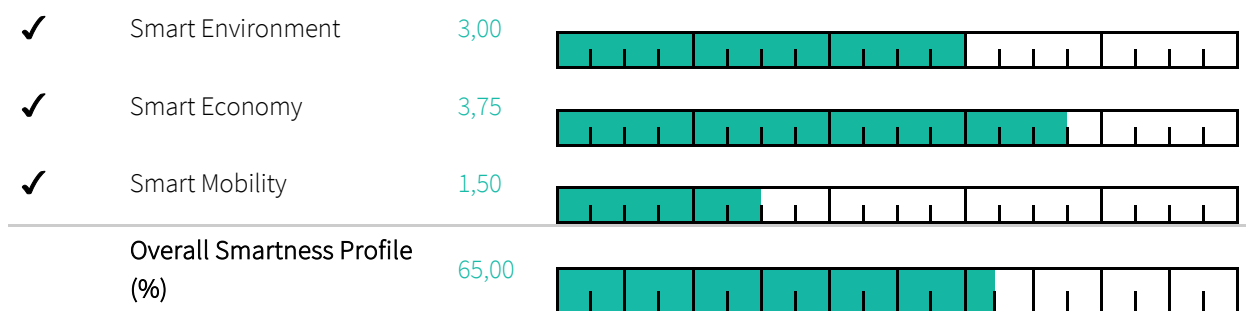
End-users: Multi-faceted target users, also depending on the pilot solution(s) that will be implemented: public institutions, civil society, the elderly, young people, tourists, employees.

LTA/FTA Pair: National Park of Gran Paradiso and Mont Avic Regional Park.

TA Smartness assessment by Smartness Dimensions



SmartCommUnity



2.10 Test Area Region Luzerne West

Test Area Region: Canton of Lucerne,
Region of Lucerne West

Map coordinates: 47.04906680298064,
8.306939838360087

Main Characteristics: The region Luzerne West is a rural area with different valleys around a big hillside called “Napf”. It is consisted of several small villages which face demographic challenges, as well as challenges in terms of mobility and use of empty stores in the village centers. Napfbergland is a beautiful, truistical area. During weekends people from nearby cities come to the area to enjoy the nature and beauty of the Napf. But they usually they get there by car which leads to roads blockages, noise pollution, and many visitors.



Main focus: Research & Innovation

Challenges addressed:

- Propose smart mobility solutions for the tourists visiting the are on the weekends, which can be also used by the local citizens during the week.
- Reviving (reusage of empty stores) the village centers.

Pilot Solutions: 1) Organization of workshops with a focus on smart mobility – a set of workshops to achieve a smarter mobility in Napfbergland (Romoos, Doppleschwand, Luthern, Menznau, Hergiswil bei Willisau communities), with the participation of Napfbergland Association, will be delivered. 2) Organization of workshops with a focus on smart economy – a set of workshops in the 27 communities in the Region Luzerne West will be organized to achieve a smarter economy in their village centers.

Smartness Dimension(s) addressed: Smart people, smart governance, smart living, smart environment, smart economy, smart mobility.

Regional Stakeholder Group: Arbeitsgruppe Verkehr

End-users: Local population, tourists visiting the area.



LTA/FTA Pair: Napfbergländ area (consisted of the communities Romoos, Doppleschwand, Luthern, Menznau, Hergiswil bei Willisau) and the 27 communities of the Region Luzerne West

TA Smartness assessment by Smartness Dimensions

Test area priority	Smartness Dimensions (index [1..5])	Value	Visual
✓	Smart People	4,00	<div><div></div></div>
✓	Smart Governance	3,50	<div><div></div></div>
✓	Smart Living	1,75	<div><div></div></div>
✓	Smart Environment	2,50	<div><div></div></div>
✓	Smart Economy	2,50	<div><div></div></div>
✓	Smart Mobility	1,25	<div><div></div></div>
Overall Smartness Profile (%)		51,66	<div><div></div></div>



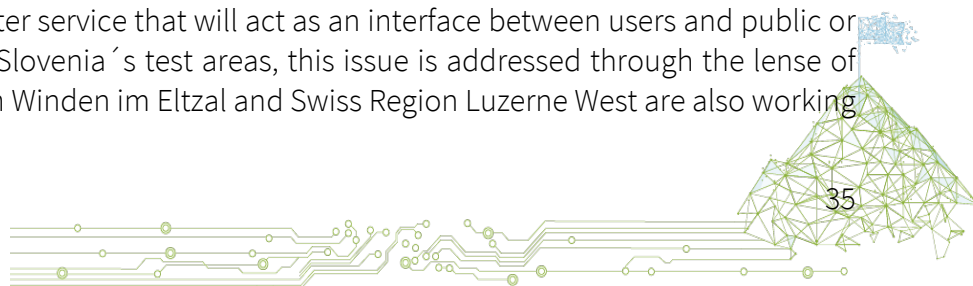
3. Summary and conclusion

In the SmartCommUnity project, several test areas across Europe are working towards developing solutions for various challenges communities are facing. Test areas differ in location, characteristics and levels of smartness, and are generally recognized either as a lighthouse or a follower test areas. In order to identify common challenges, opportunities for matchmaking and transfer of good practices, the test area info sheets are presented (chapter 2). In this chapter, we will summarize the main points and emphasize possibilities for collaboration among the test areas, based on the topics and solutions they will be working on throughout the SmartCommUnity project.

Economic Development: A common thread among various test areas is a focus on economic development. Regions such as "Communauté de communes du Guillemois-Queyra" and "Communauté de communes des Baronnies en Drôme Provençale" in France are working to boost their economic attractiveness, as well as "Green Point Living Lab" in Slovenia, which is also emphasizing economic development in the context of food production sustainability. Boosting economic development through promotion of digital jobs (for young people and digital nomads) and creation of coworking spaces is another idea, taken up by Italian test area Gran Paradiso National Park and the German test area Elzach. Swiss test area Region Luzerne West is also working on organizing workshops with the aim to achieve a smarter economy in their village centers (reviving or reusing empty stores in village centers). Collaboration between these regions could lead to the exchange of strategies and best practices for fostering economic growth, not only nationally, between the local lighthouse and follower test areas, but also transnationally, between test areas in different countries.

Connectivity and accessibility: Many of the SmartCommUnity project's test areas are addressing the issue of connectivity and accessibility – in France, main challenges communities in the selected test areas are facing are access to housing and healthcare, especially for vulnerable groups (elderly). Similarly, in German test areas (Region Südlicher Oberrhein), main focus is on issues of access to public services, which they will be tackling through improving communication between the city administration and citizens and also through development of applications that will enable citizens to foster networking among themselves (exchange platforms, apps for young people and immigrants). Topic of connectivity – connecting people and promotion of accessibility to public services is also one of the topics Austrian test area Lienzer Talboden is addressing. Having many different test areas from different countries working on this topic creates a solid opportunity for the creation of transnational links and transfer of good practices between various regions.

Mobility: Another topic that comes with an opportunity for fostering transnational collaboration, as well as local is smart mobility, adapted for rural and remote areas in Europe. Test areas in France are aiming to develop a mobility center service that will act as an interface between users and public or collaborative transport, while in Slovenia's test areas, this issue is addressed through the lens of short food supply chains. German Winden im Elztal and Swiss Region Luzerne West are also working



on promoting shared transport solutions, aimed both at local inhabitants and tourists visiting the areas.

Green infrastructure and national parks: Consequences of climate change are another challenge that is faced by many of the communities in rural alpine regions. In Lower Austria (KLAR! Regions) this issue is being actively addressed and the solutions from this lighthouse test area can be transferred to other regions as well through best practice and knowledge transfers and collaboration. Main challenges that this test area is addressing are heat waves, heavy rainfall, water supply and forest climate resilience. The Italian Gran Paradiso test area, being a national park, is also concerned with green infrastructure and is working towards exploring the interaction between natural areas and their inhabitants, in order to involve them in biodiversity protection and awareness-raising.

In conclusion, the SmartCommUnity project features a diverse group of test areas, each actively addressing unique challenges and focusing on various smartness dimensions (smart people, smart governance, smart living, smart environment, smart economy, and smart mobility). While their specific areas of emphasis differ, common themes unite these test areas. Economic development, connectivity, accessibility, and mobility are prevalent goals, forming a foundation for potential collaboration.

These test areas can greatly benefit from fostering transnational connections and the exchange of good practices. By working together, they can accelerate the development of smart communities, making them greener, more resilient to future challenges and more attractive for living and working to all age groups.



References

Albino, V., Beradi, U., & Dangelico, R. (2015). Smart cities: Definitions, dimensions, performance and initiatives. *Journal of Urban Technology*, 22, 3–21.

Birnbaum, L., Wilhelm, C., Chilla, T., & Kröner, S. (2021). Place attachment and digitalization in rural regions. *Journal of Rural Studies*, 87, 189–198.

Cowell, M., Eckerd, A., & Smart, H. (2020). The rural identity and the encroaching city: Governance, policy and development in Northern Virginia's Wine Country. *Growth and Change*, 51, 79–101.

Cowie, P., Townsend, L., & Salemin, K. (2020). Smart rural futures: Will rural areas be left behind in the 4th industrial revolution? *Journal of Rural Studies*, 79, 169–176; Visvizi, A., Lytras, M., & Mudri, M. (2019). *Smart villages in the EU and beyond*. Emerald Publishing Limited.

ENRD Thematic Work on Responding to Demographic Change and Promoting Social Inclusion: Strengthening local communities: https://ec.europa.eu/enrd/sites/default/files/w20_social-inclusion_brief_community-building.pdf (last accessed 12.10.2023).

EUSALP: <https://www.alpine-region.eu/eusalp-eu-strategy-alpine-region> (last accessed 12.10.2023).

Gianluca Lentini. 2023. The SmartCommUnity approach and definition. First SmartAlps webinar. 28.6.2023

García Fernández, Cristina, and Daniël Peek. 2023. "Connecting the Smart Village: A Switch towards Smart and Sustainable Rural-Urban Linkages in Spain" *Land* 12, no. 4: 822. <https://doi.org/10.3390/land12040822>

Zavratnik, Veronika, Andrej Kos, and Emilija Stojmenova Duh. 2018. "Smart Villages: Comprehensive Review of Initiatives and Practices" *Sustainability* 10, no. 7: 2559. <https://doi.org/10.3390/su10072559>

