



ITU Cross Regional Seminar on Broadband Access (Fixed,  
Wireless including Mobile) for CIS, ASP and EUR Regions  
Chisinau (Republic of Moldova)  
4-6 October 2011

## BWA Regulations and Universal Service Policy in SEE countries

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### Universal service in the EU *Concept*

- A **safety-net** for those whose financial resources or geographical location do not allow them to have the basic electronic communications services that are already available to, and used by the majority of consumers

## EU US REGULATION

- Universal Service Directive 2002/22/EC

- ✓ Every 3 years review of the scope at EU level with defined criteria

- ✓ The 2nd Review Communication COM(2008)572:

Are broadband services available to, and used by a substantial majority of consumers ? Answer was NO

## Scope of USOs and financing


	Scope of USO	Designation and Financing schemes
<b>EU level</b>	Services within the USO ( <i>harmonisation</i> )	State and/or sector funding ( <i>some flexibility</i> )
<b>National level</b>	Additional services to be decided by Member States ( <i>flexibility</i> )	State funding only ( <i>some harmonisation</i> )

## South Eastern European Countries-SEE

- **OBSERVED SEE:** Croatia, the former Yugoslav Republic of Macedonia (FYROM), Turkey, Albania, Bosnia & Herzegovina, Montenegro, Serbia and UNSCR 1244-Kosovo.
- **SEE COUNTRIES GOAL:**
  - the SEE countries need to align their policies for the ICT sector with the priorities of the EU Digital Agenda
- **SITUATION IN SEE COUNTRIES:**
  - significant gaps in policy making in the SEE countries.
  - the lack of relevant policy documents
  - the lack of administrative capacities into the policy making bodies (ministries)
- **THE MAIN CHALLENGES would be:**
  - To create a policy environment which encourages high-risk investments in fast and ultra-fast networks while the countries are still in or recovering from the economic crisis
  - To achieve availability of spectrum for wireless broadband
  - To carry out spectrum assignments subject to transparent and non-discriminatory procedures.

## US REGULATION IN SEE

- National legislation based on the EU 2003 regulatory framework has been adopted in Albania, Croatia, FYROM, Montenegro, Turkey and now also in Serbia
- USD 2002/22/EC allows the designation of one or more undertakings to guarantee the provision of universal service and may also designate different undertakings or sets of undertakings to provide different elements of universal service and/or to cover different parts of the national territory
- Fixed an mobile operators are eligible to get license for US
- Designation mechanism for the US provider(s) by public tender, except Turkey (No designation mechanism – the requirement is set out in the Concession Agreement of Türk Telekom
- SEE countries: some countries already designated US operator(s) and in some countries the process of public tendering is under the way (Draft Report of the Cullen Int. June 2011).

 **Universal Service in SEE countries**  
Source: Cullen International, December 2010

	HR	MK	TR	AL	BA	ME	RS	XK
Scope	✓	✓	✓	✓	✓	✓	✓	X
- Access and voice	✓	✓	✓	✓	✓	X	✓	X
- Public payphone	✓	✓	✓	✓	✓	✓	✓	X
- Directories	✓	✓	X	✓	✓	✓	✓	X
- Disabled	✓	✓	✓	✓	✓	✓	✓	✓
- Emergency	X	X	✓	X	X	X	X	X
- Other	X	X	✓	X	X	X	X	X
Technology neutral	✓	✓	X	✓	X	✓	Not def.	✓
Competitive designation	✓	✓	X	✓	X	✓	Not def.	X
Funding	Cost sharing	Cost sharing	Various sources	Cost sharing	Cost sharing	Cost sharing	Cost sharing	Not decided
Implementation	✓ tenders underway	X (by-law)	✓	X	X	X	X	X

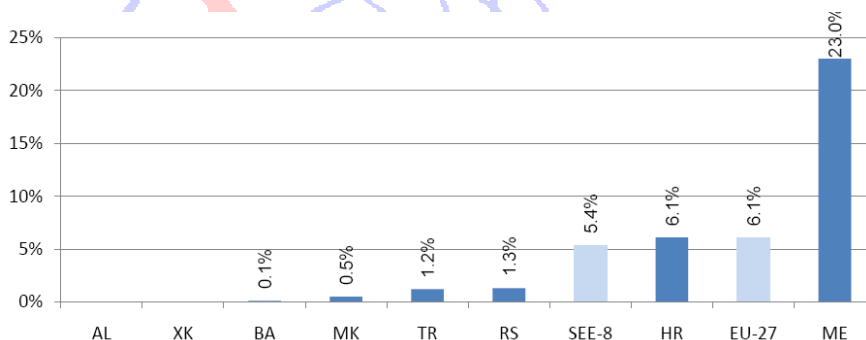
**Recent progress**

- Finalized (pointing to HR)
- Finalized (pointing to MK)
- Tender underway (pointing to AL)
- Finalized and mobile operator designated (pointing to ME)
- Finalized and mobile operators designated (pointing to RS)

## US and BB

- The average fixed broadband penetration rate for SEE countries in January 2010 was 9.4% of population, significantly below the EU-27 average rate of 24.8%.
- With 3G mobile services now available in most of these countries, except for Albania, the growth of mobile broadband has also continued. The average penetration of dedicated mobile broadband cards was 5.4% in July 2010


## Mobile broadband penetration - dedicated data service cards/modems/keys only, July 2010



Source Cullen Int, Report IV, December 2010

## ROLE OF THE BWA


- Broadband Wireless Access technologies can constitute efficient and cost-effective solution for providing BB services in uncovered or underserved areas in order to reap the full benefits of wireless broadband,
- Most of the SEE countries need to ensure availability of spectrum for wireless broadband and to carry out spectrum assignments subject to transparent and non-discriminatory procedures.
- The main challenge is to ensure that sufficient spectrum is made available to mobile broadband services to meet rapidly increasing mobile data traffic volumes and bridge „digital divide‘.
- Assignment of spectrum for wireless broadband services in the 2.0 GHz, 2.6 GHz and 3.5 GHz bands, refarming of GSM spectrum in the 900 and 1800 MHz bands and opening the digital dividend spectrum in the 800 MHz bands are key elements in this process.



### Overview of issued spectrum licences

	HR	MK	TR	AL	BA	ME	RS	XK
450 MHz		-	-	-	-	-	2	-
900 MHz	3	3	3	4	3	3	3	2
1800 MHz	2	2	1	4	3	3	3	1
2100 MHz	3	2	3	-	3	3	3	-
2.6 GHz	-	-	-	-	-	-	-	-
3.5 GHz	42	6	-	-	-	5	local	-

Source Cullen International, Report IV, December 2010



### Refarming of GSM spectrum for 3G/4G

	HR	MK	TR	AL	BA	ME	RS	XK
900 MHz	2009	2009	No	No	No	No	No	No
1800 MHz	2009	2009	No	No	No	No	No	No
Technology permitted	Neutral (UMTS/GSM)	UMTS/GSM	-	-	-	-	-	-
Redistribution	No	No	-	-	-	-	-	-
Fees	€6.85m	No	-	-	-	-	-	-

Source Cullen International, Report IV, December 2010



## Analogue switch-off and digital dividend

	HR	MK	TR	AL	BA	ME	RS	XK
Deadline	10/2010	?	2014	?	12/2011	12/2012	4/2012	2012
Platform	DVB-T	-	DVB-T	-	DVB-T/ MPEG 4	DVB-T	DVB-T2/ MPEG 4	
DD size	?	-	72 MHz	-	?	?	?	?
Band	-	-	790-862 MHz	-	-	-	-	-

Source Cullen Int, Report IV, December 2010

## EU DIGITAL AGENDA

- **The Europe 2020 Strategy has underlined the importance of broadband deployment to promote social inclusion and competitiveness in the EU.**
- **“Every European Digital” message from N. Kroes, EU Commissioner for Digital Agenda**

## FAST AND ULTRA FAST INTERNET ACCESS

*Strategy: We need very fast Internet for the economy to grow strongly and to create jobs and prosperity, and to ensure citizens can access the content and services they want.*

The Europe 2020 Strategy restated the objective to bring basic broadband to all Europeans by 2013 and seeks to ensure that, by 2020, (i) all Europeans have access to much higher internet speeds of above 30 Mbps and (ii) 50% or more of European households subscribe to internet connections above 100 Mbps.

Two parallel goals:

- **To guarantee universal broadband coverage** (combining fixed and wireless) with internet speeds gradually increasing up to 30 Mbps and above
- **To foster the deployment and take-up of next generation access networks (NGA)** in a large part of the EU territory, allowing ultra fast internet connections above 100 Mbps

## Digital Agenda and US

- Large investment would be needed to secure basic broadband at an affordable price for all households across the EU – esp. high costs in Member States with less developed infrastructure
- Financial options that **avoid distortions of competition**



## EP resolution of 5 July 2011 on universal service (1)

- Commission to provide **guidelines** on effective implementation of the revised rules; **avoiding market distortions** while allowing measures best suiting **national circumstances**.
- **Universal service is not** (only or) **the key driver** for achieving 'broadband for all' given the **high investment costs** while not necessarily providing significantly improved services to consumers

Source: Petri Koistinen, European Commission Information Society and Media

## EP resolution of 5 July 2011 on universal service (2)

- Mandating broadband availability will not automatically result in higher take-up => **Measures to drive demand and stimulate take-up**, rather than just ensuring a connection.
- **Universal service** might become an additional incentive as a medium term target to develop broadband, but **broadband targets** should be achieved **through properly designed national programmes**. Efficient radio spectrum policy and investment-friendly regulation are important in this respect.

Source: Petri Koistinen, European Commission Information Society and Media

<b>EU and SEE</b>	
<b>EU Digital Agenda</b>	<b>SEE</b>
By 2013, 100% of EU citizens should have access to basic broadband	<p>Reaching a similar target in the SEE countries will require significant investments, as the average broadband penetration rate reaching 9.4% of the population in 2010 remains significantly below the EU-27.</p> <p>Broadband offers are often only available in limited areas and competition is still at a very early stage.</p>
By 2020, 100% of EU citizens should have access to fast broadband with at least 30 Mbps, and 50% of households should have subscribed to ultra-fast broadband above 100 Mbps	Lack of investment, the different competitive conditions, in particular the absence of competitive safeguards and difficulties to acquire spectrum usage rights as well as rights of way and construction permits will make serious divide

<b>EXAMPLE OF SERBIA: DIGITAL AGENDA FOR SERBIA</b>
<ul style="list-style-type: none"> <li>■ Announce by Minister of Telecom and Information Society <ul style="list-style-type: none"> <li>□ Strategy for e-communications 2010-2020</li> <li>□ Strategy for Information Society 2020</li> </ul> </li> <li>■ Strategy for broadband 2009-2012 to achieve 20% of broadband penetration</li> <li>■ Supported by new e-communications law</li> <li>■ USO as broadband is not discussed</li> </ul>

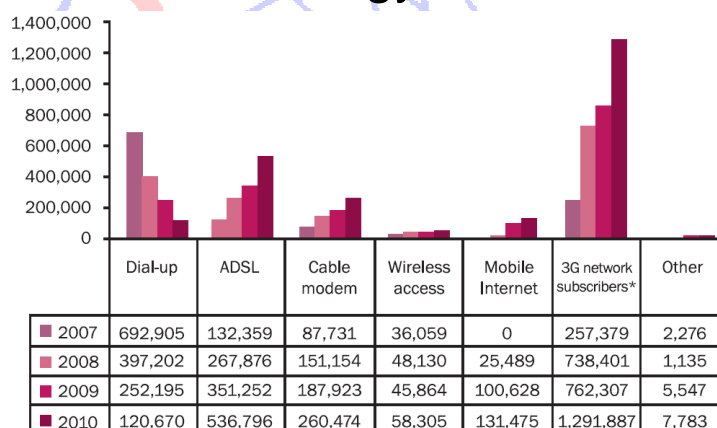
## SITUATION IN SERBIA

### ■ ITU ICT Development Index -IDI

INDICATOR	ITU ideal value	Value for Serbia in 2010
Fixed telephone lines per 100 inhabitants 42.57	60	42,5
Mobile cellular telephone subscriptions per 100 inhabitants	170	135,7
Proportion of households with a computer	100	50,4
Proportion of households with Internet access at home	100	39
Fixed broadband Internet subscriptions per 100 inhabitants	60	10,99
Mobile broadband subscriptions per 100 inhabitants	100	17,68

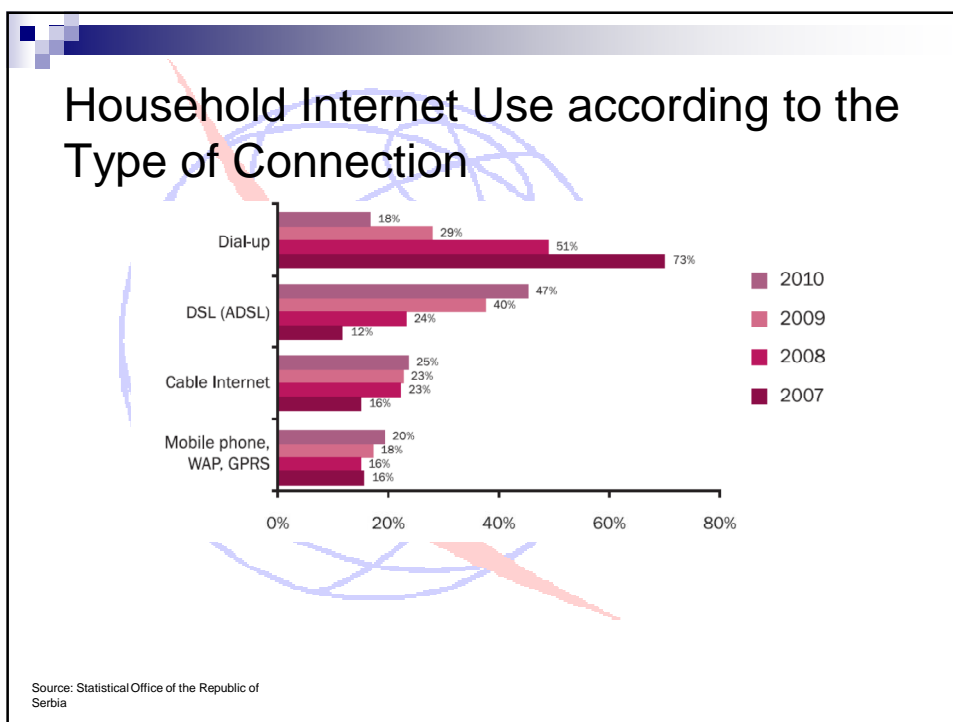
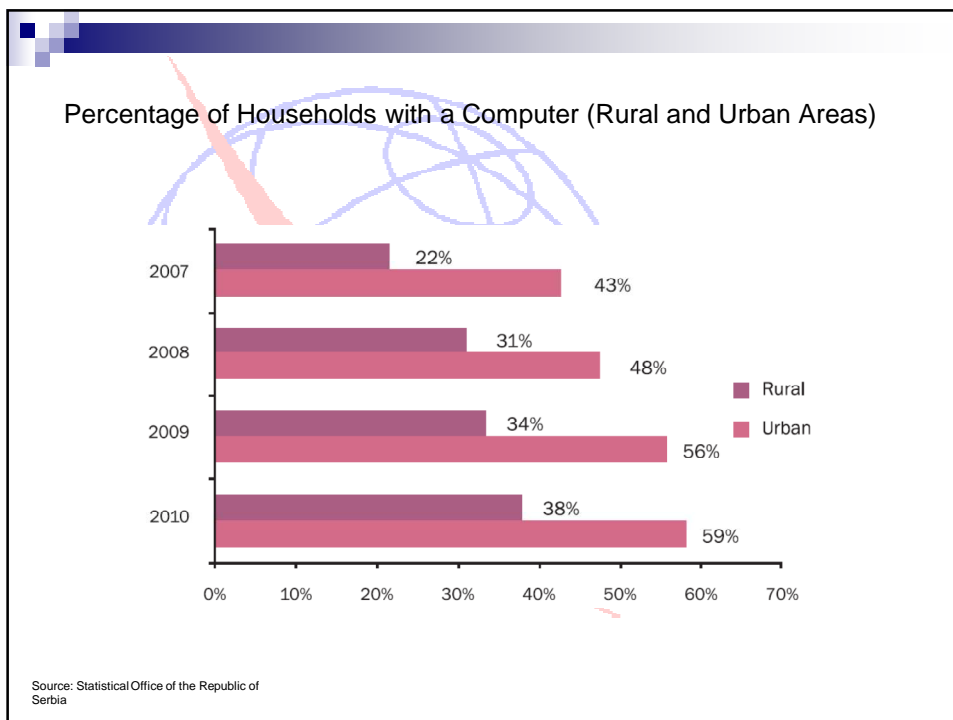
Source: RATEL, 2011

## Number of Users According to Access Technology



\*3G network subscribers without mobile Internet

Source: RATEL, 2011



## Universal service- Serbia

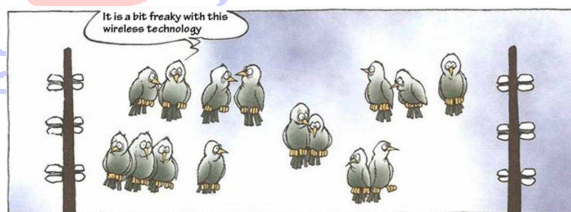
- The end of the 2010:
  - Internet connectivity had 39% households in 2009 - 36,7% ,
  - Rulebook on Universal Service, (Ministry of Culture and Media)
  - US service based on functional Internet (up to 56 Mbps)
  - US OPERATORS DESIGNATED by NRA - RATEL
    - Incumbent fixed operator and FWA operator
    - Mobile operators
  - **US FUND IS NOT ACTIVATED**
  - Lack of basic infrastructure

## EVOLUTION TOWARDS US BROADBAND POLICY

- PROPOSAL FOR US BROADBAND POLICY BASED ON:
  - CREATION OF US BROADBAND PROJECT
    - Make a detailed overview of the situation of telecom infrastructure and telecom service provisioning in the whole territory of the country to defined sustainability and affordability
  - Recommendations for broadband US implementation
    - Clear mechanism for investment
      - Public Investment
      - Local initiatives on PPP
      - Development of skills and trainings
    - Business risk
  - Public discussion
  - US Broadband Operator(s)
  - US Broadband implementation

## CONCLUDING REMARKS

- Adjustment of National framework with EU
- National policies should be developed
- National, EU and EIB funding instruments should be used for well targeted broadband investments in areas where the business case is currently weak
- Efficient spectrum management, by mandating the use of certain digital dividend frequencies for wireless broadband by a fixed future date, by ensuring additional flexibility (also allowing spectrum trading) and by supporting competition and innovation.
- Access to radio spectrum for Wireless broadband
- Adjustment of competitive safeguards to the NGA environment along with promotion of co-investment and risk sharing mechanisms.



**THANK YOU FOR YOUR  
ATTENTION !**

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