

The report is based on data regularly collected from all operators in the Croatian electronic communications market. In certain cases HAKOM cannot observe irregularities in reports/data until several consequent periods are compared. As a result, HAKOM emphasises that minor discrepancies from actual data are possible.

HAKOM does not assume the responsibility for the quality of data reports delivered by the operators.

Fixed telephony services	Q3 2019	quarterly change Q3 2019 – Q2 2019	annual change Q3 2019 – Q3 2018
<b>Total fixed telephony services revenue (HRK)</b>	322.163.640	-0,97%	-8,54%
<i>Retail revenue</i>	272.594.593	-2,33%	-8,20%
<i>Wholesale revenue</i>	49.569.047	6,54%	-10,40%
Total number of fixed lines	1.338.712	-0,28%	-1,60%
Stand-alone – fixed voice telephony subscribers	381.237	-2,45%	-21,11%
Number of subscribers <sup>1</sup>	1.263.845	0,15%	-0,25%
CPS subscribers	50.751	-5,26%	-14,13%
Fixed originating voice minutes <sup>2</sup> (min)	387.229.320	-4,85%	-10,31%

<sup>1</sup> CPS (carrier pre-selection) subscribers are included

<sup>2</sup> includes all types of calls (local, national, international calls, calls to mobile networks and calls to VAS numbers)

Mobile telephony services	Q3 2019	quarterly change Q3 2019 – Q2 2019	annual change Q3 2019 – Q3 2018
<b>Total mobile telephony services revenue (HRK)</b>	1.120.862.930	7,35%	-3,95%
<i>Retail revenue</i>	882.024.431	2,01%	-2,96%
<i>Retail revenue - Residential</i>	656.074.818	3,18%	-5,52%
<i>Prepaid subscribers</i>	262.546.615	5,19%	-8,64%
<i>Postpaid subscribers</i>	393.528.204	1,88%	-3,32%
<i>Retail revenue - Business</i>	225.949.613	-1,24%	5,33%
<i>Wholesale revenue</i>	238.838.499	33,02%	-7,43%
<b>Total number of active subscribers<sup>3</sup></b>	<b>4.604.635</b>	<b>3,54%</b>	<b>1,28%</b>
<i>Residential</i>	3.865.502	4,12%	1,01%
<i>Prepaid subscribers</i>	2.220.591	6,58%	-2,45%
<i>Postpaid subscribers</i>	1.644.911	0,97%	6,11%
<i>Business</i>	739.133	0,60%	2,68%
Mobile penetration <sup>4</sup>	107,46%	3,54%	1,28%
Mobile originating voice minutes <sup>5</sup> (min)	2.426.827.105	-0,91%	4,25%
International <i>roaming</i> traffic – own subscribers (min)	166.671.650	-3,40%	17,36%
International <i>roaming</i> traffic – foreign subscribers (min)	431.085.895	136,13%	23,24%
Total SMS sent	453.203.257	-3,24%	-13,34%
Total MMS sent	2.581.225	-7,05%	-17,88%

<sup>3</sup> Definition of active pre-paid subscriber: Subscriber who has used a mobile service or refilled the account in the last 90 days. This definition applies to all operators. Before 2011 each operator used a different active pre-paid subscriber definition (90/180/270 days).

<sup>4</sup> Mobile penetration has been calculated according to the last census of population from 2011

<sup>5</sup> includes all types of calls (local, national, international calls, calls to mobile networks and calls to VAS numbers)

<b>Broadband access services</b>	<b>Q3 2019</b>	<b>quarterly change Q3 2019 – Q2 2019</b>	<b>annual change Q3 2019 – Q3 2018</b>
<b>Total access services revenue (HRK)</b>	1.308.351.655	16,54%	2,76%
<i>Fixed broadband revenue<sup>6</sup></i>	497.441.290	1,63%	1,65%
<i>Mobile broadband revenue</i>	810.910.365	28,06%	3,46%
<b>Total number of broadband subscriptions (lines)</b>	4.840.023	1,38%	3,09%
<b><i>Fixed broadband subscriptions (lines)</i></b>	1.156.424	0,98%	3,87%
<i>Own copper access</i>	431.598	0,61%	-1,09%
<i>xDSL based broadband using full local-loop unbundling</i>	141.551	-3,95%	-11,98%
<i>xDSL based broadband using shared access</i>	19	-5,00%	-40,63%
<i>FttX – own infrastructure</i>	102.795	9,50%	30,75%
<i>Bitstream (xDSL, FttX)</i>	157.664	-2,21%	1,18%
<i>Cable broadband</i>	164.556	-1,18%	3,07%
<i>Fixed wireless access (FWA)</i>	153.346	7,51%	29,60%
<i>Other</i>	4.895	5,34%	32,30%
<b><i>Mobile broadband subscriptions</i></b>	3.683.599	1,51%	2,85%
<b><i>Residential</i></b>	2.756.893	2,13%	2,56%
<i>Dedicated data subscriptions (cards/modems/keys etc.)</i>	143.499	3,47%	3,59%
<i>Mobile phones<sup>7</sup></i>	2.613.361	2,05%	2,50%
<i>M2M</i>	33	6,45%	10,00%
<b><i>Business</i></b>	926.706	-0,28%	3,74%
<i>Dedicated data subscriptions (cards/modems/keys etc.)</i>	149.995	2,05%	0,96%

<sup>6</sup> Dial up revenue is also included

<sup>7</sup> Number of subscribers which have made an internet mobile connection in the last 90 days through mobile phones

<i>Mobile phones</i> <sup>8</sup>	542.078	-3,11%	-0,34%
<i>M2M</i>	234.633	5,28%	16,82%
Number of bundled services subscribers – 2D	483.799	-0,09%	3,73%
Number of bundled services subscribers – 3D	280.096	-0,88%	-4,54%
Number of bundled services subscribers – 4D	263.927	3,98%	41,99%
Stand-alone – broadband subscribers	143.175	2,54%	-22,12%
<b>Broadband traffic (GB)</b>	417.126.049	13,70%	20,03%
<i>Fixed broadband traffic (GB)</i> <sup>9</sup>	314.784.993	7,35%	11,83%
<i>Mobile broadband traffic (GB)</i>	102.341.056	38,99%	54,94%
<b>Television services</b>	<b>Q3 2019</b>	<b>quarterly change Q3 2019 – Q2 2019</b>	<b>annual change Q3 2019 – Q3 2018</b>
<b>Television services revenue (HRK)</b>	198.338.424	0,24%	2,69%
Stand-alone – TV subscribers	145.464	-3,21%	-33,26%
Cable reception	175.834	-0,85%	1,08%
IPTV	435.220	0,75%	4,76%
Satellite reception (SAT TV)	148.142	0,29%	2,44%
Digital terrestrial reception – pay TV	68.058	-1,23%	-5,46%
RH households with digital terrestrial reception only <sup>10</sup>	653.251	-0,20%	-3,15%

<sup>8</sup> Number of subscribers which have made an internet mobile connection in the last 90 days through mobile phones

<sup>9</sup> Fixed wireless broadband traffic is included

<sup>10</sup> **RH households with digital terrestrial reception only** = (1.520.026 (number of households in the Republic of Croatia according to the last census of population from 2011) – 2,6% households without TV) – (number of Cable receptions + number of IPTV + number of Satellite receptions + digital terrestrial reception\_pay TV)