

SEEDIG's contribution to the IGF 2016 Inter-sessional Programme on Policy Options for Connecting and Enabling the Next Billion – Phase II

Explanatory note

The South Eastern European Dialogue on Internet Governance (SEEDIG) had its second annual meeting on 22 April 2016, in Belgrade, Serbia. During this meeting, a session was held on '*Bridging digital divide(s) with a #SEExchange in digital literacy*'; the session was aimed to discuss the nature of the digital divide(s) in South Eastern Europe and the neighbouring area (SEE) that hinder(s) participation in the information society, and what bridges are being or should be built to overcome these divides.

This contribution summarises the discussions held during the session. It does not provide a comprehensive overview of the current situation in the region when it comes to the digital divide and policies aimed to overcome this challenge, but rather captures the main points raised throughout the session.

More details about this session are available at <http://www.seedig.net/seedig-2016-session-2/>. A recording of the session is also available at https://www.youtube.com/watch?v=RSs_CiJDBV4.

Session messages

- There are many layers of Internet development in the South Eastern European region, from access and infrastructure (broadband included) to cost and affordability, literacy, content, and services. Deployment of infrastructure is insufficient in itself, and it needs to be complemented by measures focused on education and development of local content, among others.
- Internet access solely via mobile technologies should be seen only as a temporary access solution. Mobile technology does not provide complete access to the breadth of the Internet, and, as such, must be reinforced by fibre networks and better use of spectrum, especially in rural areas.
- More efforts are needed in the region (both from the governments and the private sector) to improve the adoption of Internet Protocol version 6 (IPv6) and other Internet technologies that can contribute to bridging the digital divide.
- Digital literacy and awareness about content like e-services or e-government, specifically in local languages and scripts, are critical to bridging the digital divide.
- Internationalised Domain Names (IDNs) can contribute to bringing more people online. Supporting and encouraging the development and use of IDNs in the region is therefore extremely important.

Extensive report - Reflecting on the discussions

The digital divide continues to be a challenge for countries in South Eastern Europe and the neighbouring area. This divide is present not only between countries (when comparing South Eastern Europe with, for example, Western Europe), but also within countries. At a national level, there is a digital divide between urban and rural areas, between rich and poor, between educated

and less-educated parts of the populations, etc. Amongst young people, however, these differences tend to be less present, which shows that there are opportunities for youth and development.

When it comes to building policies for bridging the digital divide, the first step that needs to be undertaken is a **comprehensive analysis of the real situation**, based on accurate and reliable data. Such data would then constitute the basis for developing policies that are targeted at addressing the specific problems identified.

The **deployment of infrastructure** at a national level is seen as the second next important step in increasing accessibility. In this regards, countries in the region have different experiences.

In **Slovenia**, for example, the development of infrastructure in urban areas is driven by commercial interests. This is not so much the case when it comes to rural areas: although the demand for electronic communication services and networks is high (sometimes higher than in towns), the cost of investment for building new infrastructures are higher compared to urban areas, and private actors are not so much interested in investing. This is where governmental policies are needed, in order to incentivise the private sector to expand their networks in such areas. Between 2008 and 2013, Slovenia was using EU structural funds for building telecommunication infrastructure in rural areas. Within the framework of EU funded projects, 30 734 households got broadband connection to the Internet; of these, 28 395 were optical connections, while 2 339 were wireless connections. Regarding the use of infrastructure, 55% of the new optical connections to households are in active use, while the usage of the newly established wireless connections is at only 10%. In comparison, the average active utilisation of built optical connections in urban areas in Slovenia is at around 40 %.

Romania is often ranked high in statistics regarding the availability of high speed broadband. However, while about 60% of the country's territory is covered by high speed broadband networks, the rest of the territory - mostly rural areas - lack such connectivity. Individuals in such areas are not completely excluded from Internet access, due to availability of mobile networks, which cover most of the country's territory. The lack of fixed broadband networks connecting households in still many rural areas has determined the government to look into adopting specific policies. Such policies have been mainly focused on creating an enabling environment that would facilitate and encourage private investments in building physical infrastructure. At the same time, there have been other initiatives aimed not only at providing physical access, but also at developing the capacity of individuals to make meaningful use the Internet. One such initiative, supported by the Bill & Melinda Gates Foundation, has been focused on facilitating Internet access through public libraries. Libraries around the country have been equipped with computers and broadband access, and librarians have been trained to support the local community in understanding and taking advantage of the opportunities offered by the Internet (in terms of access to information, education, use of e-government services, etc.). 'Skills for IT Romania' is another private-led initiative implemented in the country; its activities include, amongst others: information technology (IT) training and IT competitions in schools, webinars with schools all across the countries, IT summer camps for youth, and e-guides on topics such as cybersecurity.

Looking at the experiences of the various countries in the region, it is evident that an **adequate regulatory framework**, which encourages market competition and creates a playing level field for private actors (telecom companies, Internet service providers (ISPs), etc.), is another aspect that can bring faster progress in rolling out infrastructure at the national level and bringing access to the unconnected parts of the population in South Eastern Europe.

Extensive mobile coverage is a reality in most countries in the region. This gives individuals the opportunity to access the Internet irrespective of whether they are in urban and rural areas. A survey conducted in **Armenia**, for example, showed that, thanks to mobile coverage, the country no longer has a digital divide between urban and rural areas (in terms of Internet penetration at an individual level). Yet, mobile technologies are not seen as a comprehensive solution to the problem of access in rural areas. When it comes to large areas that lack connectivity, deploying mobile and satellite technologies can be a starting point. This should, however, be seen rather as an intermediary/temporary solution (especially with regard to household access), which would eventually lead to the deployment of fibre optic infrastructure. This is because the radio spectrum has physical limits (there is a limited number of devices that can be connected over mobile technologies, for example), and the more these limits are pushed, the less usable the technologies are. Moreover, mobile technologies often limit access to certain types of services and applications.

Regarding access technologies, one opportunity that the region might benefit from exploring is that of **white spaces**. Experimenting with such technologies would require cooperation between the technical community and the regulatory authorities, but it is an opportunity that the region could consider as a potential solution to the problem of access in rural areas.

The transition to IPv6 is also an important aspect to take into account in the context of bringing more people (and devices) online. Stakeholders in the region need to develop and implement policies that will speed up the deployment of IPv6 across networks and devices.

While access to physical infrastructure is a crucial step towards bridging the digital divide, such access in itself is meaningless if users cannot afford it, from a financial point of view. **Affordability of access**, therefore, is another aspect that needs to be looked at when designing policies in this area.

Web accessibility is another aspect requiring adequate policies and initiatives to ensure that people with disabilities can access and meaningfully use the Internet (and related digital tools).

Meaningful access to Internet also deserves special consideration. It is one thing to have access to infrastructure; it is another thing to be able to meaningfully use the access that is available. Policies need to be developed that look at the interests of citizens in terms of communication, access, exchange of information, and better use, but also at how small business and entrepreneurs can have access to the Internet to grow their companies and take advantage of the innovative potential of the Internet. Attention should also be paid to the quality and limits of access, e.g., what kind of services and applications individuals can access within the traffic limits of their subscriptions or pre-paid services. The diversity of content and services available to the different categories of users also falls within the scope of 'meaningful access'.

Digital literacy is also key to bridging the digital divide and bringing more people online. Developing the digital literacy of citizens, be they children, young, or elderly is one important aspect to be considered by governments and other actors. Individuals need to be equipped not only with the practical skills needed to make use of technologies, but also with the knowledge that would allow them to take advantage of the vast opportunities offered by the Internet in areas such as education, employment, business, health, etc. Several initiatives in this area are underway in the region. In **Georgia**, for example, the government, in partnership with civil society organisations, is delivering trainings to local communities, with the aim to educate individuals on how to use the Internet in a meaningful way.

Promoting multilingualism and the availability of content in local languages and scripts is another aspect that can contribute to making the Internet more accessible. In this regard, **Internationalised Domain Names (IDNs)** are being implemented in the region, with the aim to allow individuals to register and use domain names fully in their local languages/scripts. IDNs are seen not only as a tool for potentially bringing more people online, but also as a way of reflecting national identity. **Armenia, Bulgaria, Greece, Moldova, Romania, Serbia, Slovenia, and The former Yugoslav Republic of Macedonia** are some of the countries where IDN country code top level domains (ccTLDs) have been or will be introduced. Other initiatives are also undergoing. In **Serbia**, for example, the ccTLD registry is currently exploring, in cooperation with councils of national minorities, the opportunity of introducing IDNs to reflect the diversity of the languages and scripts used by country's recognised national minorities. Despite the progress made in deployment of IDNs, there are still problems when it comes to their universal acceptance (e.g., functional IDN emails and recognition of IDNs by search engines). Finding solutions to such problems requires extensive and continuous cooperation between the technical community, the private sector, and, to some extent, public authorities.

All in all, while Internet access opens the door to multiple development opportunities, not everyone in the SEE region benefits from it. And this is one of the challenges that stakeholders in the region need to address together: to ensure that individuals are equal when it comes to benefiting from digital opportunities, that they have access to technologies and equipment, and that they have the skills and knowledge that can empower them to take full advantage of the digital society.