Croatian quarterly electronic communications market data for 3.quarter 2024.

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Data presented in this Summary of the quarterly electronic communications market indicators is based on statistical data HAKOM collects from all authorized operators quarterly. In certain cases, HAKOM cannot observe irregularities in reports/data until several consequent periods are compared. As a result, HAKOM emphasizes that minor discrepancies from actual data are possible. Also, the values of individual indicators in this report may deviate from the previously published values due to corrections and/or subsequently submitted reports by individual operators. HAKOM does not assume responsibility for the quality of data reports delivered by the operators.

Summary: Quarterly Key Data Report Q3 2024

In the first three quarters of 2024, compared to the same period last year, there is an increase in investments in fixed assets in the fixed network. As expected, the highest increase was in VHCN networks investments, in which 73 million euros were invested in the first nine months of 2024.

In the first nine months of 2024, total revenues from services on the electronic communications market amounted to EUR 1.363.861.588 million, which is an increase of 7,78 percent compared to the same period last year. Revenues from services via mobile networks are higher by 7,73 percent, and revenues from services via fixed networks by 7,87 percent

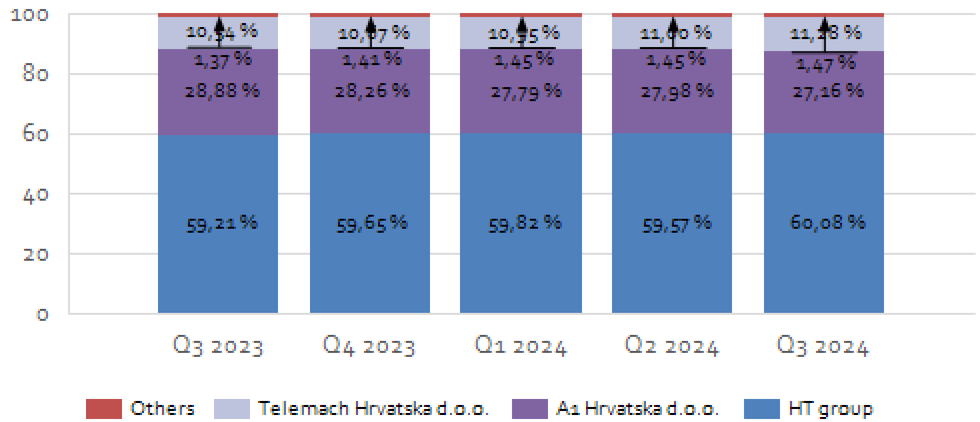
During the third quarter of 2024, there was an increase in the total number of connections and pay television revenues compared to the same quarter last year. The biggest percentage growth was in connections via own OTT service (115,64 percent) and related revenues (170,82 percent).
The structure of pay TV connections in terms of technology remains similar to earlier periods, with the largest share being connections via IPTV technology (51,19 percent). The other shares are nearly unchanged - connections via cable television (14.04 percent), satellite television (13.02 percent), terrestrial pay television (9,87 percent), and own OTT services (11,88 percent).

The duration of roaming calls by foreigners in national networks increased by almost 6 percent (5,69 percent) in the third quarter of 2024 compared to the same period last year.
In the third quarter of 2024, users continued to migrate to fiber technology, resulting in an annual increase of 83.897 fiber broadband lines, while copper broadband lines saw a decrease of 52.840.

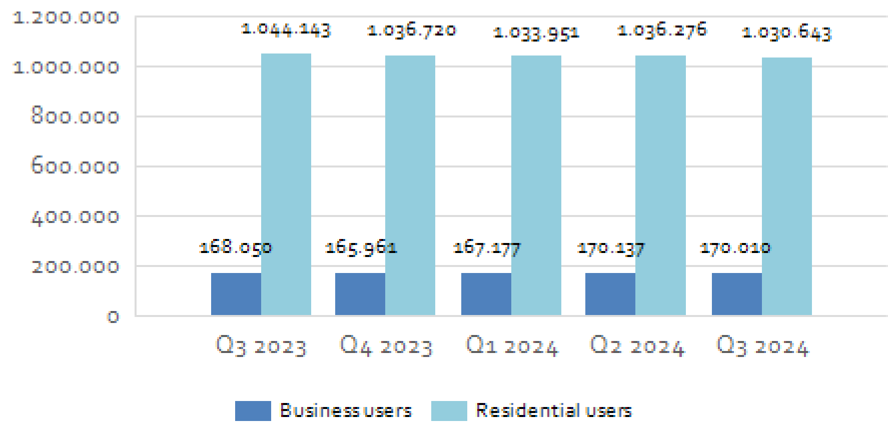
The share of VHCN broadband lines in the total number of broadband lines in the fixed network is 43,03 percent. Additionally, the proportion of broadband lines providing speeds exceeding 100 Mbps has increased to 45,16 percent.

Fixed telephony services	Q3 2024	% Change Q3 2024 - Q2 2024	% Change Q3 2024 - Q3 2023
Total fixed telephony services revenue	31.972.993,45€	5,23 %	3,54 %
Retail revenue	29.194.055,66€	3,70 %	1,67 %
Wholesale revenue	2.778.937,79€	24,59 %	28,44 %
Total number of fixed lines*	1.200.653	-0,48 %	-0,95 %
Number of subscribers	1.105.847	-0,15 %	-1,48 %
Fixed originating voice minutes (min)**	215.186.439	-4,61 %	-12,57 %

Fixed telephony service operator's market shares by number of lines

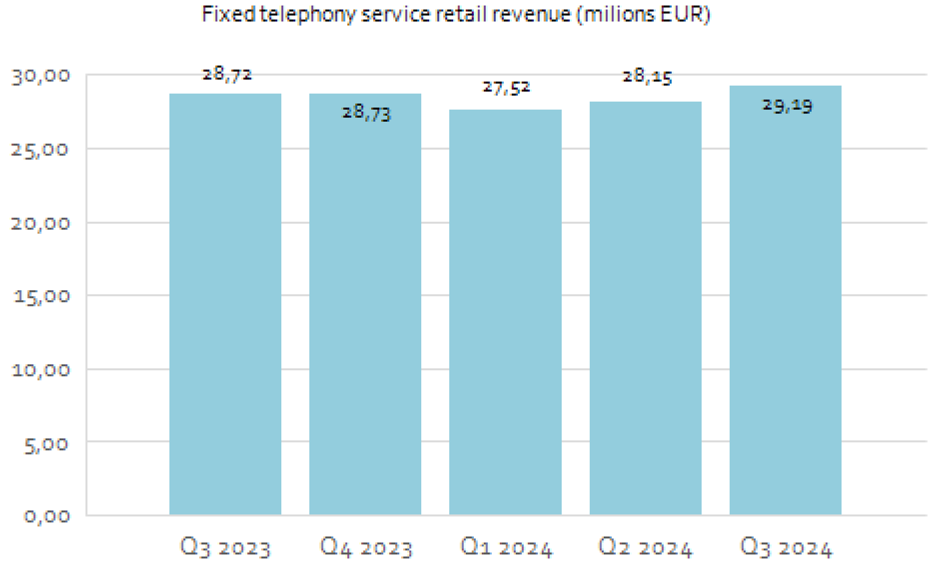


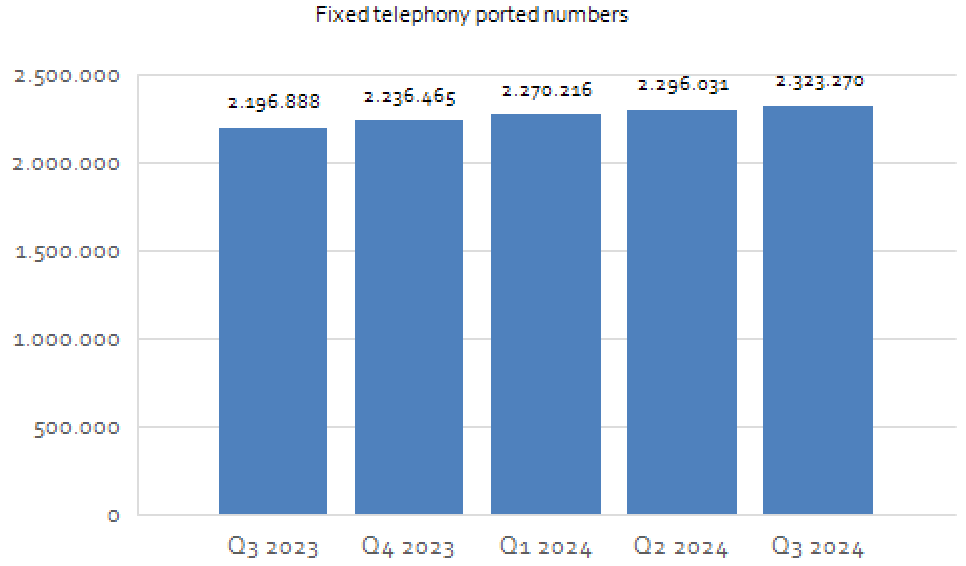
Fixed telephony lines



*CPS (carrier pre-selection) subscribers are included
**Includes all types of calls (local, national, international calls, calls to mobile networks and calls to VAS numbers)

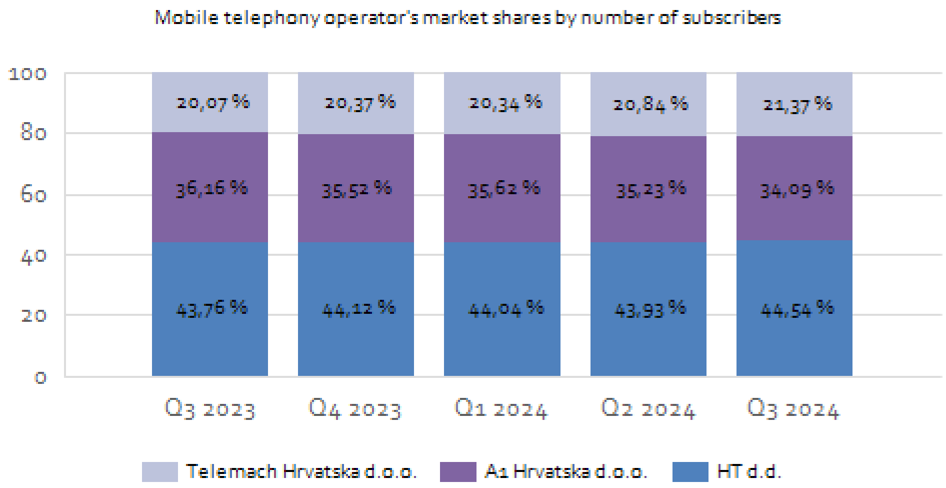
Fixed telephony services - bundles	Q3 2024	% Change Q3 2024 - Q2 2024	% Change Q3 2024 - Q3 2023
Stand-alone – fixed voice telephony subscribers	154.196	-2,87 %	-11,26 %
Number of bundled services subscribers – 2D	253.575	0,42 %	2,64 %
Number of bundled services subscribers – 3D	368.157	1,04 %	1,18 %
Number of bundled services subscribers – 4D	255.471	1,12 %	5,51 %

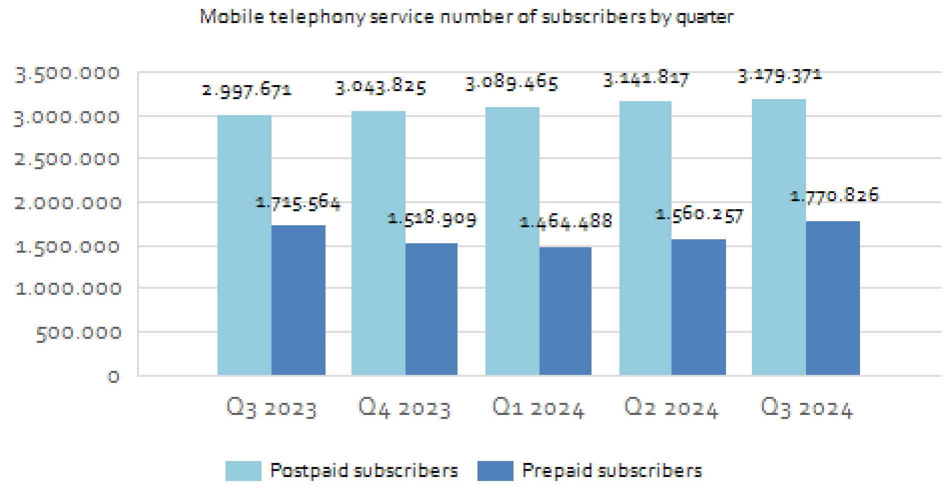


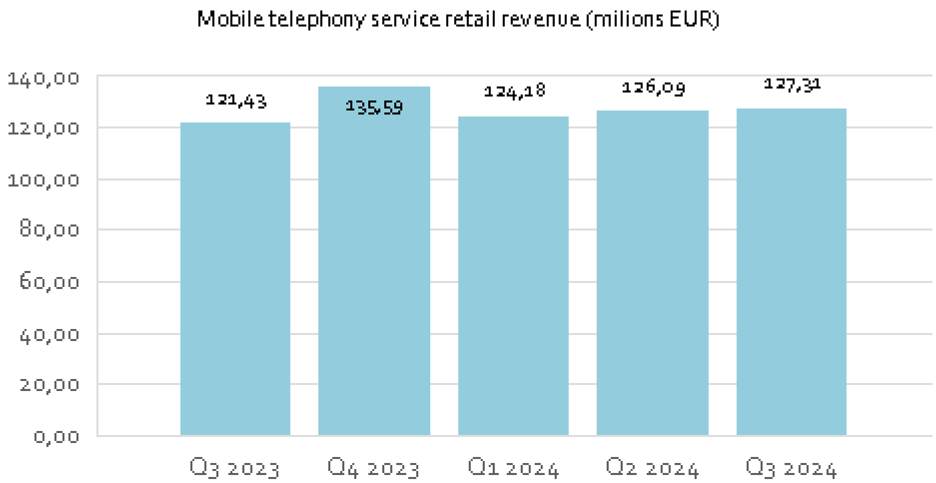


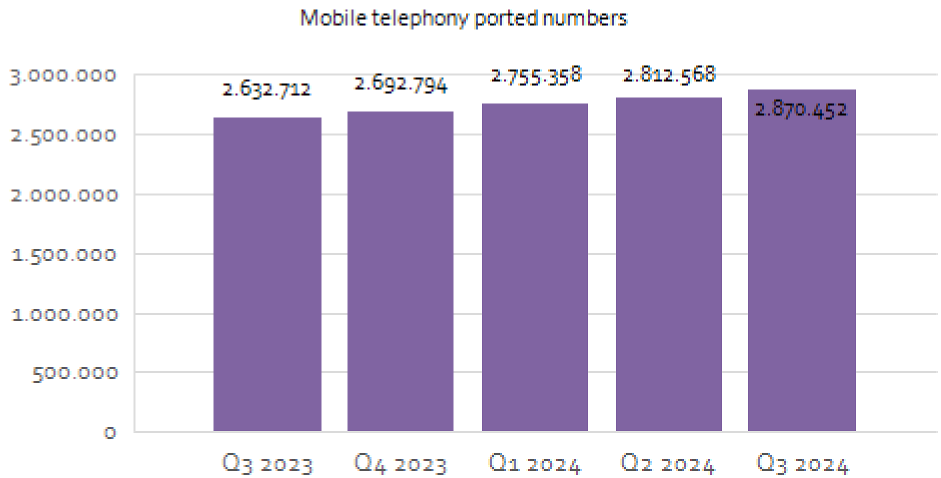
Mobile telephony services	Q3 2024	% Change Q3 2024 - Q2 2024	% Change Q3 2024 - Q3 2023
Total mobile telephony services revenues	**143.765.275,29€**	**2,27 %**	**1,31 %**
Retail revenue	**127.312.304,74€**	**0,97 %**	**4,85 %**
Retail revenue - Residential	96.074.465,27€	5,83 %	6,44 %
Prepaid subscribers	22.463.808,02€	8,35 %	-5,54 %
Postpaid subscribers	73.610.657,25€	5,08 %	10,72 %
Retail revenue - Business	31.237.839,47€	-11,54 %	0,24 %
Wholesale revenue	**16.452.970,55€**	**13,57 %**	**-19,68 %**
Total number of active subscribers (3G, 4G, 5G)*	**4.950.197**	**5,28 %**	**5,03 %**
Residential	4.087.494	6,20 %	5,02 %
Prepaid subscribers	1.770.826	13,50 %	3,22 %
Postpaid subscribers	2.316.668	1,23 %	6,44 %
Business	862.703	1,09 %	5,06 %
Mobile penetration**	127,85 %	5,28 %	5,03 %
Mobile originating voice minutes (min)***	3.193.798.498	16,28 %	17,23 %
International roaming traffic - own subscribers (min)	108.939.352	-12,29 %	-12,72 %
International roaming traffic - foreign subscribers (min)	519.114.368	121,56 %	5,69 %
Total SMS sent	201.853.694	-1,61 %	-10,32 %
Total MMS sent	1.473.623	6,00 %	-4,70 %

*Definition of active pre-paid subscriber: Subscriber who has used a mobile service or refilled the account in the last 90 days
**Mobile penetration has been calculated according to the last census of population from 2021
***Includes all types of calls (local, national, international calls, calls to mobile networks and calls to VAS numbers)

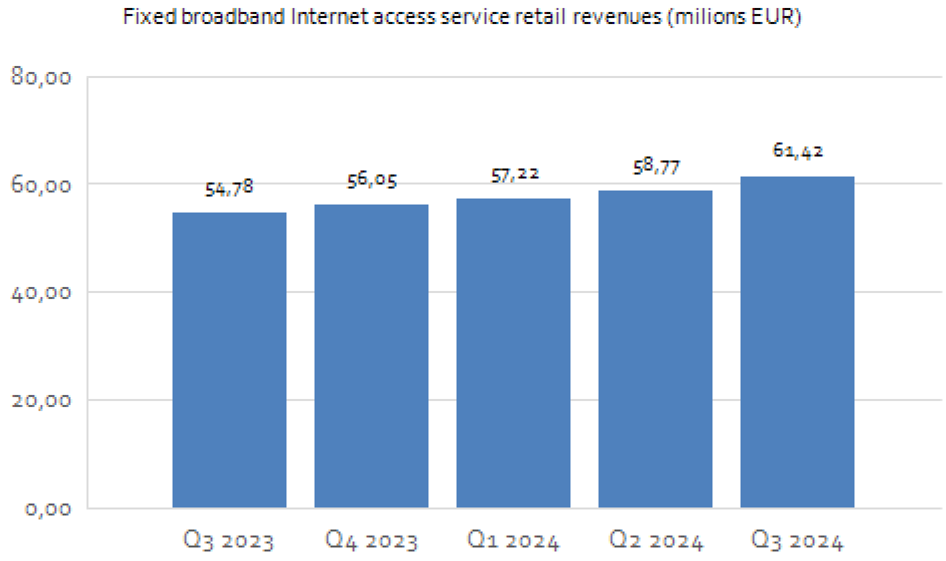

Mobile telephony operator's market shares by number of subscribers
100
80
60
40
20
0
20,07 %
20,37 %
20,34 %
20,84 %
21,37 %
36,16 %
35,52 %
35,62 %
35,23 %
34,09 %
43,76 %
44,12 %
44,04 %
43,93 %
44,54 %
Q3 2023
Q4 2023
Q1 2024
Q2 2024
Q3 2024
Telemach Hrvatska d.o.o.
A1 Hrvatska d.o.o.
HT d.d.

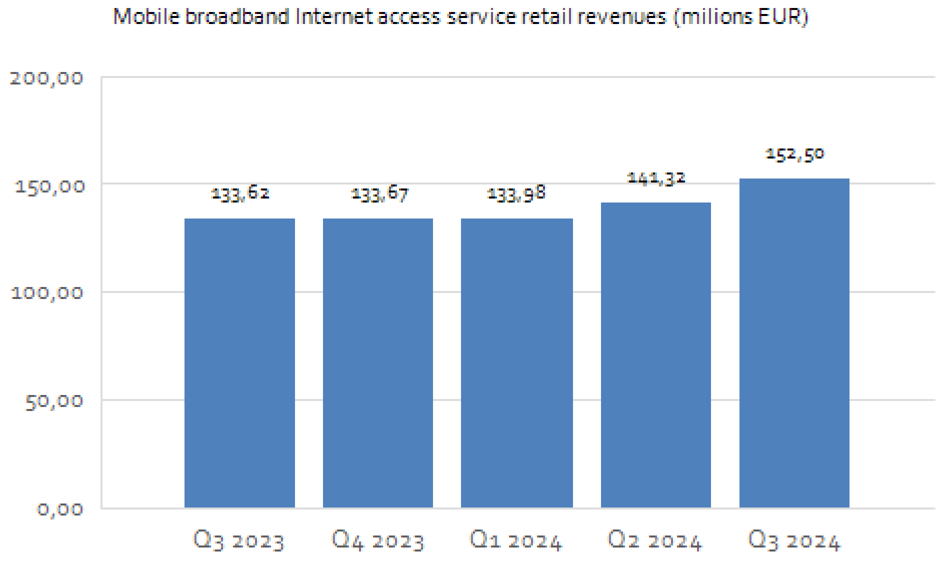

Mobile telephony service number of subscribers by quarter
3.500.000
3.000.000
2.500.000
2.000.000
1.500.000
1.000.000
500.000
0
2.997.671
3.043.825
3.089.465
3.141.817
3.179.371
1.715.564
1.518.909
1.464.488
1.560.257
1.770.826
Q3 2023
Q4 2023
Q1 2024
Q2 2024
Q3 2024
Postpaid subscribers
Prepaid subscribers


Mobile telephony service retail revenue (milions EUR)
140,00
120,00
100,00
80,00
60,00
40,00
20,00
0,00
121,43
135,59
124,18
126,09
127,31
Q3 2023
Q4 2023
Q1 2024
Q2 2024
Q3 2024


Mobile telephony ported numbers
3.000.000
2.500.000
2.000.000
1.500.000
1.000.000
500.000
0
2.632.712
2.692.794
2.755.358
2.812.568
2.870.452
Q3 2023
Q4 2023
Q1 2024
Q2 2024
Q3 2024

Internet access service (retail level) - revenues and total subscriptions	Q3 2024	% Change Q3 2024 - Q2 2024	% Change Q3 2024 - Q3 2023
Total broadband Internet access services revenues	**214.399.956,07€**	**6,84 %**	**13,68 %**
Fixed broadband Internet access service revenue	61.423.392,59€	4,52 %	12,12 %
Mobile broadband Internet access service revenue	152.496.771,85€	7,91 %	14,13 %
Satellite access revenue	479.791,63€	-19,13 %	136,79 %
Total number of broadband subscriptions (lines)	**7.140.955**	**4,98 %**	**5,96 %**

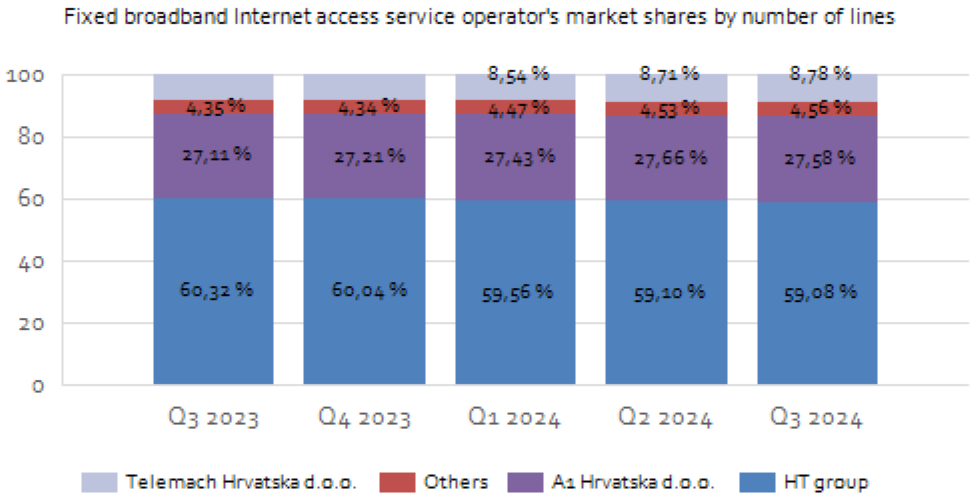


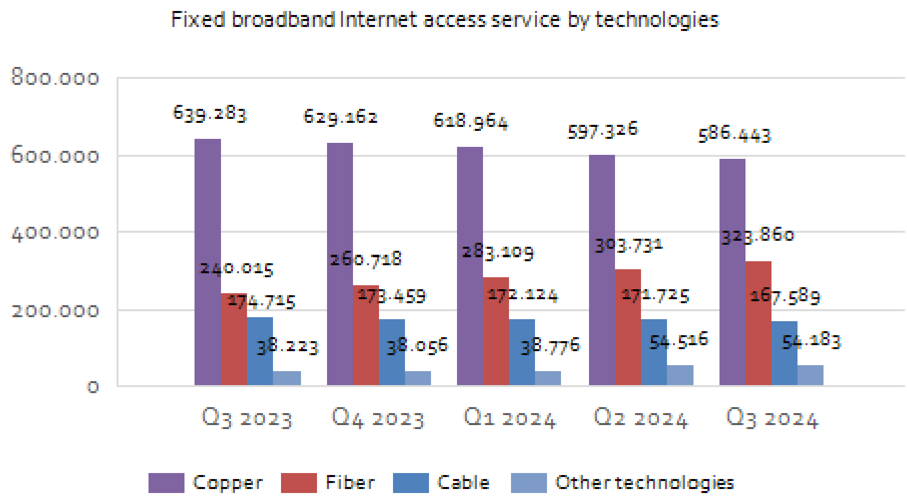


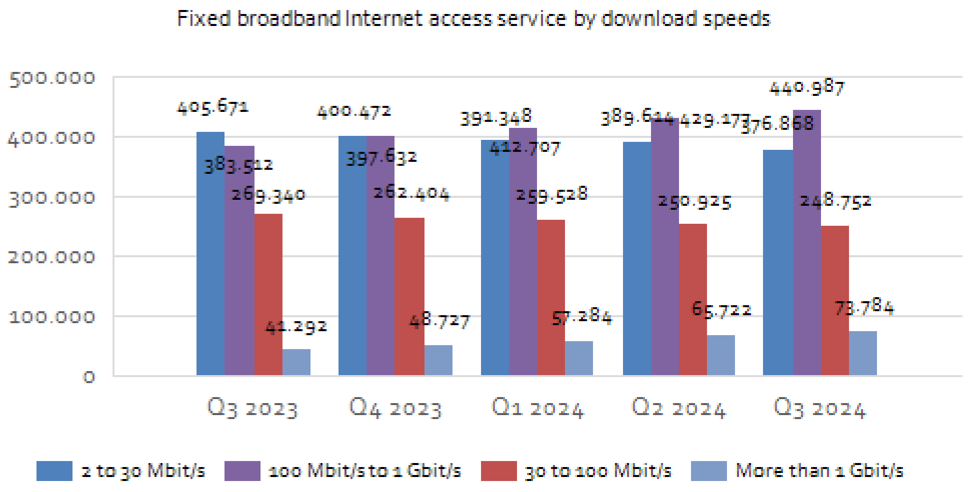
Internet access services (retail level) - fixed broadband network	Q3 2024	% Change Q3 2024 - Q2 2024	% Change Q3 2024 - Q3 2023
Fixed broadband Internet access service subscriptions (lines)*	**1.140.391**	**0,44 %**	**3,68 %**
Copper access network	586.443	-1,82 %	-8,27 %
Access over own copper access network	465.861	-1,47 %	6,71 %
xDSL based broadband using full local-loop unbundling	34.581	-5,50 %	-18,02 %
xDSL based broadband using shared access	4	-63,64 %	100,00 %
Bitstream access over copper access network (xDSL)	85.997	-2,18 %	-46,44 %
Fiber optic access network	323.860	6,63 %	34,93 %
Accesss over own fiber access network	257.296	-2,72 %	35,97 %
Fiber unbundling access	40.929	129,26 %	169,11 %
Bitstream access over fiber optic access network	25.635	19,83 %	-27,95 %
Cable access network	167.589	-2,41 %	-4,08 %
Fixed wireless access (FWA)	50.677	-1,80 %	38,69 %
Satellite access	3.506	20,56 %	108,19 %
High Quality Access	8.316	2,05 %	8,98 %
Fixed broadband traffic (TB)	1.440.122	19,22 %	90,26 %

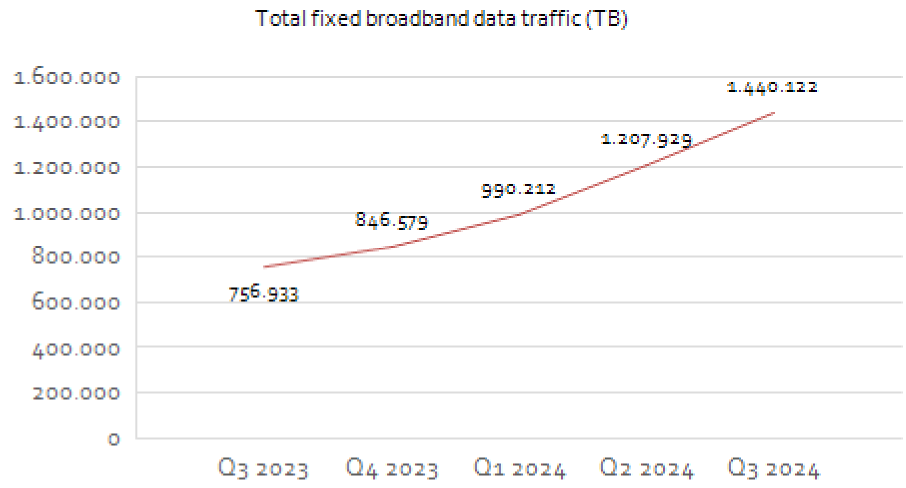
*Broadband access service at fixed location via mobile network is not included - it is included in the mobile broadband table.

Internet access services (retail level) - bundles	Q3 2024	% Change Q3 2024 - Q2 2024	% Change Q3 2024 - Q3 2023
Number of standalone internet access service subscribers	5.023.921	6,11 %	6,29 %
Number of bundled services subscribers – 2D	405.903	0,13 %	3,09 %
Number of bundled services subscribers – 3D	426.612	0,98 %	1,44 %
Number of bundled services subscribers – 4D	255.471	1,12 %	5,51 %


Fixed broadband Internet access service operator's market shares by number of lines
8,54 %
8,71 %
8,78 %
4,35 %
4,34 %
4,47 %
4,53 %
4,56 %
27,11 %
27,21 %
27,43 %
27,66 %
27,58 %
60,32 %
60,04 %
59,56 %
59,10 %
59,08 %
Q3 2023
Q4 2023
Q1 2024
Q2 2024
Q3 2024
Telemach Hrvatska d.o.o.
Others
A1 Hrvatska d.o.o.
HT group


Fixed broadband Internet access service by technologies
639.283
629.162
618.964
597.326
586.443
240.015
260.718
283.109
303.731
323.860
174.715
173.459
172.124
171.725
167.589
38.223
38.056
38.776
54.516
54.183
Q3 2023
Q4 2023
Q1 2024
Q2 2024
Q3 2024
Copper
Fiber
Cable
Other technologies

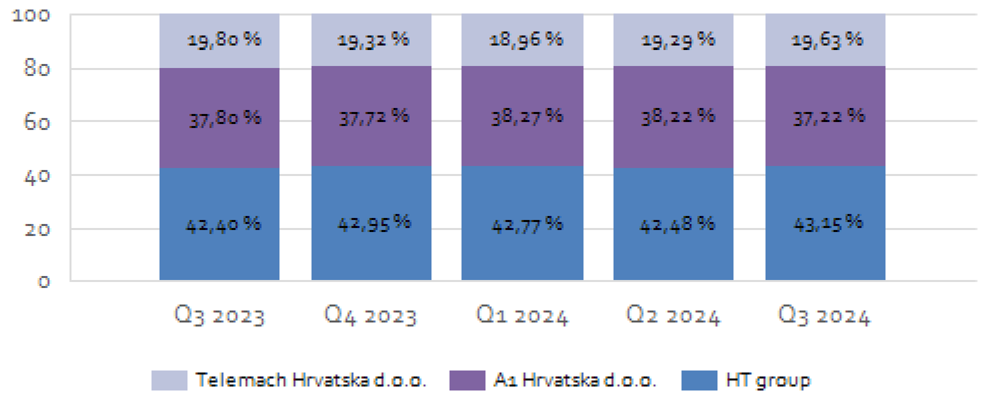

Fixed broadband Internet access service by download speeds
405.671
400.472
391.348
389.614
429.173
376.868
440.987
383.512
397.632
412.707
269.340
262.404
259.528
250.925
248.752
41.292
48.727
57.284
65.722
73.784
Q3 2023
Q4 2023
Q1 2024
Q2 2024
Q3 2024
2 to 30 Mbit/s
100 Mbit/s to 1 Gbit/s
30 to 100 Mbit/s
More than 1 Gbit/s


Total fixed broadband data traffic (TB)
756.933
846.579
990.212
1.207.929
1.440.122
Q3 2023
Q4 2023
Q1 2024
Q2 2024
Q3 2024

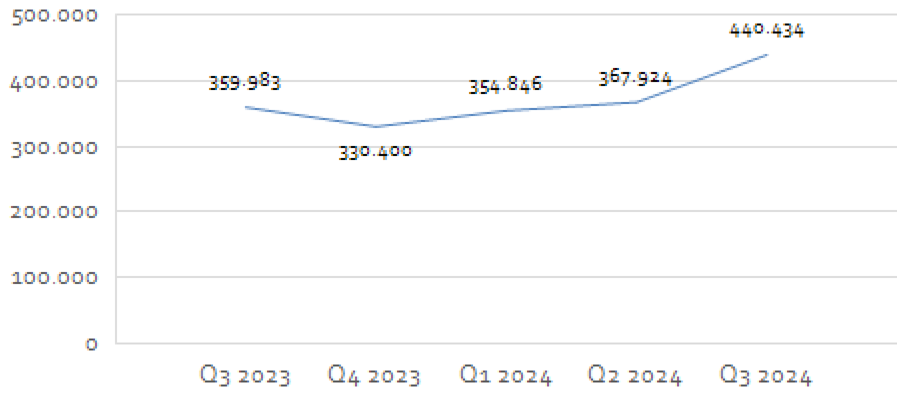
Internet access services (retail level) - mobile broadband network	Q3 2024	% Change Q3 2024 - Q2 2024	% Change Q3 2024 - Q3 2023
Mobile broadband Internet acccess service subscriptions (3G, 4G, 5G etc)*	**6.000.564**	**5,89 %**	**6,40 %**
Residential (3G and 4G)	3.455.400	7,35 %	-6,04 %
Dedicated data subscriptions (cards/modems/keys etc.)	199.979	8,91 %	-8,03 %
*Mobile phones**	3.074.757	8,09 %	-5,47 %
M2M	2	0,00 %	0,00 %
Broadband access at fixed location via mobile network	180.662	-5,14 %	-12,91 %
Residential (5G)	1.090.831	3,38 %	65,61 %
Dedicated data subscriptions (cards/modems/keys etc.)	48.229	64,90 %	337,69 %
Mobile phones	1.013.497	0,88 %	58,50 %
M2M	0	#NA	#NA
Broadband access at fixed location via mobile network	29.105	37,22 %	252,79 %
Business (3G and4G)	1.135.730	2,84 %	-0,17 %
Dedicated data subscriptions (cards/modems/keys etc.)	131.901	0,36 %	-2,24 %
Mobile phones	615.718	-1,43 %	-10,38 %
M2M	341.054	13,46 %	29,32 %
Broadband access at fixed location via mobile network	47.057	-1,35 %	-9,58 %
Business (5G)	318.603	10,38 %	92,41 %
Dedicated data subscriptions (cards/modems/keys etc.)	22.598	7,50 %	111,87 %
Mobile phones	246.971	7,98 %	84,16 %
M2M	46.534	26,42 %	140,96 %
Broadband access at fixed location via mobile network	2.500	19,90 %	67,22 %
Mobile broadband traffic (TB)	440.434	19,71 %	22,35 %

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

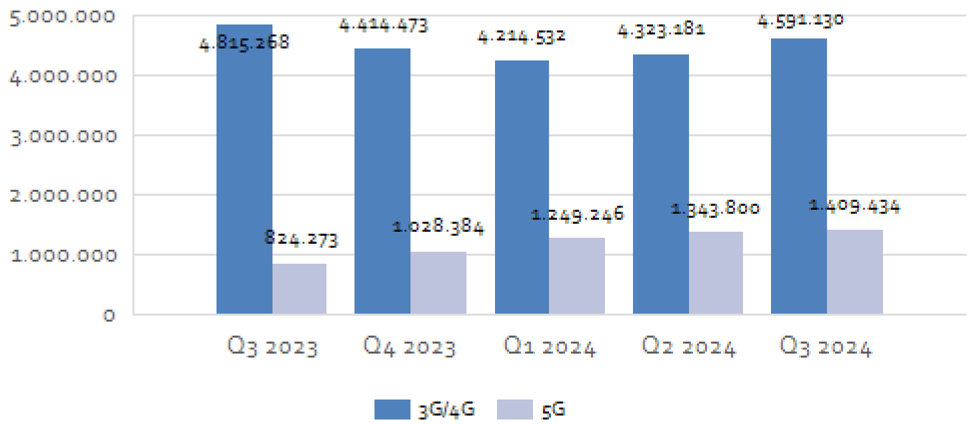
Mobile broadband Internet access service operator's market shares by number of subscriptions



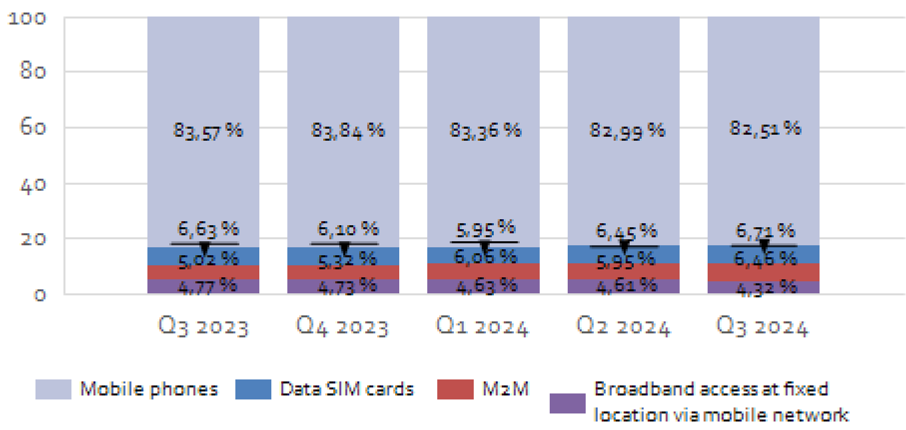
Total mobile broadband data traffic (TB)



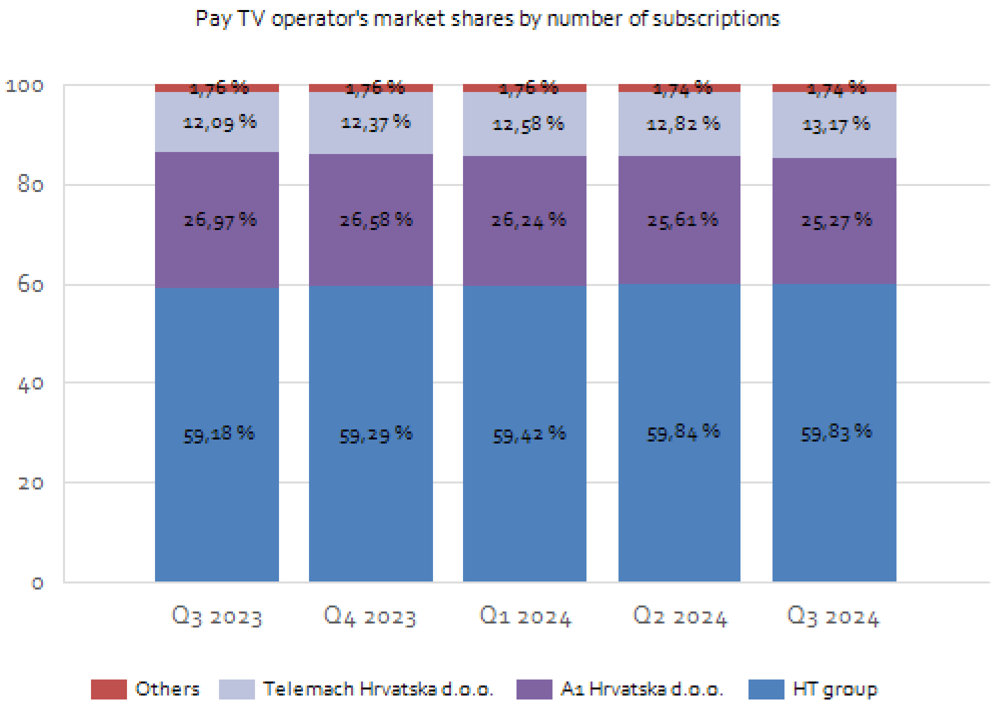
Mobile broadband Internet access service subsriptions by technologies

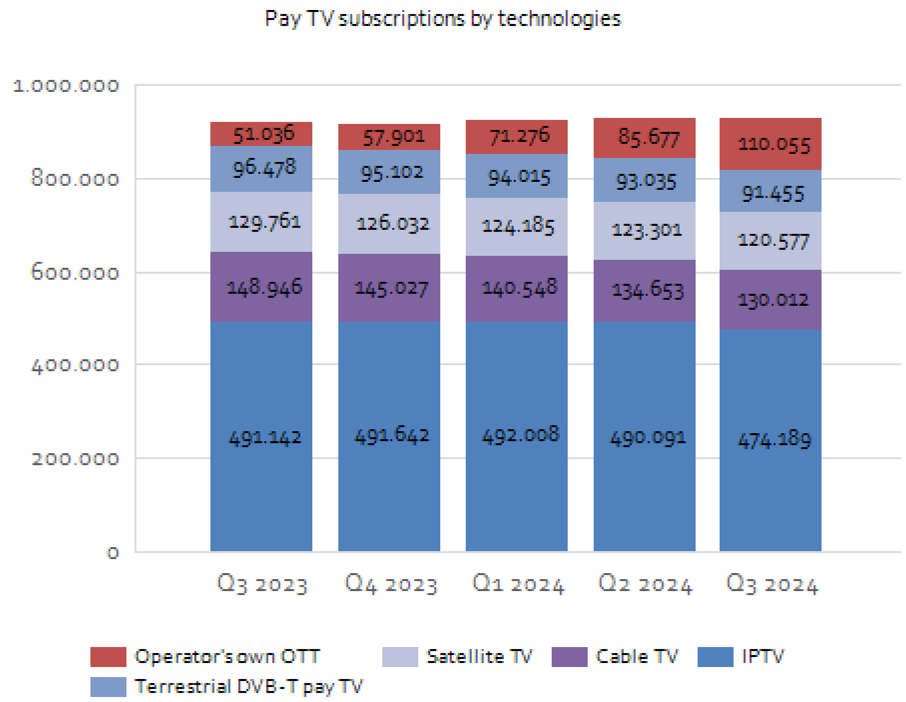


Mobile broadband Internet access service subscriptions by type of access



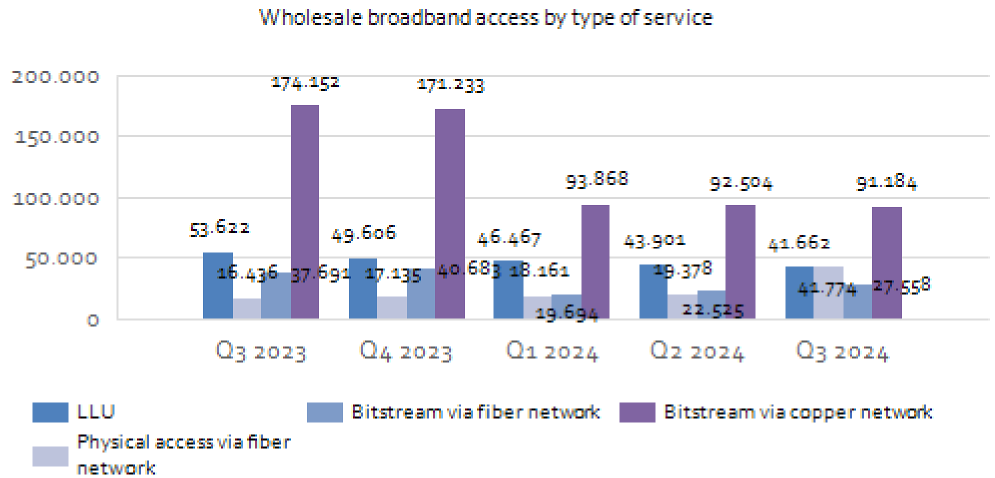
Television services	Q3 2024	% Change Q3 2024 - Q2 2024	% Change Q3 2024 - Q3 2023
Television services revenues	**36.318.285,96€**	**5,40 %**	**12,94 %**
Cable TV revenue	5.661.051,80€	3,30 %	2,95 %
IPTV revenue	20.697.934,54€	3,48 %	10,51 %
Satellite TV revenue	4.182.482,53€	5,04 %	6,73 %
Digital terrestrial TV revenue	3.182.792,07€	3,80 %	4,27 %
Own OTT service revenue	2.594.025,02€	34,54 %	170,82 %
Total number of pay-TV subscriptions (lines)	**926.288**	**-0,05 %**	**0,97 %**
Cable reception	130.012	-3,45 %	-12,71 %
Residential	126.531	-3,50 %	-12,87 %
Business	3.481	-1,53 %	-6,73 %
IPTV	474.189	-3,24 %	-3,45 %
Residential	447.325	-3,48 %	-3,74 %
Business	26.864	0,93 %	1,65 %
Satellite reception (SAT TV)	120.577	-2,21 %	-7,08 %
Residential	110.778	-2,33 %	-7,39 %
Business	9.799	-0,80 %	-3,37 %
Digital terrestrial reception – pay TV	91.455	-1,70 %	-5,21 %
Residential	90.452	-1,72 %	-5,36 %
Business	1.003	0,30 %	10,83 %
Own OTT service	110.055	28,45 %	115,64 %
Residential	100.912	31,16 %	134,46 %
Business	9.143	4,62 %	14,34 %

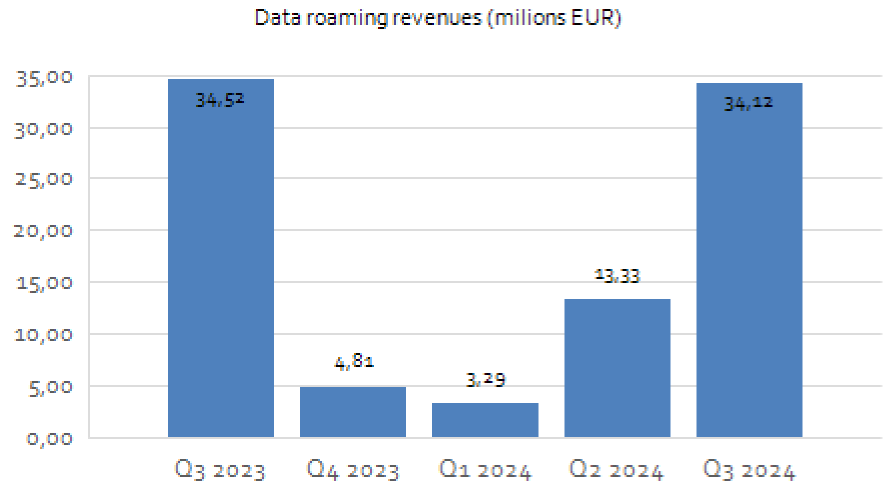




Television services - bundles	Q3 2024	% Change Q3 2024 - Q2 2024	% Change Q3 2024 - Q3 2023
Stand-alone – TV subscribers	286.709	8,55 %	17,00 %
Number of bundled services subscribers – 2D	82.912	-2,84 %	-4,98 %
Number of bundled services subscribers – 3D	308.853	1,33 %	2,23 %
Number of bundled services subscribers – 4D	255.471	1,12 %	5,51 %

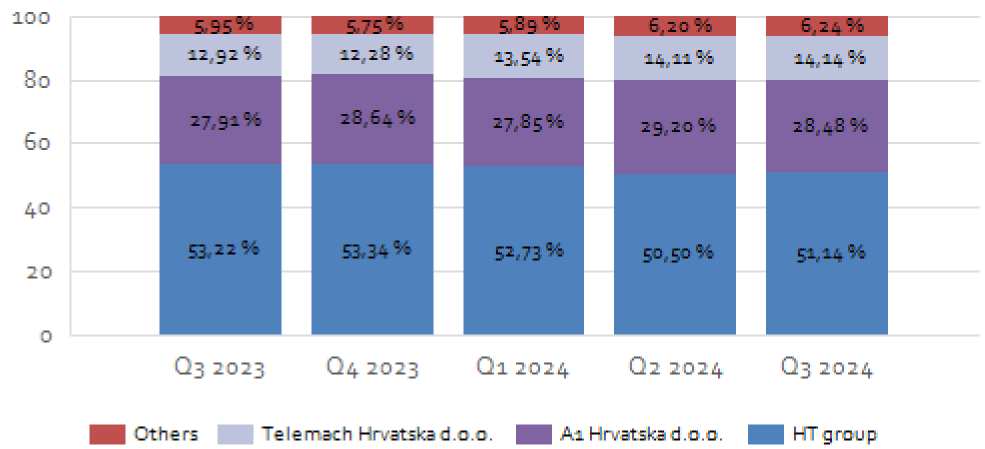
Wholesale broadband access	Q3 2024	% Change Q3 2024 - Q2 2024	% Change Q3 2024 - Q3 2023
Wholesale broadband access services via copper network revenues	3.259.502,53€	-2,29%	-41,09 %
Wholesale broadband access services via fiber network revenues	2.079.944,27€	66,78 %	28,55 %
Data roaming revenues	34.122.356,69€	155,99 %	-1,15 %
Physical wholesale access viacopper network(LLU)-number ofl ines	41.662	-5,10 %	-22,30 %
Bitstream wholesale access via copper network-number of lines	91.184	-1,43 %	-47,64 %
Physical wholesale access via fiber network (unbundled fiber at distribution node) - number of lines	41.774	115,57 %	154,16 %
Bitstream wholesale access via fiber networks - number of lines	27.558	22,34 %	-26,88 %



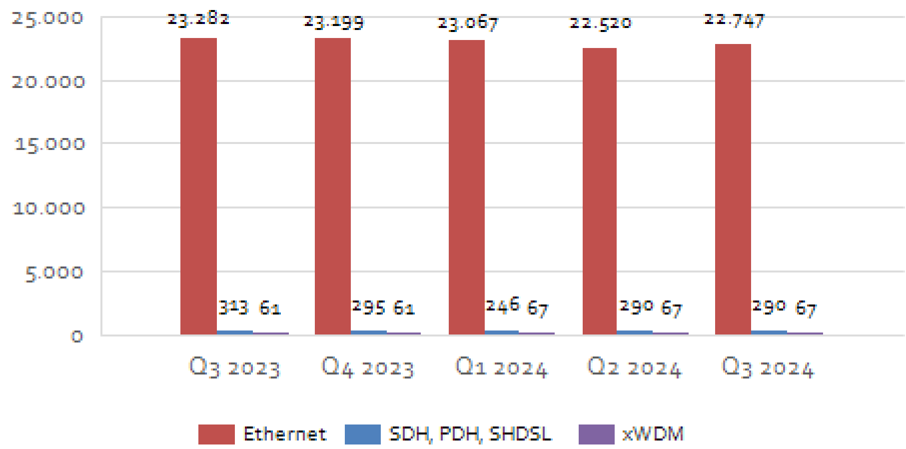


Dedicated capacity services (high-quality access) - retail level*	Q3 2024	% Change Q3 2024 - Q2 2024	% Change Q3 2024 - Q3 2023
Traditional digital lines (SDH, PDH, (S)HDSL revenue	277.951,86€	-2,40 %	-3,40 %
Ethernet technology services revenue	6.518.625,10€	3,24 %	-12,22 %
xWDM technology services revenue	387.003,65€	3,88 %	-26,45 %
"Dark fiber" services revenue	408.674,40€	-5,87 %	-18,39 %
Total number of connection points of traditional digital lines (SDH, PDH, (S)HDSL)	290	0,00 %	-7,35 %
Total number of Ethernet technology connection points	22.747	1,01 %	-2,30 %
Total number of xWDM technology connection points	67	0,00 %	9,84 %
Total length of fiber as a part of "dark fiber" service (km)	5.022	-0,63 %	50,68 %

Dedicated capacity market operator's shares by number of connection points*



Dedicated capacity market connection points by technologies*



*From Q3 2024, the report no longer includes data from the operator HEP Telekomunikacije d.o.o., which provides services exclusively to companies within the HEP Group.

Shared use of electronic communications infrastructure	Q3 2024	% Change Q3 2024 - Q2 2024	% Change Q3 2024 - Q3 2023
Cable duct system shared use revenue	1.191.429,50€	-10,84 %	-11,47 %
Poles for installation of aerial network cables rental revenue	21.421,81€	22,63 %	104,70 %
Colocation spaces rental revenue	668.698,04€	2,50 %	-14,06 %
Total length of shared use cable duct systems (km)	19.883	1,27 %	2,46 %
Pipes length, 63-110 mm diameter (km)	1.292	#NA	#NA
Pipes length, 50 mm diameter (km)	195	#NA	19.400,00 %
Pipes length, 20-40 mm diameter (km)	6.411	3,65 %	-4,28 %
Pipes length, 3-16 mm diameter (km)	11.985	-10,88 %	-5,67 %
Total number of rented poles for the installation of aerial network cables	4.241	6,24 %	36,19 %