"Intelligent city" project

Hódmezővásárhely





Subjects covered

• "Smart" Cities

 Hódmezővásárhely endeavours for a more livable city

 A Hódmezővásárhely model for an "Intelligent" city



City operation is based on 7 basic systems including **networks**, **infrastructure** and **environment**

- "People" subsystem includespublic security, healthcare and education
- "Business" subsystem includes public policy and regulatory environment influencing the city's business life
- City services subsystem
- Transport subsystem
- Communications subsystem
- Water management subsystem
- Energy management subsystem

Source: IBM Corporation

The City – the unity of complex systems I. The city's mission and administration Public Safety **Public Services** User's systems: • Citizens Businesses Healthcare and Education social affairs Infrastructure systems Energy and Water Transport Management Telecommunications

Source: IBM Corporation

City endavour for the creation of a "livable"city I.

- Integrated City development strategy
- Antisegregation Programme
- Concept on economy development
- Concept on Public Education
- Energy Strategy
- Healthy Vásárhely Programme (prevention)
- Safe Vásárhely Programme (public safety)
 - Efficient cooperation with the Police
 - Area surveillance system

City endavour for the creation of a "livable"city II.

- City reconstruction
- Joining the *"slow city"* movement
- Reorganization of Public Education
 - Elimination of segregation
 - Use of ICT tools, creating digital literacy, competency based education
- Improve service oriented approach
 - E-Local Government services
 - Drinking water management in önkormányzati kézben
- Centralization of institution duties
- Institutional infrastructure unification
 - thin client, "cloud" technology



(services, workflow and document management system)

Increasing users' volume (idea of city network)

Utilization of the edifice

EnterHód Zrt.

New Generation Open Source Network (FTTH)

-Local Government as provider of the service providers

-Competition between service providers

-New services

Unification of Institutional infrastructure and services

(thin client, "cloud" technology)

Regional engagement

The characteristics of the Hódmezővásárhely broadband model

- Joint venture establishment with the provider partner (EnterHód Zrt.)
- Owner and user of the networks is the joint venture
- Income deriving from network usage covers investors' business capital invested in the joint venture
- Open Sourced Network building for the optimal resource management and market competition
- Joint venture as provider of the service providers (basic infrastructure)
- New generation, completely optical network (FTTH) for the sake of the future-proof investment
- Market demands assessment
- Elaboration of technology (according to urban conditions)
- Financing opportunities
- Timing
 - 1. city centre(1600 households)
 - 2. further city districts and outskirts (18000 households)

The Hódmezővásárhely model



Direct and indirect benefits from broadband availability I.

- Presence of multiple providers→strong competition, more favourable service rates, better quality
- Infrastructure management
- E-municipality services
- Distance learning, providing central learning materials
- Decreasing the volume of unemployment
- Telemedicine, Telesupervision of elderly people with health problems (EVP)
- Improvement of Public Safety, (supervision, area surveillance system)
- E-information, Alarming system, community information
- Digitális alapú IPTV műsorelosztás, digital video rental, e-library
- Telework, adhering of new labour culture
- Involvement of outskirts in the life of the city
- Interactive fora
- Forming digital connections of the subregion
- Providing hosting, data base, applications-services (ASP)

Direct and indirect benefits from broadband availability II.

- Direct access to households
- Smart grid, smart metering solutions
- Property securing long term income
- Attract and keep businesses
- Attract and keep youth
- City e-mail system
- New opportunities in community forming
- IT "industrial park" solutions
- Increased property prices
- Optional participation in phisical building and operation of the network
- Strenghtening regional position
- E-shops
- VoIP telefony, conference calls

e-City architecture



Financing (?!)

- Broadband network development
- eGovernment
- Supporting end users
 - Digital Literacy Improvement Programme Internet access, emailing, etc. With the use of simple applications, IPTV adapter (STB) programmes, TV or monitor screen
 - **Programmes aiming distance learning and education** to improve labour market position and employment chances of citizens
 - **Telemedicine**, home-care and other eHealth programmes aiming at the improvement of citizens' way of life
 - Improving personal and asset safety in the framework of "Biztonságos Vásárhelyért" – "For a safer Hódmezővásárhely"
 - New opportunities for electronic local press and media
 - Fostering e-communications between citizens/businesses and municipality/government
 - Creating network conditions of energy saving, introducing smartmetering and smart-grid applications, creating conditions for strenghtening consumer positions and energy commerce