

Digital performance of Slovakia

Broadband markets

At the end of 2013, fixed broadband covered 85% of homes in Slovakia (97% in the EU). In rural areas, fixed broadband covered 82% of homes. At the same time, Next Generation Access capable of providing at least 30 Mbps download was available to 58% of homes (62% in the EU).

70% of the households had a broadband subscription at the end of 2013, lower than the EU average (76%) and 2 percentage points lower than at the end of 2012. The share of high speed connections (providing at least 30 Mbps) was higher than the EU average (26% compared to 21% in the EU). Ultra-fast connections (providing at least 100 Mbps) accounted for 8% of all subscriptions (5% in the EU).

On the mobile side, 4th generation (LTE) was available to 24% of population (compared to 0% in 2012). The take-up rate (subscription per 100 people) of mobile broadband was 50%, below the EU average of 62%.

Indicator (including breakdown and unit)	Slovakia value		EU28 value
	2012	2013	2013
Fixed broadband coverage - Total (in % of total population)	75	85	97
Rural fixed broadband coverage – Total (in % of rural population)	50	82	90
NGA broadband coverage - Total (in % of households)	51	58	62
Households with a broadband subscription - All households (in % of households)	72	70	76
Share of subscriptions with at least 30Mbps - (% of subscriptions)	19	26	21
Share of subscriptions with at least 100Mbps - (% of subscriptions)	3	8	5
4G Mobile broadband coverage - (as a % of total population)	0	24	59
Mobile broadband take-up - Total (in Subscriptions per 100 people)	60	50	62

Internet usage

In 2013, 74% of Slovaks reported using the internet at least weekly (regular users), above the EU average of 72%. Slovakia exhibited somewhat lower rates of daily use of the internet (frequent users), with 61% of the population reporting going online every day, compared to an EU average of 62%. In 2013, 18% of the population had still never used the internet; lower than in 2012 and lower than the EU average of 20%.

Indicator (including breakdown and unit)	Slovakia value		EU28 value
	2012	2013	2013
Internet users going on-line weekly (Regular internet users - All individuals, in % of individuals)	74	74	72
Internet users on a daily basis (Frequent internet users - All individuals, in % of individuals)	60	61	62
Individuals who have never used the internet - All individuals (in % of individuals)	18	15	20

Digital skills

Results obtained from a newly developed Digital Skills Indicator¹ show that, in 2012, 43% of Slovaks had low or no digital skills, compared to 47% for the EU average. Disadvantaged people (i.e. individuals who are aged 55-74, low educated and/or unemployed, retired or inactive) in Slovakia are less highly digitally skilled than is average in the EU. Within the workforce, skills are higher; 34% of the workforce has low or no digital skills. On average in the EU, the figure is 39%. At 44% in 2013, figures for households without internet access reporting lack of skills as a reason for no access are higher than the EU average of 37%. According to a broad definition, the share of ICT specialists in total employment in Slovakia was 2.2% in 2012; about the same as the EU average of 2.8%.²

Indicator (including breakdown and unit)	Slovakia value		EU28 value	
	2012	2013	2012	2013
Individuals with low or no digital skills (in % of individuals)	43	-	47	-
Disadvantaged people with low or no digital skills (in % of disadvantaged people)	65	-	64	-
Labour force with low or no digital skills (in % of labour force)	34	-	39	-
Households reporting lack of skills as a reason for having no Internet access (in % of households without internet access)	45	44	35	37
Persons Employed with ICT Specialist Skills (broad definition) - Total (in % of persons employed)	2.2	-	2.8	-

eCommerce

In 2013, 44% of Slovaks had purchased goods or services online within the previous 12 months, which means that take-up of e-Commerce was below the EU average of 47%. Slovakia exhibited better rates of cross-border e-Commerce, with 17% of the population having bought online from other EU countries in the previous 12 months, compared to an EU average of 12%. In 2013, 31% of large enterprises were selling on-line, more than in 2012 and fewer than the EU average of 35%. SMEs were significantly less active with only 17% of SMEs selling online, more than the EU average of 14%.

¹ The Digital Skills Indicator is a composite indicator of digital skills based on the IPTS Digital Competence Framework and using data collected through the Eurostat survey on Internet use in households and by individuals. The indicator has been developed as part of the work towards action 62 of the Digital Agenda to propose EU-wide indicators of digital competence. http://ec.europa.eu/information_society/newsroom/cf/dae/document.cfm?action=display&doc_id=5406

² Broad definition taken from JRC (IPTS) "The evolution of EU ICT employment 2000-2012" Technical report (forthcoming): ISCO codes 25 and 35, plus ICT graduates in certain adjacent ISCO codes.

Indicator (including breakdown and unit)	Slovakia value		EU28 value
	2012	2013	2013
Ordering goods or services online - All individuals (in % of individuals)	45	44	47
Cross-border e-Commerce - All individuals (in % of individuals)	17	17	12
Enterprises selling online - Large enterprises (in % of enterprises)	25	31	35
Enterprises selling online - SMEs (10-249 persons employed) (in % of enterprises)	12	17	14

eGovernment

In 2013, 33% of Slovaks made use of the internet for eGovernment services, a decrease from 42% in 2012 and below the EU average of 41%. 16% of citizens sent filled-in forms, down from 17% in 2012, and below the EU average. On the supply-side, the newly introduced User-centric eGovernment Indicator³ was at 44 in 2012-2013, much below the EU average of 70, and the Transparent eGovernment Indicator⁴ was at 17, much below the EU average of 49.

Indicator (including breakdown and unit)	Slovak Republic value		EU28 value
	2012	2013	2013
Citizens' use of eGovernment services, last 12 months - All individuals (in % of individuals)	42	33	41
Citizens sending filled forms to eGov services, last 12 months - All individuals (in % of individuals)	17	16	21
User-centric eGovernment Indicator - (0-100 range)	44		70 ⁵
Transparent eGovernment Indicator - (0-100 range)	17		49 ⁶

³ The User-Centric eGovernment Indicator is a composite indicator measuring the availability of eGovernment services, their connectedness and their user-friendliness for seven areas of government services through a user journey approach using the concept of life event (well defined user need).

⁴ The Transparent eGovernment Indicator is a composite indicator measuring the online transparency of governments on the different aspects of online service delivery, treatment of citizens' personal data and activities of the public administrations. The indicator has been measured over seven areas of government services through a user journey approach using the concept of life event (well defined user need).

⁵ The indicator is measured over a two-year period, figures refer to 2012-2013

⁶ See note above

eHealth

In 2013, 36% of Slovak hospitals had a broadband connection >50Mbps, about the same as the EU average of 36%. 22% of hospitals exchange clinical information with external healthcare providers or professionals, which is well below the EU average of 55%. For General Practitioners, the rate is 8%, much lower than the EU average of 28%. 0% of hospitals provide patients access to the totality or part of their medical records, which is lower than the EU average (9%).

Indicator (including breakdown and unit) for acute ⁷ hospitals	Slovakia value		EU28+2 ⁸ value
	2010	2013	2013
Broadband connection > 50Mbps (in % of hospitals)	35	36	36
Exchange of clinical care information with external health care providers (in % of hospitals)	23*	22	55
Online access (partial or total) to electronic records by patients (in % of hospitals)	0	0	9
Indicator (including breakdown and unit) for General Practitioners (GPs)	2007	2013	EU28+3 ⁹ value
Use of a computer during consultation with the patient (in % of GPs)	18	87	97
Exchange of medical patient data with other health care providers or professionals (in % of GPs)	0	8	28
Electronic storage of individual medical patient data - (in % of GPs)	53	66	83

⁷ Hospitals intended for short-term medical or surgical treatment and care

⁸ Iceland and Norway

⁹ Iceland, Norway and Turkey

*Figures are not fully comparable across years because of different sampling methodologies and questionnaires

Research and Development (R&D) in ICT

In 2010, Business Expenditure in R&D (BERD) by the ICT sector in Slovakia amounts to €6mn, up from €3mn the year before. BERD by the ICT sector represents 4% of total BERD, below the EU average of 17%, indicating relatively less of a research focus on ICT. Total BERD is 0.3% of GDP, below the EU average of 1.2%. In 2012, Public funding in R&D (GBAORD) in the ICT sector amounts to €14mn representing 4.9% to total GBAORD, below the EU average of 6.6%.

Indicator (including breakdown and unit)	Slovakia value				EU27/28 value			
	2009	2010	2011	2012	2009	2010	2011	2012
ICT BERD – Million €	3	6	-	-	25368	25993	-	-
ICT BERD - % of Total BERD	2	4	-	-	17	17	-	-
Total BERD - % GDP	0.2	0.3	-	-	1.2	1.2	-	-
ICT GBAORD – Million €	11	10	10	14	5958	6044	6118	5962
ICT GBAORD - % of Total GBAORD	4.9	3.9	3.1	4.9	6.5	6.5	6.6	6.6

Participation to the EU-funded Seventh Framework Programme for Research (FP7) in ICT

Over the period 2007-2013¹⁰ the EU co-funded projects in Slovakia in the ICT domain (FP7 Cooperation ICT Theme and e-infrastructures within Capacities) for a cumulated total of €12 million. Overall 35 Slovak organisations participated in 61 projects (so represented in 3% of all projects) and coordinated 5 projects.

In 2013 participation from higher education/research organizations was at 19% of funding, below the EU average (66%). Industrial participation was at 70% of funding, higher than the EU average (29%), all going to SMEs.

Participation (in terms of share of total funding) is higher in the following Strategic Objectives: ICT for the Enterprise, FET and Accompanying Measures.

Indicator	Slovakia value		EU28 value
	2012	2013	2013
Participations	5	9	3,493
Total EU funding to FP7 ICT projects – All organisations (Million €)	1.06	1.18	1,350
N. of organisations	5	9	1,780
New entries – All organisations (% of organisations)	20%	67%	41%
N. of SME participations - Total	1	3	679
N. of SME participations - % of total participations	20%	33%	19%
Funding by organisation type - % of EU funding			
SMEs	29%	70%	16%
Higher education/research organisations (HES/REC)	71%	19%	66%
Large enterprises	0%	0%	13%
Other organizations	0%	11%	4%

¹⁰ Data for the period 2007 – 2013 (it considers grants signed up to December 2013).

Top 20 Slovak organisations by funding, 2007 - 2013 (cumulated figures)

#	Organisation	Type	EU funding (€)	% of SK total cumulated EU funding
1	TECHNICAL UNIVERSITY KOSICE	HES/REC	1,874,878	15.9%
2	USTAV INFORMATIKY, SLOVENSKA AKADEMIA VIED	HES/REC	1,576,916	13.3%
3	BROADBIT SLOVAKIA SRO	LARGE	1,263,328	10.7%
4	FYZIKALNY USTAV SLOVENSKEJ AKADEMIE VIED	HES/REC	1,096,750	9.3%
5	INTERSOFT A.S.	LARGE	1,071,374	9.1%
6	SLOVENSKA TECHNICKA UNIVERZITA V BRATISLAVE	HES/REC	632,041	5.3%
7	NEMETSCHEK ALLPLAN SLOVENSKO SRO	SME	557,400	4.7%
8	Ardaco, a.s.	LARGE	406,659	3.4%
9	INDRA Slovakia, a.s.	LARGE	389,999	3.3%
10	UNIVERZITA KOMENSKÉHO V BRATISLAVE	HES/REC	330,479	2.8%
11	CORINEX COMMUNICATIONS AS	LARGE	328,416	2.8%
12	TOWERCOM AS	SME	282,865	2.4%
13	ADDSSEN SRO	LARGE	227,747	1.9%
14	SLOVAK TELEKOM AS	LARGE	169,584	1.4%
15	UNIVERZITA PAVLA JOZEFA SAFARIKA V KOSICIACH	HES/REC	168,051	1.4%
16	I-EUROPA SRO	LARGE	162,175	1.4%
17	ELFA S.R.O.	LARGE	141,762	1.2%
18	Institute of Electrical Engineering, Slovak Academy of Sciences	HES/REC	124,400	1.1%
19	SAE-AUTOMATION, S.R.O	LARGE	122,700	1.0%
20	JAZYKOVEDNY USTAV LUDOVITA STURA SLOVENSKEJ AKADEMIE VIED	HES/REC	116,400	1.0%
	Total		11,043,924	93.5%
	SK total cumulated EU Funding		11,815,784	