

## 3<sup>rd</sup> Smart Villages Taskforce Meeting – Czech Republic

### Purpose of the meeting

Due to the large number of small municipalities in the Czech Republic, the problem of availability of medical care, especially general practitioners, pediatricians and dentists, is growing. The change is possible especially in cooperation with the General Health Insurance Company and with the use of e-Health, or telemedicine. As an emerging issue for the Czech Republic, telemedicine is supported mainly through research and innovation national programs. The task force will look at the possibilities of expanding good practice in cooperation with the Ministry of Regional Development working group for rural areas, working group for the smart cities, with the Ministry of Industry and Trade, Ministry for Health, Ministry and Social Affairs and". The goal of taskforce interventions is to spread good practice and new solutions to smaller territorial units.

#### Date of the meeting

November 30, 2023

#### Location

Campus Hybernská (hub for societal and human research of thy City of Prague and the Charles university), Hybernská 4, Prague

#### **Participation**

When selecting and inviting participants, we focused on balance in the QH environment, mainly participants from South Bohemia and the LAG working group for SMART village were invited. The fact that the event was held in Prague created better conditions for the participation of representatives of the ministries to whom the recommendations from the meeting are addressed. The meeting was attended by the representatives of the Ministries (Ministry of Labour and Social Affairs, Ministry of Industry and Trade, Ministry of Regional Development), the national agencies (CzechTrade, TA CR) regional innovation centres (Ústecký and South Moravian regions), local action groups (LAG – working group for smart villages) and research organizations.

Our goal is to take a holistic view on the topic of eHeath and social services in the territory as a part of the smart village concept and therefore partners from the national level (the government and its directly managed organizations), partners from the territory (local action groups), representatives of the private, regional and academic sphere were addressed. Task force meeting was attended by 17 members, 4 of them online (see attend lists).

### Main outcomes & lessons learnt (including deviations from initial plan)

Knowledge from the practice:

 Evidence of the urgency of solving the problem of population aging in the Czech Republic is the growing interest in establishing private homes for the elderly.
Recently, two investment funds were even created to finance them.



- A number of research teams are engaged in reducing the cost of preventive examinations, detection and treatment of diseases at an early stage, and thus the entire healthcare sector (e.g. detection of retinal diseases) new procedures (including equipment for their implementation) are certified medical devices- there must be competent authorities, which can issue the certificate. There is only one such authority in the Czech Republic, three in the Netherlands. The lack of such authorities and at the same time the slowness of approval is a big barrier to the transfer of solutions into practice. A good example can be the USA- there is a "fast lane for new non-invasive technologies" in approvals- American companies get their solutions to the market quickly and thus outpace the competition.
- The support of the region is important for the development of telemedicine and eHealth the National Telemedicine Centre was established in the Olomouc Faculty Hospital. Some projects of this centre are implemented within the Smart Region. The Olomouc Region has a number of municipalities far from the centre, so it is important to find ways to check the immediate state of health without, for example, pregnant women having to drive tens of kilometres to specialized workplaces. Currently, for example, a solution is being developed for gestational diabetes and its detection in pregnant women, there is also a solution for remote glaucoma screening, and a method of online psychiatric consultations is being developed. Practical obstacles to the use of technology include, for example, the acceptance of digital documents by insurance companies. The interest of health insurance companies in ascertaining the state of health in the early stages of diseases is also important. The good news is the telemedicine project from the National Recovery Plan, where the Olomouc National Telemedicine Centre is working with insurance companies, lawyers and the Ministry of Health to draft further legislation for telemedicine interventions.
- As already mentioned, psychological problems and increasingly frequent cases of mental illness are a growing problem. The National Institute of Mental Health is working on a number of topics that may be important for smart communities it works, for example, on remote monitoring of mental illnesses, on learning to manage phobias using VR (managing obsessive-compulsive behaviour), biofeedback (VR breathing), Trekog memory training (see <a href="https://trekog.nudz.cz">https://trekog.nudz.cz</a>). The advantage is that a number of techniques can be used even by older people who are not computer literate. The problem, however, is that even the software is becoming a tool for the health sector that has to be approved by the State Institute for Drug Control-SIDC (according to the new European legislation, or its interpretation).
- The COVID-19 pandemic marked a great advance in the speed of technology development, as well as eHealth (a note on terminology: telemedicine includes technological solutions, mostly with the use of digitization, or "self-examination", it is a subset of eHealth, which also means ensuring, for example, mental well-being, quality of life. That is: eHealth= telemedicine + psychology=quality of life). However, it is necessary to try such solutions more and more realistically. An example is the use of a robot for the first time in a smaller village in the Czech Republic- it is being tested in the village of Třebihošť, where the robot works during the day for teaching in a school, then in a health kiosk (to measure blood pressure, etc.) and in the evening as a companion in a home for the elderly. An interesting solution is, for example, a psycho-walkman for the entertainment of seniors- see Prague 9, living lab, where the experiment includes 120 residents in their own apartments. Another possibility is, for example, examining the dentition of young children at school e.g. in socially



excluded communities (photographs or online scanning of the dentition will be examined by a doctor remotely). The problem is especially community social service, which is the weakest link in the chain. It is necessary to strengthen it.

#### Recommendations

The findings and discussion during the task force meeting resulted in the following recommendations:

1. Ministry of Labour and Social Affairs and Ministry of Health

Pay attention to the growth of private homes for the elderly and the possibility of converting small urban hospitals into social health facilities. Part of improving the quality of care for the elderly should also be the reduction of barriers in connection with social and health care. This should also be taken into account in the upcoming legislation on health and social services.

2. Ministry of Industry and Trade and Ministry of Health

It is necessary to urgently solve the issue of telemedicine in terms of the authorization of new non-invasive techniques and technologies by the State Institute for Drug Control, or recognizing them as medical devices. This is a high value-added sector and allowing these services to be brought to market quickly provides a competitive advantage for the sector.

3. Ministry of Industry and Trade, Ministry of Regional Development and Ministry of Education, Youth and Sports

In the new solutions, the importance of their support from the regions is obvious, especially as part of supporting the activities of regional innovation centres. The vast majority of these centres are supported through OP JAK – Smart Accelerator (MEYS). Rapid and regular mediation of knowledge for their needs and financial and other support from the regions is therefore extremely important for the development of the regions.

4. Ministry of Health, Government Council for Research, Development and Innovation, Technology Agency of the Czech Republic

Healthcare/medical innovations and innovations in social work are an extremely important segment of improving conditions for the development of municipalities and regions, for increasing the quality of life in municipalities and for the competitiveness of the Czech Republic. It would therefore be important to sufficiently support research in this area within the departmental research program of the Ministry of Health and through applied research programs administered by the Technology Agency of the Czech Republic.

5. Ministry of Agriculture and Ministry of Regional Development

The Ministry of Agriculture approves Local Action Group (LAG) strategies. LAGs should support the SMART village concept to the maximum extent possible. It is therefore necessary to involve LAGs in the implementation of the eHealth concept and to support this financially.



#### Conclusion

The meeting of the Czech Republic task force resulted in a number of recommendations, not only on the issue of eHealth, but also on community energy and local business. All these recommendations will be incorporated into the "cards" of the specification measures of the Implementation Plan for the Concept of Smart Cities - resilience through SMART solutions for municipalities, cities and regions. An update of the Implementation Plan is currently being prepared by the Ministry of Regional Development. It should be submitted to the government in mid-2024.

As for SMART villages, it turns out to be very useful that LAGs in the Czech Republic are already financed from a number of sources, not only from the Rural Development Program. They are also supported by the Ministry of Regional Development in terms of sustainable regional development, the Ministry of Industry and Trade in the field of consultancy for the spread of fast internet, and the Ministry of the Environment in the field of energy savings. Their role in the implementation of the national RIS3 strategy (strategy for intelligent specialization) is considered. A number of LAGs participate in research projects supported by the Technology Agency of the Czech Republic.

SMART solutions in smaller villages (i.e. practically in the entire territory of the Czech Republic – 5,800 municipalities in the Czech Republic have less than 3,000 inhabitants, LAGs cover 98% of the territory of the Czech Republic) are becoming more important due to the fact that, at the request of the Ministry of Agriculture, for the first time LAGs in their strategies must comment on the SMART concept and the possibilities of implementation within these strategies. This will also be taken into account when updating the Smart Cities Concept implementation document.

The meeting of the Task Force fully met expectations and brought a number of initiatives/recommendations. The conclusions drawn from the meeting of the Task Force on eHealth in SMART villages will be forwarded to the relevant departments of the mentioned ministries and will be incorporated to the Implementation Plan of the CSC MoRD.

## **Next steps**

The recommendations will be presented at the MoRD working group for smart cities, personally handed over to the nominated ministries and TA CR. They will also be published on the website of the Ateliér Česko and on social networks and submitted for publication on the website of the Smart Rural 27 project.

#### Supporting documents

Preparatory study for the event (attached) was sent to participants with conclusions, too.

Presentations from the meeting are available:

https://drive.google.com/drive/folders/1ShKLfBXAWe AnYGM4bpnBOFfA qbuFdr



# The event in pictures







