

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	Q4 2018	quarterly change Q4 2018 – Q3 2018	annual change Q4 2018 – Q4 2017
<b>Total fixed telephony services revenue (HRK)</b>	317.140.608	-9,97%	-15,32%
<i>Retail revenue</i>	271.491.946	-8,57%	-15,36%
<i>Wholesale revenue</i>	45.648.662	-17,48%	-15,11%
Total number of fixed lines	1.346.679	-1,02%	-2,05%
Stand-alone – fixed voice telephony subscribers	415.130	-14,09%	-13,65%
Number of subscribers <sup>1</sup>	1.263.837	-0,25%	-0,96%
CPS subscribers	57.352	-2,96%	-18,25%
Fixed originating voice minutes <sup>2</sup> (min)	453.025.441	4,93%	-10,64%

<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	Q4 2018	quarterly change Q4 2018 – Q3 2018	annual change Q4 2018 – Q4 2017
<b>Total mobile telephony services revenue (HRK)</b>	1.151.692.305	-1,31%	3,06%
<i>Retail revenue</i>	991.331.207	9,07%	5,82%
<i>Retail revenue - Residential</i>	756.829.122	8,99%	6,42%
<i>Prepaid subscribers</i>	295.479.724	2,82%	5,23%
<i>Postpaid subscribers</i>	461.349.398	13,35%	7,20%
<i>Retail revenue - Business</i>	234.502.086	9,32%	3,93%
<i>Wholesale revenue</i>	160.361.098	-37,85%	-11,27%
<b>Total number of active subscribers<sup>3</sup></b>	<b>4.388.476</b>	<b>-3,48%</b>	<b>1,69%</b>
<i>Residential</i>	3.666.508	-4,19%	1,45%
<i>Prepaid subscribers</i>	2.088.477	-8,26%	-2,41%
<i>Postpaid subscribers</i>	1.578.031	1,79%	7,07%
<i>Business</i>	721.968	0,30%	2,90%
Mobile penetration <sup>4</sup>	102,42%	-3,47%	1,69%
Mobile originating voice minutes <sup>5</sup> (min)	2.335.908.179	0,34%	3,68%
International <i>roaming</i> traffic – own subscribers (min)	157.653.473	11,01%	59,77%
International <i>roaming</i> traffic – foreign subscribers (min)	66.745.042	-80,92%	-5,67%
Total SMS sent	508.954.008	-2,68%	-12,83%
Total MMS sent	3.001.708	-4,50%	-11,94%

<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>Q4 2018</b>	<b>quarterly change Q4 2018 – Q3 2018</b>	<b>annual change Q4 2018 – Q4 2017</b>
<b>Total access services revenue (HRK)</b>	1.094.160.459	-14,06%	3,61%
<i>Fixed broadband revenue<sup>6</sup></i>	496.363.891	1,43%	4,40%
<i>Mobile broadband revenue</i>	597.796.568	-23,73%	2,96%
<b>Total number of broadband subscriptions (lines)</b>	4.634.392	-1,29%	1,06%
<b><i>Fixed broadband subscriptions (lines)</i></b>	1.120.360	0,63%	2,23%
<i>Own copper access</i>	432.943	-0,78%	-0,90%
<i>xDSL based broadband using full local-loop unbundling</i>	156.380	-2,76%	-10,38%
<i>xDSL based broadband using shared access</i>	25	-21,88%	-61,54%
<i>FttX – own infrastructure</i>	78.717	0,13%	0,37%
<i>Bitstream (xDSL, FttX)</i>	158.341	1,61%	1,12%
<i>Cable broadband</i>	163.148	2,19%	4,97%
<i>Fixed wireless access (FWA)</i>	126.777	7,14%	39,27%
<i>Other</i>	4.029	8,89%	35,11%
<b><i>Mobile broadband subscriptions</i></b>	3.514.032	-1,88%	0,70%
<b><i>Residential</i></b>	2.617.315	-2,63%	-1,90%
<i>Dedicated data subscriptions (cards/modems/keys etc.)</i>	134.100	-3,20%	-4,75%
<i>Mobile phones<sup>7</sup></i>	2.483.187	-2,60%	-1,75%
<i>M2M</i>	28	-6,67%	12,00%
<b><i>Business</i></b>	896.717	0,38%	9,14%
<i>Dedicated data subscriptions (cards/modems/keys etc.)</i>	142.808	-3,87%	-0,52%

<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>	542.260	-0,30%	3,20%
<i>M2M</i>	211.649	5,38%	38,67%
Number of bundled services subscribers – 2D	497.827	6,74%	-1,66%
Number of bundled services subscribers – 3D	289.905	-1,20%	-4,07%
Number of bundled services subscribers – 4D	211.762	13,93%	52,86%
Stand-alone – broadband subscribers	136.454	-25,78%	-17,51%
<b>Broadband traffic (GB)</b>	<b>340.956.979</b>	<b>-1,89%</b>	<b>28,81%</b>
<i>Fixed broadband traffic (GB)</i> <sup>9</sup>	285.852.619	1,55%	21,00%
<i>Mobile broadband traffic (GB)</i>	55.104.360	-16,57%	93,73%
<b>Television services</b>	<b>Q4 2018</b>	<b>quarterly change Q4 2018 – Q3 2018</b>	<b>annual change Q4 2018 – Q4 2017</b>
<b>Television services revenue (HRK)</b>	192.094.160	-0,54%	4,75%
Stand-alone – TV subscribers	171.674	-21,23%	-31,53%
Cable reception	178.244	2,47%	5,33%
IPTV	424.389	2,15%	2,60%
Satellite reception (SAT TV) <sup>10</sup>	143.806	-0,55%	3,32%
Digital terrestrial reception – pay TV	73.299	1,82%	8,75%
RH households with digital terrestrial reception only <sup>11</sup>	660.767	-2,04%	-4,38%

<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> HRT cards were included in the previous reports

<sup>11</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)