

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	Q2 2023	quarterly change Q2 2023 – Q1 2023	annual change Q2 2023 – Q2 2022
<b>Total fixed telephony services revenue (EUR)</b>	<b>30.935.563</b>	<b>-0,14%</b>	<b>-9,71%</b>
Retail revenue	28.718.414	-0,13%	-6,41%
Wholesale revenue	2.217.150	-0,28%	-38,03%
<b>Total number of fixed lines</b>	<b>1.219.681</b>	<b>-0,07%</b>	<b>-3,03%</b>
Stand-alone – fixed voice telephony subscribers	178.531	-3,59%	-12,44%
Number of bundled services subscribers – 2D	242.256	-1,63%	-3,96%
Number of bundled services subscribers – 3D	362.719	0,13%	-1,81%
Number of bundled services subscribers – 4D	243.599	3,20%	6,57%
Number of subscribers <sup>1</sup>	1.129.602	0,03%	-2,52%
CPS subscribers	20.533	-10,07%	-37,49%
<b>Fixed originating voice minutes<sup>2</sup> (min)</b>	<b>273.216.904</b>	<b>-7,64%</b>	<b>-12,19%</b>

<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	Q2 2023	quarterly change Q2 2023 – Q1 2023	annual change Q2 2023 – Q2 2022
<b>Total mobile telephony services revenue (EUR)</b>	<b>129.298.410</b>	<b>-2,04%</b>	<b>12,13%</b>
<b>Retail revenue</b>	<b>113.051.014</b>	<b>0,86%</b>	<b>19,37%</b>
Retail revenue - Residential	82.894.045	1,57%	16,96%
<i>Prepaid subscribers</i>	21.516.049	1,67%	10,49%
<i>Postpaid subscribers</i>	61.377.996	1,54%	19,41%
Retail revenue - Business	30.150.904	-1,07%	26,54%
<b>Wholesale revenue</b>	<b>16.247.396</b>	<b>-18,39%</b>	<b>-21,15%</b>
<b>Total number of active subscribers (3G, 4G, 5G<sup>3</sup>)</b>	<b>4.562.282</b>	<b>2,41%</b>	<b>1,22%</b>
Residential	3.749.108	2,58%	0,76%
<i>Prepaid subscribers</i>	1.608.445	3,48%	-6,96%
<i>Postpaid subscribers</i>	2.140.663	1,91%	7,47%
Business	813.174	1,62%	3,41%
Mobile penetration <sup>4</sup>	117,83%	2,41%	1,22%
<b>Mobile originating voice minutes<sup>5</sup> (min)</b>	<b>2.779.163.167</b>	<b>-0,28%</b>	<b>-7,21%</b>
International <i>roaming</i> traffic – own subscribers (min)	137.635.104	-11,70%	-16,62%
International <i>roaming</i> traffic – foreign subscribers (min)	213.326.035	187,03%	4,04%
Total SMS sent	230.412.674	-7,61%	-21,38%
Total MMS sent	1.524.852	8,43%	-26,94%

<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

Internet access services – retail level	Q2 2023	quarterly change Q2 2023 – Q1 2023	annual change Q2 2023 – Q2 2022
<b>Total access services revenue (EUR)</b>	<b>197.673.713</b>	<b>11,39%</b>	<b>17,82%</b>
<i>Fixed broadband revenue</i>	71.545.119	40,13%	38,46%
<i>Mobile broadband revenue</i>	126.008.587	-0,26%	8,55%
<i>Satellite access revenue</i>	120.007	57,76%	559,67%
<b>Total number of broadband subscriptions (lines)</b>	<b>6.614.025</b>	<b>2,88%</b>	<b>6,79%</b>
<b>Fixed broadband subscriptions (lines)</b>	<b>1.091.145</b>	<b>0,94%</b>	<b>2,62%</b>
<u>Copper access network</u>	649.799	-1,05%	-4,71%
<i>Access over own copper access network</i>	439.278	-0,19%	-0,87 %
<i>xDSL based broadband using full local-loop unbundling</i>	44.235	-5,63%	-37,36%
<i>xDSL based broadband using shared access</i>	2	-71,43%	-99,82%
<i>Bitstream access over copper access network (xDSL)</i>	164.284	-2,04%	-0,40%
<u>Fiber optic access network</u>	<b>217.835</b>	<b>7,52%</b>	<b>32,80%</b>
<i>Accesss over own fiber access network</i>	169.738	6,75%	29,14%
<i>Fiber unbundling access</i>	14.749	8,60%	32,93%
<i>Bitstream access over fiber optic access network</i>	33.348	11,10%	55,06%
<u>Cable access network</u>	176.331	-0,33 %	0,14%
<u>Fixed wireless access (FWA)</u>	35.050	2,88%	8,41%
<u>Satellite access</u>	1.299	77,95%	1.465,06%

<sup>4</sup> Mobile penetration has been calculated according to the last census of population from 2021

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

High Quality Access	12.831	7,06%	22,71%
<b>Mobile broadband subscriptions (3G, 4G, 5G etc)</b>	<b>5.522.880</b>	<b>3,27%</b>	<b>7,65%</b>
<i>Residential (3G and 4G)</i>	3.680.758	-0,66%	-2,21%
<i>Dedicated data subscriptions (cards/modems/keys etc.)</i>	224.826	17,39%	62,43%
<i>Mobile phones<sup>6</sup></i>	3.241.261	-2,05%	-4,77%
<i>M2M</i>	3	0,00%	-40.00%
<i>Broadband access at fixed location via mobile network</i>	214.668	4,81%	-3,25%
<i>Residential(5G)</i>	525.618	49,42%	190,72%
<i>Dedicated data subscriptions (cards/modems/keys etc.)</i>	4.275	158,00%	578,57%
<i>Mobile phones</i>	514.278	48,69%	188,20%
<i>M2M</i>	0	-	-
<i>Broadband access at fixed location via mobile network</i>	7.065	66,20%	309,80 %
<i>Business (3G and 4G)</i>	1.172.848	-0,96%	3,89%
<i>Dedicated data subscriptions (cards/modems/keys etc.)</i>	156.262	3,68%	18,08%
<i>Mobile phones</i>	698.378	-2,56%	2,26%
<i>M2M</i>	265.895	-0,45%	0,71%
<i>Broadband access at fixed location via mobile network</i>	52.313	5,41%	13,91%
<i>Business (5G)</i>	143.656	34,40%	154,03%
<i>Dedicated data subscriptions (cards/modems/keys etc.)</i>	9.635	26,73%	170,95%
<i>Mobile phones</i>	114.798	37,50%	149,69%
<i>M2M</i>	17.923	19,65%	169,97%
<i>Broadband access at fixed location via mobile network</i>	1.300	58,54%	242,11%

<sup>6</sup> Number of subscribers which have made an internet mobile connection in the last 90 days through mobile phones

xDSL with hybrid service	98.577	-1,29%	-4,65 %
Number of standalone internet access service subscribers	4.109.327	3,70%	2,22%
Number of bundled services subscribers – 2D	384.299	0,37%	0,40%
Number of bundled services subscribers – 3D	415.872	0,72%	1,33%
Number of bundled services subscribers – 4D	243.599	3,20%	6,57%
<b>Broadband traffic (TB)</b>	<b>1.047.213</b>	<b>5,58%</b>	<b>23,13%</b>
<i>Fixed broadband traffic (TB)</i>	707.564	3,18%	20,19%
<i>Mobile broadband traffic (TB)</i>	339.650	10,96%	29,73%

Television services	Q2 2023	quarterly change Q2 2023 – Q1 2023	annual change Q2 2023 – Q2 2022
<b>Television services revenue (EUR)</b>	<b>31.310.344</b>	<b>-1,21%</b>	<b>4,84%</b>
Cable TV revenues	5.419.762	-3,96%	-5,25%
IPTV revenues	18.060.963	-0,74%	9,67%
Satellite revenues	3.881.576	-1,05%	-4,10%
Digital terrestrial TV revenues	3.044.679	-2,04%	0,23%
Own OTT service revenues	903.365	9,45%	52,74%
<b>Total number of pay-TV subscriptions (lines)</b>	<b>932.187</b>	<b>0,58%</b>	<b>0,12%</b>
Cable reception	151.688	-0,80%	-3,04%
<i>Residential</i>	147.959	-0,83%	-3,07%
<i>Business</i>	3.729	0,40%	-2,15%
IPTV	487.109	0,79%	1,89%

<i>Residential</i>	460.927	0,78%	2,13%
<i>Business</i>	26.182	0,97%	-2,23%
Satellite reception (SAT TV)	131.697	-0,04%	-5,13%
<i>Residential</i>	121.438	-0,84%	-5,48%
<i>Business</i>	10.259	10,48%	-0,69%
Digital terrestrial reception – pay TV	96.801	0,16%	-8,50%
<i>Residential</i>	95.910	0,18%	-8,57%
<i>Business</i>	891	-1,00%	0,11%
Own OTT service	64.892	4,36%	24,87%
<i>Residential</i>	56.852	4,97%	28,30%
<i>Business</i>	8.040	0,21%	5,02%
Stand-alone – TV subscribers	145.980	33,74%	-1,80%
Number of bundled services subscribers – 2D	87.280	1,68%	-4,02%
Number of bundled services subscribers – 3D	294.176	-0,96%	-0,22%
Number of bundled services subscribers – 4D	243.599	3,20%	6,57%

*\*The "RH households with digital terrestrial reception only" indicator will no longer be reported from Q1 2023. As HAKOM does not collect the mentioned data but only estimates it based on other collected data and certain assumptions that do not have to be entirely correct, it will no longer be reported to avoid confusion and possibly wrong conclusions about the trend of the mentioned indicator.*

*\*\*The values of individual indicators in this report may differ from previously published values due to corrections and/or subsequently submitted reports by individual operators.*