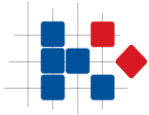


Croatian quarterly electronic communications market data for 4. quarter 2024.

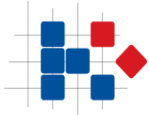
Published: 11.3.2025

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.



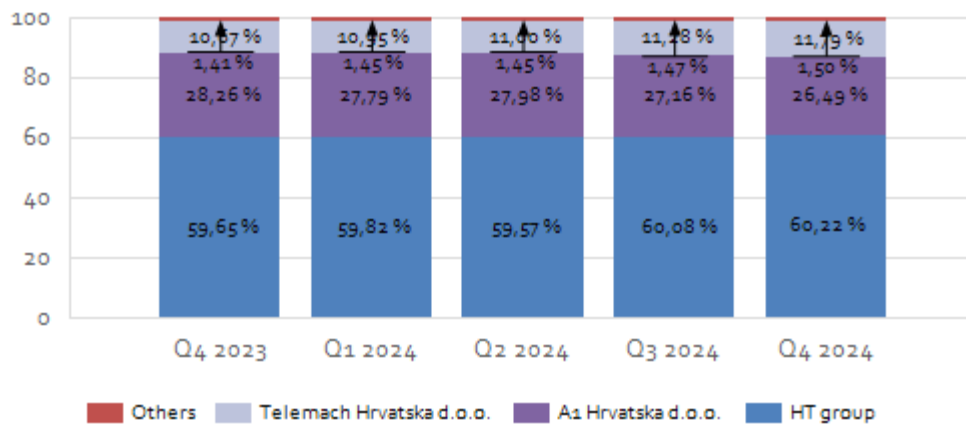
Summary: Quarterly Key Data Report Q4 2024

- In 2024 there was a 26% investment increase in mobile networks compared to the previous year. Regarding fixed networks, the highest increase was in VHCN networks investments, in which 116 million euros were invested in 2024.
- Total revenues from services on the electronic communications market in 2024 amounted to EUR 1.869.887.668 million, which is an increase of 8,5 percent compared to the last year. Revenues from services via mobile networks are higher by 8,96 percent, and revenues from services via fixed networks by 7,6 percent
- In the fourth quarter of 2024, the fiber broadband lines increased by 90,903 compared to the previous year, while the copper broadband lines decreased by 59,142. The total number of the fiber broadband lines reached 351,621.
- The number of VHCN broadband lines reached 515,558, accounting for 44.95 percent of the total 1,147,086 broadband Internet access lines. Moreover, 47.16 percent of these lines offer speeds over 100 Mbit/s, regardless of the technology
- In the fourth quarter of 2024, pay television revenue grew by 11.61% compared to the same period last year, with the highest increase recorded among users of the own OTT service, surging by 171.89%. A similar trend is observed in the number of connections, which grew by 2.57% overall, while the most significant rise was again in the own OTT service connections, up by 141.85%.
- The distribution of connections by technology shows that IPTV remains dominant, holding a 49.85% share, while the own OTT service now accounts for 14.91%. Cable network connections make up 13.43%, satellite television 12.30%, and terrestrial pay television 9.52%.
- The growth in the number of VHCN network broadband lines and the rising use of OTT services contribute to an increase in data traffic, which has grown by over 26 percent annually.

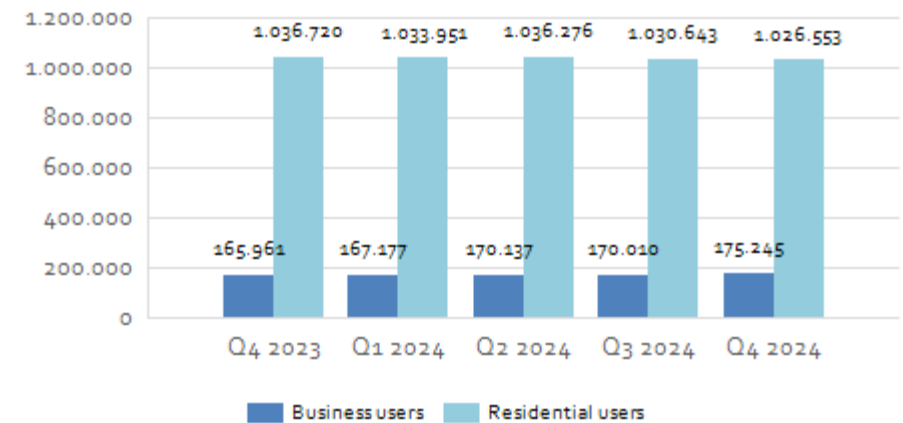


| Fixed telephony services | Q4 2024 | % Change Q4 2024 - Q3 2024 | % Change Q4 2024 - Q4 2023 |
|---|----------------|-------------------------------|-------------------------------|
| Total fixed telephony services revenue | 29.768.676,23€ | -5,35 % | -5,47 % |
| <i>Retail revenue</i> | 27.535.800,14€ | -3,96 % | -4,17 % |
| <i>Wholesale revenue</i> | 2.232.876,09€ | -19,65 % | -19,03 % |
| Total number of fixed lines* | 1.201.798 | 0,10 % | -0,07 % |
| Number of subscribers | 1.101.644 | -0,38 % | -1,21 % |
| Fixed originating voice minutes (min)** | 215.203.351 | 0,01 % | -16,31 % |

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

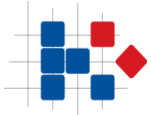


Fixed telephony lines



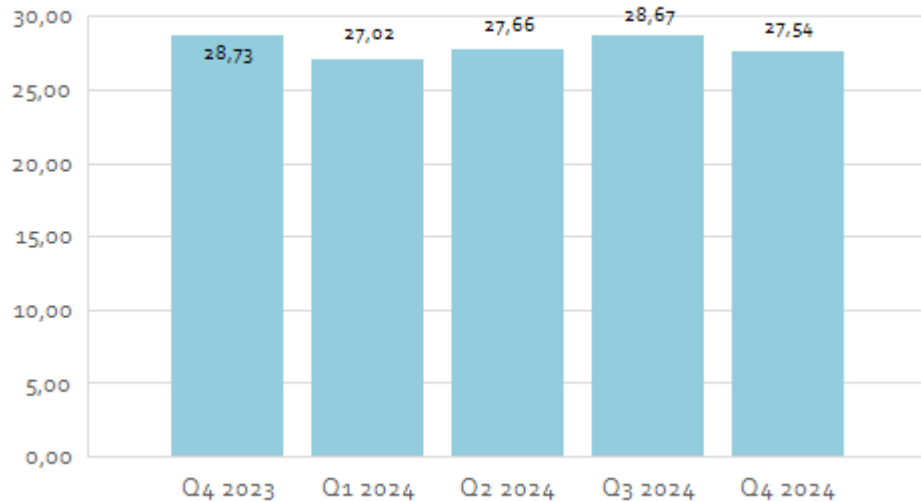
*CPS (carrier pre-selection) subscribers are included

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

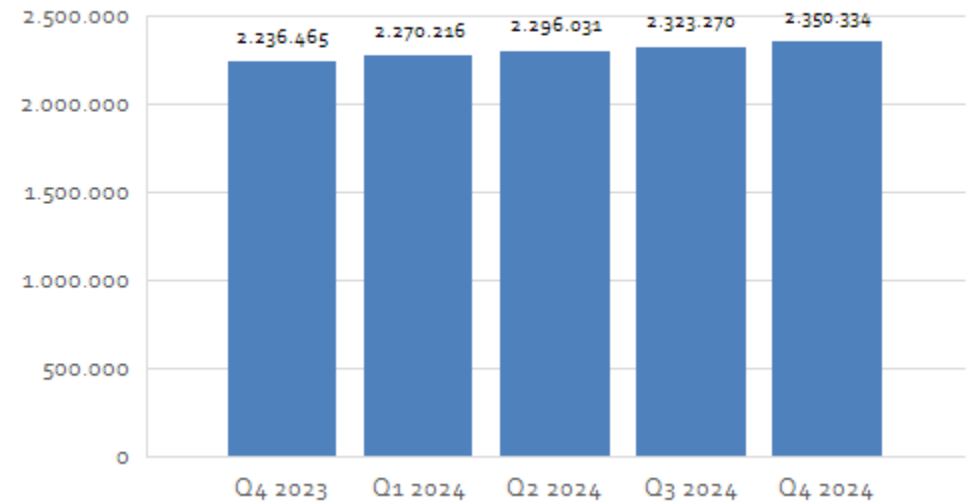


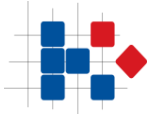
| Fixed telephony services - bundles | Q4 2024 | % Change Q4 2024 - Q3 2024 | % Change Q4 2024 - Q4 2023 |
|---|---------|-------------------------------|-------------------------------|
| Stand-alone – fixed voice telephony subscribers | 151.183 | -1,95 % | -10,50 % |
| Number of bundled services subscribers – 2D | 254.228 | 0,26 % | 2,69 % |
| Number of bundled services subscribers – 3D | 370.439 | 0,62 % | 1,95 % |
| Number of bundled services subscribers – 4D | 258.888 | 1,34 % | 5,96 % |

Fixed telephony service retail revenue (millions EUR)



Fixed telephony ported numbers





CROATIAN QUARTERLY ELECTRONIC COMMUNICATIONS MARKET DATA

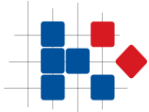
4. Quarter 2024.

| Mobile telephony services | Q4 2024 | % Change Q4 2024 - Q3 2024 | % Change Q4 2024 - Q4 2023 |
|---|------------------------|-------------------------------|-------------------------------|
| Total mobile telephony services revenues | 167.898.798,12€ | 16,79 % | 10,81 % |
| Retail revenue | 154.956.948,42€ | 21,71 % | 14,28 % |
| <u>Retail revenue - Residential</u> | 114.754.867,72€ | 19,44 % | 14,11 % |
| <i>Prepaid subscribers</i> | 24.716.439,92€ | 10,03 % | 4,04 % |
| <i>Postpaid subscribers</i> | 90.038.427,80€ | 22,32 % | 17,23 % |
| <u>Retail revenue - Business</u> | 40.242.356,55€ | 28,83 % | 14,90 % |
| Wholesale revenue | 12.941.849,70€ | -21,34 % | -18,79 % |
| Total number of active subscribers (3G, 4G, 5G)* | 4.717.531 | -4,70 % | 3,39 % |
| Residential | 3.845.126 | -5,93 % | 3,00 % |
| <i>Prepaid subscribers</i> | 1.496.478 | -15,49 % | -1,48 % |
| <i>Postpaid subscribers</i> | 2.348.648 | 1,38 % | 6,06 % |
| Business | 872.405 | 1,12 % | 5,18 % |
| Mobile penetration** | 121,84 % | -4,70 % | 3,39 % |
| Mobile originating voice minutes (min)*** | 2.738.298.749 | -14,26 % | 1,70 % |
| International roaming traffic - own subscribers (min) | 110.961.813 | 1,86 % | -13,67 % |
| International roaming traffic - foreign subscribers (min) | 109.440.129 | -78,92 % | 8,13 % |
| Total SMS sent | 191.853.525 | -4,95 % | -10,55 % |
| Total MMS sent | 1.412.707 | -4,13 % | -10,21 % |

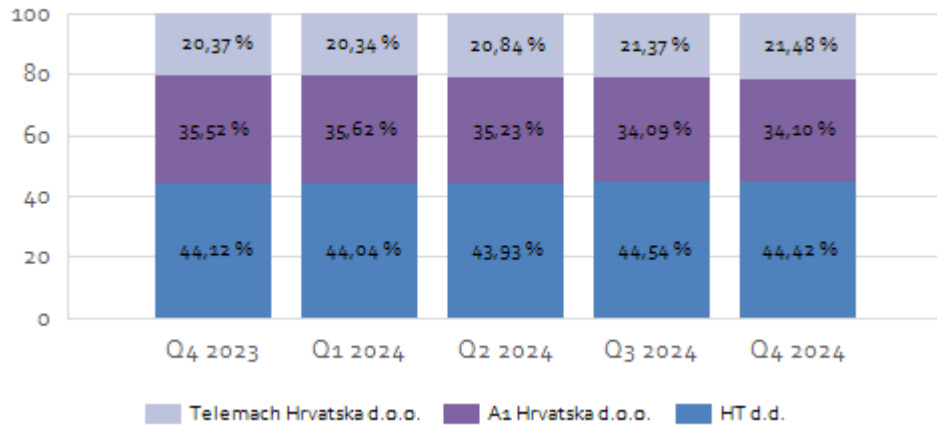
*Definition of active pre-paid subscriber: Subscriber who has used a mobile service or refilled the account in the last 90 days

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

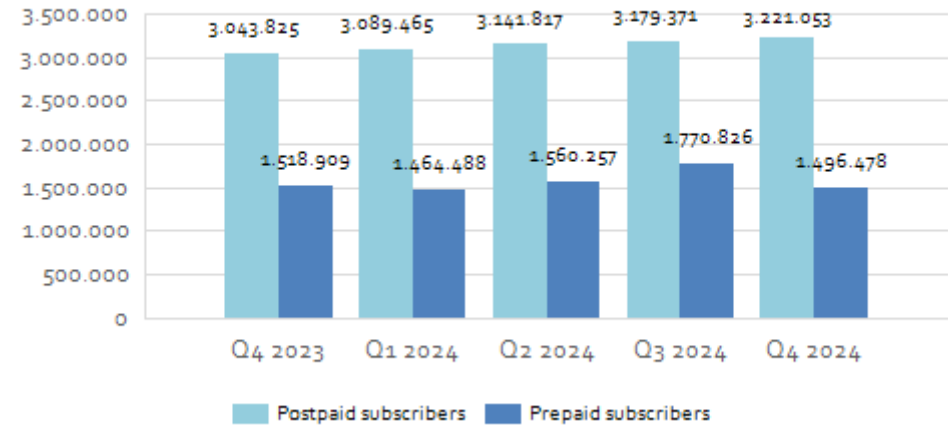
***Includes all types of calls (local, national, international calls, calls to mobile networks and calls to VAS numbers)



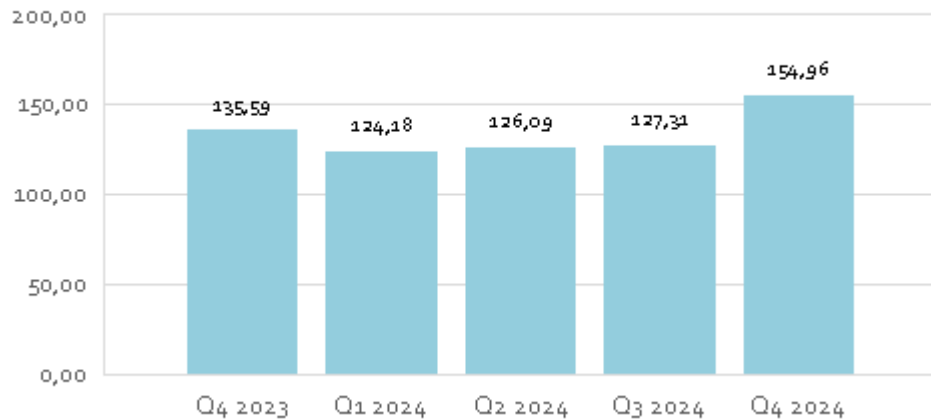
Mobile telephony operator's market shares by number of subscribers



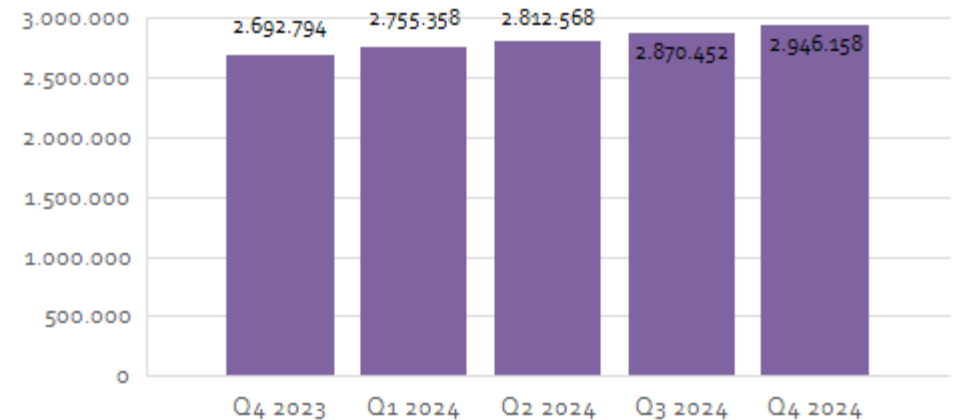
Mobile telephony service number of subscribers by quarter

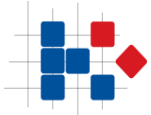


Mobile telephony service retail revenue (millions EUR)



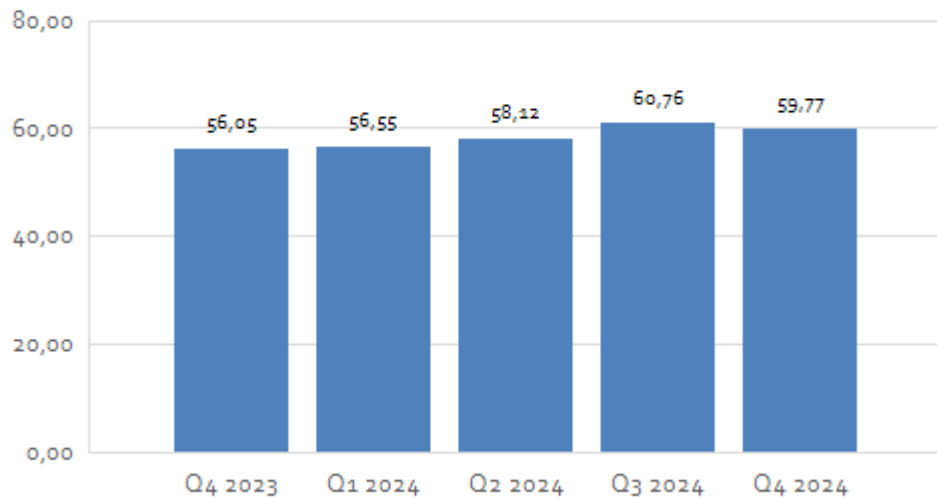
Mobile telephony ported numbers



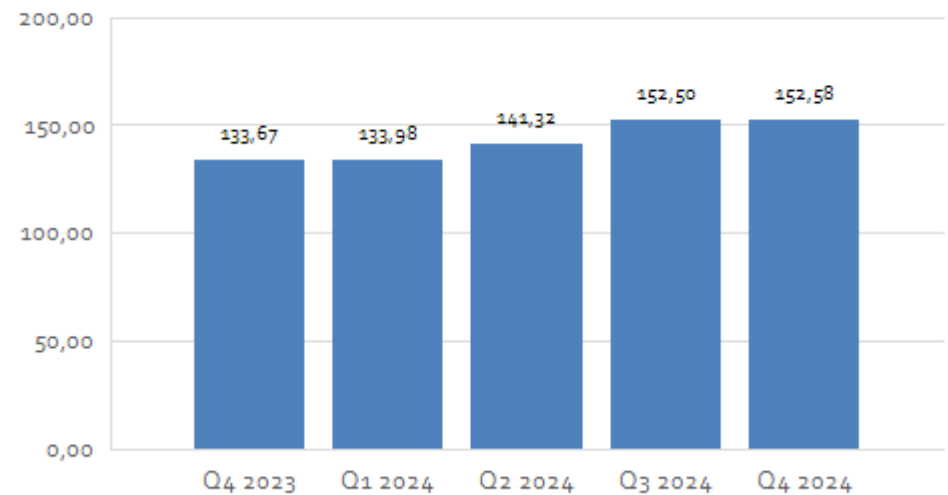


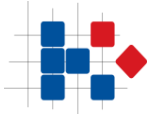
| Internet access service (retail level) - revenues and total subscriptions | Q4 2024 | % Change Q4 2024 - Q3 2024 | % Change Q4 2024 - Q4 2023 |
|---|------------------------|-------------------------------|-------------------------------|
| Total broadband Internet access services revenues | 213.011.712,06€ | -0,34 % | 12,15 % |
| Fixed broadband Internet access service revenue | 59.772.979,17€ | -1,62 % | 6,64 % |
| Mobile broadband Internet access service revenue | 152.582.674,99€ | 0,06 % | 14,15 % |
| Satellite access revenue | 656.057,90€ | 36,74 % | 198,96 % |
| Total number of broadband subscriptions (lines) | 6.886.349 | -3,57 % | 5,10 % |

Fixed broadband Internet access service retail revenues (millions EUR)



Mobile broadband Internet access service retail revenues (millions EUR)





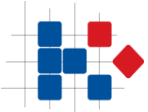
CROATIAN QUARTERLY ELECTRONIC COMMUNICATIONS MARKET DATA

4. Quarter 2024.

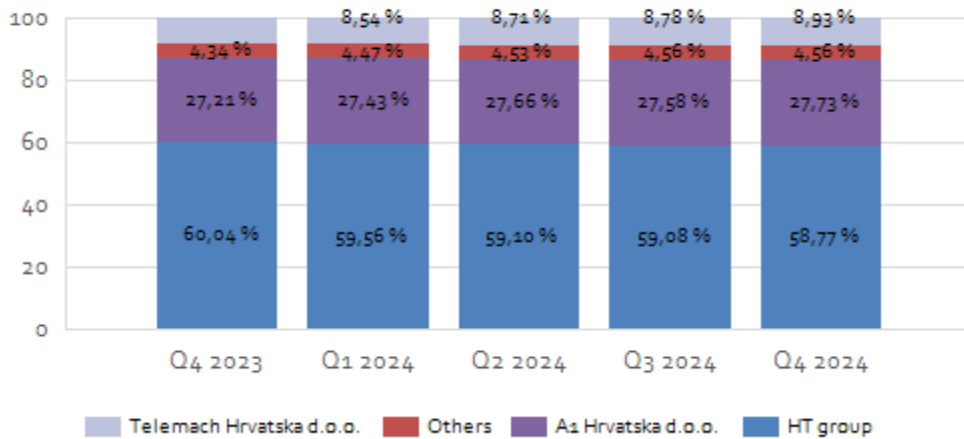
| Internet access services (retail level) - fixed broadband network | Q4 2024 | % Change Q4 2024 - Q3 2024 | % Change Q4 2024 - Q4 2023 |
|---|------------------|-------------------------------|-------------------------------|
| Fixed broadband Internet access service subscriptions (lines)* | 1.147.086 | 0,59 % | 3,41 % |
| <u>Copper access network</u> | 570.020 | -2,80 % | -9,40 % |
| <i>Access over own copper access network</i> | 453.300 | -2,70 % | 5,72 % |
| <i>xDSL based broadband using full local-loop unbundling</i> | 32.642 | -5,61 % | -20,79 % |
| <i>xDSL based broadband using shared access</i> | 2 | 0,00 % | -33,33 % |
| <i>Bitstream access over copper access network (xDSL)</i> | 84.076 | -2,23 % | -47,18 % |
| <u>Fiber optic access network</u> | 351.621 | 8,57 % | 34,87 % |
| <i>Accesses over own fiber access network</i> | 274.234 | 6,58 % | 33,11 % |
| <i>Fiber unbundling access</i> | 45.511 | 11,19 % | 178,41 % |
| <i>Bitstream access over fiber optic access network</i> | 31.876 | 24,35 % | -16,87 % |
| <u>Cable access network</u> | 164.605 | -1,78 % | -5,10 % |
| <u>Fixed wireless access (FWA)</u> | 48.597 | -4,10 % | 33,78 % |
| <u>Satellite access</u> | 3.805 | 8,53 % | 119,94 % |
| <u>High Quality Access</u> | 8.438 | 1,47 % | 7,63 % |
| <u>Fixed broadband traffic (TB)</u> | 994.597 | 10,17 % | 26,80 % |

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

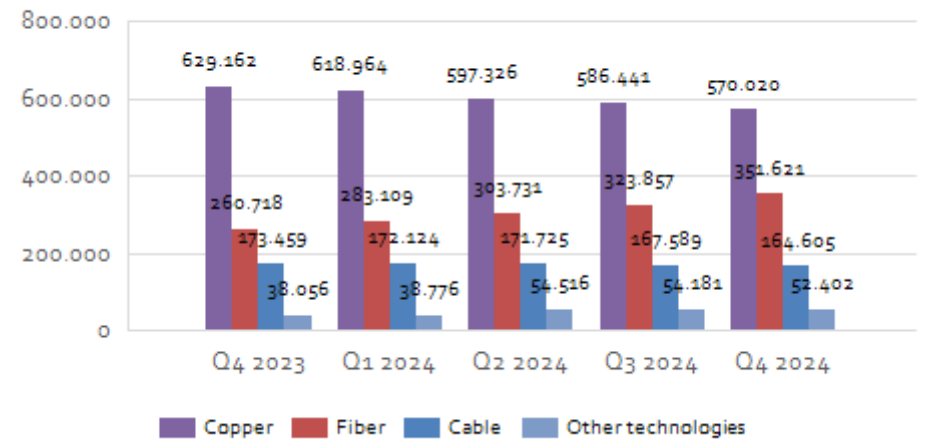
| Internet access services (retail level) - bundles | Q4 2024 | % Change Q4 2024 - Q3 2024 | % Change Q4 2024 - Q4 2023 |
|--|-----------|-------------------------------|-------------------------------|
| Number of standalone internet access service subscribers | 4.749.243 | -5,47 % | 4,95 % |
| Number of bundled services subscribers – 2D | 407.032 | 0,28 % | 3,26 % |
| Number of bundled services subscribers – 3D | 430.069 | 0,81 % | 2,19 % |
| Number of bundled services subscribers – 4D | 258.888 | 1,34 % | 5,96 % |



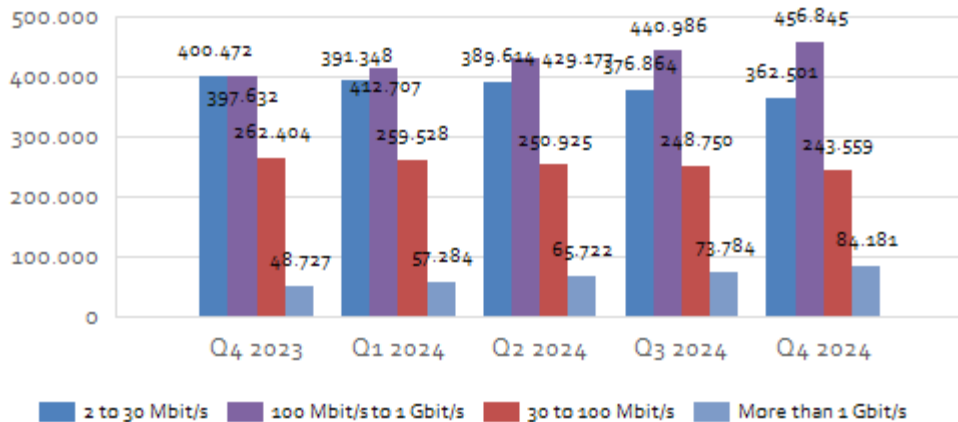
Fixed broadband Internet access service operator's market shares by number of lines



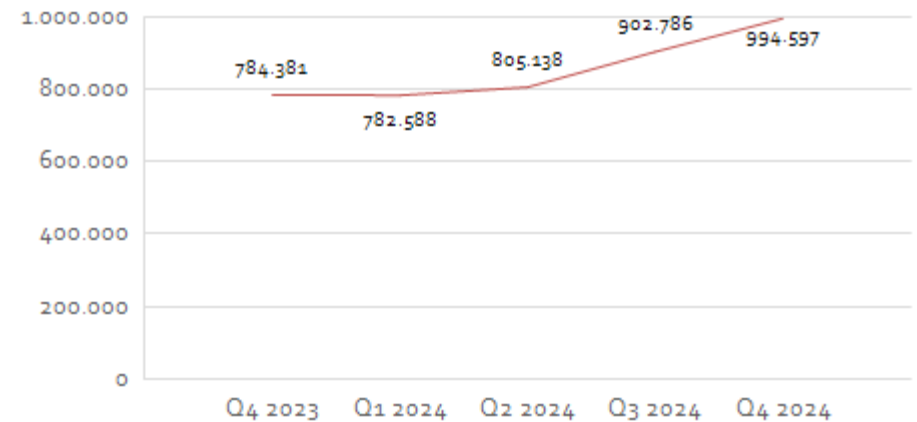
Fixed broadband Internet access service by technologies

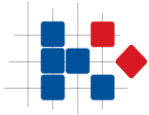


Fixed broadband Internet access service by download speeds



Total fixed broadband data traffic (TB)



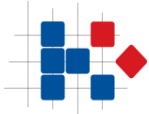


CROATIAN QUARTERLY ELECTRONIC COMMUNICATIONS MARKET DATA

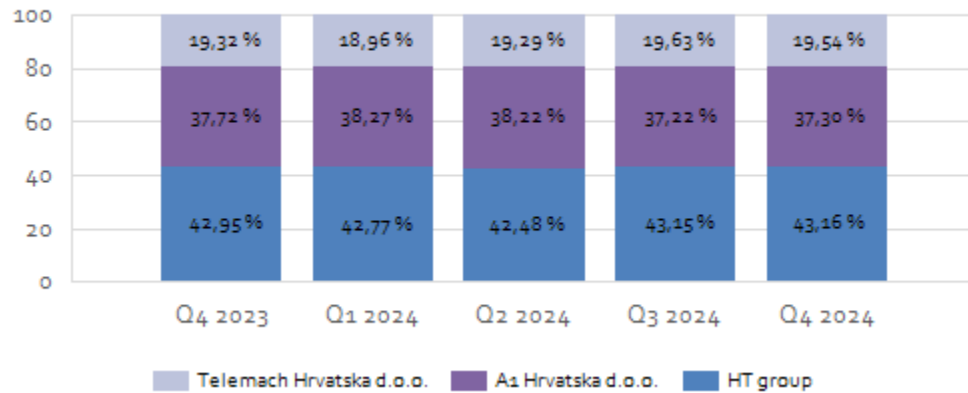
4. Quarter 2024.

| Internet access services (retail level) - mobile broadband network | Q4 2024 | % Change Q4 2024 - Q3 2024 | % Change Q4 2024 - Q4 2023 |
|---|------------------|-------------------------------|-------------------------------|
| Mobile broadband Internet access service subscriptions (3G, 4G, 5G etc)* | 5.739.263 | -4,35 % | 5,45 % |
| <u>Residential (3G and 4G)</u> | 3.144.381 | -9,00 % | -4,93 % |
| <i>Dedicated data subscriptions (cards/modems/keys etc.)</i> | 154.654 | -22,66 % | -8,80 % |
| <i>Mobile phones*</i> | 2.821.557 | -8,23 % | -4,13 % |
| <i>M2M</i> | 6 | 200,00 % | 200,00 % |
| <i>Broadband access at fixed location via mobile network</i> | 168.164 | -6,92 % | -13,59 % |
| <u>Residential (5G)</u> | 1.118.985 | 2,58 % | 36,84 % |
| <i>Dedicated data subscriptions (cards/modems/keys etc.)</i> | 59.750 | 23,89 % | 276,38 % |
| <i>Mobile phones</i> | 1.024.263 | 1,06 % | 29,54 % |
| <i>M2M</i> | 0 | NA | NA |
| <i>Broadband access at fixed location via mobile network</i> | 34.972 | 20,16 % | 212,84 % |
| <u>Business (3G and 4G)</u> | 1.148.362 | 1,11 % | 3,73 % |
| <i>Dedicated data subscriptions (cards/modems/keys etc.)</i> | 138.241 | 4,81 % | 4,10 % |
| <i>Mobile phones</i> | 604.038 | -1,90 % | -8,36 % |
| <i>M2M</i> | 360.853 | 5,81 % | 36,21 % |
| <i>Broadband access at fixed location via mobile network</i> | 45.230 | -3,88 % | -9,90 % |
| <u>Business (5G)</u> | 327.535 | 2,80 % | 55,51 % |
| <i>Dedicated data subscriptions (cards/modems/keys etc.)</i> | 19.291 | -14,63 % | 38,89 % |
| <i>Mobile phones</i> | 268.352 | 8,66 % | 57,54 % |
| <i>M2M</i> | 36.852 | -20,81 % | 48,94 % |
| <i>Broadband access at fixed location via mobile network</i> | 3.040 | 21,60 % | 83,91 % |
| <u>Mobile broadband traffic (TB)</u> | 332.036 | -24,61 % | 0,50 % |

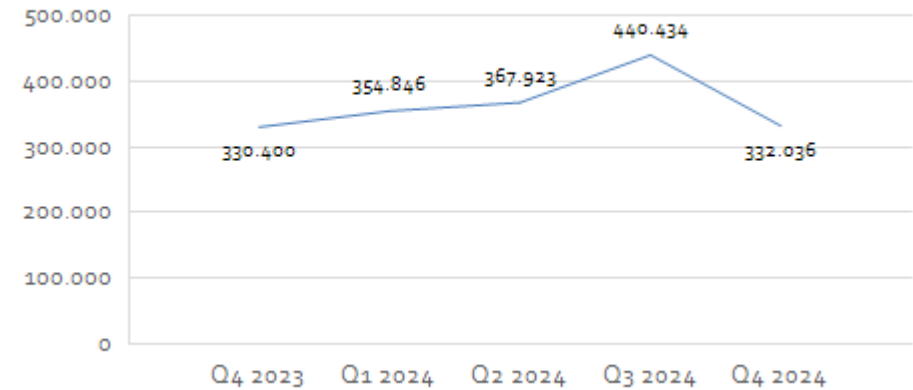
*Number of subscribers which have made an internet mobile connection in the last 90 days through mobile phones



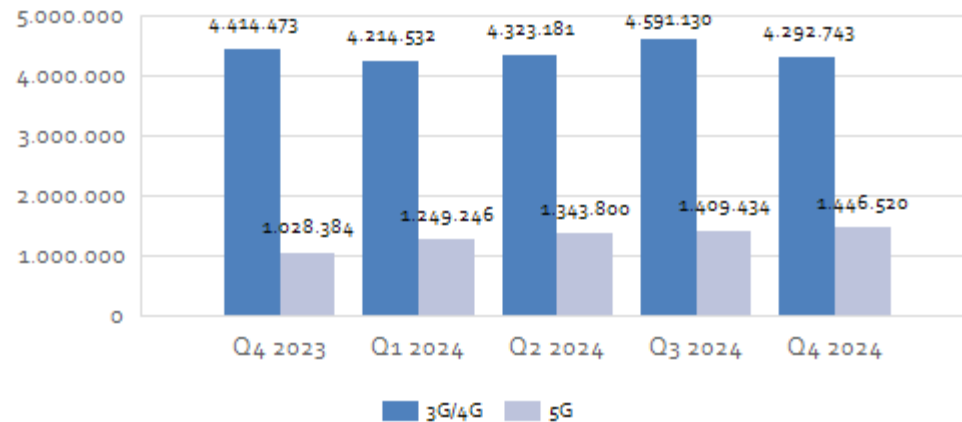
Mobile broadband Internet access service operator's market shares by number of subscriptions



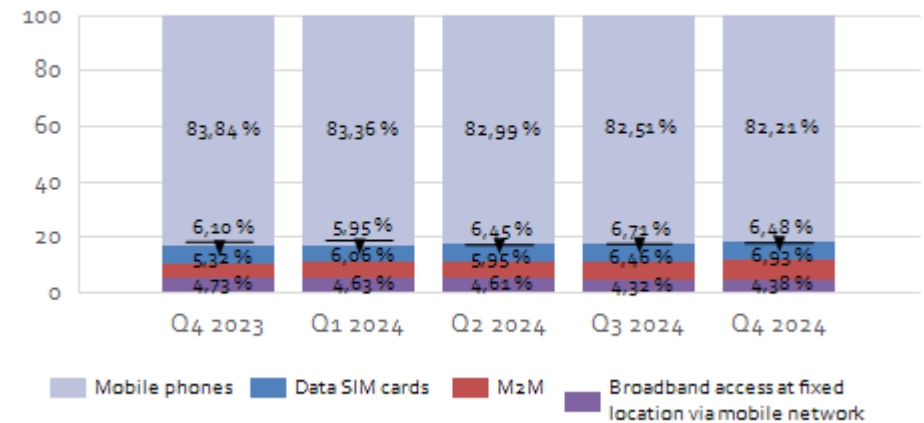
Total mobile broadband data traffic (TB)

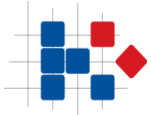


Mobile broadband Internet access service subscriptions by technologies

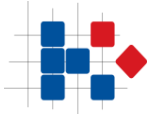


Mobile broadband Internet access service subscriptions by type of access

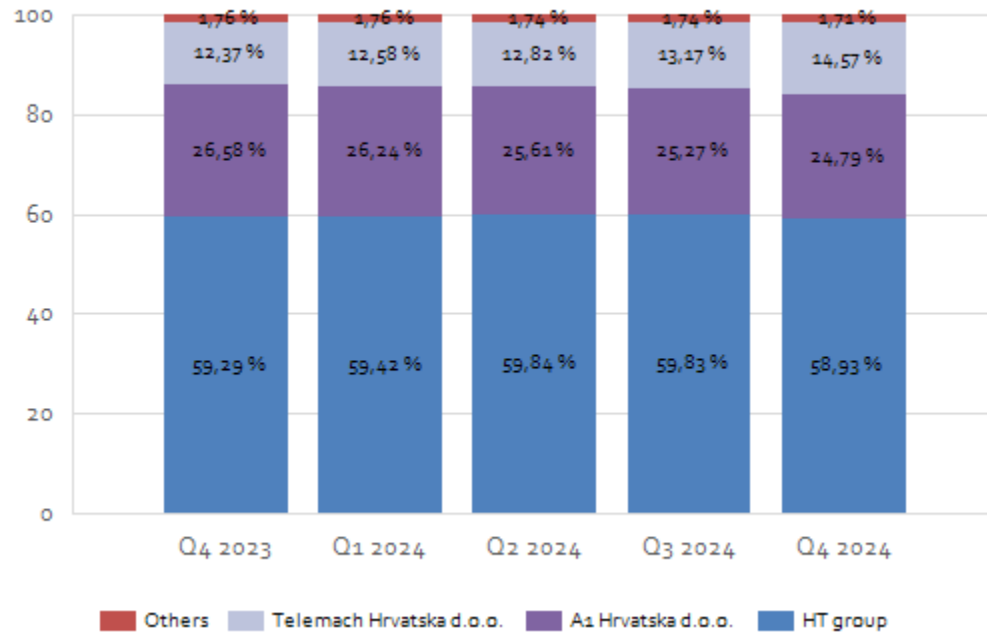




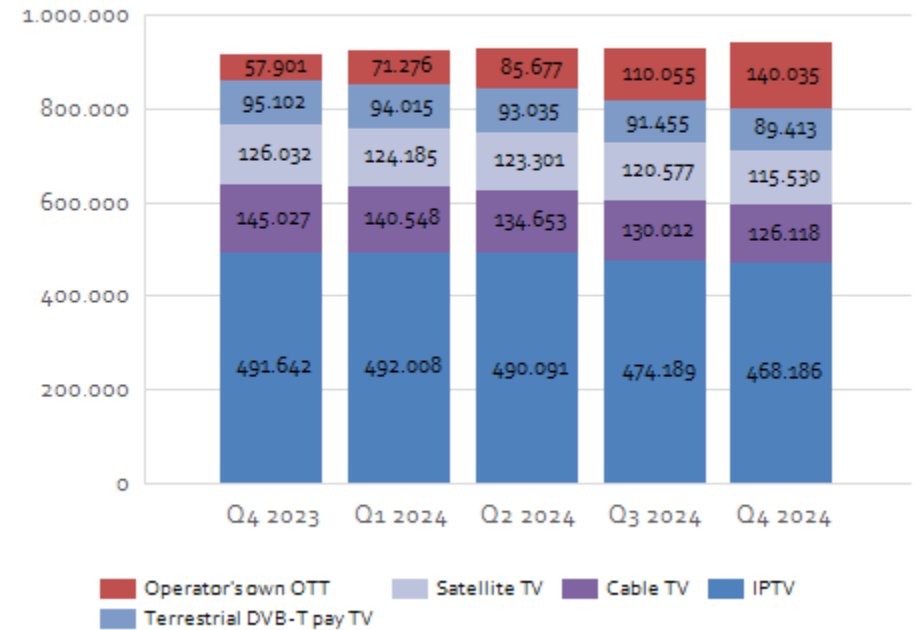
| Television services | Q4 2024 | % Change Q4 2024 - Q3 2024 | % Change Q4 2024 - Q4 2023 |
|---|-----------------------|-------------------------------|-------------------------------|
| Television services revenues | 36.740.256,05€ | 1,16 % | 11,61 % |
| Cable TV revenue | 5.730.454,51€ | 1,23 % | 14,07 % |
| IPTV revenue | 20.648.757,89€ | -0,24 % | 5,22 % |
| Satellite TV revenue | 3.990.128,00€ | -4,60 % | -0,80 % |
| Digital terrestrial TV revenue | 3.198.520,91€ | 0,49 % | 3,80 % |
| Own OTT service revenue | 3.172.397,74€ | 22,30 % | 171,89 % |
| Total number of pay-TV subscriptions (lines) | 939.282 | 1,40 % | 2,57 % |
| Cable reception | 126.118 | -3,00 % | -13,04 % |
| <i>Residential</i> | 122.777 | -2,97 % | -13,16 % |
| <i>Business</i> | 3.341 | -4,02 % | -8,49 % |
| IPTV | 468.186 | -1,27 % | -4,77 % |
| <i>Residential</i> | 441.357 | -1,33 % | -5,10 % |
| <i>Business</i> | 26.829 | -0,13 % | 1,02 % |
| Satellite reception (SAT TV) | 115.530 | -4,19 % | -8,33 % |
| <i>Residential</i> | 107.033 | -3,38 % | -8,64 % |
| <i>Business</i> | 8.497 | -13,29 % | -4,35 % |
| Digital terrestrial reception – pay TV | 89.413 | -2,23 % | -5,98 % |
| <i>Residential</i> | 88.434 | -2,23 % | -6,06 % |
| <i>Business</i> | 979 | -2,39 % | 1,87 % |
| Own OTT service | 140.035 | 27,24 % | 141,85 % |
| <i>Residential</i> | 130.336 | 29,16 % | 161,68 % |
| <i>Business</i> | 9.699 | 6,08 % | 19,83 % |



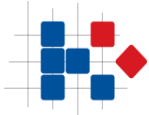
Pay TV operator's market shares by number of subscriptions



Pay TV subscriptions by technologies



| Television services - bundles | Q4 2024 | % Change Q4 2024 - Q3 2024 | % Change Q4 2024 - Q4 2023 |
|---|---------|-------------------------------|-------------------------------|
| Stand-alone – TV subscribers | 283.042 | -1,28 % | 16,99 % |
| Number of bundled services subscribers – 2D | 81.428 | -1,79 % | -5,40 % |
| Number of bundled services subscribers – 3D | 312.544 | 1,20 % | 3,42 % |
| Number of bundled services subscribers – 4D | 258.888 | 1,34 % | 5,96 % |

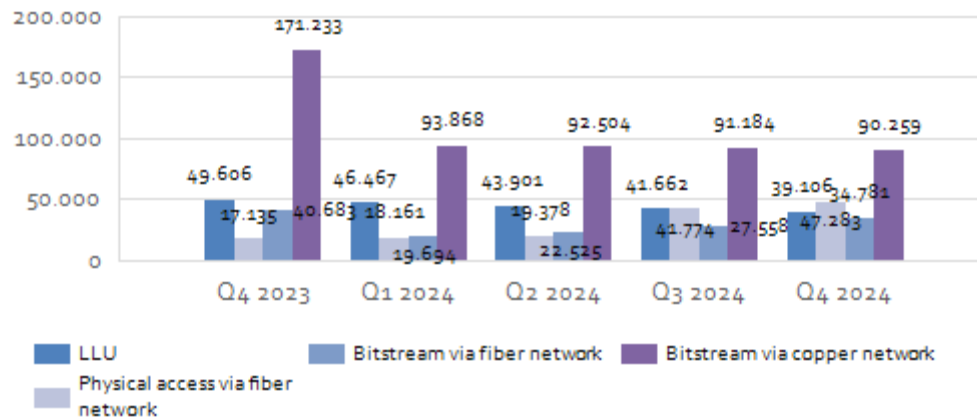


CROATIAN QUARTERLY ELECTRONIC COMMUNICATIONS MARKET DATA

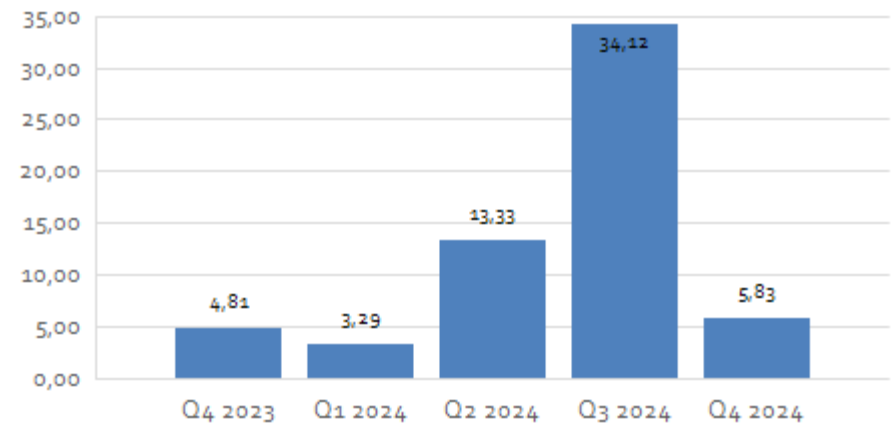
4. Quarter 2024.

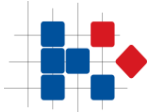
| Wholesale broadband access | Q4 2024 | % Change Q4 2024 - Q3 2024 | % Change Q4 2024 - Q4 2023 |
|--|---------------|-------------------------------|-------------------------------|
| Wholesale broadband access services via copper network revenues | 3.180.248,13€ | -2,43% | -40,66 % |
| Wholesale broadband access services via fiber network revenues | 2.477.773,91€ | 19,13 % | 39,41 % |
| Data roaming revenues | 5.832.693,09€ | -82,91 % | 21,33 % |
| Physical wholesale access via copper network(LLU)-number of lines | 39.106 | -6,14 % | -21,17 % |
| <i>Bitstream</i> wholesale access via copper network-number of lines | 90.259 | -1,01 % | -47,29 % |
| Physical wholesale access via fiber network (unbundled fiber at distribution node) - number of lines | 47.283 | 13,19 % | 175,94 % |
| <i>Bitstream</i> wholesale access via fiber networks - number of lines | 34.781 | 26,21 % | -14,51 % |

Wholesale broadband access by type of service



Data roaming revenues (millions EUR)



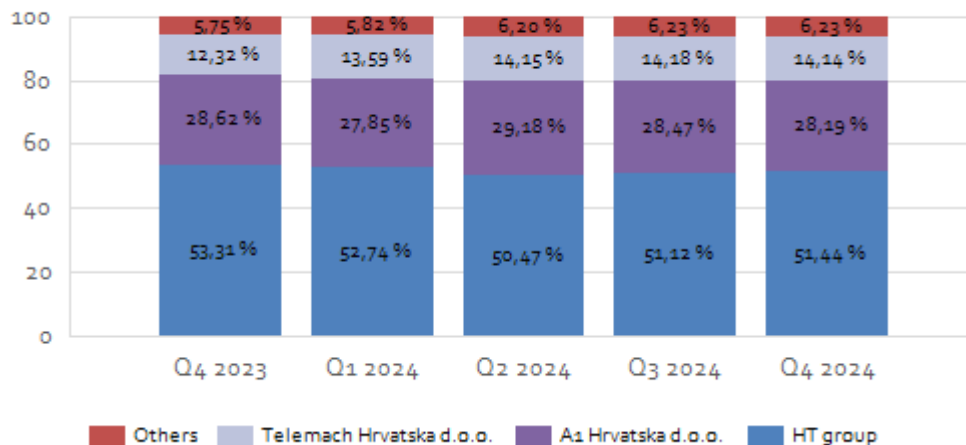


CROATIAN QUARTERLY ELECTRONIC COMMUNICATIONS MARKET DATA

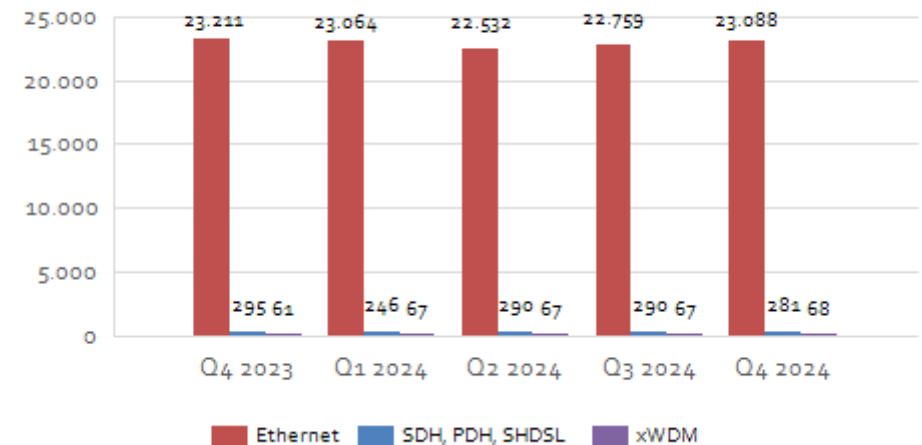
4. Quarter 2024.

| Dedicated capacity services (high-quality access) - retail level* | Q4 2024 | % Change Q4 2024 - Q3 2024 | % Change Q4 2024 - Q4 2023 |
|--|---------------|-------------------------------|-------------------------------|
| Traditional digital lines (SDH, PDH, (S)HDSL revenue | 273.569,15€ | 0,08 % | -6,68 % |
| Ethernet technology services revenue | 7.519.818,00€ | 15,26 % | 3,91 % |
| xWDM technology services revenue | 351.179,99€ | -9,26 % | 7,01 % |
| "Dark fiber" services revenue | 400.554,16€ | -1,99 % | 19,24 % |
| Total number of connection points of traditional digital lines (SDH, PDH, (S)HDSL) | 281 | -3,10 % | -4,75 % |
| Total number of Ethernet technology connection points | 23.088 | 1,45 % | -0,53 % |
| Total number of xWDM technology connection points | 68 | 1,49 % | 11,48 % |
| Total length of fiber as a part of "dark fiber" service (km) | 5.034 | 0,00 % | 41,68 % |

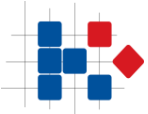
Dedicated capacity market operator's shares by number of connection points*



Dedicated capacity market connection points by technologies*

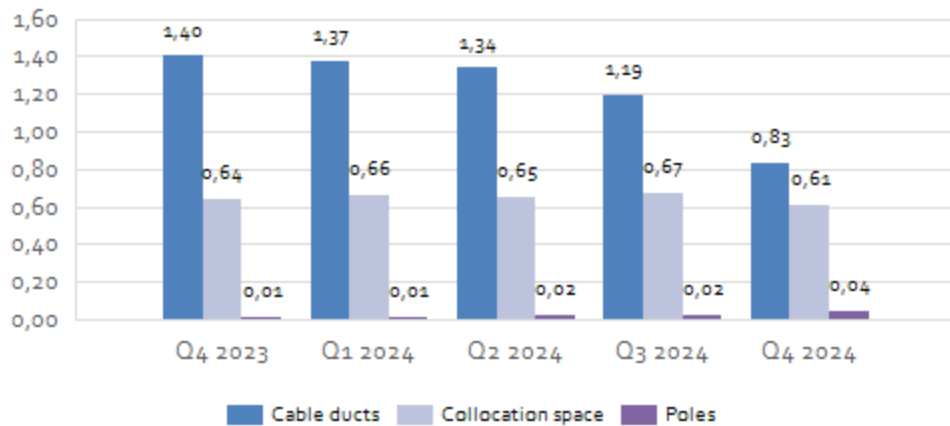


*From Q3 2024, the report no longer includes data from the operator HEP Telekomunikacije d.o.o., which provides services exclusively to companies within the HEP Group.



| Shared use of electronic communications infrastructure | Q4 2024 | % Change Q4 2024 - Q3 2024 | % Change Q4 2024 - Q4 2023 |
|--|-------------|-------------------------------|-------------------------------|
| Cable duct system shared use revenue | 829.554,07€ | -30,37 % | -40,77 % |
| Poles for installation of aerial network cables rental revenue | 42.081,25€ | 96,44 % | 302,11 % |
| Colocation spaces rental revenue | 605.077,16€ | -9,51 % | -5,16 % |
| Total length of shared use cable duct systems (km) | 23.469 | 18,04 % | 18,17 % |
| <i>Pipes length, 63-110 mm diameter (km)</i> | 4.832 | NA | NA |
| <i>Pipes length, 50 mm diameter (km)</i> | 486 | 149,23 % | NA |
| <i>Pipes length, 20-40 mm diameter (km)</i> | 6.562 | 2,36 % | -2,32 % |
| <i>Pipes length, 3-16 mm diameter (km)</i> | 11.589 | -3,30 % | -11,82 % |
| Total number of rented poles for the installation of aerial network cables | 4.942 | 16,53 % | 48,23 % |

Shared use of electronic communications infrastructure revenues (millions EUR)



Total length of shared cable ducts (km)

