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 2019	quarterly change Q4 2019 – Q3 2019	annual change Q4 2019 – Q4 2018
Total fixed telephony services revenue (HRK)	297.421.039	-7,68%	-6,22%
Retail revenue	253.951.272	-6,84%	-6,46%
Wholesale revenue	43.469.768	-12,30%	-4,77%
Total number of fixed lines	1.326.702	-0,90%	-1,48%
Stand-alone – fixed voice telephony subscribers	370.010	-2,94%	-10,82%
Number of subscribers ¹	1.247.402	-1,30%	-1,30%
CPS subscribers	50.238	-1,01%	-12,40%
Fixed originating voice minutes ² (min)	407.186.290	5,15%	-10,12%

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 2019	quarterly change Q4 2019 – Q3 2019	annual change Q4 2019 – Q4 2018
Total mobile telephony services revenue (HRK)	1.078.481.167	-3,78%	-6,36%
Retail revenue	902.188.469	2,29%	-8,99%
Ratail revenue - Residential	659.205.258	0,48%	-12,90%
Prepaid subscribers	251.449.306	-4,23%	-14,90%
Postpaid subscribers	407.755.952	3,62%	-11,62%
<u>Retail revenue - Business</u>	242.983.211	7,54%	3,62%
Wholesale revenue	176.292.699	-26,19%	9,93%
Total number of active subscribers ³	4.404.652	-4,34%	0,37%
<u>Residential</u>	3.659.482	-5,33%	-0,19%
Prepaid subscribers	1.994.190	-10,20%	-4,51%
Postpaid subscribers	1.665.292	1,24%	5,53%
<u>Business</u>	745.170	0,82%	3,21%
Mobile penetration ⁴	102,80%	-4,34%	0,37%
Mobile originating voice minutes ⁵ (min)	2.401.999.028	-1,02%	2,83%
International roaming traffic – own subscribers (min)	172.076.215	3,24%	9,15%
International roaming traffic – foreign subscribers (min)	84.905.016	-80,30%	27,21%
Total SMS sent	455.586.353	0,53%	-10,49%
Total MMS sent	2.552.996	-1,09%	-14,95%

³ 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).

⁴ Mobile penetration has been calculated according to the last census of population from 2011

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

Broadband access services	Q4 2019	quarterly change Q4 2019 – Q3 2019	annual change Q4 2019 – Q4 2018
Total access services revenue (HRK)	1.156.495.116	-11,61%	5,70%
Fixed broadband revenue ⁶	504.429.051	1,40%	1,62%
Mobile broadband revenue	652.066.065	-19,59%	9,08%
Total number of broadband subscriptions (lines)	4.778.633	-1,27%	2,94%
Fixed broadband subscriptions (lines)	1.154.773	-0,14%	2,35%
Own copper access	428.353	-0,75%	-1,06%
xDSL based broadband using full local-loop unbundling	137.416	-2,92%	-12,13%
xDSL based broadband using shared access	18	-5,26%	-28,00%
FttX – own infrastructure	105.780	2,90%	22,11%
Bitstream (xDSL, FttX)	156.154	-0,96%	-1,38%
Cable broadband	166.957	1,46%	2,33%
Fixed wireless access (FWA)	155.091	1,14%	22,33%
Other	5.004	2,23%	24,20%
Mobile broadband subscriptions	3.623.860	-1,62%	3,13%
Residential	2.666.936	-3,26%	1,90%
Dedicated data subscriptions (cards/modems/keys etc.)	144.285	0,55%	7,60%
Mobile phones ⁷	2.522.622	-3,47%	1,59%
M2M	29	-12,12%	3,57%
Business	956.924	3,26%	6,71%
Dedicated data subscriptions (cards/modems/keys etc.)	148.886	-0,74%	4,26%

⁶ Dial up revenue is also included

⁷ Number of subscribers which have made an internet mobile connection in the last 90 days through mobile phones

Mobile phones ⁸	574.983	6,07%	6,03%
M2M	233.055	-0,67%	10,11%
Number of bundled services subscribers – 2D	478.996	-0,99%	-3,82%
Number of bundled services subscribers – 3D	280.728	0,23%	-3,19%
Number of bundled services subscribers – 4D	269.635	2,16%	27,33%
Stand-alone – broadband subscribers	139.761	-2,38%	-3,06%
Broadband traffic (GB)	404.985.517	-2,91%	18,78%
Fixed broadband traffic $(GB)^9$	313.398.821	-0,44%	9,64%
Mobile broadband traffic (GB)	91.586.696	-10,51%	66,21%
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Television services	Q4 2019	quarterly change Q4 2019 – Q3 2019	annual change Q4 2019 – Q4 2018
		quarterly change	annual change
Television services	Q4 2019	quarterly change Q4 2019 – Q3 2019	annual change Q4 2019 – Q4 2018
Television services Television services revenue (HRK)	Q4 2019 202.083.354	quarterly change Q4 2019 – Q3 2019 1,89%	annual change Q4 2019 – Q4 2018 5,20%
Television services Television services revenue (HRK) Stand-alone – TV subscribers	Q4 2019 202.083.354 140.407	quarterly change Q4 2019 – Q3 2019 1,89% -3,48%	annual change Q4 2019 – Q4 2018 5,20% -18,16%
Television services Television services revenue (HRK) Stand-alone – TV subscribers Cable reception	Q4 2019 202.083.354 140.407 176.857	quarterly change Q4 2019 – Q3 2019 1,89% -3,48% 0,58%	annual change Q4 2019 – Q4 2018 5,20% -18,16% -0,78%
Television services Television services revenue (HRK) Stand-alone – TV subscribers Cable reception IPTV	Q4 2019 202.083.354 140.407 176.857 436.609	quarterly change Q4 2019 – Q3 2019 1,89% -3,48% 0,58% 0,32%	annual change Q4 2019 – Q4 2018 5,20% -18,16% -0,78% 2,88%

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

⁹ Fixed wirelles broadband traffic is included

 $^{^{10}}$ **RH households with digital terrestrial reception only** = $(1.520.026 \text{ (number of households in the Republic of Croatia according to the last census of population from <math>2011) - 2.6\%$ households without TV) – (number of Cable receptions + number of IPTV + number of Satellite receptions + digital terrestrial reception_pay TV)