

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	Q1 2023	quarterly change Q1 2023 - Q4 2022	annual change Q1 2023 - Q1 2022
Total fixed telephony services revenue (EUR)	30,966,045	-3.19%	-9.52%
Retail revenue	28,753,323	-1.90%	-6.29%
Wholesale revenue	2,212,721	-17.25%	-37.52%
Total number of fixed lines	1,220,515	-1.06%	-2.93%
Stand-alone – fixed voice telephony subscribers	185,185	-3.70%	-12.29%
Broj korisnika telefonske usluge u nepokretnoj mreži u 2D paketima	246,265	-0.99%	-2.05%
Broj korisnika telefonske usluge u nepokretnoj mreži u 3D paketima	362,255	-1.59%	-2.07%
Broj korisnika telefonske usluge u nepokretnoj mreži u 4D paketima	236,056	0.36%	4.99%
Number of subscribers ¹	1,129,248	-0.97%	-2.61%
CPS subscribers	22,831	-26.91%	-32.46%
Fixed originating voice minutes ² (min)	295,855,386	0.41%	-17.21%

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	Q1 2023	quarterly change Q1 2023 - Q4 2022	annual change Q1 2023 - Q1 2022
Total mobile telephony services revenue (EUR)	131,995,346	-5.53%	13.34%
Retail revenue	112,086,055	-4.56%	16.11%
<i>Retail revenue - Residential</i>	81,609,870	-7.14%	13.27%
<i>Prepaid subscribers</i>	21,162,081	-12.17%	8.44%
<i>Postpaid subscribers</i>	60,447,789	-5.24%	15.06%
<i>Retail revenue - Business</i>	30,476,185	3.13%	24.48%
Wholesale revenue	19,909,291	-10.66%	-0.11%
Total number of active subscribers (3G, 4G, 5G³)	4,498,260	0.40%	2.16%
<i>Residential</i>	3,698,031	0.35%	1.98%
<i>Prepaid subscribers</i>	1,558,623	-3.50%	-7.31%
<i>Postpaid subscribers</i>	2,139,408	3.35%	10.00%
<i>Business</i>	800,229	0.62%	3.02%
Mobile penetration ⁴	116.18%	0.40%	2.16%
Mobile originating voice minutes ⁵ (min)	2,786,922,938	5.35%	-1.86%
International <i>roaming</i> traffic – own subscribers (min)	155,878,724	11.97%	4.15%
International roaming traffic – foreign subscribers (min)	74,322,144	-23.74%	2.70%
Total SMS sent	249,395,416	0.75%	-10.77%
Total MMS sent	1,406,349	-10.47%	-28.25%

³ Definition of active pre-paid subscriber: Subscriber who has used a mobile service or refilled the account in the last 90 days

⁴ Mobile penetration has been calculated according to the last census of population from 2021

Internet access services – retail level	Q1 2023	quarterly change Q1 2023 - Q4 2022	annual change Q1 2023 - Q1 2022
Total access services revenue (EUR)	177,316,286	2.56%	8.28%
<i>Fixed broadband revenue</i>	50,907,339	-3.46%	0.81%
<i>Mobile broadband revenue</i>	126,332,880	5.19%	11.59%
<i>Satellite access revenue</i>	76,068	36.75%	83.16%
Total number of broadband subscriptions (lines)	6,427,732	4.09%	6.79%
<i>Fixed broadband subscriptions (lines)</i>	1,079,563	0.14%	2.45%
<u>Copper access network</u>	654,706	-1.80%	-4.31%
<i>Access over own copper access network</i>	440,125	-0.23%	-1.06%
<i>xDSL based broadband using full local-loop unbundling</i>	46,872	-16.33%	-42.86%
<i>xDSL based broadband using shared access</i>	7	250.00%	-99.26%
<i>Bitstream access over copper access network (xDSL)</i>	167,702	-1.09%	7.27%
<u>Fiber optic access network</u>	202,608	7.55%	34.04%
<i>Access over own fiber access network</i>	159,012	6.56%	31.69%
<i>Fiber unbundling access</i>	13,581	4.84%	29.69%
<i>Bitstream access over fiber optic access network</i>	30,015	14.57%	50.56%
<u>Cable access network</u>	176,911	-0.62%	0.23%
<u>Fixed wireless access (FWA)</u>	34,068	-0.17%	7.43%
<u>Satellite access</u>	730	24.57%	165.45%
<u>High Quality Access</u>	10,540	3.11%	6.36%

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

Mobile broadband subscriptions (3G, 4G, 5G etc)	5,348,169	4.93%	7.72%
<i>Residential (3G and 4G)</i>	3,705,309	4.17%	0.35%
<i>Dedicated data subscriptions (cards/modems/keys etc.)</i>	191,528	39.21%	68.86%
<i>Mobile phones⁶</i>	3,308,952	3.02%	-1.67%
<i>M2M</i>	3	-25.00%	-40.00%
<i>Broadband access at fixed location via mobile network</i>	204,826	-1.22%	-4.07%
<i>Residential(5G)</i>	351,778	4.61%	217.82%
<i>Dedicated data subscriptions (cards/modems/keys etc.)</i>	1,657	1.41%	282.68%
<i>Mobile phones</i>	345,870	4.60%	215.70%
<i>M2M</i>	0	-	-
<i>Broadband access at fixed location via mobile network</i>	4,251	6.65%	509.90%
<i>Business (3G and 4G)</i>	1,184,192	6.67%	5.58%
<i>Dedicated data subscriptions (cards/modems/keys etc.)</i>	150,716	15.89%	18.35%
<i>Mobile phones</i>	716,745	8.61%	4.44%
<i>M2M</i>	267,105	-2.75%	0.72%
<i>Broadband access at fixed location via mobile network</i>	49,626	8.96%	16.04%
<i>Business (5G)</i>	106,890	14.22%	163.32%
<i>Dedicated data subscriptions (cards/modems/keys etc.)</i>	7,603	32.07%	191.08%
<i>Mobile phones</i>	83,487	10.44%	155.11%
<i>M2M</i>	14,980	30.85%	194.19%
<i>Broadband access at fixed location via mobile network</i>	820	5.53%	403.07%
<i>xDSL with hybrid service</i>	99,866	-2.06%	-4.52%

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

Number of standalone internet access service subscribers	3,962,517	-0.39%	1.98%
Number of bundled services subscribers – 2D	382,881	0.27%	1.35%
Number of bundled services subscribers – 3D	412,903	-0.71%	0.93%
Number of bundled services subscribers – 4D	236,056	0.36%	4.99%
Broadband traffic (TB)	991,882	4.10%	16.80%
<i>Fixed broadband traffic (TB)</i>	685,785	3.90%	15.14%
<i>Mobile broadband traffic (TB)</i>	306,097	4.54%	20.72%

Television services	Q1 2023	quarterly change Q1 2023 - Q4 2022	annual change Q1 2023 - Q1 2022
Television services revenue (EUR)	31,695,019	3.26%	9.25%
Cable TV revenues	5,643,137	-0.06%	-0.63%
IPTV revenues	18,195,907	6.60%	11.86%
Satellite revenues	3,922,652	-3.28%	-0.52%
Digital terrestrial TV revenues	3,107,966	-1.73%	19.58%
Own OTT service revenues	825,357	8.57%	57.88%
Total number of pay-TV subscriptions (lines)	926,793	-0.60%	0.39%
Cable reception	152,914	-1.24%	-2.95%
<i>Residential</i>	149,200	-1.25%	-3.03%
<i>Business</i>	3,714	-0.75%	0.11%
IPTV⁷	483,303	-0.31%	1.84%

⁷ Number of IPTV lines was corrected on 15.09.2022.

<i>Residential</i>	453,993	-0.86%	1.32%
<i>Business</i>	29,310	9.17%	10.58%
Satellite reception (SAT TV)	131,751	-0.06%	-4.34%
<i>Residential</i>	122,465	-0.61%	-5.03%
<i>Business</i>	9,286	7.78%	5.92%
Digital terrestrial reception – pay TV	96,642	-4.47%	-8.17%
<i>Residential</i>	95,742	-4.47%	-8.17%
<i>Business</i>	900	-0.99%	6.26%
Own OTT service	62,183	4.11%	29.26%
<i>Residential</i>	54,160	5.72%	32.36%
<i>Business</i>	8,023	-5.60%	11.60%
Stand-alone – TV subscribers	109,156	-0.41%	-25.44%
Number of bundled services subscribers – 2D	85,839	-1.01%	-6.49%
Number of bundled services subscribers – 3D	297,030	-0.83%	0.96%
Number of bundled services subscribers – 4D	236,056	0.36%	4.99%
RH households with digital terrestrial reception only ⁸	536,414	1.52%	2.00%

⁸ 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)