

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 2022	quarterly change Q4 2022 – Q3 2022	annual change Q4 2022 – Q4 2021
Total fixed telephony services revenue (HRK)	238.497.650	-7,35%	-9,35%
Retail revenue	220.512.011	-4,15%	-6,73%
Wholesale revenue	17.985.639	-34,21%	-32,59%
Total number of fixed lines	1.233.109	-1,23%	-2,64%
Stand-alone – fixed voice telephony subscribers	415.580	-3,12%	-8,32%
Number of subscribers ¹	1.182.557	-1,01%	-1,77%
CPS subscribers	31.238	-1,41%	-11,98%
Fixed originating voice minutes ² (min)	293.871.754	-0,62%	-22,53%

¹ CPS (carrier pre-selection) subscribers are included

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

Mobile telephony services	Q4 2022	quarterly change Q4 2022 – Q3 2022	annual change Q4 2022 – Q4 2021
Total mobile telephony services revenue (HRK)³	1.052.741.500	4,27%	7,98%
Retail revenue	884.830.709	10,42%	7,03%
<i>Retail revenue - Residential</i>	662.183.700	8,02%	6,39%
<i>Prepaid subscribers</i>	219.814.931	5,22%	2,52%
<i>Postpaid subscribers</i>	442.368.769	9,46%	8,43%
<i>Retail revenue - Business</i>	222.647.008	18,23%	8,98%
Wholesale revenue	167.910.791	-19,39%	13,30%
Total number of active subscribers⁴	4.480.469	-3,54%	1,78%
<i>Residential</i>	3.685.153	-4,41%	1,48%
<i>Prepaid subscribers</i>	1.615.080	-11,58%	-6,26%
<i>Postpaid subscribers</i>	2.070.073	2,04%	8,47%
<i>Business</i>	795.316	0,69%	3,19%
Mobile penetration ⁵	115,22%	-3,54%	12,15%
Mobile originating voice minutes ⁶ (min)	2.645.389.923	-3,74%	-10,13%
International <i>roaming</i> traffic – own subscribers (min)	139.044.825	0,60%	-9,39%
International roaming traffic – foreign subscribers (min)	95.573.306	-79,19%	8,88%
Total SMS sent	247.542.509	-4,26%	-21,55%
Total MMS sent	1.570.728	-0,28%	-27,72%

³ Due to system change, one operator has inconsistency in delivered data.

Broadband access services	Q4 2022	quarterly change Q4 2022 – Q3 2022	annual change Q4 2022 – Q4 2021
Total access services revenue (HRK)	1.364.233.060	-16,01%	4,68%
<i>Fixed broadband revenue⁷</i>	465.990.971	-1,02%	1,05%
<i>Mobile broadband revenue</i>	921.424.320	-20,12%	9,42%
Total number of broadband subscriptions (lines)	5.992.716	-3,20%	3,95%
<i>Fixed broadband subscriptions (lines)</i>	1.087.689	0,27%	3,74%
<i>Own copper access</i>	414.367	-0,06%	-1,57%
<i>xDSL based broadband using full local-loop unbundling</i>	52.733	-10,85%	-41,64%
<i>xDSL based broadband using shared access</i>	2	-71,43%	-75,00%
<i>FttX – own infrastructure</i>	198.428	20,76%	26,29%
<i>Bitstream (xDSL, FttX)</i>	203.373	2,57%	19,05%
<i>Cable broadband</i>	180.936	0,52%	3,53%
<i>Fixed wireless access (FWA)</i>	31.519	-9,04%	12,00%
<i>Other</i>	6.331	-4,09%	9,00%
<i>Mobile broadband subscriptions</i>	4.905.027	-3,94%	3,99%
<i>Residential</i>	3.745.473	-5,25%	3,54%
<i>Dedicated data subscriptions (cards/modems/keys etc.)</i>	384.917	-7,80%	2,61%

⁴ 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).

⁵ Mobile penetration has been calculated according to the last census of population from 2011

⁶ includes all types of calls (local, national, international calls, calls to mobile networks and calls to VAS numbers)

⁷ Dial up revenue is also included

<i>Mobile phones</i> ⁸	3.360.552	-4,94%	3,65%
<i>M2M</i>	4	0,00%	-20,00%
<i><u>Business</u></i>	1.159.554	0,51%	5,47%
<i>Dedicated data subscriptions (cards/modems/keys etc.)</i>	200.265	-3,25%	7,11%
<i>Mobile phones</i> ⁹	667.339	0,62%	3,61%
<i>M2M</i>	291.950	3,02%	8,78%
Number of bundled services subscribers – 2D	323.987	0,47%	4,46%
Number of bundled services subscribers – 3D	262.453	-0,65%	-5,86%
Number of bundled services subscribers – 4D	339.374	0,39%	4,87%
Stand-alone – broadband subscribers	165.603	4,99%	15,67%
Broadband traffic (GB)	891.990.074	-1,34%	16,94%
<i>Fixed broadband traffic (GB)</i>	619.917.029	2,94%	16,08%
<i>Mobile broadband traffic (GB)</i>	272.073.045	-9,86%	18,95%

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

⁹ Number of subscribers which have made an internet mobile connection in the last 90 days through mobile phones

Television services	Q4 2022	quarterly change Q4 2022 – Q3 2022	annual change Q4 2022 – Q4 2021
Television services revenue (HRK)	225.991.212	1,17%	4,28%
Total number of pay-TV subscriptions (lines)	872.635	-0,51%	-0,07%
Cable reception	182.024	-1,54%	0,76%
<i>Residential</i>	176.648	1,53%	0,43%
<i>Business</i>	5.376	1,64%	12,63%
IPTV¹⁰	457.613	0,15%	1,89%
<i>Residential</i>	432.406	0,17%	1,79%
<i>Business</i>	25.207	-0,20%	3,68%
Satellite reception (SAT TV)	131.831	-3,49%	-5,87%
<i>Residential</i>	123.215	-2,53%	-6,48%
<i>Business</i>	8.616	-15,50%	3,67%
Digital terrestrial reception – pay TV	101.167	-2,98%	-2,15%
<i>Residential</i>	100.258	-3,02%	-2,40%
<i>Business</i>	909	0,55%	37,10%
Stand-alone – TV subscribers	85.465	-4,69%	-5,85%
RH households with digital terrestrial reception only ¹¹	528.389	0,85%	-12,99%

¹⁰ Number of IPTV lines was corrected on 15.09.2022.

¹¹ **RH households with digital terrestrial reception only** = (1.438.423 (number of households in the Republic of Croatia according to the last census of population from 2021) – 2,6% households without TV) – (number of cable receptions + number of IPTV + number of satellite receptions + digital terrestrial reception pay TV)