

Business in SMART villages

This short document is a reflection on the possibilities of business in SMART villages - given that the topic is "smart villages", which in the conditions of the Czech Republic are villages with up to two thousand inhabitants.

Theme framework – municipalities in the Czech Republic

Note:

The following description is applicable to all sub-researches that will be carried out in the Czech Republic as a part of the Smart Rural 27 project. Knowledge of the framework in which individual topics, important for rural development in the Czech Republic, are placed is the aim of this description.

The Czech Republic has long been characterized by two decisive facts:

1. Within the EU, the Czech Republic is one of the countries with the highest share of industry in GDP, which brings about high associated energy, material and emission intensity (the amount of greenhouse gas emissions per inhabitant and GDP)
2. In terms of the number of municipalities per area, the Czech Republic belongs to the countries with the most fragmented population. A total of 10.8 million inhabitants live in 6,254 municipalities with their own self-government, of which 5,800 have less than 3,000 inhabitants. This is connected with extensive infrastructure – a high density of roads and railways, e.g. the length of railways per territory is the second highest in Europe (after Luxembourg, 120 km of tracks per 1000 km² of area), the total length of roads and motorways in the Czech Republic is 55838 km – 708 km of roads per 1000 km² of area.

Other characteristics include the complete liquidation of any, even small, business during the communist regime (in contrast to other EU countries, which in the past belonged to the Eastern Bloc), the centralization of industry in large factories and the intensification of agriculture by farming "on large ropes" in large cooperatives. This type of agricultural production remains characteristic for the Czech Republic till today.

After the changes in society (Velvet Revolution) in 1989, there were fundamental changes in the economy. State property was privatized, a large number of companies went bankrupt. In 2000, Act No. 72/2000 Coll., on investment incentives, was adopted, which started the influx of foreign capital into the industry of the Czech Republic. The main strategy was the renewal of industry in large industrial parks and large companies. The main reason was the increase in employment for a large number of people in less qualified positions (currently 18% of university students in the population aged 15+ are in the Czech Republic, around 2000 it was 12% of the working population). Investment incentives were therefore mainly given to large car manufacturers and their subcontractors.

A decrease in unemployment, i.e. the need for employment growth, is not the main criterion for business development today. For more than 10 years, the Czech Republic has been one of the European countries with the lowest unemployment (up to 3% in the long term), and the need for a sufficient number of people in large companies, construction and agriculture is

solved by the work of foreigners, especially their employment through agencies. This leads to a number of problems, at the same time ordinary services to citizens in cities and towns are not sufficiently provided. The labour market is changing, the fundamental change is the growth of self-employed people and small companies, not only in traditional fields, but also in a number of new fields, especially those connected with digitalization.

For the residents of municipalities, who until now commuted to work in large companies (with a corresponding burden on the transport system, centralization of services to larger settlements, etc.), new challenges and new opportunities arise at the place of residence. According to the latest population, house and apartment censuses in 2021, there is a noticeable trend of residents moving out of medium-sized cities (in the Czech Republic, these are cities of 6,000-20,000 inhabitants) to villages in their vicinity, with services in these centres. The situation is different in several large agglomerations, where many young people from the regions are still heading. It mainly concerns Prague and Brno, and to a lesser extent several cities with hundreds of thousands (Olomouc, Ostrava, Pilsen). Here, too, people settle mainly on the outskirts of these cities, but their needs and opportunities are different.

On the other hand, there is a noticeable trend of "returning home", when young people with small children return to their native villages, in many cases it is also the return of elderly people to inherited properties in the rural areas. All this gives the rural areas new possibilities.

Public administration in the Czech Republic is organized as combined (or mixed), i.e. municipal authorities perform both self-administration and state administration in a delegated capacity. Municipalities in the Czech Republic are divided into three types:

- 1st type – municipalities with the basic scope of delegated powers, which they exercise only on the territory of their municipality (all municipalities – currently 6,254 municipalities outside Prague)
- 2nd type - municipalities with an authorized municipal office, i.e. with a wider scope of delegated powers - they perform this for their municipality and surrounding municipalities (388 municipalities)
- 3rd type - municipalities with extended jurisdiction - their municipal authority exercises additional competences in the entire administrative district of the municipality with extended jurisdiction (205 municipalities) compared to the first two categories of municipalities of the district

The development of municipalities is the responsibility of two ministries: Public administration is the responsibility of the Ministry of the Interior, territorial and regional development is the responsibility of the Ministry for Regional Development. An important role in the development of the territory is played by the Ministry of the Environment and the Ministry of Agriculture. Roles of other ministries are partial only. and other departments.

Today, the challenge for the Czech Republic are mainly **disruptive innovations** that will enable:

- sufficient energy resources and an adequate level of energy security and self-sufficiency,
- an economy based on knowledge,
- the use of digitization of the entire territory of the Czech Republic and all public and private sector services as a tool for the prosperity of the entire society,
- environmentally responsible business and way of life so that the quality of the environment increases and the Czech Republic is on the way to achieving carbon neutrality.

In other words, the sustainable development of the Czech Republic which is being implemented using the available tools of the 21st century.

Strategies supporting rural development in the Czech Republic

Three state strategies are currently essential for rural development:

1. Regional Development Strategy 2021+
2. Concept of rural development
3. Concept of Smart Cities - Resilience through SMART solutions for municipalities, cities and regions

The Regional Development Strategy 2021+ (SRR) was approved by the government in 2019 and is implemented through two-year action plans. It determines the basic areas of regional development support so that cohesion occurs, i.e. the balanced development of the Czech Republic and its regions.

The global goal of the strategy is formulated for individual types of territory that have been identified in the Czech Republic, as follows:

- Metropolitan areas and their hinterland are the economic drivers of the Czech Republic, and their social and environmental limits are respected during their coordinated growth.
- Agglomerations and their hinterland use their development potential, represent important regional economic, cultural and academic centres, and their social and environmental limits are respected during their coordinated growth.
- Regional centres fulfil the role of a pillar of the Czech residential system and are centres for commuting to services and work. The population- and economically stabilized rural background of the regional centres fulfils an irreplaceable role in the care of the landscape, it has a sufficient network of services and is well connected to the regional centres. Agglomerations or metropolises are easily accessible from most regional centres.
- Fundamental changes aimed at their economic transformation into new, competitive fields have been initiated in structurally affected regions, and social and environmental problems are effectively solved in them.
- In economically and socially threatened areas, a good quality of life is ensured in the sense of ensuring a relevant range of civic amenities and a functioning local economy based on successful local companies.

The strategy also has six strategic goals, five of which are "territorial" - development priorities are set for large cities (or metropolitan areas and agglomerations), medium-sized and smaller cities (so-called regional centres), structurally affected regions and economically and socially threatened areas. The sixth strategic goal is cross-cutting and is aimed at improving planning in the area of regional development, at the national, regional and municipal levels. Regions should be guided by the strategy when creating their development strategies.

There are five specific goals within the above-mentioned sixth strategic goal, the third of which is "to take into account the territorial dimension within sectoral policies and to develop SMART solutions. To achieve this goal, the system of national subsidy titles should be clarified, use the Territorial Impact Assessment tool at the level of policies and projects, and use SMART solutions in urban and rural areas.

The government approved the **Concept of Rural Development** in January 2020. According to it, progress is being made in supporting rural development, which is the majority of the territory of the Czech Republic - out of 6,254 municipalities, approx. 2,300 have less than 300 inhabitants, and the population density outside agglomerations is less than 130 inhabitants/km².

The rural areas of the Czech Republic is suffering from ageing of population, marginal areas from depopulation, which of course is not generally the case, especially because municipalities are growing very intensively in the vicinity of large cities and relatively significantly in the vicinity of any cities. Necessary services in small municipalities are difficult to provide, therefore small municipalities are viewed with scepticism. For this reason, the concept has a vision: "In 2027, the rural areas is an area that lives well and is said to live well". Strategic goals are then oriented in five directions: people, settlements, environment, economy, planning and cooperation. The concept is valid until 2027, with the understanding that it can be updated earlier if necessary.

The strategic goals are formulated in the individual directions as follows:

People:

Stable population of rural areas characterized by high human and social capital ensuring dynamic endogenous rural development,

Settlements:

Sufficient infrastructure and equipment in rural settlements ensuring a quality life for residents and creating opportunities for rural economic development,

Environment:

A healthy, recreationally attractive, biologically diverse and climatically stable rural environment

Economy:

A powerful, stable and diversified rural economy enabling the self-realization of rural residents, creating an important component of the state's economic base,

Planning and collaboration:

Developed multi-level strategic planning and knowledge-based development management and successful municipal cooperation.

In the fifth strategic goal - objective, planning and cooperation - the third specific goal is Smart rural areas - which is explained to mean the support of functionally integrated and territorially conceived solutions that contribute to strengthening rural competitiveness and improving the quality of life of local residents.

"Strategic planning and management of rural development cannot currently be successful without adequate use of so-called smart solutions. For rural development, the development of smart governance, public services in electronic form and the possibility of all residents to use smart solutions, conditioned to a large extent by digitization, are essential. It is about supporting the use of technologies, especially digital ones, which are applied in individual spheres of the rural economy and social life, improving the functioning of local administration, the efficiency of public services and maintaining community cohesion. Smart solutions contribute to security, including data protection and cyber (information) security," it says.

The Concept of Smart Cities – Resilience through SMART solutions for municipalities, cities and regions was approved by the government in 2021 as the fulfilment of one of the tasks set for the Ministry of Regional Development in the Innovation Strategy of the Czech Republic. The concept specifies in more detail how to ensure regional development of the Czech Republic and rural development (the two strategies mentioned above) through "smart" solutions. The goal is to succeed by using the potential of people and the potential of the territory, through new technological tools, regional clusters, or regional cooperation and innovative solutions in municipalities, cities and regions to achieve quality conditions for people's lives, a good environment and strengthen the competitiveness of the Czech Republic in international competition. For SMART Czech Republic, as this concept is sometimes abbreviated, the goal is more clearly expressed as follows:

"To create such conditions on the territory of the Czech Republic that every person, of any age, education and status in any place, can live well here." This statement can be understood primarily as support for the existing fragmented settlement, when the rural areas is not a "burden of the cities", but a place where you can live well with all the services common in 21st century cities.

The Concept defines what can be considered "smart", i.e. SMART (in capital letters because it is a specific, generally not yet used definition that can be applied to municipalities, territories or regions of any size). Innovative, i.e. "smart" solutions evolve over time - what is "smart", i.e. innovative today, will not be "smart", i.e. innovative tomorrow. Innovations inherently contain the dynamics of change. However, it is possible to establish a definition that will allow its long-term validity. It is a complex of seven principles that for "smart" solutions must always apply, at the same time, at least to a limited extent.

These are the following principles:

1. The principle of change of direction - this means creating conditions so that, where possible and expedient, services are delivered to people and work and business can be carried out from home or from a place close to home
2. The principle of resilience – this is the resilience of people and communities, the local economy, the environment and cohesion in the territory based on digitization and innovative solutions

3. The principle of one solution with several effects - a solution is expected that will bring several significant effects (it solves several needs at once) with a holistic approach
4. The principle of "short distances" - everything that can be provided locally must be provided locally, or in the shortest distance (using the 3E rule – economy, efficiency, effectiveness)
5. The principle of cooperation and financial sustainability to achieve the effectiveness of the solution - this is cooperation with all partners in the territory, the use of multi-source financing with regard to its long-term sustainability
6. The principle of cohesion and complementarity, horizontal and vertical connection - the new solution leads to equalization of opportunities, reduces tensions, solutions are connected to each other, cooperation and connection at all levels and all levels of public administration is a basic prerequisite for achieving resilience and cohesion
7. The principle of solutions based on relevant information and facts (evidence based) - on the basis of facts, openness and data sharing, transparency and equal opportunities - understandable and accessible data is generated for innovative applications and the development of people's lives, communities and for business (sharing is caring).

A SMART solution means fulfilling the seven principles mentioned above. The first principle in particular – the principle of change of direction – is essential for a turnaround in rural development. According to the latest data from the CZSO and sociological surveys, and from knowledge of megatrends, it follows that such a change is not only possible, but that it is happening. The rural areas is becoming a good place to live for all generations and people with any education. The rural areas is not a place where (traditional) agriculture is the main economic sector, but a place where people live well and conduct business of any kind.

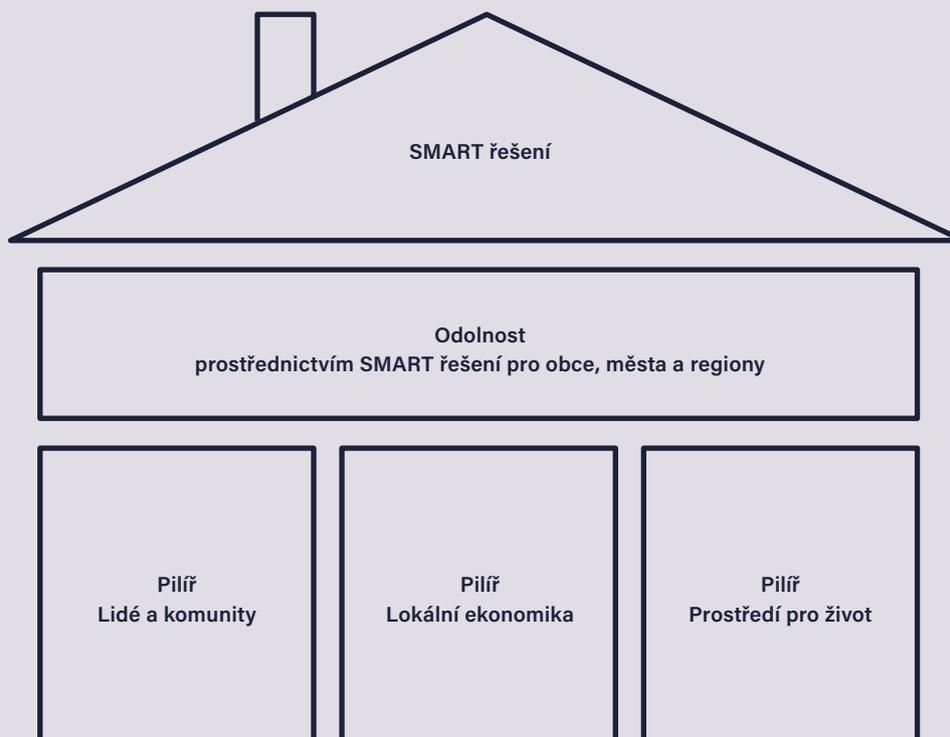
The concept is divided into four parts - an umbrella part (cross-sectional tools) and three pillars, which is illustrated by the image below.

The Local Economy pillar has four components, each of which is elaborated into several goals

1. Entrepreneurship is a natural part of the life of a village, city and region - with the goals of:
 - a. Sufficient infrastructure and facilities for self-employed and SME businesses are created in cities and municipalities
 - b. Innovation and start-ups are an essential factor in the development of the municipality, city and region
 - c. Conditions are created for doing business in the place and working from home or from the place of residence
 - d. Conditions are created for the development of the local economy when a larger or global company enters the region/city/municipality
2. Citizens and municipalities as partners or as part of energy suppliers
 - a. Increasing the level of self-sufficiency of the territory in energy supply
 - b. The energy economy in the territory of the region is optimized with regard to the efficient use of resources and the achievement of savings
 - c. The energy infrastructure in the territory enables a safe and reliable supply of energy, there is a reduction in the degree of dependence on external sources and an optimal ratio of supplies from central and decentralized sources

3. Raw materials and recycled or secondary raw materials in the circular economy, development of the bioeconomy
 - a. Waste management is optimized at the level of municipalities, cities and regions
 - b. Appropriate infrastructure is created for the implementation of circular economy/circular economy principles in municipalities, cities and regions
 - c. A water management infrastructure is created that respects the principles of the circular economy and meets the needs in times of climate change in municipalities, cities and regions
4. ICT infrastructure – a basic prerequisite for the success of digitization
 - a. Sufficiently dimensioned ICT infrastructure is available throughout the territory of the Czech Republic
 - b. Cities, municipalities and regions have the necessary infrastructure and ICT equipment for their activities
 - c. ICT infrastructure enables the safe development of digital services at the level of cities, municipalities and regions

Obrázek 1. **Struktura Koncepce Smart Cities postavená na pilířích udržitelného rozvoje**



Zdroj: MMR, vlastní zpracování

Strategy supporting business development

As mentioned above, the Czech Republic is still a country of traditional industry, the importance and share of GDP is dominated by the automotive industry and its subcontractors. Even though the Czech Republic has long been declaring the need to shift to a knowledge-based economy, and this is happening to a large extent, the crises of recent years have become the biggest impetus for change. First, the COVID-19 pandemic, which brought about the rapid development of digitization and the use of digital solutions, followed by Russian aggression against Ukraine and the EU's response to it in the field of energy. The electric power industry of the Czech Republic is based on coal, somewhat less on nuclear sources, the installed capacity of renewable energy sources is growing, but it is still not sufficient and the remaining potential for it is not very large.

Concepts that create the conditions for changes in the economy are therefore particularly important at present. In the medium term, the economic policy is formulated in the National Recovery Plan, the turn to the knowledge economy is part of the Innovation Strategy of the Czech Republic 2030. The support of small and medium-sized enterprises is processed in a separate strategy, the tools for the economic turn are formulated in particular in the Artificial Intelligence Strategy and the Strategy for the Development of 5G Networks . The National Brownfield Regeneration Strategy 2019-2024 is also important for rural areas.

The Strategy for the Support of Small and Medium-Sized Enterprises In the Czech Republic for the Period 2021-2027 was approved by the government in 2021. The goal is to increase the productivity and competitiveness of Czech SMEs and thereby strengthen the international position of the Czech Republic, among other things, in the field of research and innovation, in the use of advanced technologies and skills.

Altogether, ten strategic goals were formulated in seven areas - business environment; access to finance; access to markets; workforce, skills and education; research, development and innovation; digitization; low-carbon economy and efficient management of resources. The strategy states that "when supporting SMEs, the different conditions of different types of territories (from the point of view of geographical location, economic performance, social structure, etc.) must be taken into account." Increased emphasis must be placed on areas that are structurally affected and economically and socially threatened, as SME support in this type of area can significantly contribute to limiting the risk of growing regional differences. The specific form of the territorial dimension is part of individual implementation tools, in accordance with SRR 21+, or in relation to the support of the rural economy with the Concept of Rural Development." The lack of retail trade and services in the rural areas was identified as the most pressing problem, and a national program was determined for this purpose.

In the analysis of the SME Support Strategy, it is stated that nine out of ten entrepreneurs in rural areas are self-employed without employees, 8% are micro-firms with up to 9 employees, 1.5% are small firms between 10-49 employees and 0.5% of firms in rural areas have more as 50 workers. The number of companies with 50 or more employees is growing at the expense of small entrepreneurs. More than 20% of all companies in the rural areas are entrepreneurs in the field of trade and small services, 15% are small industrial activities, 10% each are held

by companies from professional fields, construction, accommodation and social services. Entrepreneurs in agriculture are represented in the rural areas by 5%.

One of the latest news in the field of 5G is from June 2023: the Ministry of Industry and Trade announced a call from the National Renewal Plan, within the framework of which it will support the construction of the base station infrastructure of the 5G network. It will thus ensure the coverage of rural locations with a 5G signal, which will enable the reliable provision of mobile services to end customers. This creates an opportunity for the development of business and services throughout the territory of the Czech Republic.

Business in SMART villages

The Concept of Smart Cities of the Ministry for Regional Development is implemented through a government-approved implementation document, where measures - activities that will enable the gradual fulfilment of the goals - are elaborated for the individual pillars and goals.

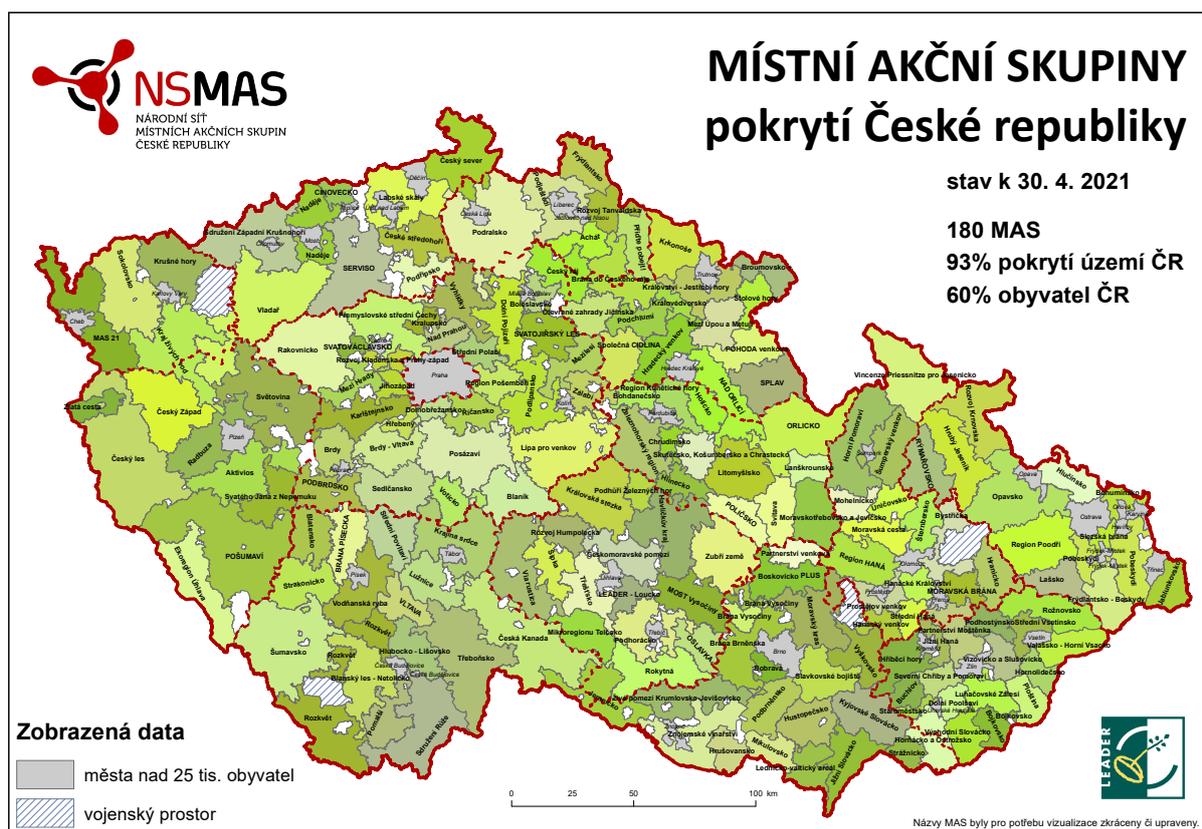
In the Local Economy pillar, development activities are mainly concentrated in the area of community energy and the development of ICT infrastructure. At the same time, the document formulates several other activities that can contribute to the development of local business in SMART villages. The Smart Specialization Strategy of the Czech Republic (RIS3) and its regional annexes play a relatively big role here, where the issue of SMART solutions is described as an important tool for innovative development in the territory. Support for business development in regions based on this strategy is provided by regional innovation centres, supported by EU funds, until now from the operational program of the Ministry of Education and Culture Research, development and education (through the program title Smart Accelerator), now from the operational program Jan Ámos Komenský (OP JAK). A so-called "smart city developer" is paid within the centre from European and partly from regional funds. The smart city developer cooperates with municipalities and their self-governments on the development of local business, especially business with high added value, which is often based on the results of research. Innovation centres further support the development of start-ups, small and medium-sized businesses, through connecting research organizations and companies. In the field of business, the PLATINN method, developed by the South Moravian Innovation Centre and its Swiss partners, is rapidly expanding. Over the past six years, it has become clear that it is not enough for innovation centres to provide services in regional cities. The new Smart Accelerator therefore made it possible to create "branches" of innovation centres in smaller cities, and business could thus be supported throughout the territory of each region.

The Zlín Region and the city of Slavičín (6,200 inhabitants) are an extraordinary case. The Technological Innovation Center of the Zlín Region (www.ticzlin.cz) collaborates here with Mayor Tomáš Chmela on a number of very interesting projects (<https://www.mesto-slavicin.cz/cs/mesto-slavicin/aktualni-clanky/aktualni-clanky-2022/strategie-chytry-slavicin-ceka-na-vase-nazory.html>). Similarly, the Ústí Innovation Center specializes in the development of smart rural areas in one part of its activities, especially in cooperation with the city of Terezín (2,880 inhabitants). See more at <https://icuk.cz/projekty-a-resenatemata/smart-ustecky-kraj/#chytry-venkov>. In addition to the South Moravian Innovation Center (www.jic.cz), the South Moravian Region established an independent organization for

the development of SMART solutions in the region, the JINAG agency (<https://jinag.eu/cs/projekty>). Connecting the activities of both organizations creates an extraordinary opportunity for the development of smart rural areas.

The development of smart rural areas is also supported by information from CzechInvest, an agency to support business and innovation (<https://www.czechinvest.org/cz/Sluzby-pro-municipality>), which was established by the Ministry of Industry and Trade (MPO). Export support and, in this sense, business cooperation with municipalities is in charge of CzechTrade, another agency founded by the MPO (<https://www.czechtrade.cz/media/clanky-a-rozhovory/2022/4Q/smart-cities-prinaseji-exporterum-nova-pravidla-hr>).

Of course, Local Action Groups (LAGs) have the greatest impact on business at the local level. They are united in the National Network of LAGs (<https://www.nsmas.cz/o-spolku/kde-pusobi-mas/>) and due to the nature of the settlement, they cover most of the territory of the Czech Republic, as is clear from the map below. Their "evidence-based" functioning with data is systematically supported by the Czech Statistical Office (ČSÚ). <https://www.czso.cz/csu/czso/data-pro-mistni-akcni-skupiny-mas>. The strategies of individual LAGs are approved by the Ministry for Regional Development (<https://mmr.cz/cs/microsites/uzemni-dimenze/regionalni-rozvoj/clld>) and are published on <https://www.databaze-strategie.cz/cz/oblastni-dokumenty>.



LAGs today do not only have a role within the CLLD, but also act as innovation brokers, advisors in the field of community energy and digitalization development within the BCO – Broadband competence office (see <https://www.bconetwork.cz/>). Since 2018, there has been an intensive discussion in the National Network of LAGs about the importance of smart rural

areas, and LAGs are very effectively cooperating on the creation and functioning of the local "quadruple helix". In addition, the LAGs National Network has a separate working group for smart rural areas, led by Miloslav Oliva from the Pošembeří Sub-Region - Central Bohemian Region, who was at the origin of the SMART Czech strategy (see https://www.nsmascr.cz/o-polku/ps-a-platformy/ps-chytry-venkov/?ftresult_menu=chytr%C3%BD)

All of these actors mentioned above and their activities (funded by state and European resources) support the creation of a smart rural areas/SMART villages - a place where it is good to live and do business not only for farmers, but for people of any profession.

In 2022, the staff of ISFOR, the Institute for Society 4.0, and Ateliér Česko conducted detailed discussions about SMART solutions with the staff of the ministries responsible for the accomplishment of individual activities in the implementation plan of the Smart Cities Concept. At the same time, they participated in the creation of several municipal strategies. Two basic insights emerged from this:

1. Individual ministries support the development of smart rural areas with their policies and a number of subsidy titles, but there is a lack of sufficient interconnection – complementarity of individual solutions. Here, the role of MRD as a coordinator of activities in the territory is essential – this must be strengthened. The Working Group for Rural Development and the Working Group for Smart Cities are an important tool for vertical and horizontal communication (between ministries and ministries with the regional and local levels), but their role must be further strengthened. From the point of view of supporting business in municipalities, there is a wide range of options, the most frequently mentioned of which is support for the regeneration of brownfields and their use for business.
2. At the municipal level, there is still insufficient knowledge of the importance of strategic work and knowledge of the benefits that SMART solutions bring. In addition, business is often understood as that part of community life that does not require special interest from the community management. Entrepreneurship "happens" in municipalities, the local government does not always actively prepare good conditions for local business. This is influenced by the budgetary determination of taxes, when the tax interest of municipalities in the development of business in their territory is not high.

These findings led to the formulation of the first topic of Task Force Smart Rural 27 in the Czech Republic – business in the smart rural areas/SMART villages.

Experience so far shows that (large) industrial zones outside the city are definitely not an asset (in Czech terms, "cities" are essentially smaller municipalities, 5,000-8,000 inhabitants), once heavily supported by investment incentives and subsidies from the Ministry of Industry and Trade. Settled companies cannot make much use of the labour force of local residents. Unemployment in the Czech Republic has been very low for a long time (always under 5 %, mostly under 3 %), the qualifications of people in small settlements do not meet the needs of companies located in industrial zones, and these companies usually do not offer very attractive working conditions. This results in the need for agency employees, mostly

foreigners. In addition, no follow-up services are created near the zones (restaurants, regular services for the zones – subcontracting, cleaning, supplies, etc.), so the impact of these zones on the life of the municipalities is small, often rather negative. (An opposite example is Dolní Břežany near Prague, where the mayor bet on supporting large investments in research. Today, approx. 500 people, scientists and university-educated technical staff, Czechs and foreigners, work in the two laser centres. Necessary services, mostly supplied from the municipality and the surrounding area, completely changed the once backward village (see <https://www.dolnibrezany.cz/>).

What municipalities need is business in the municipality. From the covid era, we have a number of examples when highly qualified people moved to the rural areas (the Czech Republic has the most "cottage owners" in Europe - see <https://www.ceskovdatech.cz/clanek/155-chaty-a-chalupy/>, recreational property is owned by more than 18% of the population of the Czech Republic) and remained here after the end of the pandemic. Working from home has become a matter of course for a large number of professions, but the ability to connect to a fast Internet is essential. The next wave of "moving out of Prague" is a reaction to the financial inaccessibility of housing in larger cities and the quality of life. Especially young families quite often move from the cities where young people studied and started their careers, back to their birthplace, either to their parents or, much more often, to newly acquired properties. Again, these are people who find work in the immediate vicinity or rather work remotely, either as self-employed or for large companies in the Czech Republic and abroad. For example, it is visible in the creative industries - see <https://www.linabellovicova.cz/> - recognized architect, born in Uherské Hradiště, after experience from Japan, she settled in the rural areas near her birthplace, where she works. From her website, it is not obvious that she lives in a village in the east of the Czech Republic.

How representatives of municipalities that want to be SMART think about the issue of "local business"

Before the Task Force meeting, its members - representatives of municipalities - were asked to answer the following questions below.

Questions asked:

- What do you imagine under the term "local business"
- Do you need something like this and if so, would you be willing to support local business?
- Do you have an "economic pillar" - entrepreneurship - as a part of your strategic plan?
- What business would be most important in a municipality of your size and population structure for its development? What do you have and what would you welcome?
- Do you expect or need any (financial or methodological, advisory) support from the region or the state?
- Are new companies already being created (Start Ups)? If not, do you think that they could develop ?
- Have you already used any supporting tool for business renewal in your municipality - regeneration of brownfields, development of digitization, coworking?

- Do you observe any changes towards local business development in your area? E.g. young people are not leaving, new employees came with the arrival of companies and settled in the village, is the offer and infrastructure of services developing?

Answered by:

- Milevsko, Ivan Radosta, mayor – population around 8 100
- Klec, Vlastimil Štěřba, mayor – population around 200
- Vodňany, prof. Otomar Linhart, city councillor – population around 7 400
- Jindřichův Hradec, Karel Holý, city office secretary – population around 21 000
- Tálín, Tomáš Sládek, deputy mayor – population around 170
- Písek, Tomáš Hrdý, chairman of the municipal environmental committee – population around 31 000, the first Smart City in the Czech Republic (2015)

The prevailing opinion is that for business it is necessary to create conditions (infrastructure, services, development areas), or that it is a business that is based on local resources, is focused on local needs, develops relationships in the community, etc.

The broadest answer shows a comprehensive understanding of the importance of local business:

"Entrepreneurship, which is the backbone not only of the local economy, and as such is a fundamental element of the "resilience" of the region/state. A business that requires creative talent and the ability to take care of yourself / your employees, therefore often a business with a higher added value. This is a key element: from the point of view of economic growth (see the assessment of the economy of the Czech Republic as a middle-income economy; Navrátil: reVision of the Czech Republic 2023). Since de-globalization tendencies towards globalization can be identified due to the action of a whole range of factors, supporting local business is a strategic decision."

To the question **whether the municipality needs local business and how it can support it**, the answer was mostly positive, with the fact that the representatives of the municipalities consider the support of local business to be beneficial in all respects.

According to the Act on Municipalities (Act 128/2000 Coll.), municipal councils (the highest self-governing body of the municipality) must make decisions on the basis of the municipal development program, i.e. the strategic plan. The structure of the strategic plan depends on the municipality itself, therefore the question was asked **whether the "economic pillar" - entrepreneurship is included in the municipalities' plans.**

The larger municipalities (cities) addressed have entrepreneurship in their strategies, some even have a separate strategy for business development. Small municipalities do not have this in their concepts.

The needs and possibilities of municipalities of different sizes are different, therefore the next question was directed to **what business would be most important in a municipality**

of your size and population structure for its development? What do you have and what would you welcome?

The answers reflected the municipalities' approach to business so far - the settlement of companies with higher added value, the possibility of implementing community energy, supporting local trade and local (eco)agriculture, the products of which would be used locally, e.g. in schools. With the permission of the secretary of the municipal office in Jindřichův Hradec, we present his answer:

"The city of Jindřichův Hradec is not and will not be a city / center of classic industry (today the automotive industry), because its geographical location and physical environment determine it differently. Therefore, it is necessary to take advantage of the indisputable advantages that the city and its wider surroundings have, i.e. a historic city nestled in nature / Czech Canada, a region with small villages / villages. The potential is therefore offered by sectors that do not require large industrial halls and complex logistics (transportation), i.e. sectors with added value using e.g. remote working methods, sectors where graduates of the local faculty of management will find employment. This is linked to the development of the service segment, as workers in these sectors are an aspiring middle class, i.e. a class that has quality services as a standard and moves to (demands) them. In combination with the history of the city and the surrounding nature, this is a positive effect. The above could be simplified into the slogan, "let's not make Jindřichův Hradec what it doesn't want/cannot be" (no one will believe us anyway)."

Respondents were also asked about **the need for financial, methodological or advisory support from the region or the state**. According to the experience of the Atelier's experts at the regional level, a certain amount of help can be expected, especially from the regional departments of the state agency CzechInvest and innovation centres. Economic chambers (associations of entrepreneurs) also operate in all regions, which are supported long-term by European funds. However, it is clear that all this is insufficient for municipalities, especially smaller ones. Respondents also answered in this way. They are quite sceptical about the possibilities of support from the state administration.

In addition to the fact that the cooperation of the town hall with current entrepreneurs in the municipality was investigated, the respondents were also asked about **the possibility of establishment of new companies and the possible support of start-ups in the territory of the municipality**. In larger municipalities, they are aware of the importance of the newly emerging business and present as an advantage, for example, a good location in terms of transport (Písek, Vodňany - near one of the main routes from Prague to České Budějovice). Small municipalities do not deal with this issue, or they do not see activity in this direction among their residents. However, the positive response to support new business prevails.

The main way the Ministry of Industry and Trade supports entrepreneurship is through a subsidy title for the regeneration of brownfields, which are mostly abandoned sites or dilapidated buildings, especially the remains of agricultural cooperatives in smaller municipalities. It is a widely used title that has already helped to develop business in a number of municipalities. That is why the representatives of the municipalities were asked whether they have already used any **tool for the renewal of business in the municipality** -

support for the regeneration of brownfields, the development of digitalization or the creation of coworking centers. The answers indicate the use of European funds, the Smart Parks for the Future (MIT) program, support for digitization, but there is no significant experience with this in smaller municipalities.

Municipalities and cities that are known for supporting local entrepreneurship are seeing a gradual increase in the return of young people to the municipality, or an increase in business-related services, which were newly created in the village (see Dolní Břežany). The last question focused on this - whether or to what extent the representatives of the municipalities observe **changes in the trend of departure and arrival of new residents.**

Except for one case, the answer was positive in this matter – the smart park meant a change in the place, the proximity of good transport connections combined with lower living costs leads to an increase in the population, digitization is already having a positive effect on the life of the municipality, even if smaller, specific ones are more interested groups. However, the most significant change in the population is the construction of the main road between Prague and Písek, or České Budějovice.

The survey shows that representatives of municipalities are interested in the issue of local business, they are aware of the importance of creating an environment for its development, especially if they are from larger municipalities/cities, but they do not find sufficient support in the state administration and state organizations (applies especially to small municipalities, but essentially for all interviewees – all the municipalities approached are "too small" for state organizations and the forces of the supporting state infrastructure are not sufficient to take care of them). It follows from the responses to the survey and the experience of the Atelier's experts that local action groups (they are also represented in the Task Force) will have the main role in educating and spreading good practice in the area of local business in the long term.

1st Task Force meeting - a meeting organized by Atelier Česko in České Budějovice, in the South Bohemian Science and Technology Park, on June 22, 2023

Program:

1. Introduction - welcome

Vít Král – Atelier Česko, z.s.

2. Introduction to the issue – the Smart Village concept and the Smart Rural 27 project

Rut Bízková - Smart Rural 27, Atelier Česko

The potential for the development of SME business in small municipalities - introduction to the issue based on the research carried out - formulation of questions for the task force discussion

3. Service science in the service of small villages

Leonard Wallezky – Masaryk University

How service science can support business development in smart villages – a method, examples of good practice from the Czech Republic

4. Business forum in the region of small villages

Michal Kozár, Major of Jindřichův Hradec, Karel Holý, City Secretary and Veronika Vašíčková, Faculty of Management

A specific example of business development support in the Jindřichův Hradec region with several dozen small municipalities. (There are a total of 58 municipalities in the ORP Jindřichův Hradec district).

5. Czech Management Association and its role in supporting entrepreneurship in the regions through regional and professional clubs

Ivo Gajdoš, CEO of CMA

CMA members are organized into clubs based on their specific professional interests or regions. Club activities offer inspiring events and exceptional personalities, networking and personal contacts. How it helps to small business in small smart villages?

6. CzechInvest and business in smart villages

Lucie Tomandlová, CzechInvest

The results of the CzechInvest survey about business conditions in in small villages - contribution to the fulfilment of the smart concept of the Czech Republic. Why to support “start up” village – CzechInvest experience

7. Research and innovation for local business development

Ladislav Mlčák, Technology Agency of the Czech Republic

Information about the national programmes supporting R&D&I for the smart concept and examples of research projects and their results for business development in the smart villages. How to support “start up” village?

8. Evaluation of the development potential of micro-regions and municipalities in terms of data availability

Jan Vozáb - Czech Technical University

Presentation of result of the research project supported by the Technology Agency of the CR - usability for rural development

9. Discussion of the issues raised in the background document

Rut Bízková – moderator

10. Conclusions and information about the programme of the next meeting

Rut Bízková and Vít Král

The program was prepared in such a way that it was possible to discuss with representatives of municipalities and representatives of other organizations and interest groups what will most help local business, how to support it, what the state, non-governmental organizations can do for it and how research organizations can help. An extremely interesting approach to business opportunities in Jindřichův Hradec was presented. The program aroused extraordinary interest and extensive discussions (presentation in the attachment).

The role of university education for the development of municipalities, the possibilities that municipalities can use in cooperation with universities were discussed. A number of sub-problems can be described and solutions proposed through the cooperation of universities - teachers and students, with representatives of municipalities. It is very convenient when students receive practical assignments for their seminar, bachelor's, master's and doctoral theses directly in the municipalities and thus begin to cooperate with them. This is proven by the practical experience of the municipality of Strmilov (a participant in the meeting - a teacher at the Faculty of Management of the University of Economics in Jindřichov Hradec is also an employee of the municipal office in Strmilov) or the municipality of Ořechov near Brno (the lecturer is Dr. Wallezky from Masaryk University).

The possibilities of supporting business development in cities and towns were also discussed. What is a matter of course in larger towns and cities is not common in small towns - for example, paying by card for any services, which is already prevalent today, is a problem in small towns, many establishments only expect payment in cash, ATMs are rarely available (you need to drive for them for several kilometers). The apparent trifle disgusts residents and tourists who are used to the usual standard of online service availability and cashless payment. The main reason for small services and shops in the countryside is mainly that card payment services are burdened with relatively high bank fees.

Recommendation for the Ministry of Regional Development (MRD), the Ministry of Industry and Trade (MIT) and the Ministry of Finance (MF): Negotiate with the banks on the possibilities of favouring SMEs (small services, entrepreneurs and rural businesses) so that the fees for these contractual relationship bank- SME's were minimal and thus enabled more extensive cashless payments.

Business opportunities in municipalities include community energy. Subsidies - especially from the New Green to Savings program and other subsidy programs of the State Environmental

Fund of the Czech Republic - are a great incentive especially for the installation of photovoltaic panels, when installed, for example, in the entire village, there is a great opportunity for the development of community energy. There is interest in this even in the smallest municipalities. However, the problem is the connection to the grid, because the provision of the subsidy is tied to the confirmation of the distribution system that the source will be connected. Distributors in many places do not allow this due to the unpreparedness of the grids.

Recommendation for MRD and MIT, in cooperation with the Ministry of Environment (MoE): Arrange a remedy as quickly as possible and (in addition to completing the legislative process in favor of community energy) enable all interested parties to have a problem-free connection.

With the mayor of Jindřichův Hradec and the secretary of the municipal office in Jindřichův Hradec, the possibility of doing business in the city and in the surrounding municipalities was extensively discussed. In this part of Southern Bohemia, the population density is relatively low, so the microregion shows all the known problems of a sparsely populated rural area. With the knowledge that for the long-term sustainable development of the Czech Republic with crucial role of the smaller settlements, which also include the municipalities within their reach into their efforts, the mayor and his team are preparing a Business Forum in Jindřichův Hradec on September 21, 2023 (<https://jhpf.fm.vse.cz/>). In its strategic plan, the city has cooperation with academia and support for business development. The city officials are aware of the need to "prepare the infrastructure for the future and the conditions for changes that have not yet occurred" - this particularly applies to changes in jobs and business that are associated with Industry 4.0, the development of artificial intelligence and the change of the labor market. The city has relatively large savings, it did not invest much in the past. The challenge is to prepare the conditions for new residential construction and increase the city's attractiveness for young people. At the same time, use the options offered by the silver economy. "We are targeting companies that have not yet been established," said the mayor in his presentation. The upcoming business forum will be a discussion platform on which representatives of the city and businessmen will discuss the future of Jindřichohradecko. The high rationality of decision-making, which is due to the previous experience of the mayor of the city as a manager in the health sector and the similar strategic thinking of the political leadership of the city and the secretary of the city office, is certainly worthy of attention. It is also significant that the political representation is aware of the importance of cooperation with the Faculty of Management of the University of Economics, which is based in the city and thus brings young people to the city. Cooperation with, for example, Patrik Juránek from Startup Disrupt - <https://www.startupdisrupt.com/> was mentioned. Jindřichův Hradec aspires to the position of leader of SMART solutions in the context of the Czech Republic.

Recommendation for MRD and MIT: To methodically support and popularize the efforts of Jindřichův Hradec to develop the business environment and SMART business.

Recommendation for the Technology Agency of the Czech Republic (TA CR), or the Council for Research, Development and Innovation (CRDI): Enable greater support for R&D projects where the research organization and the municipality cooperate (i.e. public administration at the local level, not only at the level of the central state administration).

"Marketplace for Municipalities" - a platform for cooperation between municipalities and companies on new solutions within the Smart Cities concept is one of the activities of CzechInvest (see <https://trziste.czechinvest.org/>). CzechInvest has a number of support tools, especially informational ones, it operates a database of brownfields, a map application for the possibilities of investment incentives. In addition to municipalities and companies, the marketplace should also be extended to the academic sphere, so that it is possible to search for partners for cooperation in the most effective way.

Recommendation for MRD and MIT: CzechInvest activities can be very useful for the development of business and new solutions for municipalities within the SMART concept, but they require significantly greater support from the state administration and non-governmental organizations that bring together municipalities (especially Association of Towns and Municipalities - SMO ČR, Union of local governments - SMS ČR) and are partially subsidized by the state so that as many municipalities as possible learn about the market's potential and use it, or all partners.

A very interesting example of what even a small village can do for its development is the already mentioned village of Strmilov. Innovative solutions in public administration are available at <https://www.strmilovsko.cz/obcan/privetivy-inovativni-urad-strmilov/>. The initiator of the SMART village solution is Mgr. Jaroslava Sedláková, PhD. As part of the innovation week in the fall this year, a hackathon for municipalities will be organized (previous event - see <https://fm.vse.cz/vzdelavani-a-transfer-znalosti/centrum-vzdelavani-a-transferu-znalosti/inovacni-tyden/inovacni-tyden-2022/koncept-smart-city/>).

More and more opportunities are provided by the support of applied research and development through the state Technology Agency of the Czech Republic.

Conclusions:

The meeting of the Task Force revealed a great need for vertical state-region-municipality cooperation, especially methodical support of municipalities from the regional or national level. Considering the number of municipalities, it is necessary for the MRD and MIT to work effectively, i.e. to coordinate their activities in detail with the regional level, especially innovation centres, regional offices of CzechInvest and regional centres - cities the size of Jindřichův Hradec (ORP), which can be leaders in the territory of micro-regions. **These regional players are decisive for the development of SMART rural areas/SMART villages. Cooperation with them is manageable in terms of time and personnel.** At the same time, it is clear that the decisive factor is not the availability of funds, although it is of course very important.

The conclusions drawn from the meeting of the Task Force on doing business in SMART villages will be forwarded to the relevant departments of the mentioned ministries.

