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Zoran Kostov

Global tendencies and local implications: Cyber exclusion of and within Western Balkan countries

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Centre for the Study of Global Governance
London School of Economics and Political Science
Houghton Street, London WC2A 2AE
http://www.lse.ac.uk/Depts/global

ABSTRACT This paper intends to present evidence[1] concerning the information inequality, particularly digital divide and its causes and consequences in the Western Balkan countries: Albania, Bosnia & Herzegovina, Croatia, Macedonia and Serbia & Montenegro. It is based on quantitative analysis of the Internet penetration levels, both on national and where possible intra-societal level, cross-referred to several economic and social indicators, with successive barriers of entry and use analysed separately. The main argument in the paper is that neither Western Balkan can be considered as homogenous group of countries, nor their societies experience simple differentiation. One implication of this complexity is that the critical issue of the cyber exclusion - access - must not be treated as a goal in itself, but as a quantitatively and qualitatively attributed mean towards achieving inclusive society.

KEY WORDS Internet, Western Balkan, access, information gap, digital divide, cyber exclusion, social exclusion

1. The information inequality

One of the most emotionally debated issues of the information society during the last decade is the *information gap*, i.e. the divide of the so-called *information have's* (information rich) and *information have-not's* (information poor). This type of information inequality has been defined as a disproportion in the possession and the usage of sources of information and means of communication in a particular society, such as the telephone, television, or the Internet.

Further to this division, *digital divide* describes the fact that the world can be divided into people who do and people who don't have access to - and the capability to use - modern information and communication technologies (ICTs). Similarly to the information gap, the digital divide exists between the educated and the uneducated, between economic classes, and, globally, between the more and less industrially developed nations.

Once a trendy notion, the information gap has been nearly replaced by the notion of digital divide during mid 1990s. The later, however, in the recent years has been interpreted in a more social than technical context, therefore named *cyber exclusion*. It can be seen as an aspect of the social exclusion, widely used term referring to cumulative marginalisation from production, consumption, social networking and decision-making.

This way social exclusion got an online component. In its whole complexity it proclaims a simple logic: if the cyber space is considered as social space then cyber exclusion contributes to social exclusion.

1.1. Legacy of the past

The debate concerning the differences between information rich and poor is very old as this notion appears with every arrival of a new technology in the history. It was reaffirmed by Tichenor, Donohue and Olien about 35 years ago, in their thesis of what they called *knowledge gap*. "As the infusion of mass media information into a social system increases", they said, "the segments of the population with higher socio-economic status tend to acquire this information at a faster rate than the lower status segments, so that the gap in knowledge between these segments tends to increase rather than decrease" (Tichenor, Donohue and Olien, 1970: 159). In other words - media use and exploitation of information occurs unequally along socio-economic lines, including race, gender and age. It was thought later that the Television is able to shrink the gap as it was considered as more passive medium where the literacy was not required, while on contrary, the advent of the Internet was feared to reverse this change, since "the multiple formats (text, graphics, sound, video) introduced by the Web suggest that the literacy now needs to be approached from a perspective of multiple literacies" (Barnes, 2003: 211). As it will be shown later in this paper, the users of the Internet really need more skills to navigate through vast amount of information rather than just passively receiving information feed from television.

Following the knowledge gap theory, comparable theses were made in regard to the advent of computers and the perspective of the information society in the 1980s. Now the supposed differences were called an information gap. In that respect, while the thesis of knowledge gap was only about information supplied by the mass media and about differences in cognition and information processing, the information gap theses were much broader. They dealt first of all with conditions of access, that is to say the differences in social and economic position

and the usage opportunities of different kinds of information technology users. Particularly these theses were about the possession of computers and the above mentioned skills to use them. A number of characteristics, namely, were seen as conditions of participation in the information society and the ability to use the information gathered and processed with information and communication technologies.

That way the theory came to the notion of digital divide - a phenomenon wherein the rich in digital technology, particularly Internet, get richer with the rapid advance of the information age, while the technologically poor get poorer as the gap between the Internet haves and have-nots widens. "Left to its own devices, the information marketplace will increase the gap between the rich and poor countries and the rich and poor people", says Dertouzos (1997: 241), and this perception resonated with the widely grown scepticism against the initial claims of the revolutionary power of the Internet and the optimistically promoted utopian information society.

In that sense, while in the early theory the techno-optimists voiced an utopian vision, suggesting that the Internet and other ICTs are inevitably transforming society, improving our mutual understanding, eliminating power disparities, realizing a democratic society and "creating digitally mediated environments for the kinds of lives that we will want to lead and the sorts of communities that we will want to have" (Mitchell, 1995: 5), it was becoming more and more evident in reality that the information inequality appears to be increasing worldwide. That situation made a room for techno-sceptics and their dystopian perspectives, to claim that the developed nations had in excess many of the resources that the developing ones could use to solve some of their problems, but the existence of geographical, economic, political and cultural barriers, including the "systematic colonization of social knowledge" (Robins & Webster, 1999: 125) made it difficult or impossible for these solutions to be transferred effectively.

1.2. Cyber exclusion as social exclusion

Social exclusion has become a key concept in both academic and political debate during 1990s, too. The concept was first developed by sociologists interested in the breakdown of the relationship between the individual and the society (see: Bhalla and Lapeyre, 1997), but has since been more widely applied in considerations of the role of individuals, institutions and wider social relations. In certain context, social exclusion growth has been understood as a reversal of the trend towards a narrowing of the gap between rich and poor.

On its side, at the same time information definitely got its own social recognition, moving itself "beyond technical interpretations", and becoming "social relation" (Robins and Webster, 1999: 4). In this respect it is true that during the first years of its wider penetration Internet and the associated concept of cyberspace have been considered as virtual space with its own rules, norms and communicative codes, existing parallel to the physical social space. However, there has been a consistent demand since that time, to recognise that cyberspace is not simply a medium or a technology that isolates individuals from direct social relation but a social space in which people interact on broad-range basis.

In that sense, further to the traditional aspects of the social inclusion, such as having financial resources, conventional capabilities and cultural qualities, the access to the information highway was increasingly becoming its additional component. So, as in the pre-information society the risk of being socially and politically excluded has been associated, for example, with those who did not have homes and jobs, after the information revolution - during the

1990s and later - the exclusion risk happened to be related also with those who were unable to make effective use of information resources.

A lack of access to ICTs, namely, promotes social exclusion in many areas by inhibiting the ability of the technological have-nots to participate in the social activities and "reproduces other kinds of inequalities in the society at large" (Lister et al., 2003: 200). The information poor become more impoverished because government bodies, community organisations and corporations are displacing resources from their ordinary channels of communication onto the Internet. That way any demographic group excluded from and underrepresented on the Internet also becomes excluded from the range of social benefits. The centrality of ICTs in today's society is such that if access for all is not provided the whole world emerges as potentially economically, socially and politically disruptive place, "populated by two essentially distinct populations: the interacting and the interacted" (Castells, 1996: 371).

Therefore, digital inclusive society became a crucial issue among the information society policy makers, among the other in various *e-Europe* and *Information Society for All* initiatives. In its basic, universal principles it is designed by the theorists of the early 21st century as a place where everyone is able to explore the potential and benefits of ICTs, everyone can access and share information and services freely, and - based on improved quality of usage - everyone can participate in the community more effectively. The later formulations included bringing everyone into the digital age, creating a digitally literate Europe and ensuring the whole process is socially inclusive (see: European Commission, 2000).

Simply, it became clear that the attempts to resolve societal divisions by simply adding technology rarely succeed. ICTs' employment was finally understood as a matter related to the general development of the society, thus requiring far more than technical skills and solutions. The whole process was considered far too important to be left to the technologists and that logic left a space for socially responsible actors to move forward with the cyber inclusion agenda.

2. Western Balkan cyber exclusion indicators

As said in the previous section, the information inequality and the related social exclusion are a social and political issue referring to the socio-economic gap between countries, communities and different segments of society that have access to any ICT and media, including computers and the Internet - and those who do not. It was also said that the access is only one aspect, but some other factors, as usage patterns and quality of usage, could also be part of the issue.

However, the access is the basic indicator. It "does not solve the problem", says Castells, "but it is prerequisite for overcoming the inequality in a society whose dominant functions and social groups are increasingly organized around the Internet" (2001: 248). In that respect, any comparative study of the level of Internet penetration in the Western Balkan countries is expected to explore the number of Internet users[2] and hosts[3] by country, that way measuring the global divide or divide between nations, hereafter named *external exclusion*. The divide within nations or social divide (see: Norris, 2001: online), in this paper referred to as *in-country exclusion* of various categories of certain population, is explained through the indicators in the later sections.

It is to be said in this respect that the indicators being measured have been a moving target. Early studies talked about general computer penetration among households. Then, as the Internet became more predominant, Internet access by individuals became the measure. Now, as said above, with the wider provision of free Internet access, experts discuss the quality of access and usage. Yet, it might be just an illusion of having a progress, as the differential timing in access to information - even if the late adopters catch up after several years - is itself a significant source of social inequality and unequal participation.

2.1. External exclusion

It is well known that the Western Balkan countries have largely been outside of the intensive information society building process of European profile, due to a decade of regional instability and severe economic disruptions. Underdevelopment from the past, existential problems of the present and the uncertainty of the future created a mix of unfavourable circumstances for new ICTs adoption and these are the main reasons why, with exception to one notable case, Internet penetration levels in these countries are low compared with those published[4] as average of Europe[5]. With major European e-related initiatives missed or came too late to the region, it is still theoretically possible for a country to make a leapfrog to the use of latest ICTs and get competitive advantages, but the tables below show that in fact this does not happen.

Of the two major indicators - the number of Internet users and hosts, in 2004 the first one is 3 to 15 times lower than the European average in Albania, Bosnia & Herzegovina, Macedonia and Serbia & Montenegro. Croatia is a significant exemption in this respect, coming close to the European average.

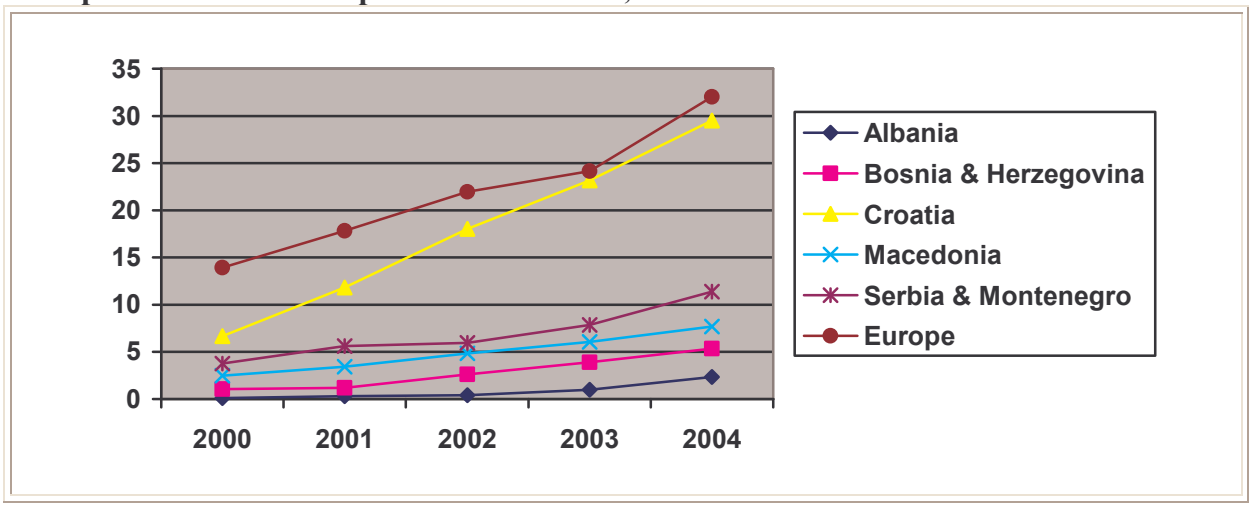
Similar characterisation applies to the growth rate, as for the other four countries it was not fast enough over the last five years (2000-2004). Actually, in relative terms growth is faster than the average of Europe - in the year of the global Internet bubble (2000) starting position of Albania was incomparable to that of Europe - 126 times lower, while five years later it was only 13 times behind the average of the continent. Yet, in absolute numbers that tendency is far slower than needed if the *Information Society for All* objectives are taken seriously.

Table 1: Internet users per 100 inhabitants, 2000 - 2004

	2000	2001	2002	2003	2004
Albania	0,11	0,32	0,39	0,98	2,34
Bosnia & Herzegovina	1,06	1,18	2,62	3,91	5,37
Croatia	6,69	11,84	18,04	23,18	29,50
Macedonia	2,47	3,42	4,84	6,05	7,69
Serbia & Montenegro	3,76	5,62	5,97	7,87	11,40
Europe	13,92	17,83	21,94	24,16	32,01

Source: ITU, *Internet indicators: Hosts, Users and Number of PCs, 2000-2004.*

Graph 1: Internet users per 100 inhabitants, 2000 - 2004



The immediate suggestion of the above seen penetration levels is that they have a strong relationship with the level of economic development. As said, particularly notable is the high Internet users' rate in Croatia which is also at the top of the GDP per capita ranking of the region. Croatian figure, actually, reached European average in 2003, which is, if not misinterpreted, an extraordinary achievement.

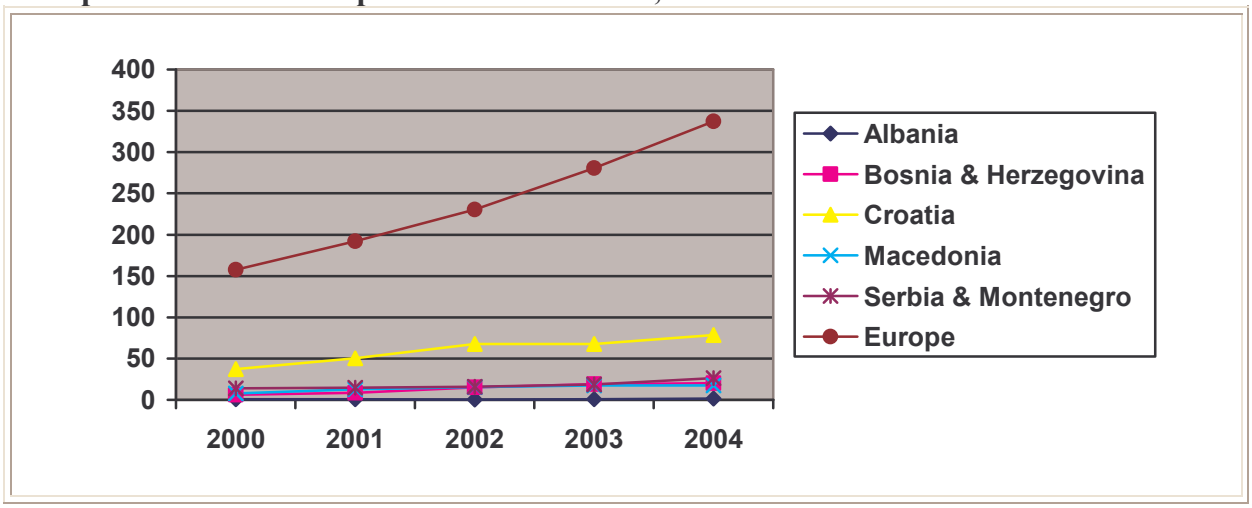
However, the same exemption of Croatia from the Western Balkan mainstream does not apply to the number of Internet hosts. It is well over the second one of Serbia and Montenegro, but not that significantly close to the European average. In fact, what is attention capturing in the host figures is the extremely small number of Internet hosts in Albania, caused by a number of reasons including various systemic failures - long lasting power blackouts and unreliable telephone infrastructure.

Table 2: Internet hosts per 10.000 inhabitants, 2000 - 2004

	2000	2001	2002	2003	2004
Albania	0,68	0,61	0,56	0,81	1,65
Bosnia & Herzegovina	6,04	8,55	14,95	18,87	20,05
Croatia	37,12	50,27	67,77	67,77	78,57
Macedonia	7,85	12,69	15,34	17,25	17,40
Serbia & Montenegro	14,13	14,67	15,83	18,43	26,22
Europe	157,47	191,98	230,54	280,84	337,09

Source: ITU, *Internet indicators: Hosts, Users and Number of PCs, 2000-2004.*

Graph 2: Internet hosts per 10000 inhabitants, 2000 - 2004



In this context, it is worth to mention an implication derived from the intersection of the two Internet penetration indicators. Namely, the small number of Internet hosts logically results in poor content, primarily of local (national) nature, in the case of Western Balkan countries practically incomparable to what is globally available. Following this situation, poor or irrelevant content attracts very few Internet users and that explains, to a large extent - why the number of hosts is so small.

In other words, if the Western Balkan countries are able to provide a significant amount of Internet content for a sizable fraction of their citizens, the number of Internet users may significantly increase as well. Currently, Croatia is an exception from this situation – its demand (Internet users penetration level) is much higher than its supply (Internet hosts penetration level) and there is no other way then this imbalance to be settled (Internet host penetration level to rise) in the nearest future. However, for the rest of the Western Balkan countries the question that comes up is: who is to break this circle?

2.2. In-country exclusions

Basically, in-country cyber exclusion has been based on differences among various population groups i.e. on information inequalities internal to one society. These disparities are comparable to other social inequalities, being determined in many cases by the class structure and treatment of minority population groups. However, it's too simplistic to think of the gap between the information rich and information poor within countries as merely reflecting existing divisions. Some authors namely (see: Wolf, 2005: online), underline offline and online divisions, that way intending to separate the real world from the cyber space limitations.

Nevertheless, in global terms, those considered as information rich - whether that be in the sense of PC ownership, Internet usage or access to training - are more likely to be men, young, employed and from the upper and middle classes. On the other side, the categories of people most likely to be marginalised and consecutively excluded are people on low incomes. Further, three social groups in particular have frequently been identified as being at risk from exclusion in the information society, whether or not they experience poverty: women, elderly and the people in rural communities - due to the inadequacy of the infrastructure provided. In addition, almost everywhere on a global level there is a significant divide along racial/ethnic

lines - certain racial/ethnic groups have much lower rates of computer ownership and Internet access than other. However, there are no data available on this sort of exclusion in the Western Balkan countries.

As implied above, the existing divide does not create homogeneous groups. It might be broken down along many demographic factors since anyone can be categorised in several ways and many experience multiple disadvantages. In the table shown below there are some initial attempts Internet use in the Western Balkan countries to be put in correlation with age, gender and urban/rural location, while family income, employment status, educational attainment and occupation as contributing factors were insufficiently standardized, therefore omitted. Actually, there are no prevailing standards neither on how to classify the age, nor how to assess or measure the other groups in terms of Internet use. The lack of these standards results in lack of comparable data and that is the reason why the following indicators are just partially usable.

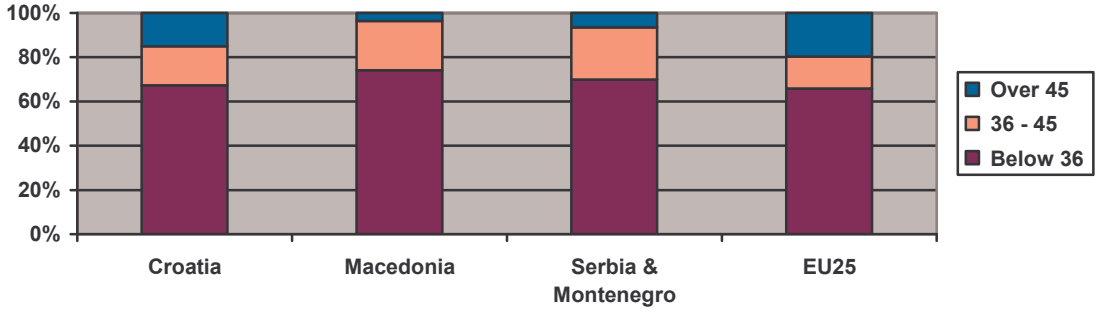
Table 3: Age, gender and residence distribution of Internet users

	Age			Gender		Location	
	<36	>36	>45	Male	Female	Urban	Rural
Albania	..	..	..	..	..	99	1
Bosnia & Herzegovina	..	..	..	66,7	33,3	99	1
Croatia	67,3	32,7	15,0	56,0	44,0	77	23
Macedonia	76,9	23,1	3,8	56,8	43,2	..	..
Serbia & Montenegro	70,0	30,0	6,5	60,0	40,0	..	..
EU25	65,9	34,1	19,7	53,3	46,7	..	..

Sources: IFC, *Internet and e-Commerce in Albania, 2000*; Dholakia & Kshetri, *Gender Asymmetry in the Adoption of Internet and e-Commerce, 2002*; eSEE, *Regional ICT Sector Status and Usage Report, 2004*; Metamorphosis, *General data about the situation regarding the ICT in Macedonia, 2004 (data derived)*; Demunter, *The Digital Divide in Europe, 2005 (data derived)*.

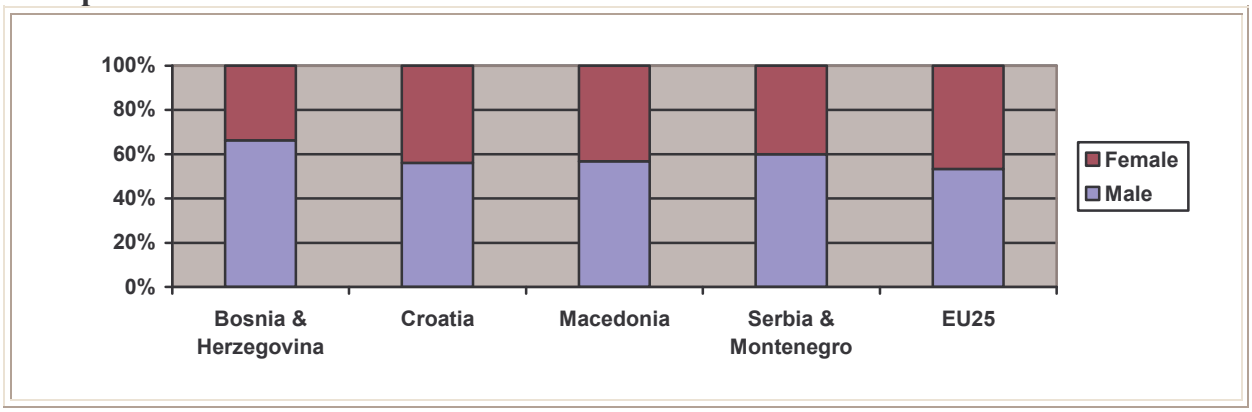
Based on the available data for three countries, it is clear that the age distribution of Internet users reflects the respective level of economic development. Older than 45 namely, are those who had left the education system prior to or right about the time of Internet appearance, and that category had to find serious motives to deal with the unknown technology. Whatever reason was being found for that - business or leisure, it was to come along with economic and social well-being and that logic to a large extent explains why those online older than 45 reached almost 20% of the Internet users in the European Union of 25 countries, compared to 15% in Croatia, 6,5% in Serbia & Montenegro and only 3,8% in Macedonia.

Graph 3-a: Age distribution of Internet users in certain Western Balkan countries



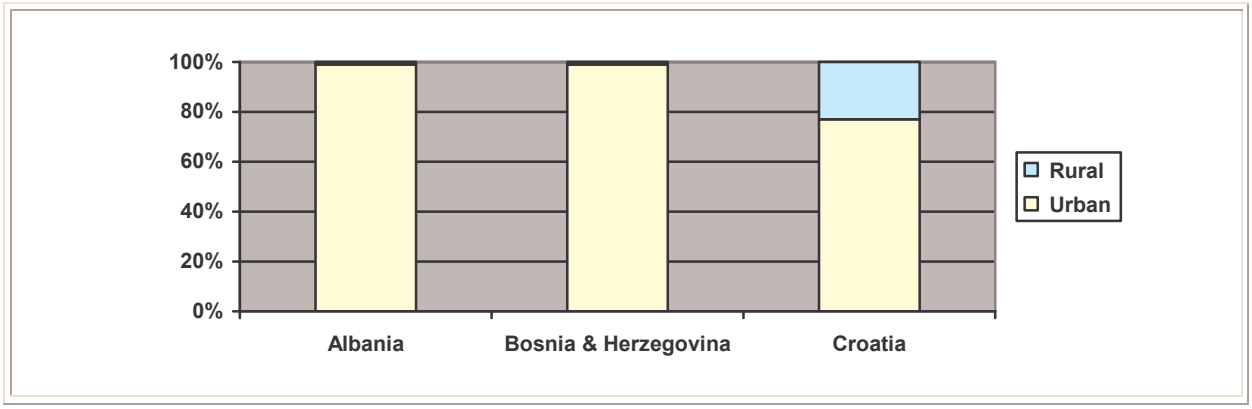
On the other side, of the available data it does not appear that there is a huge gender gap in Internet use, with a slight exception of Bosnia & Herzegovina - most likely due to cultural specifics. Generally, there is no other explanation for this balance than believing that men and women in the Western Balkan countries are almost equally rich or poor and have equal access to the education system.

Graph 3-b: Gender distribution of Internet users in certain Western Balkan countries



However, it appears that urban/rural divisions in regard to the Internet use are pretty sharp, with recurring strong relation to the level of economic development, and possible, but unexplored influence of other factors: inadequate infrastructure, lower education levels of the prospective users and specific form of cultural lag in adopting new technologies. Data that were available for this research, particularly those for Albania and Bosnia & Herzegovina, with 99% of the Internet users being urban population, are disappointing. Plus, they are not comparable to those of Europe, as the European statistics nowadays measure urban/rural penetration of broadband lines only.

Graph 3-c: Residence distribution of Internet users in certain Western Balkan countries



3. Interpreting the figures, widening the debate

Although incomplete and with deficient comparability, indicators presented above point out that the information inequality is an issue with many aspects, some of which may grow while others decline in importance. In that respect, range of reasons restricts the wider Internet penetration in the Western Balkan countries. If there is money enough, says one logic, then there is just basic but not sufficient literacy to ensure that ICTs would be broadly usable. If there was literacy sufficient to using them, then there is a lack of a telephone infrastructure, or reasonable alternative, sufficient to ensure that computers could be widely accessed. If

there was a telephone infrastructure sufficient to enabling wide access to Internet resources, then there is no sufficient number of computers so to take advantage of the telephone infrastructure.

And all of this can be bought of course, but the low income per capita of these countries is where the problems begin.

3.1. Income as an anchor determinant

When the mean Gross National Income (GNI) per capita for a country is just slightly over the cost of an average equipped laptop, it is difficult to see how people in that country can obtain access to the Internet in anything close to large numbers. People in these countries may well have adequate resources to handle one time expenses like desk top computers, but may have difficulty maintaining additional regular costs such as those associated with computer network access. Countries that already have digital resources, on the other hand, have the resources to obtain more, and continuing declines in price of high quality access should bring the Internet within the reach of increasing numbers of people.

As said above, the difference is in the mean GNI per capita. As expected, Croatia with 6.590 USD has been in far lead over the group of countries, while four others range between 2.080 and 2.620 USD. The poorest one, Albania has more than seven times less income per capita than the European average, while the richest one has positioned itself somewhere in between, with about two times less then the average income of Europe.

Nevertheless, the income figure may be an alpha but not an omega determinant to the Internet penetration rate. The following tables indicate the impressive commitment of the Western Balkan nations towards achieving the advantages of the Internet despite the low income or poverty. It shows that these societies, exempting Albania, are much poorer in terms of overall wealth than in terms of Internet penetration. In other words, they sacrifice a lot of their material wellbeing in order to stay connected, both in terms of Internet users and hosts.

As seen below, Croatia and Serbia & Montenegro have the best use of their economic potential in terms of Internet penetration, with respective ratios much higher than the European one. One hundred inhabitants of Croatia, for example, have aggregate of 659.000 USD GNI per capita and have 29 Internet users among them, compared to average European figure of 1.434.000 USD , with only 32 users among those who form that aggregate. In this respect, better ratios than the average European have Macedonia and Bosnia & Herzegovina too.

Table 4-a: Internet users per aggregate of 100.000 USD of GNI per capita in 2004

	Internet users per 100 inhabitants	GNI per capita for 100 inhabitants (‘000 USD)	Ratio
Albania	2,34	208	1,12
Bosnia & Herzegovina	5,37	204	2,63
Croatia	29,50	659	4,47
Macedonia	7,69	235	3,27
Serbia & Montenegro	11,40	262	4,35

Europe	32,01	1.434	2,23

Sources: ITU, *Internet indicators: Hosts, Users and Number of PCs, 2000-2004*; World Bank, *World Development Indicators 2004.*

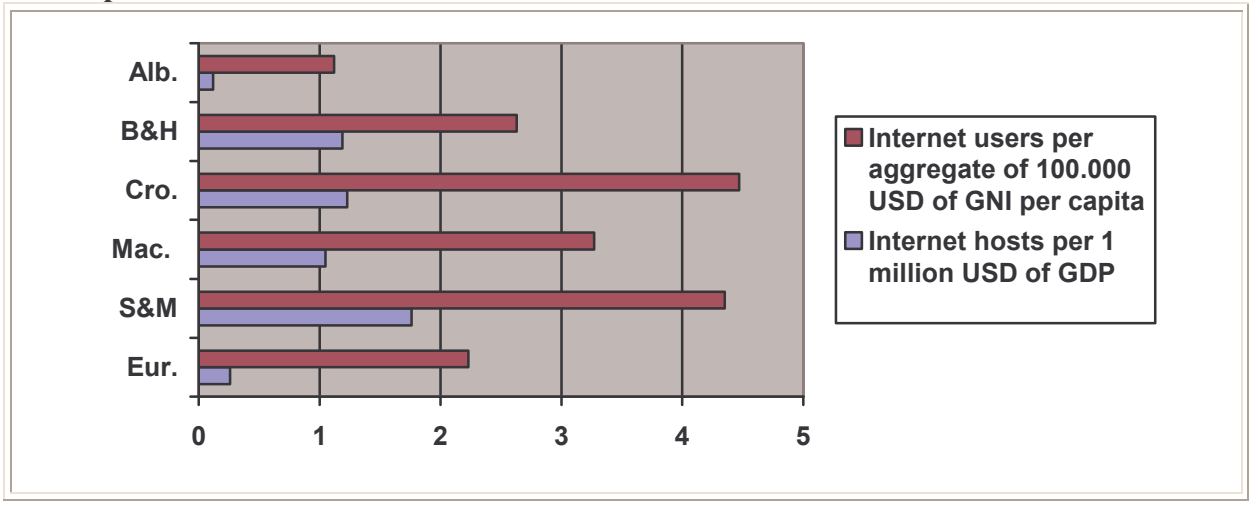
Almost parallel characterisation applies to another ratio, namely Internet hosts per 1 million USD of GDP. In that respect, if the previous relation has been a kind of reference to the attitude of an individual, this one measures the attitude of the whole society or at least the attitude of the national economy. Again, four out of five Western Balkan countries have better ratios than the European average. They have more Internet hosts per adequate portion (1 million USD) of the national product.

Table 4-b: Internet hosts per 1 million USD of GDP in 2004

	Internet hosts	GDP (million USD)	Ratio
Albania	527	4.100	0,12
Bosnia & Herzegovina	8.393	7.000	1,19
Croatia	34.695	28.000	1,23
Macedonia	3.595	3.400	1,05
Serbia & Montenegro	27.578	15.600	1,76
Europe	26.998.040	103.811.900	0,26

Sources: ITU, *Internet indicators: Hosts, Users and Number of PCs, 2000-2004;* World Bank (2005) *World Development Indicators 2004*.

Graph 4: Internet users per aggregate of 100.000 USD of GNI per capita and Internet hosts per 1 million USD of GDP in 2004



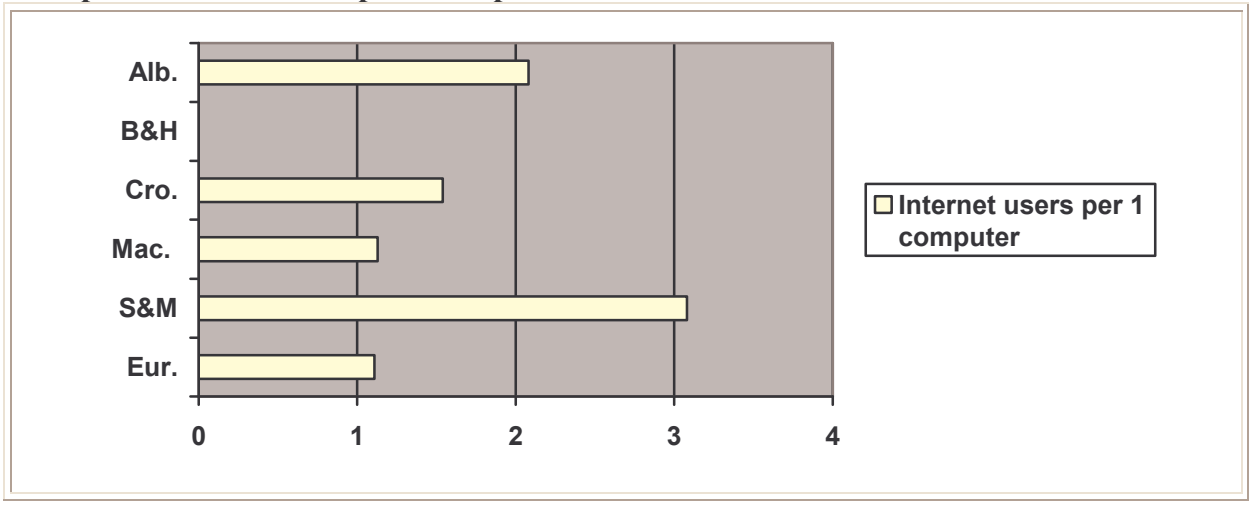
Finally, similar characterization may be given to one additional indication of the best possible use of limited resources, in this case computers[6]. Since the major factor preventing higher usage rates is the high cost of the equipment compared with income, when measuring the number of Internet users compared to the number of available computers it comes out that Serbia & Montenegro's population again has the strongest commitment towards gaining from the advantages of the Internet, despite the limited resources in terms of computer equipment.

Table 5: Internet users per 1 computer in 2004

	Internet users ('000)	Computers ('000)	Ratio
Albania	75	36	2,08
Bosnia & Herzegovina	225	..	..
Croatia	1.303	842	1,54
Macedonia	159	140	1,13
Serbia & Montenegro	1.200	389	3,08
Europe	256.416	230.057	1,11

Source: ITU, *Internet indicators: Hosts, Users and Number of PCs, 2000-2004.*

Graph 5: Internet users per 1 computer in 2004



3.2. Infrastructure

When infrastructure is considered as a factor that affects Internet penetration, it usually means electricity/power supply and telephone lines availability.

In that respect, power is not considered an obstacle to Internet penetration in the Western Balkan countries. Blackouts are rather often in Albania, but considered as qualitative aspect, it is neither easily predictable nor measurable. In quantitative terms, this paper regards the territories of the Western Balkan countries as covered (households connected) with power network to a sufficient extent.

On its side, telephone infrastructure matters to Internet penetration because it is, in general, the telephone network that provides the first level of access. There are other choices for provision of such services, including cable television and power line infrastructures, where available, but the telephone infrastructure is generally the infrastructure of first resort because of the ready availability and low cost of modems.

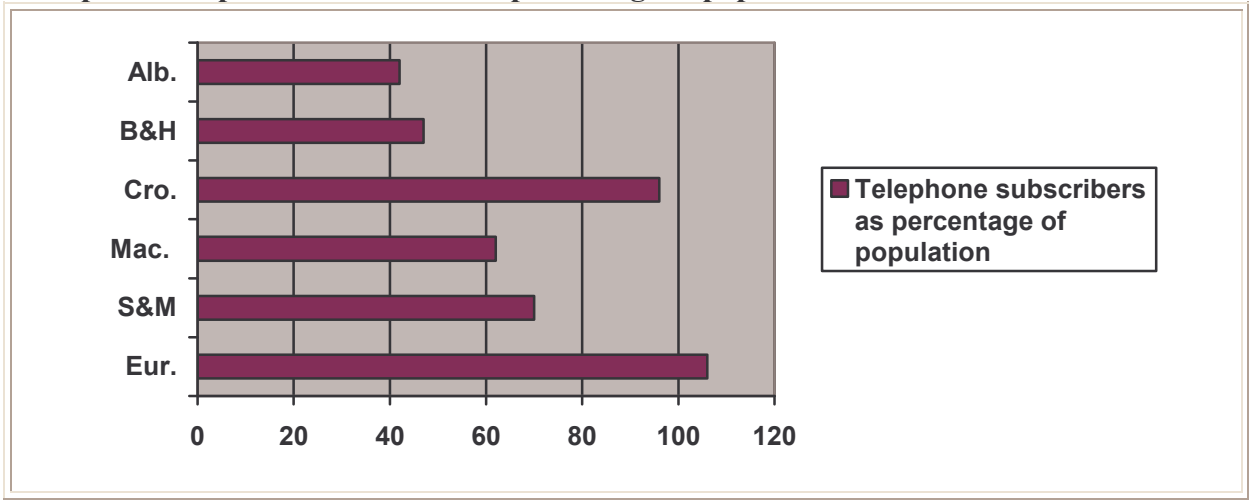
So, considering the telephone infrastructure as one of the basic preconditions for improved Internet penetration, it is obvious from the table below that the starting positions of the Western Balkan countries are different.

Table 6: Telephone subscribers as percentage of population in 2004

	Population (millions)	Telephone subscribers (millions)	Ratio (%)
Albania	3,19	1,35	42
Bosnia & Herzegovina	4,19	1,99	47
Croatia	4,42	4,25	96
Macedonia	2,07	1,30	62
Serbia & Montenegro	10,52	7,41	70
Europe	804,68	851,42	106

Source: ITU, *Population, GDP, total telephone subscribers and total telephone subscribers per 100 people, 2004.*

Graph 6: Telephone subscribers as percentage of population in 2004



As seen, Croatia leads the group of countries with a number of telephone subscribers close to the total number of population, and also close to the European average. Other four countries are gradually lagging behind.

Based on these starting positions, one not very precise[7] but easily measurable parameter, relevant to the main thesis of this paper is the level of utilization of the existing telephone infrastructure in regard to the Internet use. Again, Croatia has the best ratio, completely comparable to the European average. Namely, almost every third telephone subscriber in Croatia is an Internet user, while that ratio in Albania is one Internet user in twenty telephone subscribers.

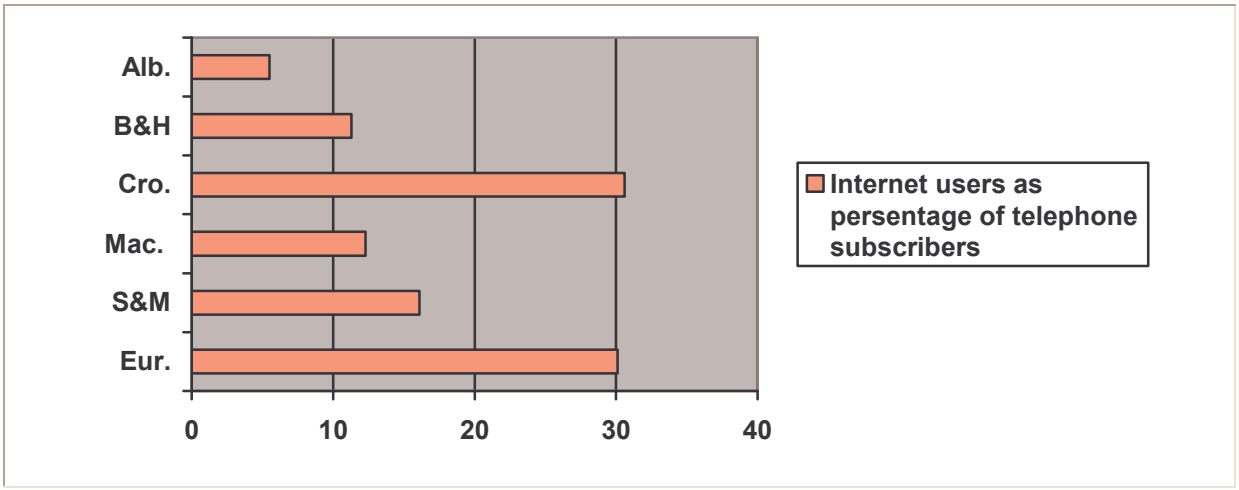
Table 7: Internet users as percentage of telephone subscribers in 2004

	Telephone subscribers (‘000)	Internet users (‘000)	Ratio (%)
Albania	1.355	75	5,5
Bosnia & Herzegovina	1.988	225	11,3
Croatia	4.253	1.303	30,6
Macedonia	1.301	159	12,2
Serbia & Montenegro	7.415	1.200	16,1

Europe	851.420	256.416	30,1

Sources: ITU, *Population, GDP, total telephone subscribers and total telephone subscribers per 100 people, 2004;* ITU, *Internet indicators: Hosts, Users and Number of PCs, 2004*.

Graph 7: Internet users as percentage of telephone subscribers in 2004



It should be underlined at the end of this section again that telephone infrastructure data used here have been measured quantitatively. Unfortunately, infrastructure's quality, otherwise essential for deeper analysis of the cyber exclusion, has been difficult to explore due to the lack of standardised indicators. As mentioned above, the inclusive information society promoted by *eEurope* and *eEurope+* initiatives includes an expansion of infrastructure and Internet connectivity that goes beyond infrastructure-based criteria. It focuses on the delivery of broadband services, characterized by measures such as capacity, reliability and speed, but these data, when Western Balkan countries are in question, were not easily obtainable.

3.3. Literacy

As said in the previous sections, the term digital divide also refers to gaps that exist between groups regarding their ability to use ICTs effectively, due to differing levels of literacy and technical skills. Although certain levels of literacy are expected if wanting to use and benefit from a range of new technologies, literacy levels were often left out of debates surrounding the digital divide. It was argued namely, that the much expected broadband Internet connection and its applications will change the situation yet another time, bringing audio-visual dimension to the medium and relieving the user of the literacy skill usually required.

On the other side, however, an argument stands that new technological tools may require a consideration of a range of unconventional literacies that are to enable individuals to utilise them effectively, making them capable, actually, to evaluate materials and recognize the quality content. Apart from the basic literacy, aspects such as computer literacy, followed by contextual literacy, media creativity, social competence and responsibility were advised to be taken into consideration.

Some authors go even further. Carvin, for example suggests that the digital equity debate should consider issues far beyond basic literacy of simply reading and writing, starting with its functional, and moving towards its occupational, technological, information and adaptive component (see: Carvin, 2000), while Katz & Rice take more general approach. "Many of the obstacles to more equitable access may be deeply embedded in cultural contexts", they

claim (2002: 34). However, it is clear that incorporation of these aspects presents formidable challenges in many areas, from education to civic engagement, while their ignorance may become the biggest barrier of participation in the information society.

In the meantime, as such issues are not empirically surveyed even among developed nations, the debate is left on what is available. In that sense, given the fact that the basic literacy rate in the Western Balkan countries ranges from 94,6% among adults in Bosnia & Herzegovina, to 98,7% among adults in Albania (see: UNDP, 2005), it is not considered as a barrier to Internet penetration. Rather, in some reports (see: eSEEurope, 2004), emphasis has been put on English language proficiency - another literacy component essential for increasing cyber inclusion, related to yet another important factor of Internet penetration - usable content.

3.4. Beyond access

It is said in the previous sections that in the early days of digital divide analysis, the availability of Internet access at an affordable cost was the key issue. That approach was promoting policies that position access as a goal in itself, rather than treating it as a mean towards achieving specific development objectives. However, as more and more people can get cheap or free access by many means, that way modifying the issue of being disadvantaged and undermining the initial concern about the digital divide, foundation is laid for reconsidering the common-sense concept of measuring the simple access to technology. It is, namely, increasingly treated "as an important human right" (Katz & Rice, 2002: 84), and that approach moves the agenda towards more sophisticated issues.

The new focus is, of course, on the quality of both - the access and the usage. It nowadays takes, on one side, such characterizations as processing speed and other capabilities of the computer used, followed by the quality of connection and supporting services. On the other side, another issue stands - access to useful, quality, mostly subscription-based content.

Named elsewhere as the digital divide's new frontier, the issue of usable content seems to be the most complex of these mentioned, closely related to another crucial question - what are people doing while being on Internet? It is a kind of "gulf between what people need and what they actually find available online" says Couldry (2004: 191) and that gulf has its own logic and dynamics, not necessarily related to the problem of access itself. Simply, it can be imagined that the large majority of the populations will possess a computer and a network connection within a few decades, and will be able to use them, but it is still to be expected that people will do increasingly different things while online. "If the content that is accessible through the Internet serves primarily the needs and interests of a consumer class (especially a wealthy one), then low-income, low-education and minority groups will not use Internet even if they have access", claim Katz & Rice (2002: 25) and this growth of a usage gap might have the most lasting effect. Unfortunately, these disparities could not be resolved by merely giving everyone a computer with Internet access, and that is why some authors find that the use of the digital divide as an autonomous concept when analyzing the social exclusion should be put under re-conceptualization. They claim, in fact, that the outcome of this situation will be determined by the social context again, among other by the "kind of complex interactions between ownership, regulation, technology and ideology" (Lister et al., 2003: 200).

4. Conclusion

The sections above intended to supply evidence concerning the information inequality and its social implications in the Western Balkan countries. For that purpose Internet penetration levels are presented, analysed, and then cross-referred to several economic and social indicators. In that respect, despite the difficulties with the data comparability and the associated approximations that were made, differences were easy to notice.

It is obvious, namely, that in terms of the external cyber exclusion the Western Balkan is not a homogeneous group of countries. On the top of the list with leading inclusion indicators is Croatia, whose overall performance is close to the average of 40 European countries. On the bottom stays Albania, with structural and systemic weaknesses, mostly inherited from the past, thus not easily solvable. The first hand suggestion is that the basis of the digital divide lies in the development divide while the Internet penetration concern comes at a stage later.

In Croatia, the most digitally ready of these countries, bridging the basic external digital divide in terms of Internet users rate might be easy and probably will happen soon. People who want Internet access can, in general, achieve it, whether or not they have access from their homes. For Croatians it is, indeed, almost an issue of choice rather than access. Nevertheless, the other four countries have a range of challenges to face, among the other poor purchasing power of households, infrastructure deficiencies, and inadequate literacy of the population.

Internet hosts figures are even worse. All five countries suffer low Internet penetration in terms of directly connected computers hosting certain content under the local domain name. Limited means of businesses are to be added as a cause for this situation, along with the poor economic condition, infrastructure deficiencies again, and literacy challenges. Similar reasons have been found for the in-country exclusion. Beside the poor, the most disadvantaged groups in terms of facing barriers to access appear to be the elderly and those living in rural communities.

However, beyond the inequalities explained above and in order to understand what further meaning the digital divide has, it is found important to look at what people are doing with the technology and what can they find while being online. This again disputes the notion of a binary division of simply having or having no access, as a simplification of the subject which is, actually, a complex one. One implication of this complexity is that the critical issue of the cyber exclusion - access - must not be treated as a goal in itself, but as a quantitatively and qualitatively attributed mean towards achieving inclusive society.

In that respect, in order to maximise opportunities for full participation and contribution, there is a need for introducing specific social, economic and educational policies. Of all, the education is found to be crucial at an individual level. This should be more than simple training in tool use, usually called computer literacy - people need to learn the basics of information literacy, too. Yet, the provision of computers and Internet access should continue to be part of a broader multi-layered solution. Continued advocacy for more and better access is also important.

And all this should be done reasonably soon. As soon as one source of technological inequality seems to be diminishing, another one emerges, so even if those currently without access become users, they will still be disadvantaged. Individual and social damage, namely, remains or appears even after later Internet adoption.

Of course, people can still choose not to use the Internet, for one reason or another. Yet, this should be an informed decision. In many cases not being part of the network might be more expensive than being there and that is how we need to think of the cyber exclusion - not to count the connections but to measure the consequences of being or not being connected.

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Notes:

[1] When studying Western Balkans, provision of strong evidence is a real methodological challenge in many respects. Limited, often outdated, non-standardised data from various types of sources (private/commercial, governmental, international/inter-governmental, NGOs etc.) makes them difficult for any cross-reference.

[2] ITU bases the Internet user figures on nationally reported data. In some cases, surveys have been carried out that give a more precise figure for the number of Internet users. However surveys differ across countries in the age and frequency of use they cover. The reported figure for Internet users, which may refer to only users above a certain age, is divided by the total population to obtain users per 100 inhabitants. Countries that do not have surveys generally base their estimates on derivations from reported Internet Service Provider subscriber counts, calculated by multiplying the number of subscribers.

[3] Internet hosts refer to the number of computers directly connected to the worldwide Internet network. Note that Internet host computers are identified by a two-digit country code or a three-digit code generally reflecting the nature of the organization using the Internet computer. The number of hosts is assigned to economies based on the country code although this does not necessarily indicate that the host is actually physically located in the economy. Therefore the number of Internet hosts shown for each country can only be considered an approximation.

[4] As Internet use statistics from different sources tend to vary widely, the statistics used in this section are nearly all from International Telecommunication Union (ITU).

[5] Average rate of Europe (40 countries, as categorised by the International Telecommunication Union), includes Eastern Europe, Russia, Belarus, Ukraine and Armenia.

[6] It is to be taken in account that Internet may be accessed through mobile phones also, and that possibility has not been taken in consideration in the shown ratios.

[7] It would be more precise if comparing telephone subscribers with Internet subscribers, or telephone users with Internet users. This way huge approximation is made, assuming that every Internet user uses different telephone line.