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INTEGRATED SOLUTION DEVELOPMENT AND TELEMATICS

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In the year 2001 the European Union adopted the directive „Regions and new economy" – for innovative actions ERDF (European Regional Development Fund) 2000 – 2006, which could be worked out according to the strength of solving region and its opportunities for development.

Pointed and concentrated support of science, research and innovations in the solving region – and particularly in the areas with ecological limits – would mean considerable development impulse and impact on the increase of region self-sufficiency measure and its competitive ability based on the value of the natural and cultural resources. And that requires:

a. **Development of the economics based on knowledge**
   - creating and developing the **cooperating networks** (so-called soft infrastructure) between different partners (small and medium-sized entrepreneurships - SME, universities, industrial parks etc.),
   - **exchange** of science and research results, **knowledge** and so-called best practice via specialized portal,
   - **circulation** of the research results and its application would strengthen the technological adaptability of enterprises with the emphasis on environment,
   - preparing and authorizing **regional/local strategies** oriented on new technologies and innovations,
   - establishment of **technological and innovation incubators** and
   - **creation** of new financial tools for start-up enterprises, innovation companies, including risk capital

b. **eEurope-regio**
   - **information society** in the service of regional development as a network of the common information and consulting/advisory centers in municipalities based on using the Internet

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- building up a **technical infrastructure** for the work with **digital content** and offering services through IKT (safe clearance working, distance management etc.)
- creating **conditions for** applying **e-business** in the area of tourism, shopping etc.
- **identification** and **enlargement** of the specific **areas** for experimentation, realization of pilot projects; for example using hi-technologies in mountain areas, expansion of community services through the Internet etc.

c. Regional identity and the countryside development

- **support** of small and medium-sized entrepreneurship starting in the field of innovative media and culture
- **creating procedures** (manuals, examples of the best practice, etc.) oriented on environment management – clean technologies, recycling, economical usage of energies
- **transfer** of the latest **knowledge** from the ecological agriculture area and production of ecological foodstuff
- **building up** a specialized **educational center** to support agro tourism and ecological agriculture including forest management .

An important factor of this development is **informatization. Internet** is the prime communication media for couple of years in EU and other advanced countries in the world. Countries which are not going to undertake the steps necessary for effective and fast integration of this media to all fields of social, political and economic life, would automatically stay at the edge of the happening with all of the consequences related to this position.

It appears that insufficient population approach to the new information technologies has considerable impact also against employment of risky categories and then against social cohesion, particularly at the countryside and mountain areas.

Information technologies and comware **create** an important element of competitiveness growth for enterprises and services in monitored region as well and open new perspectives of work organization and employment policy (creating new job opportunities).

New information technologies at all levels of economical and social life lead the society from conventional industrial society to „information society".

Support of local and regional development using telematics

Assigning communication needs at regional territory particularly with quality offer of telecommunication voice and data services for regional, national and international level and finalizing the network digitalization and equipment would help to the modernization of telecommunication infrastructure as one of the terms of solution, it would improve the facilities at countryside settlements and cover attractive areas for tourists.

The goal of development activities should be utilization of growing telecommunication and technological enterprises as new clean branches, support of e-business and progress of activities related to modern logistics, possibilities of using telematics and so-called grid accesses in offering services and **telematics applications**, support and creating modern regional information systems for different fields like monitoring, information system about tourism branch etc.

Combination of new **communication** and **information** technologies or **telematics** contributes to reduction of time restrictions and distances and changes the socio-economical visage of the cities dramatically. The most simple and most popular **telematics technologies** combine usage of **voice** telephone services with **telefax** for transmission of printed pages. Those are quickly followed by **e-mail** and **network** services, where messages and documents in electronic form are transferred immediately and are available in real time or later. Other fast-growing systems include **paging** and **mobile phones**, which allow contact to individuals no matter where they are. In last five years on-line data services, **electronic data exchange (EDI)**, and **electronic funds transfer (EFT)** become the common place mainly for big enterprises and public sector. Great expansion perspective has also contactless technology **radio frequency identification (RFID)**, as an element of identification or localization persons or objects. These services allow organizations searching in remote databases automatic transmission of standardized documents and execute financial transactions using high ability networks as an integrated services digital network (**ISDN, xDSL, ATM** etc.)

Videoconferences and telephoning allow electronically meetings at distant places (support congress travel branch using tele-bridges) with support of on-line exchange and so reduce conventional need for traveling. Technical and political changes cooperate together

with dramatic increase of accessibility of information technologies and all kind of data to everyone and in farthest places. It has economical, cultural and social impacts for example:

- **reducing isolation** of countryside and peripheral areas
- **reducing** transaction **costs** between enterprises and other kinds of organizations raising the communication speed and giving fast and comfortable access to information
- **guarantees** that enterprises **could compete** with companies located at central areas
- **possibility** to be **flexible** in work organization by finalizing centralization of activities in geographically separated places, for example using **teleworking**, where individuals work full or part time at home or in local offices
- **possibility of time reduction** and costs for communication by finalizing centralization of work and also load and contamination reduction
- **facilitation of time delivery** of products to market without place restrictions
- **providing** strong **support** to attract new enterprises in specific area, particularly where services and information are located

Opportunities of **telematics** could be capitalized, if areas become **proactive** from the **telematics** point of view, developing coherent telematic strategy as an integral part of wide expansion plans. Allow them to add new developing tools to go through disadvantages, discover opportunities and value to economical growth, employment and quality of living. Lack of this strategy for **telematics** development could be a prime factor in deficit of competitive ability against territories which has the strategy.

All of these changes lead to situation, where comparative advantage of localities is re-evaluated and often turned upside down. Traditional regional economical activities were based upon resources of raw material, its agricultural potential, on industrial complexes, manufacturing and processing devices, transport infrastructure, geographical vicinity to important economical centers or big markets with high number of the population. Although more factors could be also important, stress should be laid on new group of factors:

- **human capital**: qualification, competences, skills, flexibility
- **level of** local **services**: consist of public and private services
- **environment**: attractive, build by humans, offering well-being or uniqueness

- **quality of living**: whole range of factors including some of above mentioned plus social and cultural institutions, sense for community, well operating cultural and social networks, less contamination and criminality
- **dynamic** and creative **economic networks**: based on innovative company association supported by public sector
- **telematic infrastructure**: support of local economic networks and their connection to wide systems
- **proactive** local **institutions** and developing **agencies**: supporting higher factors, dependence on specific comparative benefits in area, emphasis on creation of partnerships with private sector and other participants with internal and external interests, attracting investments to region.

Telematics could dramatically reduce dependence in many forms of accessibility and interaction distance and location. But that does not mean that distance and location are not important. The attention is drawn to other factors which could not be easily moved. It concerns mainly the creation of well developed sources of human capital, innovative and dynamic economics, local partnerships and networks, which accelerate growth and interaction. These factors are built on long-term strategic choice using **telematics as a key tool**. Without negating an importance of place, telematics determines new priorities in certain characteristic areas and emphasizes freedom in activities of local and regional participants in utilization of a new found areas potential.

Goal of local and regional developing institutions should be offering background and motivation for creating the right local conditions for activities which could use telematics. It could be done by creating local infrastructure and conditions for local development which could not be easily displaced; this includes:

- **education** and **training**
- **networking** and **partnerships**
- **supporting** public sector and **incentives**
- **co-operation** with local universities, technical institutes and competency centers
- **attractive environment** supporting quality of living and well-being.

General goal is to reduce localization flexibility of enterprises by increasing attractiveness of existing localities. Guarantee the accessibility of internet at public places as self-access services, half-assist and assist services would allow to realize a strategy of a

learning region and would make available education, information and consulting services for example also in the field of regional job market to all age and social groups of population.

Under the integrated solution in the field of informatization we propose these concrete activities:

- **creation** of pilot **project** for a city and selected micro regions of solving area for creating and operating of Common information advisory centers using modern IKT
- e**stablishment of technical infrastructure** for digital television transmission
- financial support for **building up an educational center** for enlargement of new skillfulnesses and competences according to establishing information and advisory centers
- financial support of **establishing** and **operation** the **technology** and **innovating** incubator pointing to teleworking, products of **distance education**, gradual construction of services so-called soft infrastructure for establishment of future planned/prepared cluster in region etc.

Development of business and services based on IKT and development of economy based on knowledge could become an element of long-term competition advantage for the region keeping its uniqueness and it can possibly increase competitiveness.

Resources:

[1.] Smernica 97/7/ES Európskeho Parlamentu a Rady
[2.] Rozhodnutie č. 1336/97/ES Európskeho parlamentu a Rady
[3.] Rozhodnutie č. 2046/2002/ES Európskeho Parlamentu a Rady

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