

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)	30.979.333	-3,20%	-9,50%
Retail revenue	28.756.051	-1,92%	-6,31%
Wholesale revenue	2.223.282	-17,18%	-37,22%
Total number of fixed lines	1.220.523	-1,06%	-2,97%
Stand-alone – fixed voice telephony subscribers	185.185	-3,70%	-12,29%
Number of bundled services subscribers – 2D	246.267	-0,99%	-2,05%
Number of bundled services subscribers – 3D	362.255	-1,59%	-2,07%
Number of bundled services subscribers – 4D	236.056	0,36%	4,99%
Number of subscribers ¹	1.129.255	-0,97%	-2,61%
CPS subscribers	22.831	-26,91%	-32,46%
Fixed originating voice minutes² (min)	295.811.709	0,43%	-17,20%

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%
Retail revenue - Residential	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%
Retail revenue - Business	30.476.185	3,13%	24,48%
Wholesale revenue	19.909.291	-10,66%	-0,11%
Total number of active subscribers (3G, 4G, 5G³)	4.455.051	-0,57%	1,18%
Residential	3.654.822	-0,82%	0,78%
<i>Prepaid subscribers</i>	1.554.314	-3,76%	-7,56%
<i>Postpaid subscribers</i>	2.100.508	1,47%	8,00%
Business	800.229	0,62%	3,02%
Mobile penetration ⁴	115,06%	-0,57%	1,18%
Mobile originating voice minutes⁵ (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 <i>roaming</i> 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

Internet access services – retail level	Q1 2023	quarterly change Q1 2023 - Q4 2022	annual change Q1 2023 - Q1 2022
Total access services revenue (EUR)	177.466.450	2,56%	8,29%
<i>Fixed broadband revenue</i>	51.057.503	-3,43%	0,86%
<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)	6.429.177	4,09%	6,81%
Fixed broadband subscriptions (lines)	1.081.008	0,14%	2,54%
<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%

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

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

High Quality Access	11.985	2,54%	15,65%
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%

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

xDSL with hybrid service	99.866	-2,06%	-4,52%
Number of standalone internet access service subscribers	3.962.577	-0,39%	1,98%
Number of bundled services subscribers – 2D	382.883	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%	-0,73%
IPTV revenues	18.195.907	6,60%	11,90%
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%
IPTV	483.303	-0,31%	1,84%

<i>Residential</i>	457.372	-0,13%	2,07%
<i>Business</i>	25.931	-3,42%	-2,17%
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	-4,50%	-8,29%
<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%

**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.*