



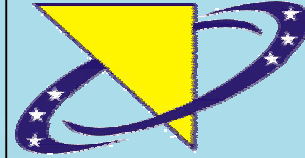
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***Community access to ICT***  
***measuring, estimating, monitoring***  
***BiH model***

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Communications Regulatory Agency  
Bosnia and Herzegovina



# *Thoughts at the beginning*



*The availability of data and faster computer processing are expanding at an unprecedented pace. The benefit for better decision making will depend critically on human interface:*

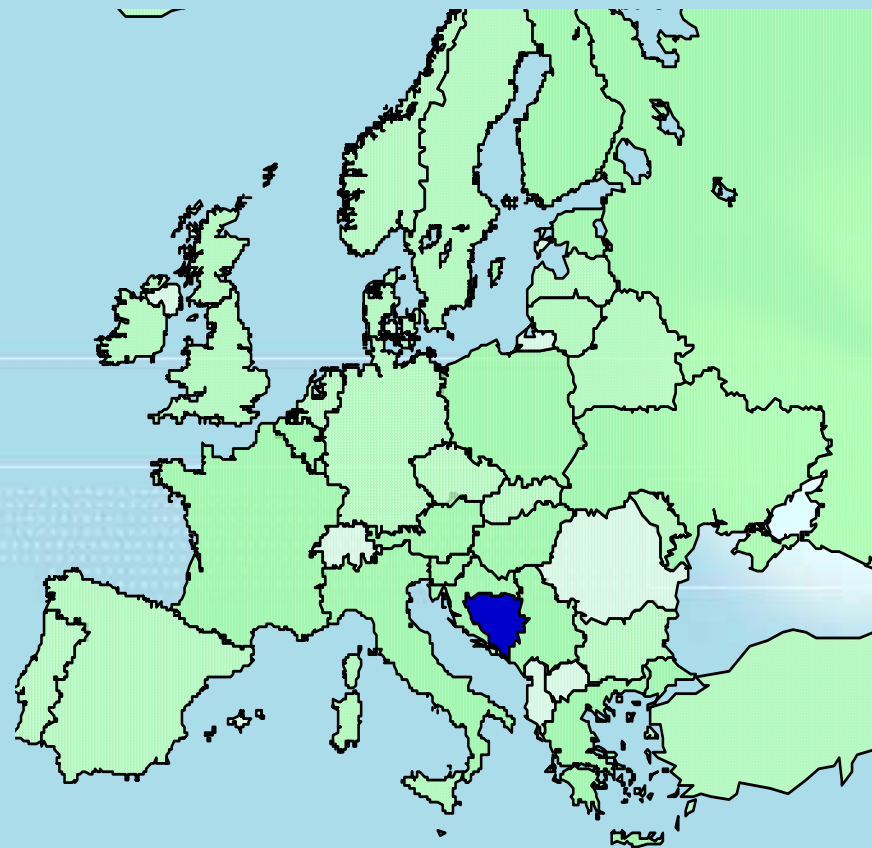
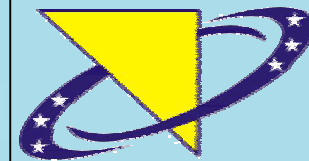
*understanding of information*

*and*

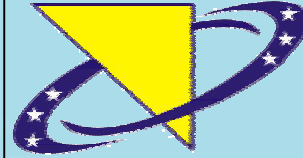
*communication of that understanding.*

*Dr. Pavle Sicherl,  
Presentation at the workshop Benchmarking the  
Information Society: Data, Measurement and  
Methods, Cavtat, Croatia, 7-9 June 2004*

# *Contents of the presentation*



- WSIS reflection on BiH
- ICT infrastructure in BiH
- Established system
- Initiative



# *WSIS (Geneva 2003): an ambitious action plan*

- 1. Governments and stakeholders to promote ICT4D*
- 2. Develop the foundation of Information Society:: ICT Infrastructure*
- 3. Broaden access to knowledge*
- 4. Contribute to capacity building and ICT literacy*
- 5. Build confidence and security in the use of ICTs*
- 6. Establish an enabling environment*
- 7. Develop ICT applications within the framework of national e-strategies*
- 8. Develop local content, stimulate cultural and linguistic diversity*
- 9. Recognize the essential role of the Media in the development of the IS*
- 10. Promote the common good and abusive use of ICT (ethical dimension)*
- 11. International and Regional Cooperation to implement this action plan*

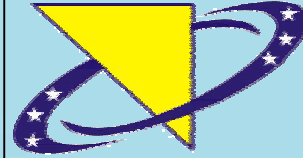


*Governments and stakeholders to promote ICT4D BiH:*

## *Telecommunications Sector Policy – (USO)*

*“... to provide the whole population of Bosnia and Herzegovina at affordable prices access to public switched voice telephone services (as an important social category) as well as access to Internet (as a basis of faster economic development of society and fuller integration into global trends)”.*

*Quotation from the Telecommunications Sector Policy of BiH*



## *Governments and stakeholders to promote ICT4D BiH:*

### *BiH ICT Policy, Strategy, Action Plan*

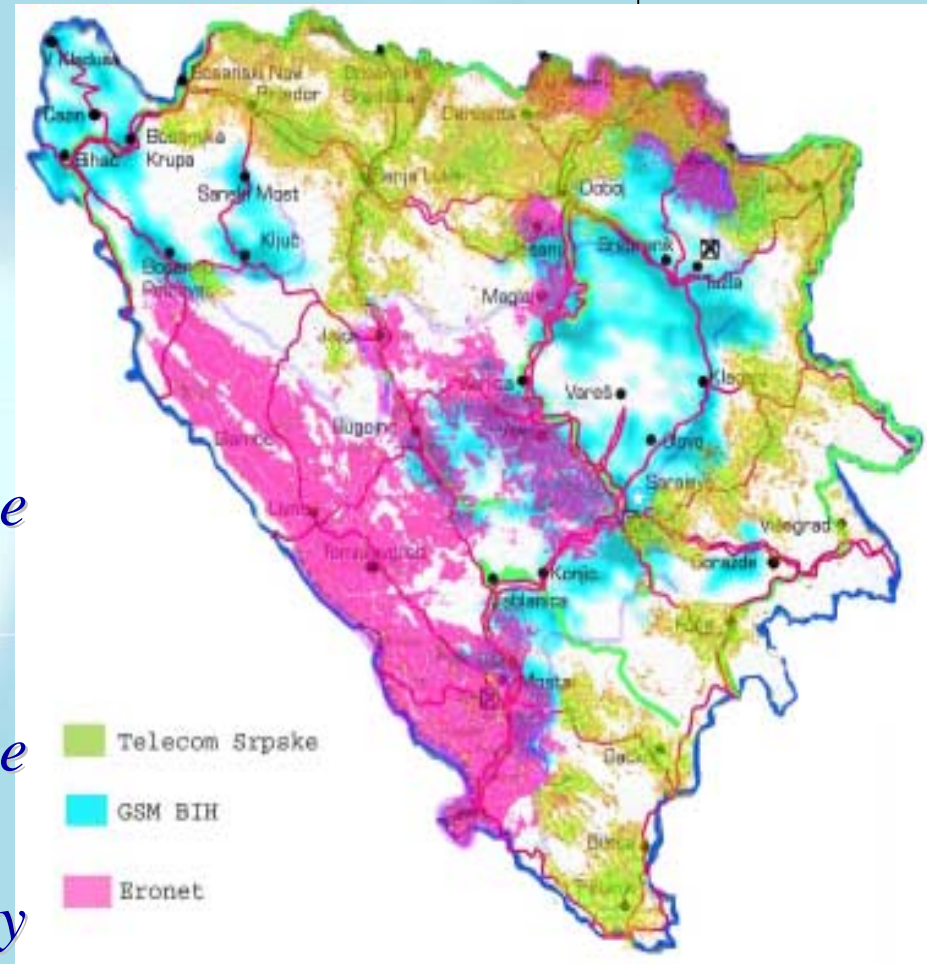
- ↪ Prepared by domestic experts*
  - ↪ supported by the Council of Ministers of BiH*
  - ↪ financed by UNDP BiH*
- ↪ Reviewed by both domestic and foreign experts*
- ↪ Reviewed by the Government*
- ↪ To be adopted by the end of 2004*





# *BiH ICT infrastructure*

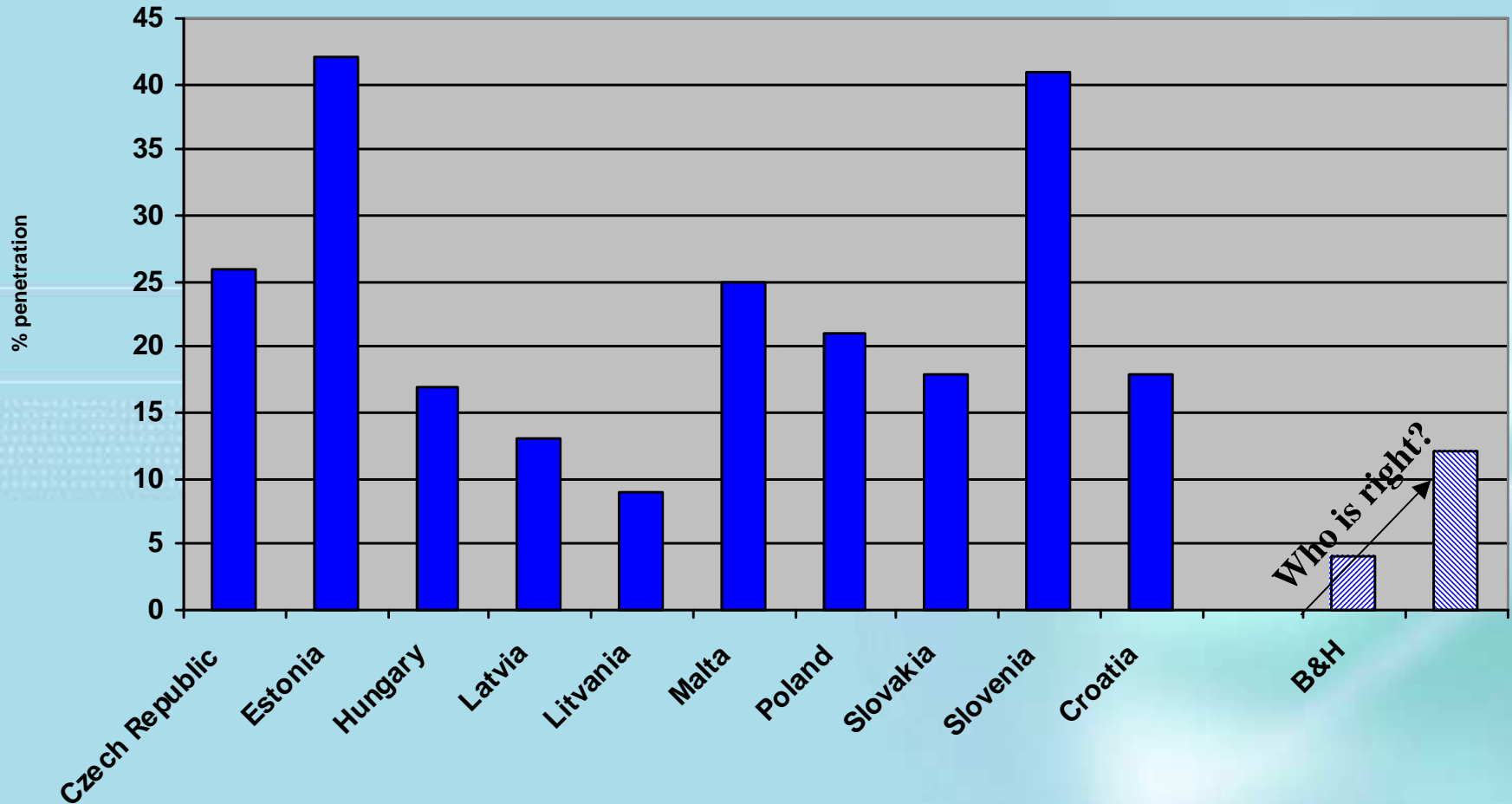
- ↪ *3 dominant telecom operators*
- ↪ *3 mobile GSM networks*
- ↪ *65 network operators*
- ↪ *41 Internet Service Providers (ISPs)*
- ↪ *>95% of network digitalization;*
- ↪ *>75% of inhabitants live within the area of technical coverage of a fixed network*
- ↪ *>80% of inhabitants live within the GSM signal coverage;*
- ↪ *>95% of households has electricity*
- ↪ *>90% of households has TV sets*





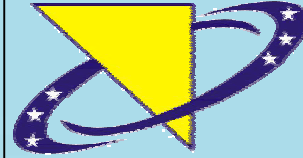
# *BiH ICT infrastructure: Internet penetration?*

**INTERNET:** from pessimistic to...





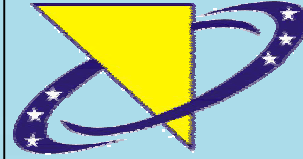
## *Indicators selection...*



- ↪ *Describe the current situation;*
- ↪ *Identify the need for ICT investment;*
- ↪ *Identify the need for policy and law changes;*
- ↪ *Compare and select best practice;*

## *Problems*

- ↪ *Lack of basic data (demographic, ...) – not likely to be collected before 2010*



## *Approach we chose*

*develop a system based on international recommendations and, if possible, practice:*

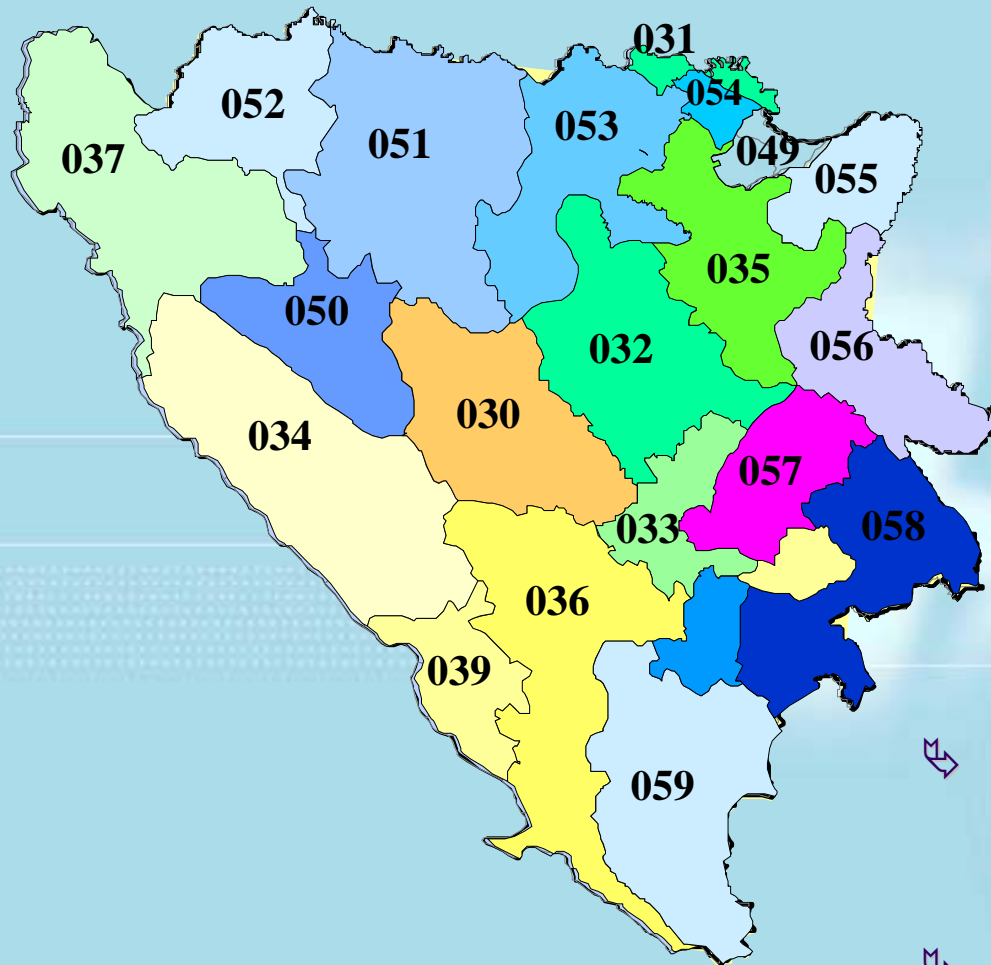
↪ *for measuring availability of community access;*

↪ *for estimating the demand for community access;*

↪ *for monitoring/estimating community access;*

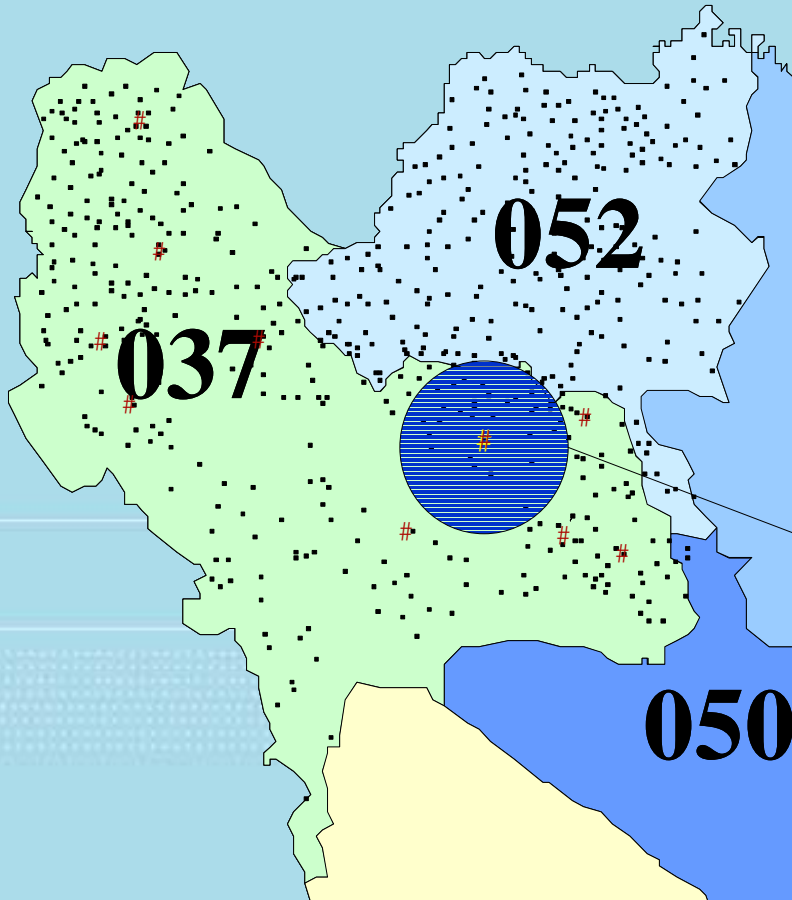


# *About the established system*



- ↳ *Based on GIS model of BiH*
- ↳ *Entities*
- ↳ *Municipalities*
- ↳ *Organised on Network Destination Codes*

# *Model used for measuring, estimating, monitoring*



## *Positioning Calculation*

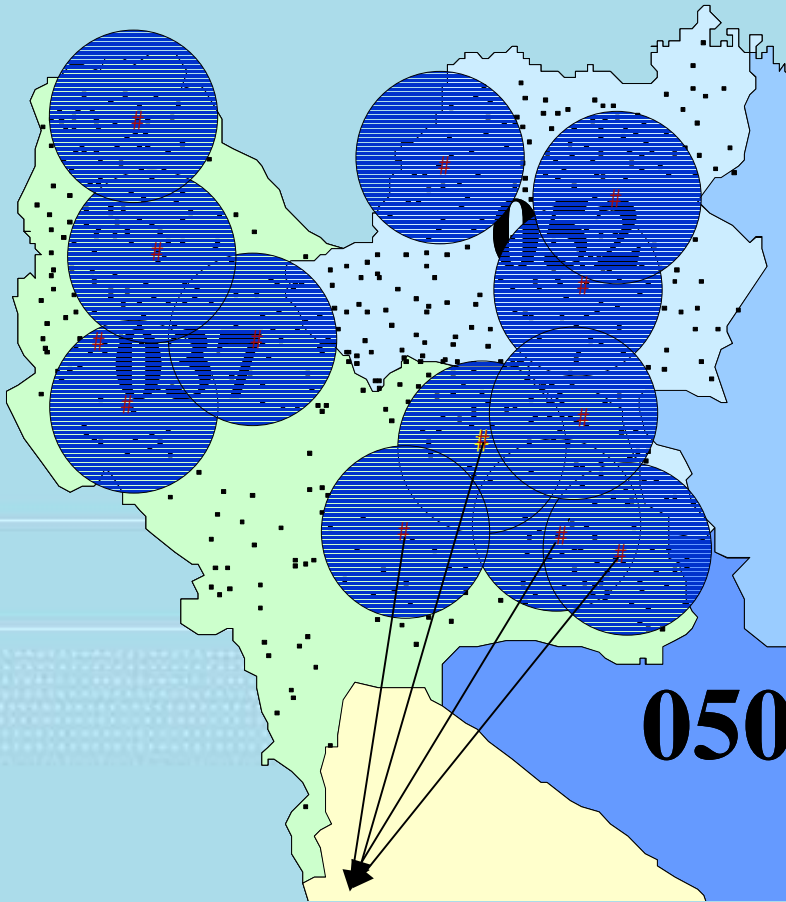
- ↪ List of communities within technical coverage (certain distance from the node);*
- ↪ Number of inhabitants;*
- ↪ Installed capacity;*
- ↪ Type of available services;*

*Estimation and assessment could be based on international guidelines: e.g.*

*ITU SG2 REPORT ON QUESTION 4/2 -  
Communications for rural and remote areas;*



*Developed to be flexible*



*Switching nodes  
or  
Community access centres  
or...*

*Technique for estimating the  
demand for community access  
based on e.g:*

*Number of inhabitants;*

*Waiting list;*

*Distance to first access point...*

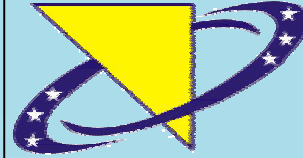
*This technique could be used for  
community access*

*measuring,*

*estimating,*

*monitoring*

## *Projects/initiatives linked to measuring community access*



*The Project: “Development of common information system in support of measuring and monitoring of community access”*

- ↪ To be developed within the framework of ITU Action Plan*
- ↪ To be based on administrative model of the countries;*
- ↪ To be enhanced through the use of GIS;*
- ↪ To use the good experience of a common BiH - ITU project (“Establishment of e-Regulator”)*





Thank You for Your  
Attention

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