

STATISTICAL YEARBOOK

**DEVELOPMENT OF ELECTRONIC COMMUNICATIONS
IN THE REPUBLIC OF MOLDOVA, IN 2021**



This Report is also available in the electronic version. To open it, go to <http://anrceti.md/fileupload/62> Statistical yearbook on the development of electronic communications in 2021 or scan the QR code using your smartphone or tablet.

Contents:

1. Market evolution. General description.....	5
1.1 Evolution of revenues	5
1.2 Evolution of the number of end users	7
1.3 Evolution of voice traffic in mobile and fixed networks	9
1.4 Evolution of investment	10
2. Mobile voice	10
2.1 Market development	10
2.2 Users and penetration.....	13
2.3 Evolution of traffic	16
2.4 Radio signal coverage rates of territory and population	17
3. Fixed voice	19
3.1 Market development	19
3.2 Subscribers and penetration	20
3.3 Evolution of traffic	21
4. Fixed and mobile broadband access	22
4.1 Evolution of revenues	22
4.2 Evolution of revenues from fixed broadband access services	23
4.3 Evolution of revenues from mobile broadband access services.....	24
4.4 Fixed/mobile broadband subscribers and penetration.....	27
4.5 Fixed broadband subscribers, penetration rates and technologies of access.....	28
4.6 Mobile broadband subscribers and penetration rates	30
4.7 Machine-to-machine or M2M services	33
5. Transmission and retransmission of audiovisual programs	35
5.1 Generale data. Market development.....	35
5.2 Subscribers and penetration	36
6. Conclusions	39
7. List of providers with significant market share on the electronic communications market	40
8. Number of subscribers and use of fixed broadband access technologies in administrativ – territorial units of the Republic of Moldova.....	44

Preface

The statistical yearbook on the development of electronic communications in the Republic of Moldova for 2021 was developed based on the statistical data presented by the providers of publicly available electronic communications networks and services.

In accordance with the provisions of the Electronic Communications Law no. 241-XVI of 15.11.2007, with subsequent amendments (*hereinafter - Law no. 241/2007*), the National Regulatory Agency for Electronic Communications and Information Technology (*hereinafter ANRCETI*) collects and processes statistical data regarding the quarterly/annual situation on the segments of the electronic communications market, in order to evaluate the existing trends and to carry out market analyses.

On quarterly basis, ANRCETI publishes on its web page reports that reflect the situation on the electronic communications market segments, and yearly before April 30, it publishes the yearbook on the development of the electronic communications sector for the preceeding year.

Readers wishing to provide comments, suggestions or questions regarding the content and format of this yearbook, are welcome to contact ANRCETI via email address raport.statistic@anrceti.md.

Electronic Communications Market Key Indicators

Indicators	2020	2021	Change
Mobile voice services			
Users, total:	4 108 207	4 706 062	14,6%
Active users	3 420 383	3 900 179	14,0%
- individuals	3 135 108	3 601 067	14,9%
- businesses	285 275	299 112	4,9%
Total traffic volume in mobile networks (mil. minutes)	6 626,5	6 681,8	0,8%
Average number of minutes monthly consumed by an active user - MoU (minutes)	310	296	-4,3%
SMSs (mil.)	923,2	858,8	-7,0%
Service penetration rate per 100 population (active subscribers)	129,5%	150,2%	20,7 p.p.
Revenues (mil. lei)	2 914,8	2 889,1	-0,9%
Average ARPU - active subscribers (lei)	70,7	66,4	-6,1%
Fixed voice services			
Subscribers (linii telefonice)	1 027 689	1 000 228	-2,7%
- individuals	897 766	871 280	-3,0%
- businesses	129 923	128 948	-0,8%
Service penetration rate per 100 population	38,9%	38,5%	-0,4 p.p.
Total traffic volume in fixed networks (mil. minutes)	1 147 051	972 042	-15,3%
Average number of minutes monthly consumed by a user - MoU (minutes)	142	122	-14,5%
Revenues (mil. lei)	379,6	334,0	-12,0%
ARPU (lei)	30,0	27,5	-8,4%
Mobile broadband access services			
Mobile broadband users (3G, 4G, data-only), total:	2 371 108	2 688 907	13,4%
- via smartphones	2 176 652	2 542 074	16,8%
- via data-only access (modems/cards/USB)	194 456	146 833	-24,5%
Mobile broadband penetration rate per 100 population	89,8%	103,5%	13,7 p.p.
Data-only penetration rate per 100 population	7,4%	5,7%	-1,7 p.p.
Data-only mobile broadband traffic (TB),	68 734	64 643	-6,0%
Data-only mobile traffic via smartphones (TB),	81 450	136 920	68,1%
Revenues from broadband mobile acces ¹ (mil. lei)	1 208,8	1 281,4	6,0%
- Revenues from data-only mobile broadband access (mil. lei)	235,4	198,2	-15,8%
Average ARPU of data-only mobile broadband access (lei)	91,7	94,8	3,4%
Average ARPU of mobile broadband via smartphones (lei)	39,4	37,9	-3,7%
Subscribers M2M	45 085	52 053	15,5%
Revenues M2M ² (mil. lei)	14,0	16,0	14,6%
Fixed broadband access services			
Subscribers	719 001	762 333	6,0%
- individuals	681 821	722 958	6,0%
- businesses	37 180	39 375	5,9%
Service penetration rate per 100 population	27,2%	29,4%	2,1 p.p.
Revenues (mil. lei)	1 383,0	1 440,3	4,1%
Average ARPU (lei)	166,6	161,9	-2,8%
Total global Internet capacity (Gbps)	755,9	938,3	24,1%
Revenues from data transmission (mil. lei)	66,6	86,2	29,3%
Transmission and retransmission of audiovisual programs			
Pay TV subscribers	360 932	730 648	102,4%
Service penetration rate per 100 households	41,0%	84,4%	43,4 p.p.
Revenues from services of transmission and retransmission of audiovisual programs (mil. lei)	283,3	353,9	24,9%
- including revenues from pay TV	184,7	236,0	27,8%
ARPU of pay TV services (lei)	44,2	49,1	11,3%
Revenues from other electronic communications activities (mil. lei)	745,3	896,6	25,4%
Total Revenues in electronic communications sector (mil. lei)	5 941,4	6 112,0	2,9%

¹ This indicator also includes revenues from the sale of mobile broadband access services via the smartphone and is presented, for information purposes, to show the evolution of total revenues on the mobile broadband market. These revenues are a component of the total volume of revenues attested on the mobile voice market, because they are revenues from additional services to the basic service - mobile voice.

² These indicators are presented, for information purposes, to show the dynamics of revenues on the market segments under consideration. The quantum of these revenues are included in the revenues from other activities in the field of electronic communications.

Remark: 1) Penetration rates reported per 100 households are estimates (on average a household consisted of 3 people).

2) Annual average of ARPU and MOU indicators are calculated based on quarterly averages. At the same time, the percentage presented graphically may contain a margin of error, being determined by the rounding of the last digit.

1. Market evolution. General description

1.1 Evolution of revenues

According to the statistical data provided to ANRCETI by the 319 providers of public electronic communications networks and/or publicly available electronic communications services (of which - 60 providers reported zero indicators), in 2021, the total volume of revenues in the electronic communications sector (mobile voice, mobile and fixed broadband, fixed voice, retransmission of audiovisual programs, other activities in the field of electronic communications) increased by 170.6 million lei (2.9%), compared to 2020, and reached a total of 6 billion 112 million lei.

Compared to 2020, the revenues on the fixed voice market decreased by 12%, estimated at approximately 334 million lei, those on the mobile voice market decrease 0.9% and totaled 2,889.1 million lei, on data-only mobile broadband market (via modems/cards/USB) - by 15.8%, making 198.2 million lei. At the same time, the revenues from fixed broadband services increased by 4.1% and totaled 1,440.3 million lei. A 24.9% increase was attested on the market for retransmission of audiovisual programs, summing up to a total of 353.9 million lei. Revenues from sale of other electronic communications services increased by 25.4% and totaled 896.6 million lei (Chart 1).

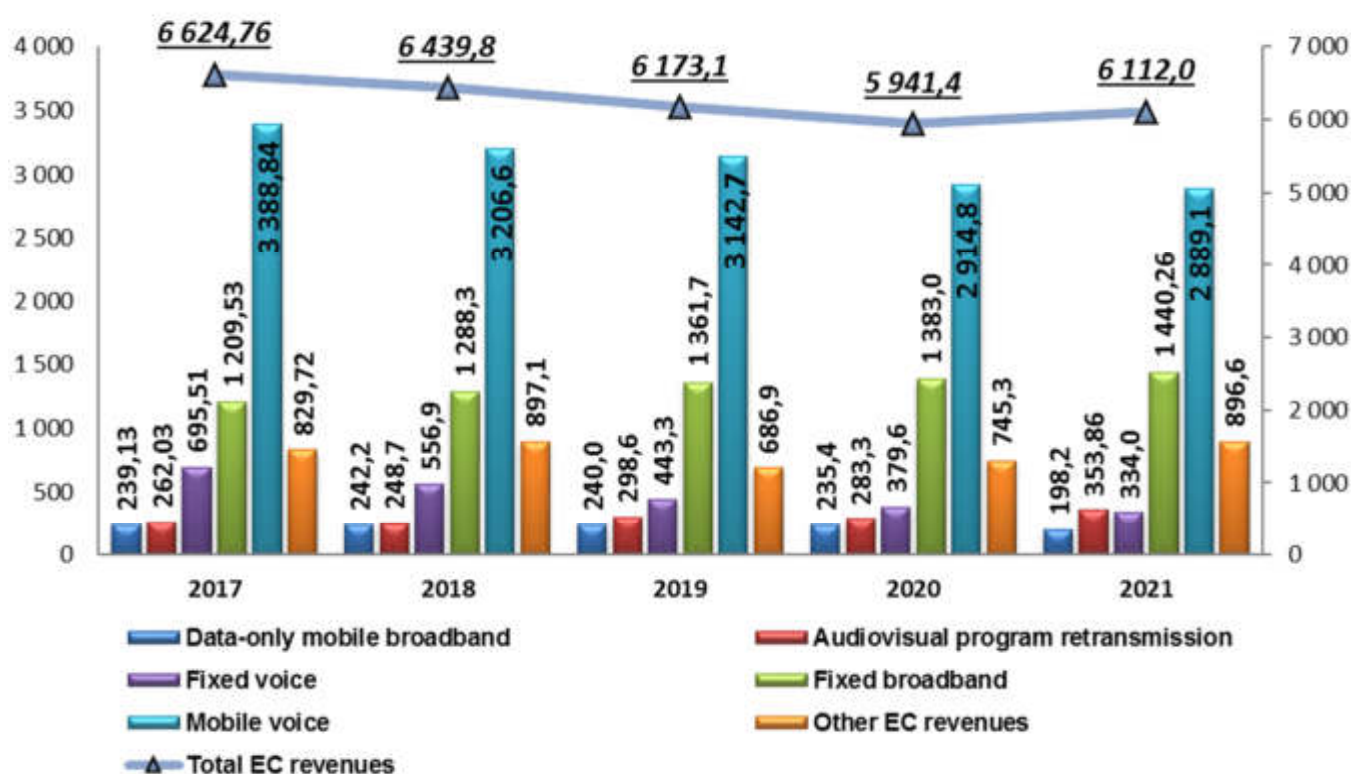


Chart 1. Evolution of revenues in electronic communications sector (mil. lei)

Source: ANRCETI

Compared to 2020, the structure of the electronic communications market by revenues did not change significantly. The share of revenues from fixed broadband services increased from 23.3% to 23.6%, those from retransmission of audiovisual programs - from 4.8% to 5.8%, and those from other activities in the field CE - from 12% to 14.7%

At the same time, the share of revenues from fixed voice services reduced from 6.4% to 5.4%, the share of revenues from mobile voice services - from 49.5% to 47.3%, and the share of revenues from mobile data-only services - from 4% to 3.2% (Chart 2).

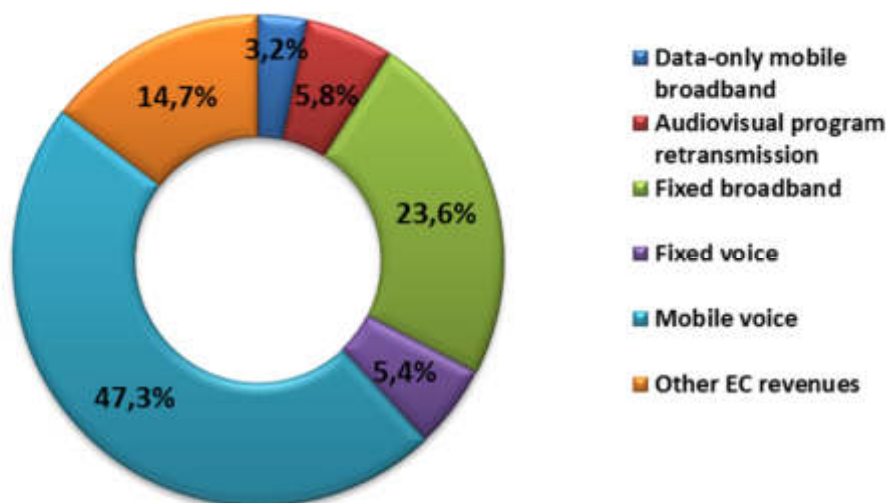


Chart 2. Structure of electronic communications market by revenues

Source: ANRCETI

Statistical data show that during the reporting period, like in previous years, the most significant average monthly revenue per user (ARPU) - of 161.9 lei - was attested on the fixed broadband market. On the data-only mobile access market this indicator was 94.8 lei, on the mobile voice market - 66.4 lei, on the pay TV market - 49.1 lei and on the fixed voice market - 27.5 lei (Chart 3).

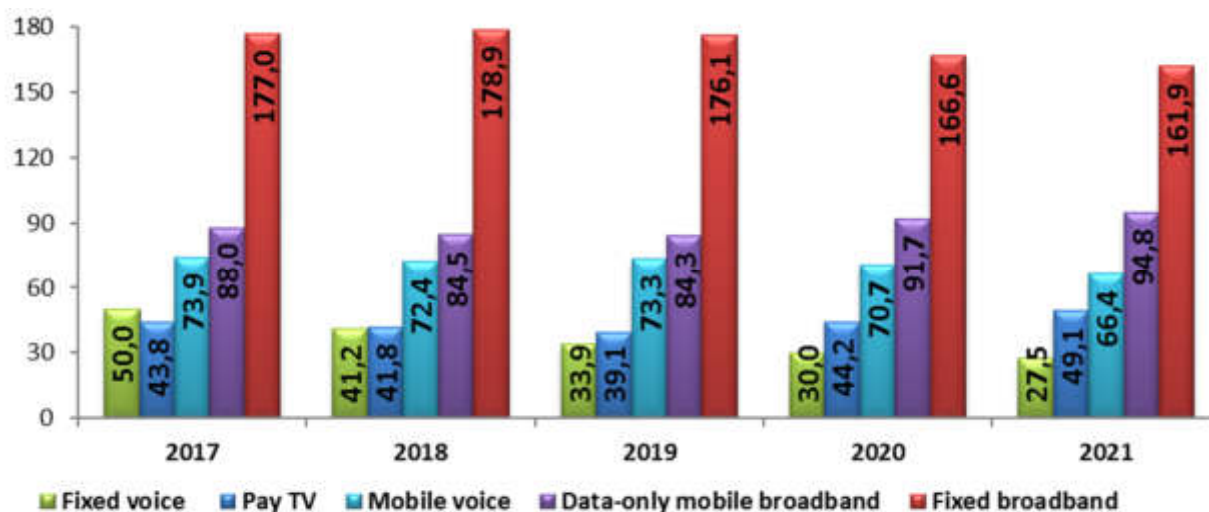


Chart 3. Evolution of average revenue per user - ARPU (lei)

Source: ANRCETI

In 2021, the largest volume of revenues was reported by JSC Orange Moldova - 2,113 million lei or 34.6% of the total revenues in the electronic communications sector. The revenues of JSC Moldtelecom constituted 1,622 million lei or 26.5% of the total, and those of JSC Moldcell totaled 899 million lei or 14.7% of the total. The other providers reported cumulative volume of revenues 1,478 million lei or about 24.2% of the total (Chart 4).

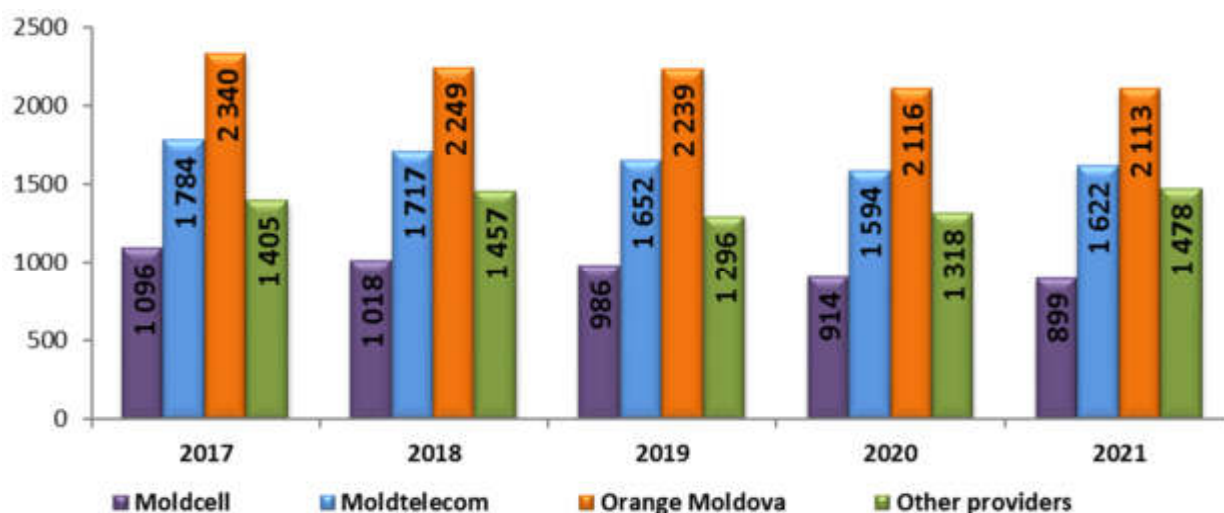


Chart 4. Volume of revenues of electronic communications networks and service providers (mil. lei)

Source: ANRCETI

1.2 Evolution of the number of end users

During the reporting period, a positive development in the number of end users was recorded on the fixed broadband market. The total number of these users increased, compared to 2020, by 6% and totaled 762.3 thousand.

The number of subscribers to pay TV services (CATV and IP TV) also increased and reached 730.6 thousand, of which 447 thousand are IP TV Subscribers of JSC Moldtelecom, according to data published on the company's official website.

The total number of end users on mobile broadband market (based on 2G, 3G, 4G technologies and via modems/cards/USB – data-only access) increased by 13.4% and reached 2 688.9 thousand, of which: the number of users of mobile broadband services via smartphones increased by 16.8% and totaled over 2 million 542.1 thousand, the number of users of data-only mobile broadband decreased by about 24.5% and totaled 146.8 thousand, that of mobile voice users increased by 14.6% and reached 4 706.1 thousand. The number of fixed voice subscribers decreased by 2.7% and reached approximately 1,000.2 thousand (Chart 5).

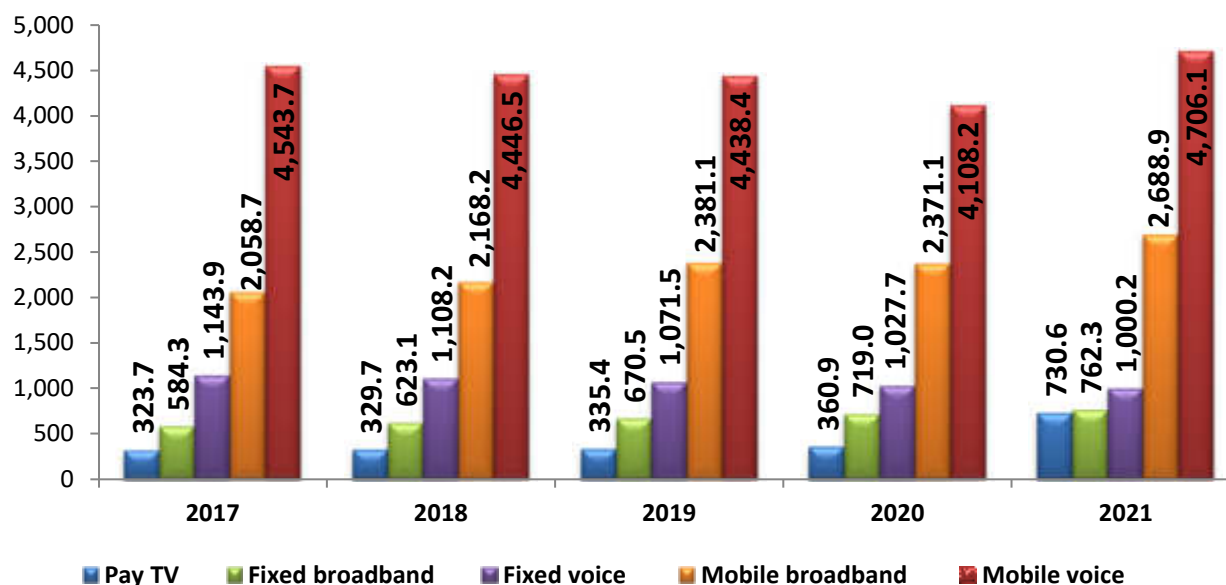


Chart 5. Evolution of number of electronic communications service users (thousand)

Source: ANRCETI

Following the developments mentioned above, the penetration rates of most types of services per 100 inhabitants of the Republic of Moldova, registered a positive development. Respectively, the increase of this indicator - by 2.1 percentage points (p.p.), compared to 2020, was attested on the fixed broadband access, reaching 29.4%. The penetration rate of mobile broadband access per 100 population increased by 13.7 p.p. and showed 103.5%. The pay TV penetration rate per 100 population increased by 14.4 p.p. and reached 28.1%, while the penetration rate, reported per 100 households, reached an estimated 84.4%. Mobile voice penetration rate, reported per 100 population, increased by 20.7 p.p. and equaled 150.2%, while that of fixed voice decreased by 0.4 p.p. and equaled 38.5% (Chart 6).

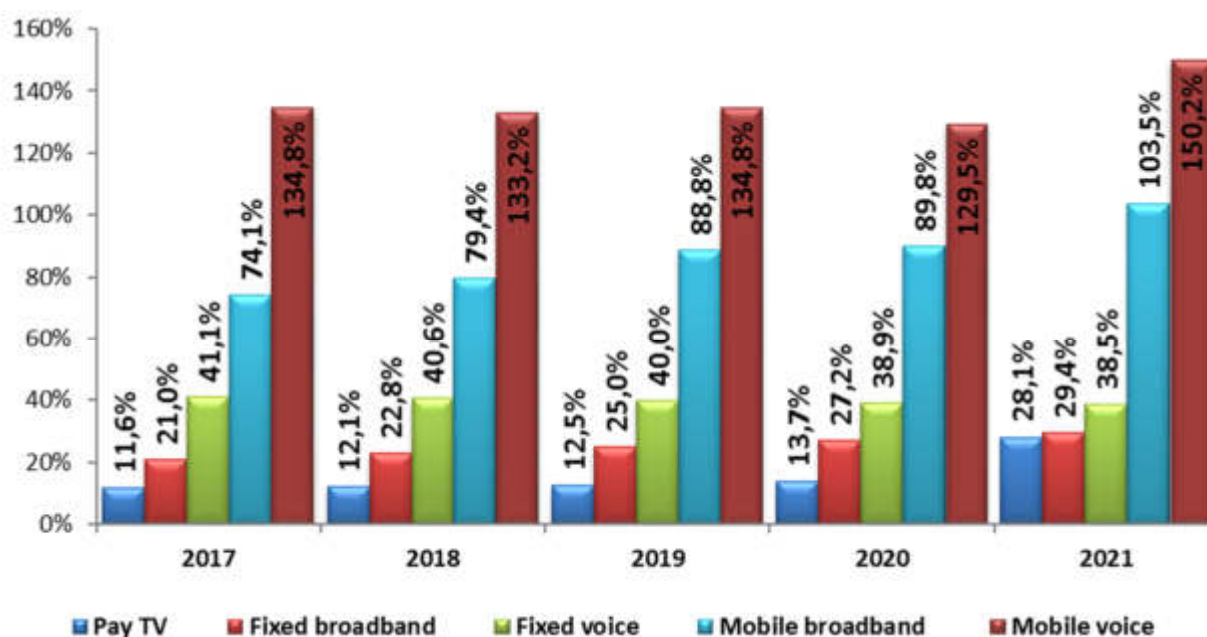


Chart 6. Evolution of penetration rates of electronic communications services per 100 population

Source: ANRCETI

1.3 Evolution of voice traffic in mobile and fixed networks

The total volume of traffic decreased, compared to 2020, by 1.5% and reached about 7.7 billion minutes. This trend has been influenced by the increase of voice traffic in mobile networks. The voice traffic in these networks increased by 0.8% up to 6.7 billion minutes, while the voice traffic in fixed voice networks decreased by 15.3%, compared to the previous year, and made up about 1 billion minutes (Chart 7).

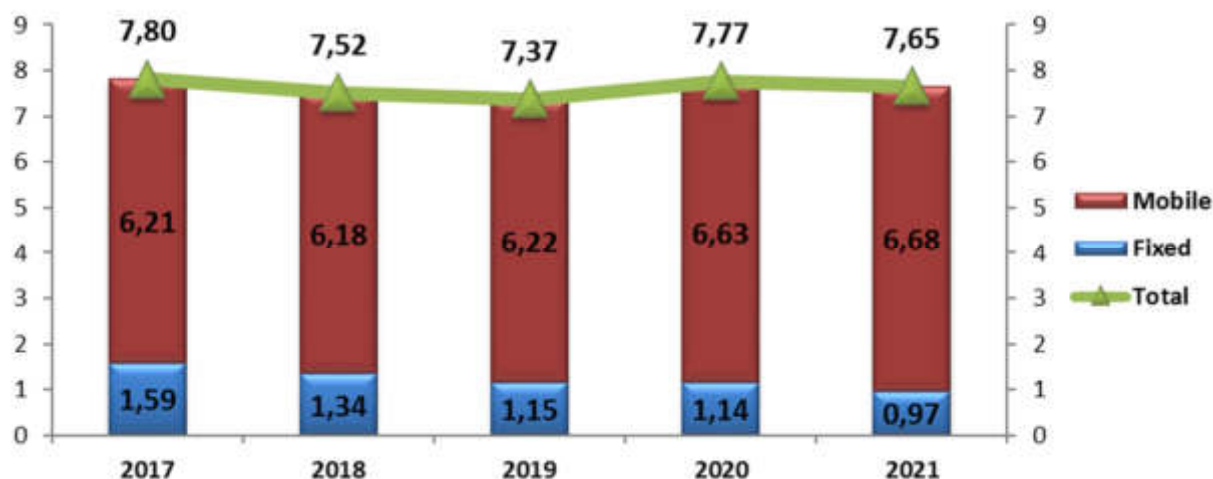


Chart 7. Evolution of voice traffic in mobile and fixed voice networks(bn. minutes)

Source: ANRCETI

As a result of the decrease in voice traffic in fixed voice networks, the share of traffic in mobile voice networks (this includes traffic in the providers' own networks and traffic from one mobile voice network to another of the same type) in the structure of total traffic increased, compared to 2020, by 2.1 p.p. and summed up at 87.3%, while the share of traffic in fixed voice networks decreased the same amount and made up 12.7% (Chart 8).

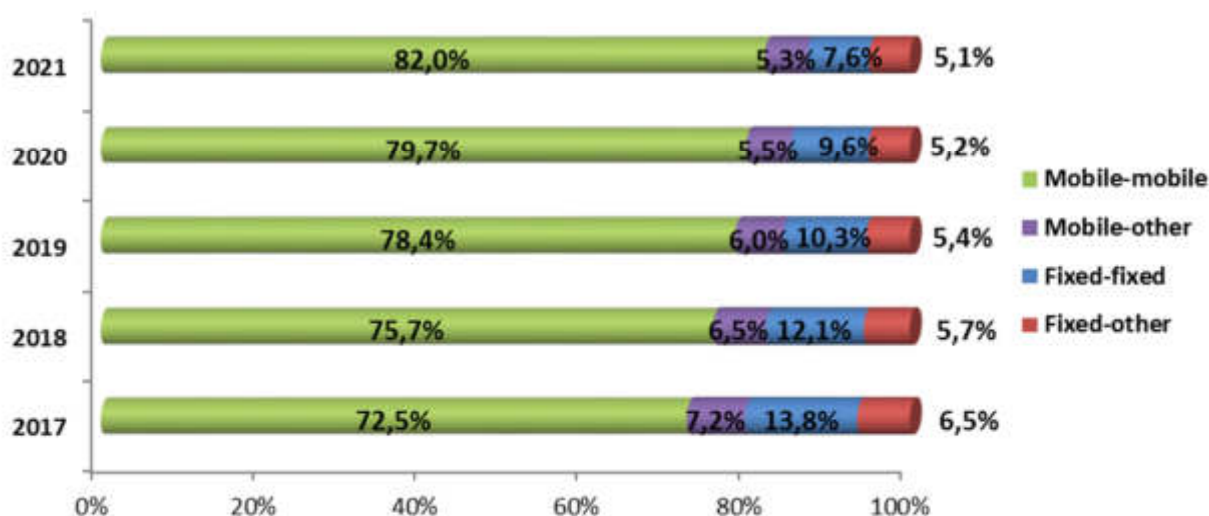


Chart 8. Share of traffic types in the structure of the total voice traffic in fixed and mobile voice networks

Source: ANRCETI

1.4 Evolution of investment

According to the statistical data aggregated by ANRCETI for 2021, the total volume of investments in the electronic communications sector increased, compared to 2020, by 19.3% and was estimated at 1,124 million lei. This trend was driven by the 43.4% increase in investments in audiovisual networks, which totaled over 236 million lei.

At the same time, the value of investments in fixed electronic communications networks increased by 25.5% and was estimated at approximately 491 million lei, and investments in mobile networks increased by 2.8 and reached 396 million lei (Chart 9).

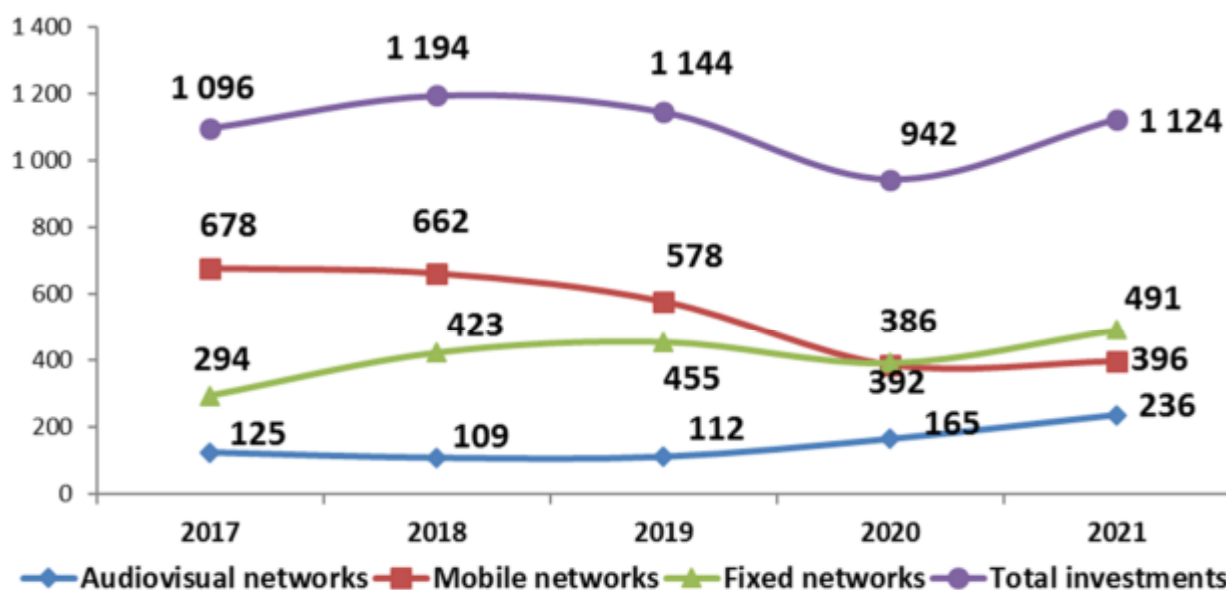


Chart 9. Evolution of investments in electronic communications (mil. lei)

Source:ANRCETI

As for the share of investments, the values of this indicator on the segments of mobile and fixed electronic communications networks, in 2021, were 35.3% and 43.7%, respectively. The share of this indicator on the segment of audiovisual program retransmission reached about 21%.

2. Mobile voice

2.1 Market development

In 2021, the total volume of revenues by mobile voice providers (JSC Orange Moldova, JSC Moldcell and JSC Moldtelecom under Unite brand) decreased, compared to the previous year, by 0.9% and reached approximately 2,889.1 million lei. Revenues of JSC Moldtelecom from the provision of mobile voice services increased by 17.5% and totaled 222.3 million lei, while the revenues of JSC Moldcell and JSC Orange Moldova decreased by 3.9% and, respectively, 1.4%, making up a revenue of approximately 832.1 million lei and 1,834.6 million lei, accordingly.

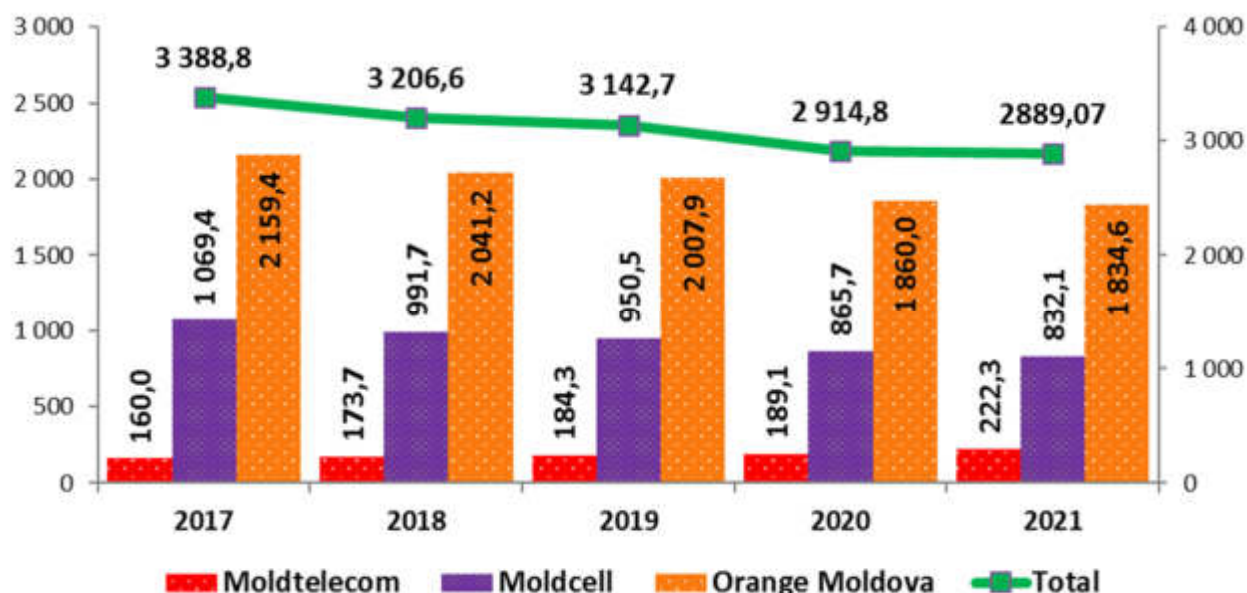


Chart 10. Evolution of revenues reported mobile voice providers (mil. lei)

Source: ANRCETI

In 2021, the total revenue recorded by mobile voice providers on the retail market, from services provided to individuals (B2C) and businesses (B2B) decreased by 0.4%, compared to 2020 (Table no. 1).

Table no. 1. Market structure by revenues at retail level from services provided to individuals and businesses (thousand, lei)

	2017	2018	2019	2020	2021
Revenues from services provided to individuals (B2C)					
JSC Moldcell	678 211,0	691 066,7	688 091,5	643 295,7	606 749,8
JSC Moldtelecom	39 968,7	116 728,0	130 254,9	137 242,3	169 097,7
JSC Orange Moldova	1 460 936,3	1 494 469,3	1 545 659,2	1 472 242,2	1 454 643,3
Total, revenues from services provided to individuals (B2C)	2 179 116,0	2 302 264,1	2 364 005,6	2 252 780,2	2 230 490,8
	86,0%	86,2%	86,1%	86,6%	86,1%
Revenues from services provided to businesses (B2B)					
JSC Moldcell	135 474,7	138 078,4	147 891,4	139 195,3	148 048,0
JSC Moldtelecom	5 576,4	19 470,1	21 047,7	20 319,1	21 541,7
JSC Orange Moldova	213 890,6	209 748,2	212 397,1	189 960,8	190 855,3
Total, revenues from services provided to businesses (B2B)	354 941,7	367 296,8	381 336,2	349 475,2	360 445,0
	14,0%	13,8%	13,9%	13,4%	13,9%
Total	2 534 057,7	2 669 560,9	2 745 341,8	2 602 255,4	2 590 935,8

In 2021, the market shares by turnover were as follows: JSC Orange Moldova held a 63.5% share of the mobile voice market, JSC Moldcell - 28.8% and JSC Moldtelecom - 7.7%.

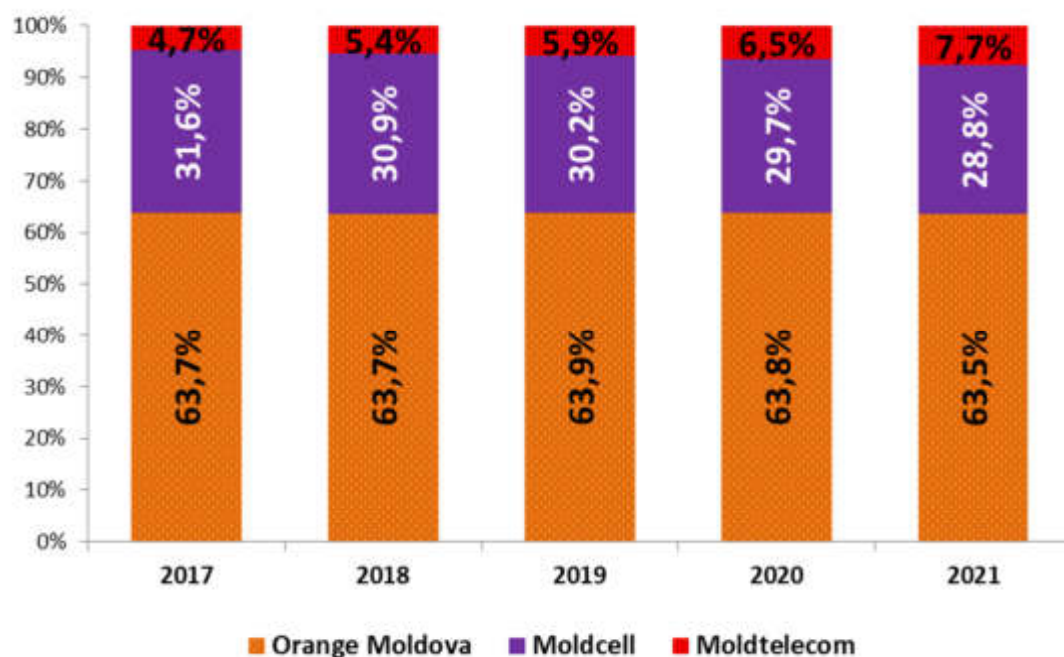


Chart 11. Evolution of market shares of mobile voice service providers, by revenues

Source: ANRCETI

Last year, the revenues on the retail market from subscriptions (postpaid) represented 79.3% (more by 0.8 p.p.), and the revenues from prepaid cards - approximately 20.7%, outlining an upward trend by approximately 0.8 p.p compared to the preceeding years. (Table no. 2).

Table no. 2. Market structure by revenues on retail market for subscriptions and prepaid services (thousand, lei)

	2017	2018	2019	2020	2021
Revenues from subscriptions (postpaid)					
JSC Moldcell	636 668,2	640 323,8	638 916,4	648 092,6	612 083,8
JSC Moldtelecom	36 315,4	121 666,3	129 558,1	129 679,4	152 508,5
JSC Orange Moldova	1 035 128,3	1 158 544,8	1 265 925,4	1 265 499,2	1 289 285,7
Total, revenues from subscriptions (postpaid)	1 708 111,9	1 920 534,9	2 034 399,9	2 043 271,2	2 053 878,1
	67,4%	71,9%	74,1%	78,5%	79,3%
Revenues from prepaid cards					
JSC Moldcell	177 017,6	188 821,3	197 066,5	134 398,5	142 714,0
JSC Moldtelecom	9 229,7	14 531,9	21 744,5	27 881,9	38 130,9
JSC Orange Moldova	639 698,5	545 672,8	492 130,9	396 703,8	356 212,8
Total, revenues from prepaid cards	825 945,8	749 026,0	710 941,9	558 984,2	537 057,7
	32,6%	28,1%	25,9%	21,5%	20,7%
Total	2 534 057,7	2 669 560,9	2 745 341,8	2 602 255,4	2 590 935,8

The average monthly revenue per user (ARPU), in 2021, decreased 6,1%, compared to the preceeding period and was equal to 66,4 lei (Chart 12). The highest ARPU was reported by JSC Orange Moldova - 73.4 lei. JSC Moldtelecom reported an ARPU of 59.8 lei, and JSC Moldcell - 56.4 lei.

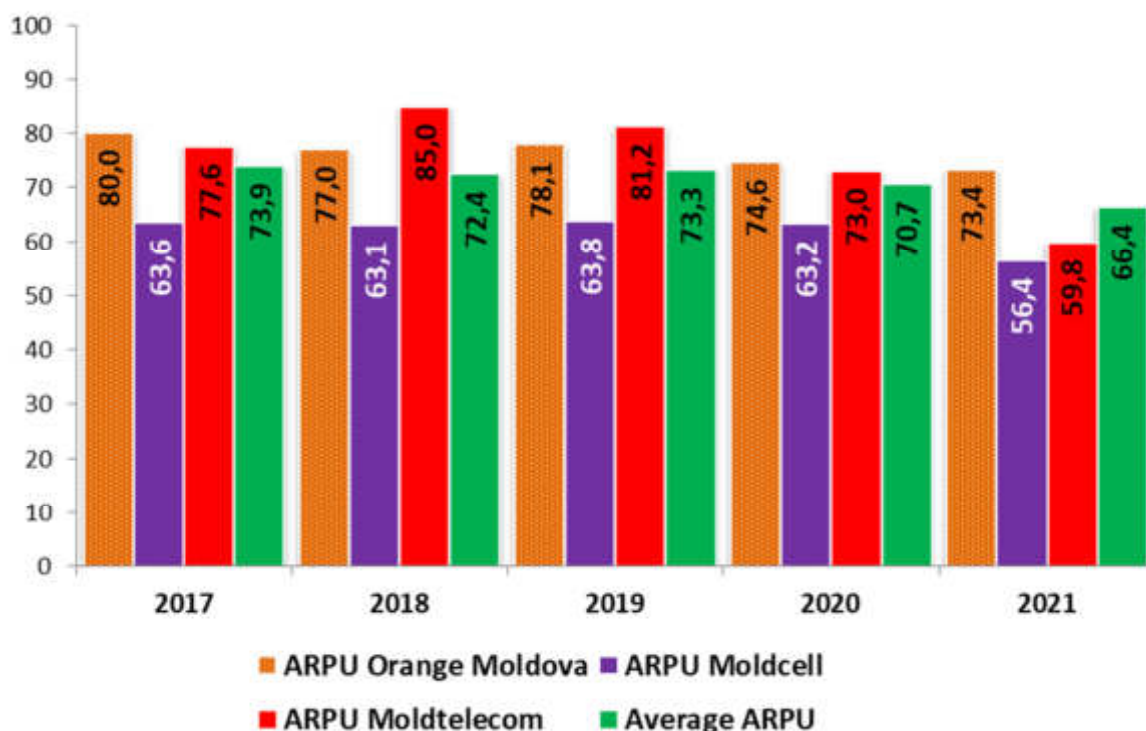


Chart 12. Evolution of monthly average revenue per mobile voice user - ARPU (lei)

Source: ANRCETI

In 2021, the monthly average revenue per user (ARPU) from services provided to individuals decreased, compared to 2020, by 6,9% and was equal to 55,7 lei, whereas the ARPU from services provided to businesses increased by 0,7% and made 103 lei (Table no.3).

Table no. 3. Evolution of average monthly revenue per user (ARPU) from services provided to individuals and businesses (lei)

	2017	2018	2019	2020	2021
ARPU from services provided to individuals					
JSC Moldcell	43,3	47,8	50,5	52,1	45,4
JSC Moldtelecom	23,8	70,7	72,1	63,2	51,5
JSC Orange Moldova	57,5	59,9	64,1	63,2	62,4
Average ARPU, services provided to individuals	51,0	56,1	59,8	59,6	55,7
ARPU from services provided to businesses					
JSC Moldcell	118,5	112,2	115,5	104,2	107,6
JSC Moldtelecom	14,7	47,6	45,5	48,1	49,9
JSC Orange Moldova	137,0	132,8	131,2	114,6	112,8
Average ARPU from services provided to businesses	115,1	114,2	113,4	102,3	103,0

2.2 Users and penetration

In 2021, the total number of mobile voice users increased over the end of 2020 by 14.6%, and constituted 4.7 mil. lei, while the service penetration rate, per 100 population, was

181.2%. The number of active mobile voice users grew by 14% up to 3.9 mil., while the penetration rate was 150.2% (Chart 13).

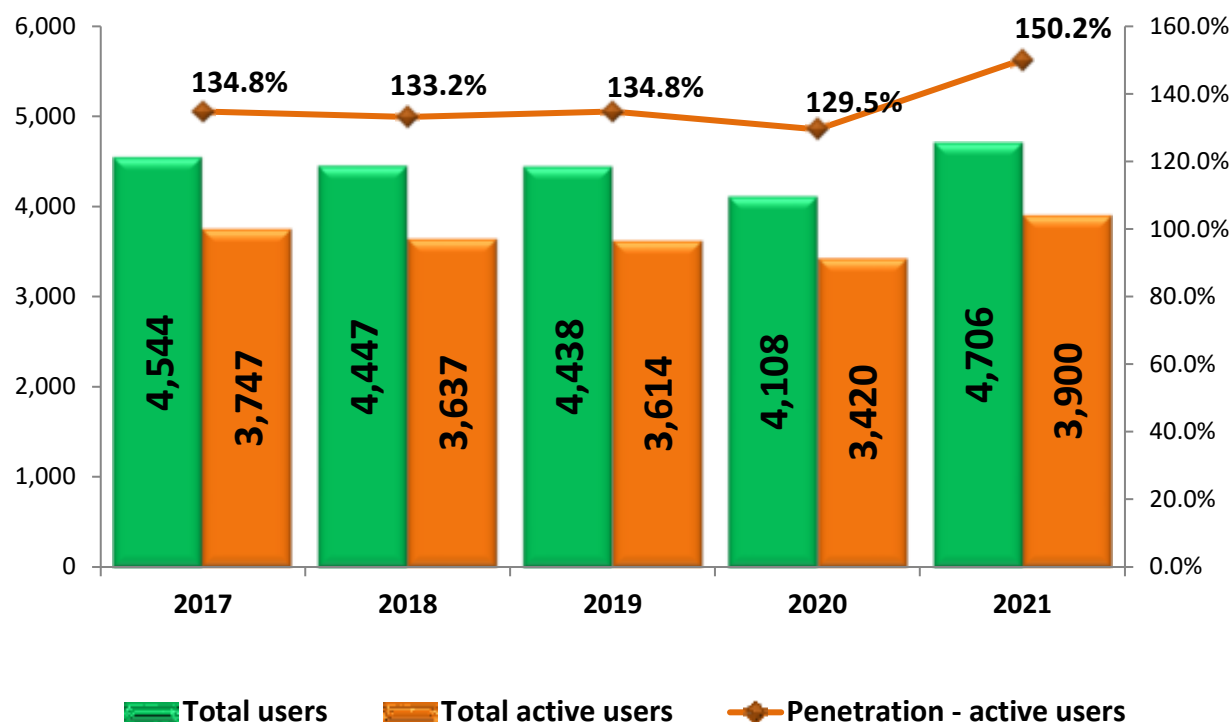


Chart 13. Evolution of the number of mobile voice users and penetration rates (thousand)

Source: ANRCETI

In 2021, from the total number of active users, 3.6 million were individuals (B2C), representing a share of 92.3%, and 299.1 thousand - businesses (B2B), a share of about 7.7% (Table no. 4).

Table no. 4. Structure of the market of active users, in terms of individuals/businesses

	2017	2018	2019	2020	2021
Individuals (B2C)					
JSC Moldcell	1 241 962	1 172 257	1 117 007	995 998	1 293 981
JSC Moldtelecom	124 848	139 458	163 625	245 229	341 565
JSC Orange Moldova	2 110 564	2 046 362	2 049 708	1 893 881	1 965 521
Total, individuals (B2C)	3 477 374	3 358 077	3 330 340	3 135 108	3 601 067
	92,8%	92,3%	92,2%	91,7%	92,3%
Businesses (B2B)					
JSC Moldcell	106 102	111 200	112 100	110 403	119 807
JSC Moldtelecom	31 947	34 814	34 941	35 693	35 577
JSC Orange Moldova	131 221	132 840	136 465	139 179	143 728
Total, businesses (B2B)	269 270	278 854	283 506	285 275	299 112
	7,2%	7,7%	7,8%	8,3%	7,7%
Total, active users	3 746 644	3 636 931	3 613 846	3 420 383	3 900 179

Like previously, JSC Orange Moldova had the most significant share of the mobile voice market, by total number of users - 51.8%, followed by JSC Moldcell, with 35.4% market share and JSC Moldtelecom - 12.7%. (Chart 14).

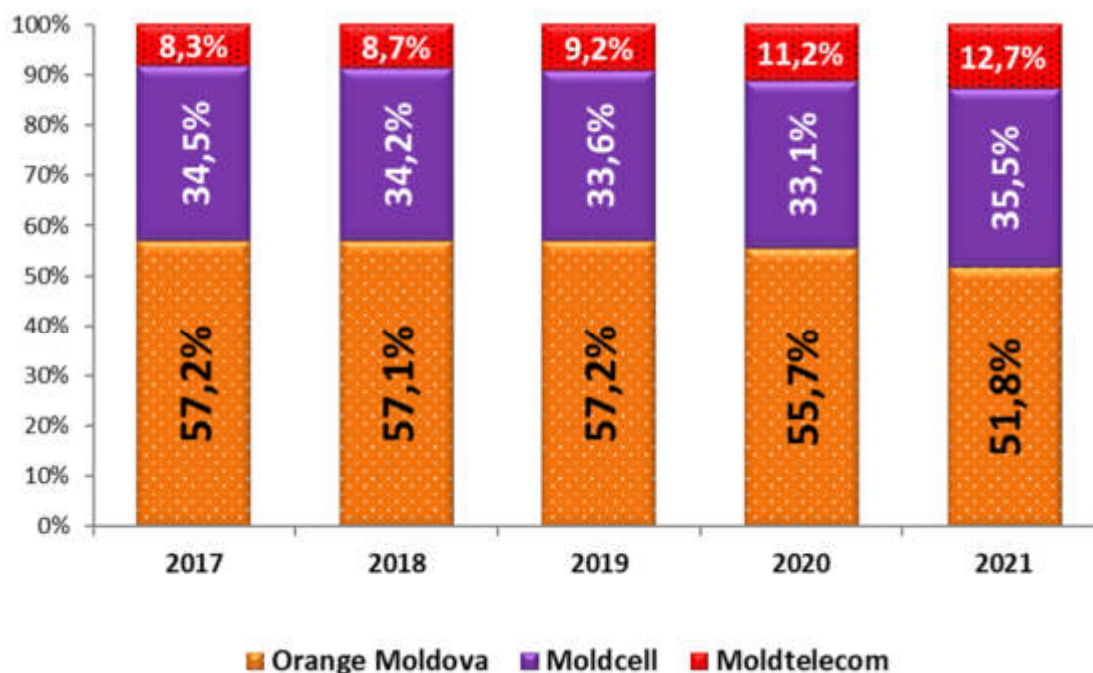


Chart 14. Evolution of market shares of mobile voice providers by number of users

Source: ANRCETI

At the end of the reporting period, the share of active³ users was about 82.9%, out of the total of 4.7 million mobile voice users, and the share of passive users was 17.1%.

In 2021, compared to the end of 2020, all three mobile voice providers reported an increase in the number of users – thus, at JSC Moldtelecom the subscriber base increased by 139.6 thousand (30.4 %) and totaled 599,4 thousand, at JSC Moldcell the subscriber base increased by 307.9 thousand (22.6%) and equaled about 1 668.2 thousand, at JSC Orange Moldova the subscriber base expanded by 150.2 (6.6%) and totaled 2 438.4 thousand. (Table no.5).

Table no. 5. Market structure by types of users active/pasive

	2017	2018	2019	2020	2021
Active users					
JSC Moldcell	1 348 064	1 283 457	1 229 107	1 106 401	1 413 788
JSC Moldtelecom	156 795	174 272	198 566	280 922	377 142
JSC Orange Moldova	2 241 785	2 179 202	2 186 173	2 033 060	2 109 249
Total, active users	3 746 644	3 636 931	3 613 846	3 420 383	3 900 179
	82,5%	81,8%	81,4%	83,3%	82,9%
Pasivi users					
JSC Moldcell	221 414	239 056	264 054	253 811	254 372

³ According to ANRCETI methodology, users who during the last three months before reporting consumed at least one paid service are considered active users.

JSC Moldtelecom	218 512	210 447	208 708	178 874	222 303
JSC Orange Moldova	357 105	360 077	351 823	255 139	329 208
Total, pasive users	797 031	809 580	824 585	687 824	805 883
	17,5%	18,2%	18,6%	16,7%	17,1%
Users, total					
JSC Moldcell	1 569 478	1 522 513	1 493 161	1 360 212	1 668 160
JSC Moldtelecom	375 307	384 719	407 274	459 796	599 445
JSC Orange Moldova	2 598 890	2 539 279	2 537 996	2 288 199	2 438 457
Total	4 543 675	4 446 511	4 438 431	4 108 207	4 706 062

In 2021, the share of users who used subscription-based mobile voice services (postpaid users) made up 35.9% of the total number of subscribers, and the share of those who consumed mobile voice services based on prepaid cards constituted about 64.1%. (Table no.6).

Table no. 6. Market structure by type of users – based on prepaid cards or subscription-based (prepaid/postpaid)

	2017	2018	2019	2020	2021
Users based on prepaid cards					
JSC Moldcell	1 160 998	1 098 981	1 028 896	879 650	1 167 980
JSC Moldtelecom	247 628	247 484	254 105	289 250	400 058
JSC Orange Moldova	1 816 484	1 680 422	1 612 413	1 324 398	1 449 894
Total, users of prepaid cards	3 255 110	3 026 887	2 895 414	2 493 298	3 017 932
	71,0%	68,1%	65,2%	60,7%	64,1%
Users based on subscription-based (postpaid)					
JSC Moldcell	408 480	423 532	464 265	480 562	500 180
JSC Moldtelecom	127 679	137 235	153 169	170 546	199 387
JSC Orange Moldova	782 406	858 857	925 583	963 801	988 563
Total, subscription-based (postpaid)	1 318 565	1 419 624	1 543 017	1 614 909	1 688 130
	29,0%	31,9%	34,8%	39,3%	35,9%
Total, users	4 543 675	4 446 511	4 438 431	4 108 207	4 706 062

2.3 Evolution of traffic

In 2021, the total volume of voice traffic in mobile networks increased over the similar period of 2020, by 0,8% up to 6 681,8 mil. minutes.

The average number of minutes monthly consumed by a user (MoU) decreased compared to 2020 by 4,3% and totaled 296 min. (4 h. 56 min.). JSC Moldcell reported MoU decreasing from 233 min. to 226 min. (-3,1%), JSC Moldtelecom – MoU decreasing from 341 min. to 315 min. (-7,6%) and JSC Orange Moldova – from 348 min. to 335 min. (-3,8%), (Chart 15).

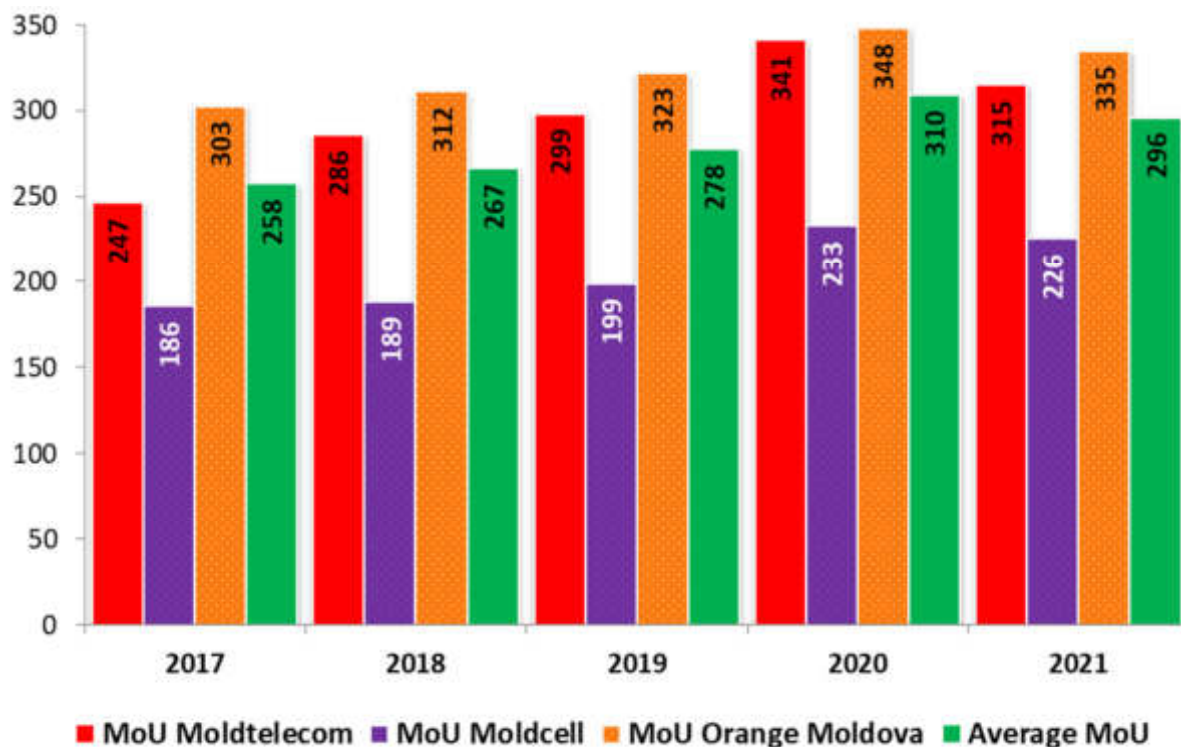


Chart 15. Evolution of average monthly traffic generated by a user - MoU indicator (minutes)

Source: ANRCETI

The number of SMSs sent via mobile networks reduced compared to 2020, by about 7% to a total of 858,8 thousand, i.e. on average 20 SMSs sent by a user.

2.4 Radio signal coverage rates of territory and population

The statistical data regarding territory and population coverage with radio signal from electronic communications mobile 3G networks show that in 2021, all three mobile voice providers maintained their coverage rates at the level of the preceeding year: Orange Moldova reported 99% coverage, JSC Moldcell – 96.6%, and JSC Moldtelecom 99.8% (Chart 16).

However, these statistical indicators may differ from the values measured by the Public Institution "National Radio Frequency Management Service" and published by ANRCETI in 2020 (Chart 16).

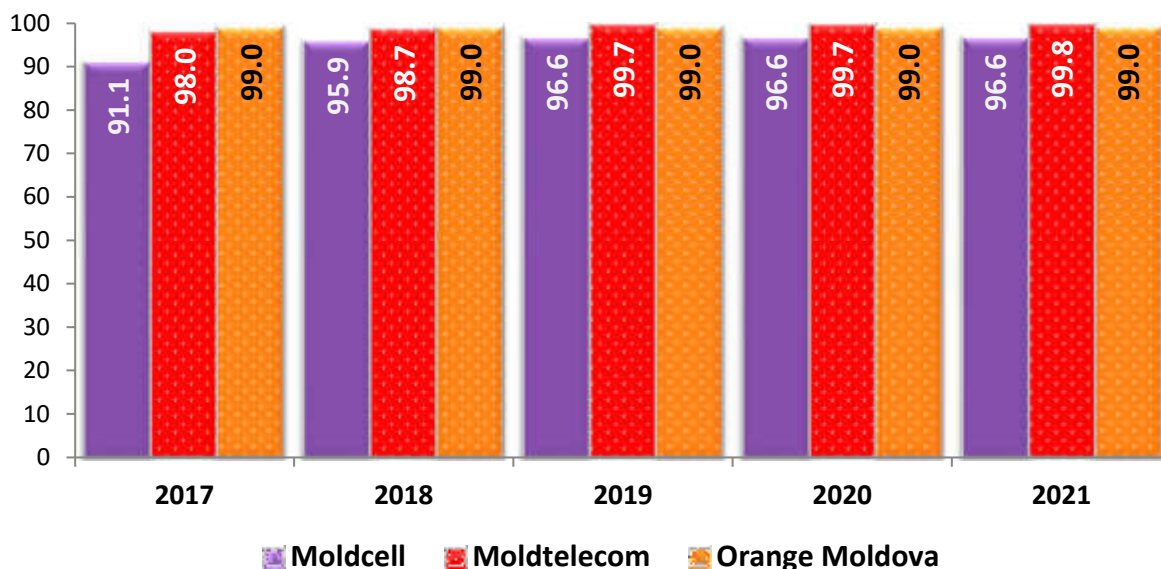


Chart 16. Rates of territory coverage with 3G mobile networks (%)

Source: ANRCETI

As for population coverage with 3G networks radio signal, the rate is attested like in the preceeding year, of just under 100%. (Chart 17).

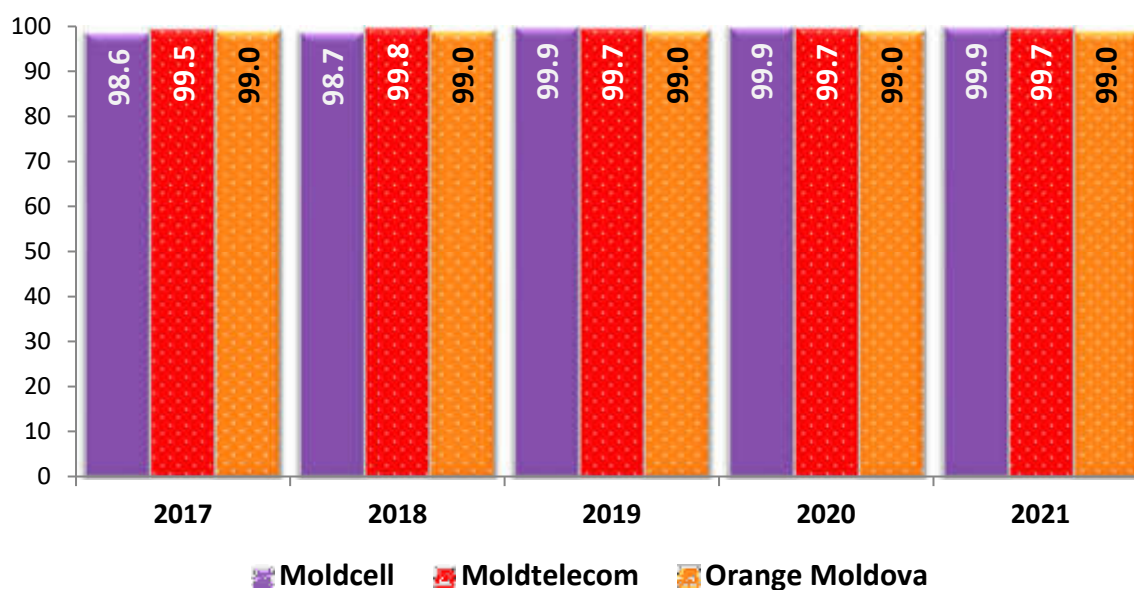


Chart 17. Rates of population coverage with 3G mobile networks (%)

Source: ANRCETI

As regards territory coverage with mobile 4G networks, in 2021, this indicator was maintained at the same level - JSC Moldtelecom - 28%, JSC Orange Moldova - 97%, and JSC Moldcell - 82% (Chart 18).

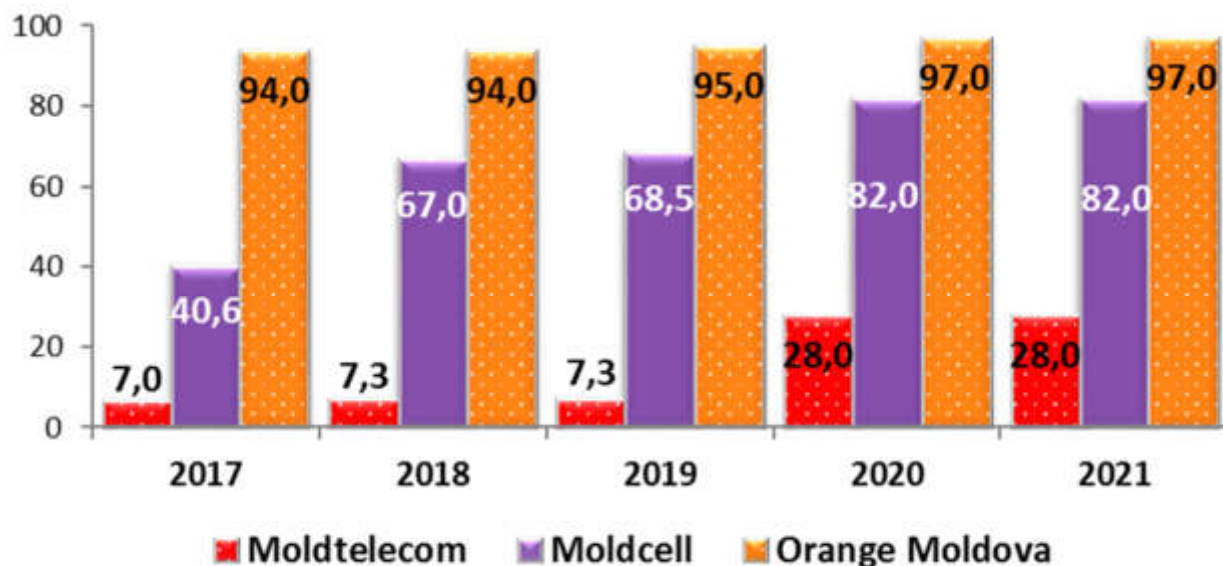


Chart 18. Rates of territory coverage with 4G mobile networks (%)

Source: ANRCETI

As for population coverage with 4G radio signal, JSC Moldcell reported 92%, JSC Orange Moldova - 99% and JSC Moldtelecom - 41,2% (Chart 19).

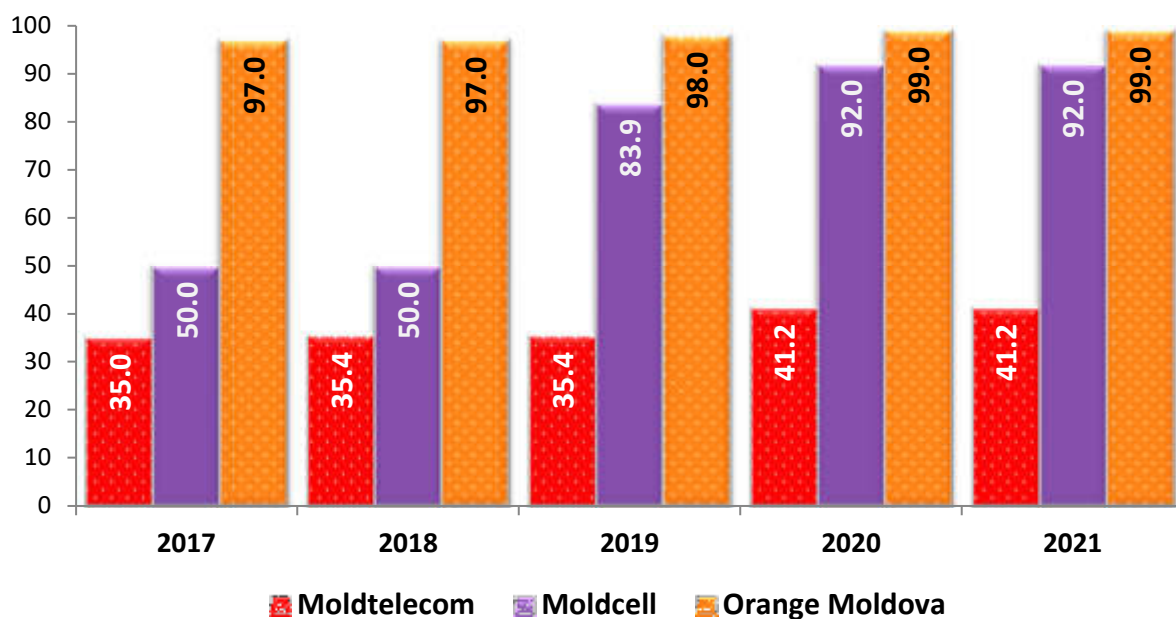


Chart 19. Rates of population coverage with 4G mobile networks (%)

Source: ANRCETI

3. Fixed voice

3.1 Market development

In the reporting period, the total volume of revenues on this market segment decreased, compared to 2020, by 12% and approximately 334.0 million lei. The revenues of JSC Moldtelecom decreased by 12.5%, to approximately 311.6 million lei. (Chart 20).

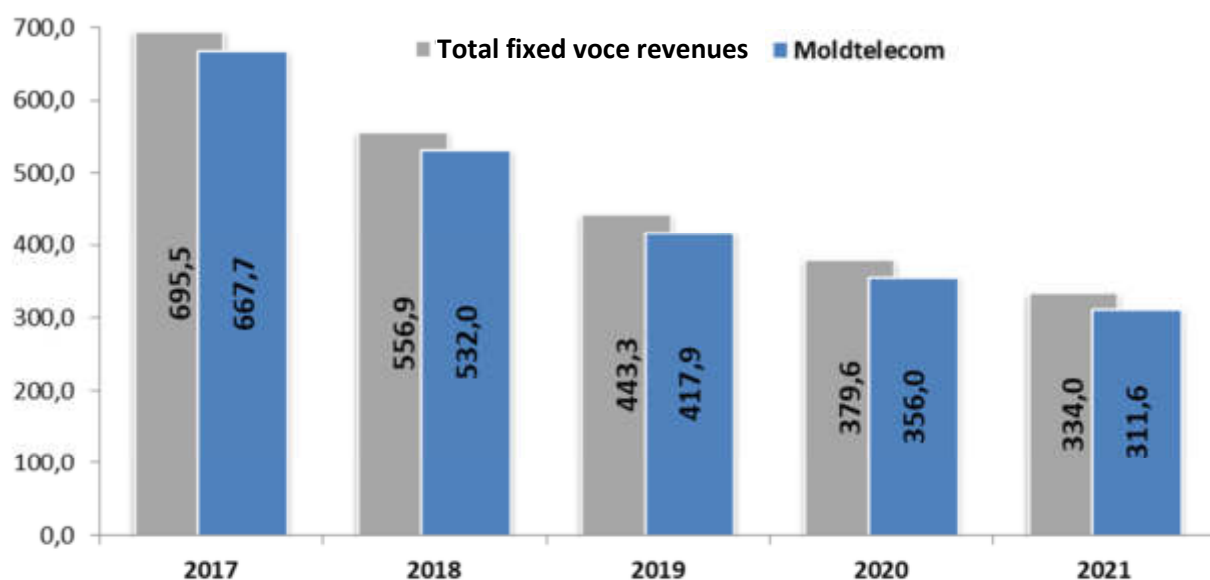


Chart 20. Development of fixed voice market, by turnover

Source: ANRCETI

In 2021, the revenue share of JSC Moldtelecom constituted - 93.3%, decreasing by 0.5 p.p. compared to the preceeding year.

The monthly average revenue per subscriber (ARPU) reported by fixed voice providers dropped compared to the preceeding year, by 8.4 %, to 27.5 lei (Chart 21).

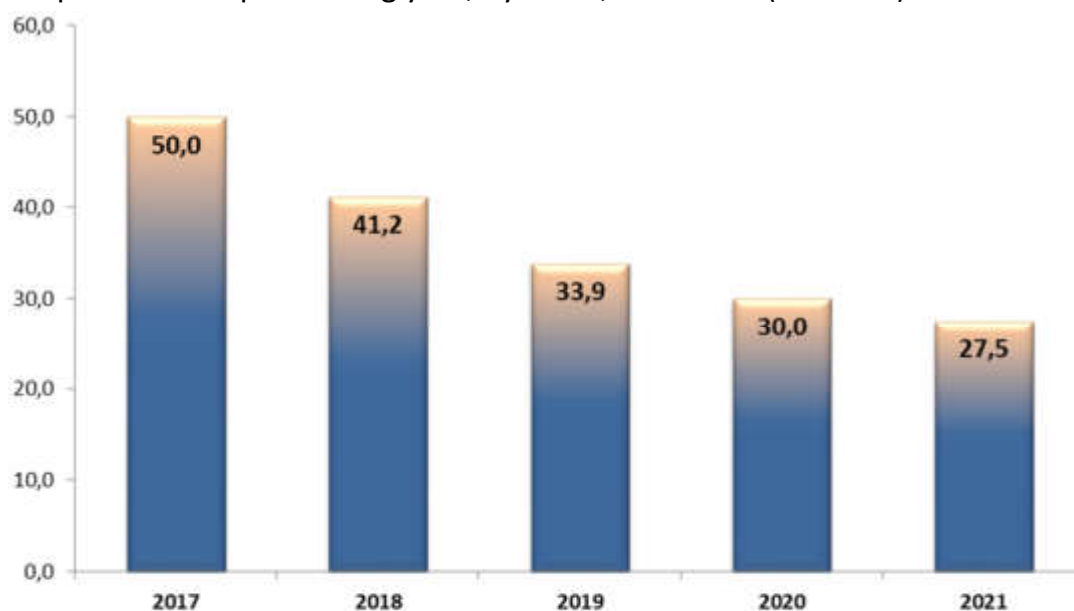


Chart 21. Evolution of monthly average revenue per user – ARPU (lei)

Source: ANRCETI

3.2 Subscribers and penetration

Since the beginning of 2021, the number of fixed voice subscribers decreased by approximately 2.7% and reached just over 1.0 million.

Compared to the end of 2020, the penetration rate of fixed voice services per 100 population decreased by 0.4 p.p. and reached the value of 38.5%, and per 100 households was estimated at 115.5% (Chart 22).

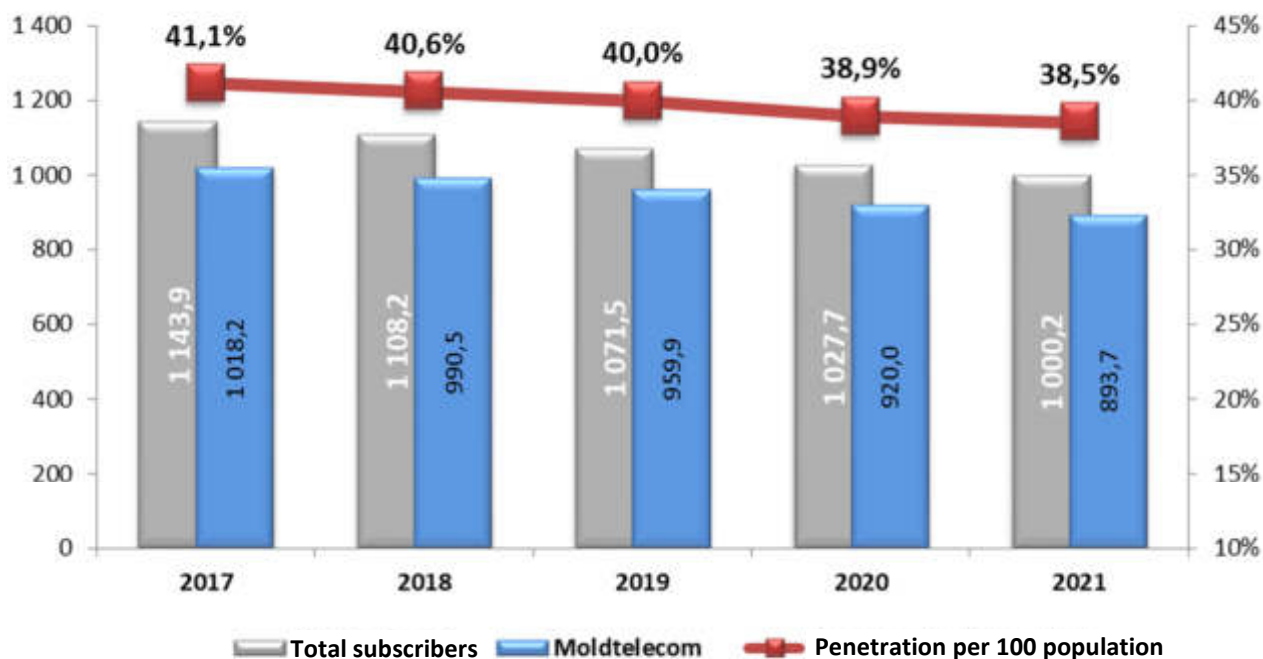


Chart 22. Number of subscribers (thousand) and penetration rates of fixed voice services

Source: ANRCETI

In 2021, the market share of JSC Moldtelecom by number of subscribers (users) was 89.4%, decreased by of 0.2 p.p. compared to 2020.

3.3 Evolution of traffic

In 2021, the total volume of voice traffic in fixed voice networks decreased, compared to 2020, by 15.3%, to a total of 972.0 million minutes, the largest decrease of 33.4% was reported from the traffic to international networks.

The average number minutes monthly consumed by a subscriber (MoU) decreased, compared to the same period of last year, by 14.5% and was estimated at 122 min. (2 hours and 2 min.) (Chart 23).

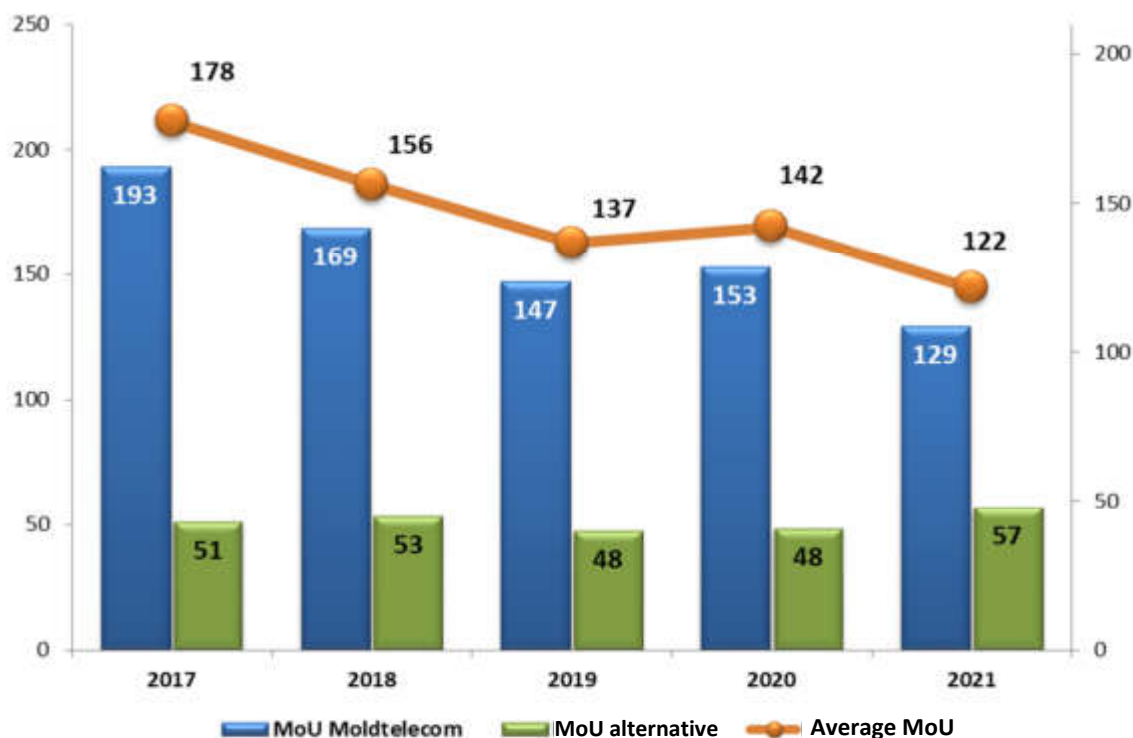


Chart 23. Evolution of MoU indicator (minutes)

Source: ANRCETI

4. Fixed and mobile broadband access

4.1 Evolution of revenues

According to the data reported by providers, in 2021, the total volume of revenues on the fixed and mobile broadband market increased, compared to 2020, by 5% and totaled over 2.7 billion lei. The highest increase of revenues, by 11.3%, was reported on the mobile broadband market. (*Revenues from broadband access by voice users*) (Table no.7).

Table no. 7. Revenue from fixed and mobile broadband access (mil. lei)

	2017	2018	2019	2020	2021
Fixed broadband access	1 209,5	1 288,3	1 361,7	1 383,0	1 440,3
Mobile broadband access:	908,5	1 058,5	1 186,7	1 208,8	1 281,4
<i>Including revenues from broadband access by voice users⁴</i>	669,4	816,3	946,7	973,4	1 083,1
<i>Including revenues from data-only mobile broadband</i>	239,1	242,2	240,0	235,4	198,2
Total Revenues from fixed and mobile broadband access	2 118,1	2 346,8	2 548,4	2 591,8	2 721,6
Share of revenues from fixed broadband access (%)	57,1%	54,9%	53,4%	53,4%	52,9%
Share of revenues from mobile broadband access (%)	42,9%	45,1%	46,6%	46,6%	47,1%

⁴ Revenues from mobile broadband access services are presented for informative purpose, to show the total revenues on the broadband access market. Additionally, these revenues are included as a component of the total volume of revenues reported on the mobile voice market, given that they are revenues from additional services of the basic service - mobile voice.

4.2 Evolution of revenues from fixed broadband access services

According to the data reported by fixed broadband service providers, the total volume of revenues on this market increased, compared to 2020, by 4.1% and were estimated at 1,440.3 million lei. Due to the redistribution of revenues among the provided services, the revenues of JSC Orange Moldova decreased by 12.9% to 89.8 million lei. The revenues of JSC Moldtelecom and LLC Starnet Soluții increased by 5.1% and 4.0%, totalling over 887.9 million lei and 301.9 million lei, accordingly. (Chart 24).

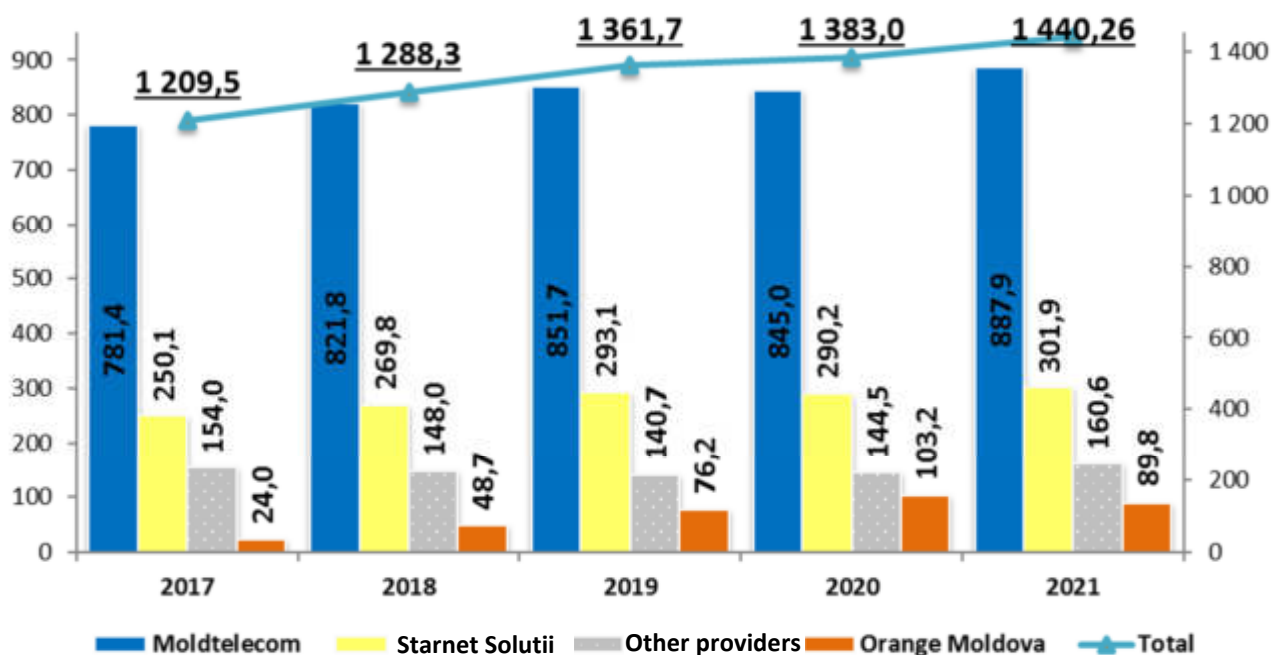


Chart 24. Structure of fixed broadband access market, by revenues (thousand lei)

Source: ANRCETI

As a result of this development, in 2021, the market shares of fixed broadband providers in terms of revenues were as follows: JSC Moldtelecom - 61.7%, LLC Starnet Solutii– 21%, JSC Orange Moldova – 6,2%. The total share of the other fixed broadband service providers was 11.1%, increasing by 0.7 p.p., compared to 2020.

Of the total revenues of 1,526.4 million lei, from the provision of broadband access and data transmission services, 94.4% are revenues from fixed broadband services. The evolution of this market segment is presented in the diagram below, where the difference in values between the 2 curves make the revenues from data transmission (leased lines, Internet transit, IP peering, IP transit, etc.).

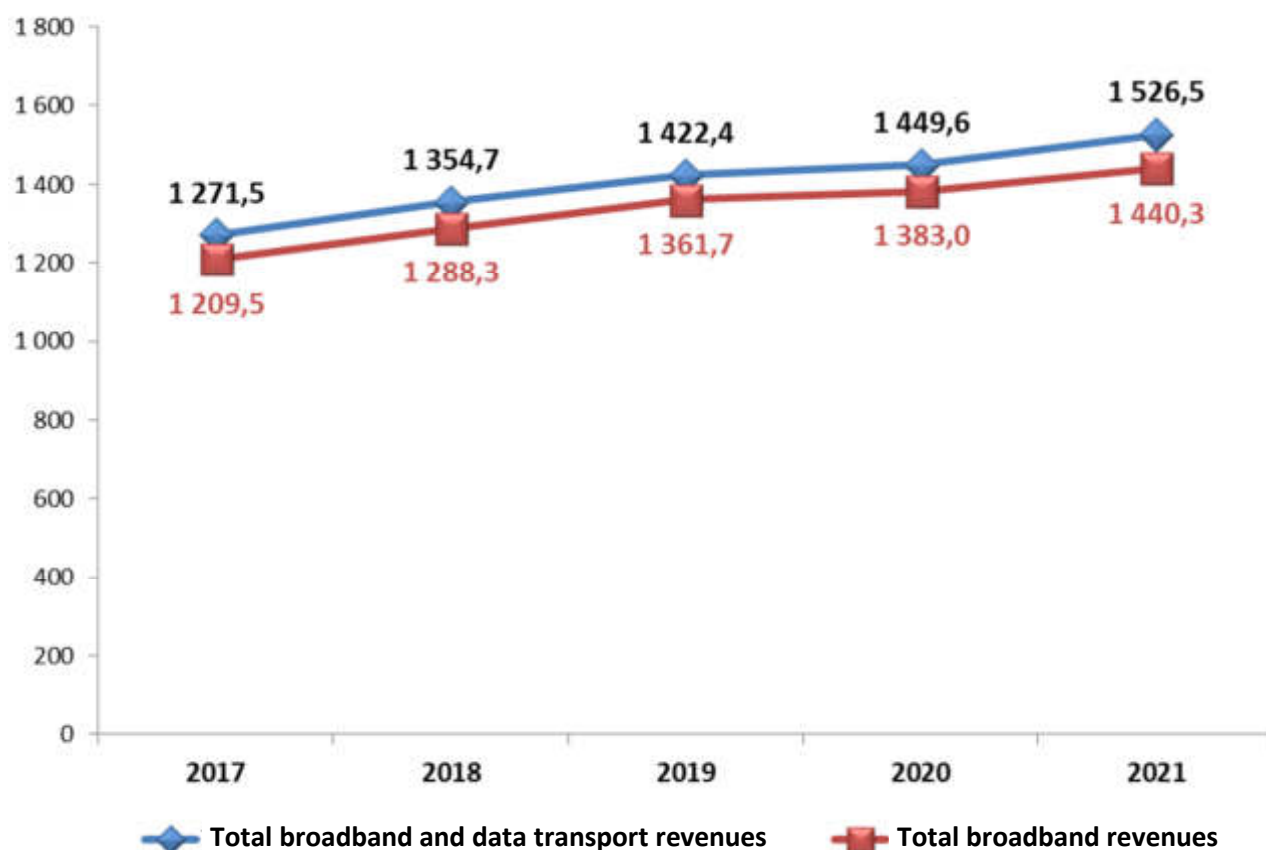


Chart 25. Evolution of revenues from broadband access and data transmission (mil. lei)

Source: ANRCETI

The average monthly revenue per subscriber (ARPU) of fixed broadband service providers decreased compared to 2020 by 2,8%, making 161,9 lei.

4.3 Evolution of revenues from mobile broadband access services

In the reported timeframe, the total volume of revenues of the three mobile communications providers from mobile broadband access services (includes data-only access and broadband access via mobile phone as an additional service) increased, compared to 2020, by 6% and reached approximately 1,281.4 million lei. JSC Orange Moldova reported revenues worth about 780.6 million lei, JSC Moldcell - 420.1 million lei and JSC Moldtelecom - about 80.7 million lei (Chart 26).

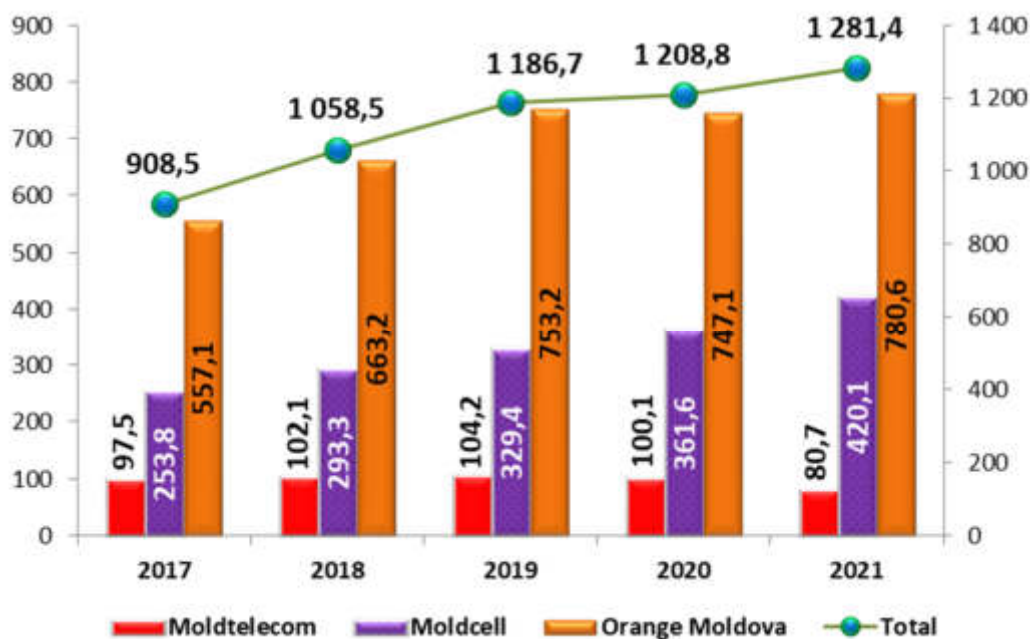


Chart 26. Evolution of revenues reported by mobile broadband service providers (mil. lei)

Source: ANRCETI

In terms of turnover, in 2021, JSC Orange Moldova had a 61% share of the mobile broadband market, JSC Moldcell – about 33% and JSC Moldtelecom – 6% (Chart 27).

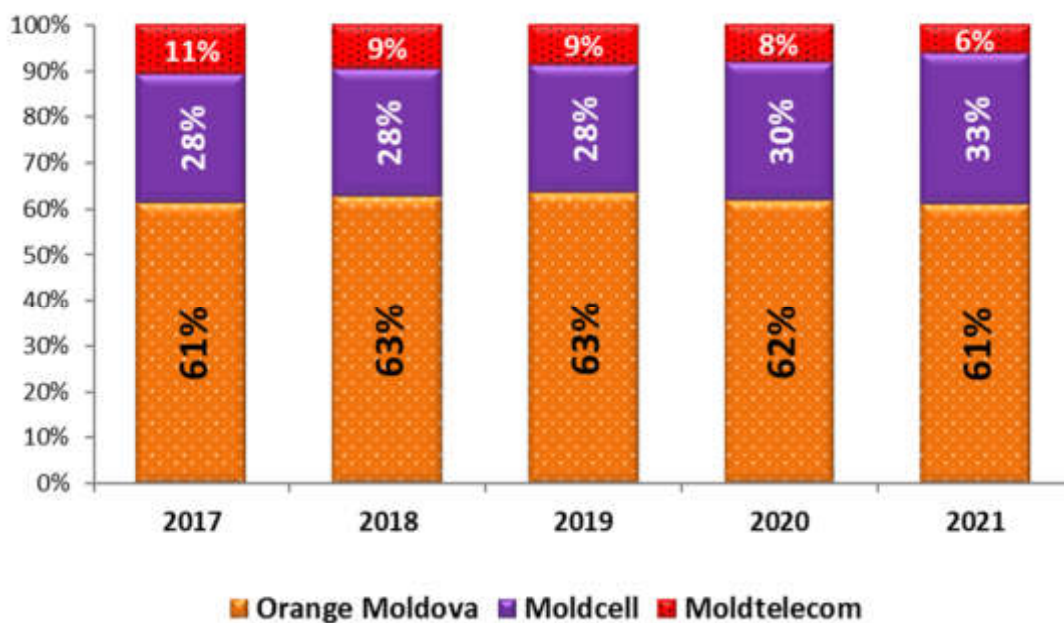


Chart 27. Evolution of market shares of mobile broadband providers by turnover

Source: ANRCETI

In 2021, the revenues from the data-only mobile broadband services reached 198.2 million lei, down by 15.8%, distributed as follows: JSC Orange Moldova - 98.4 million lei, JSC Moldtelecom - 73.4 million, and JSC Moldcell - 26.4 million lei (Chart 28).

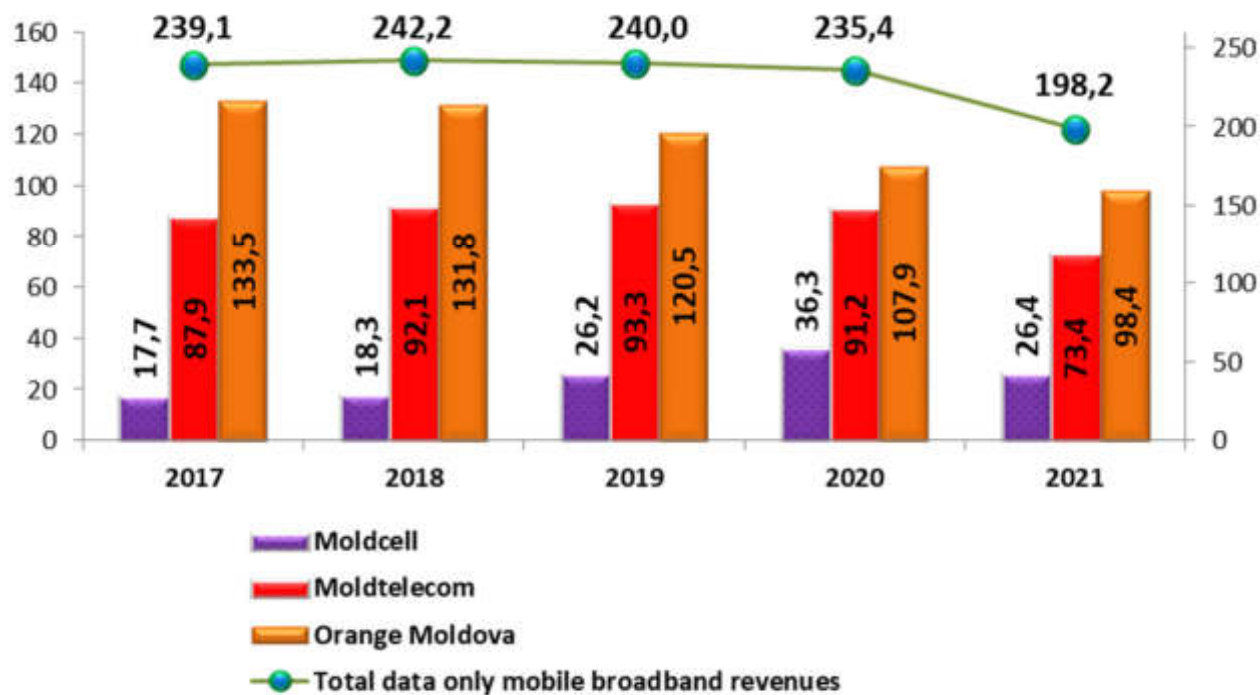


Chart 28. Evolution of revenues from data-only mobile broadband services (mil. lei)

Source: ANRCETI

In terms of turnover, in 2021 JSC Orange Moldova had 50% share of the data-only mobile broadband market, JSC Moldtelecom - 37%, and JSC Moldcell – 13% (Chart 29).

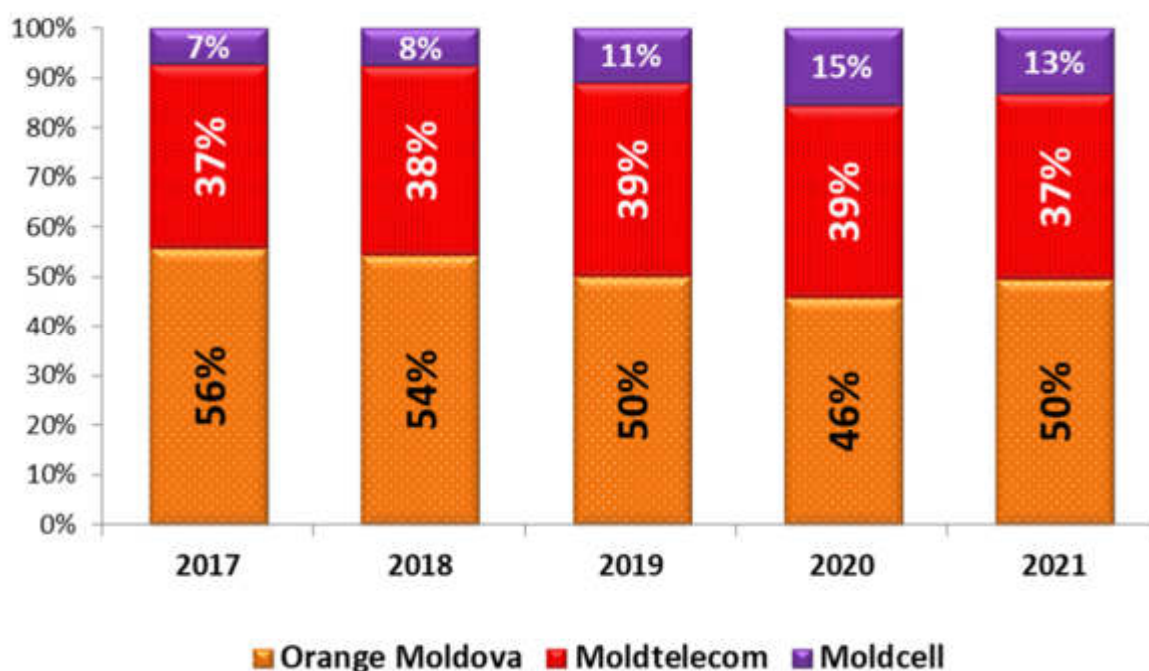


Chart 29. Evolution of market shares of data-only mobile broadband providers, by turnover

Source: ANRCETI

In 2021, the average monthly revenue per users (ARPU) reported by data-only mobile broadband service providers was 94,8 lei, increased by 3,4%, over 2020. JSC Moldcell reported 107,8 lei ARPU, lower by 16,1%. JSC Orange Moldovaa reported 107,5 lei ARPU, up by 5,0%, and JSC Moldtelecom – 79 lei (6,6%) (Chart 30).

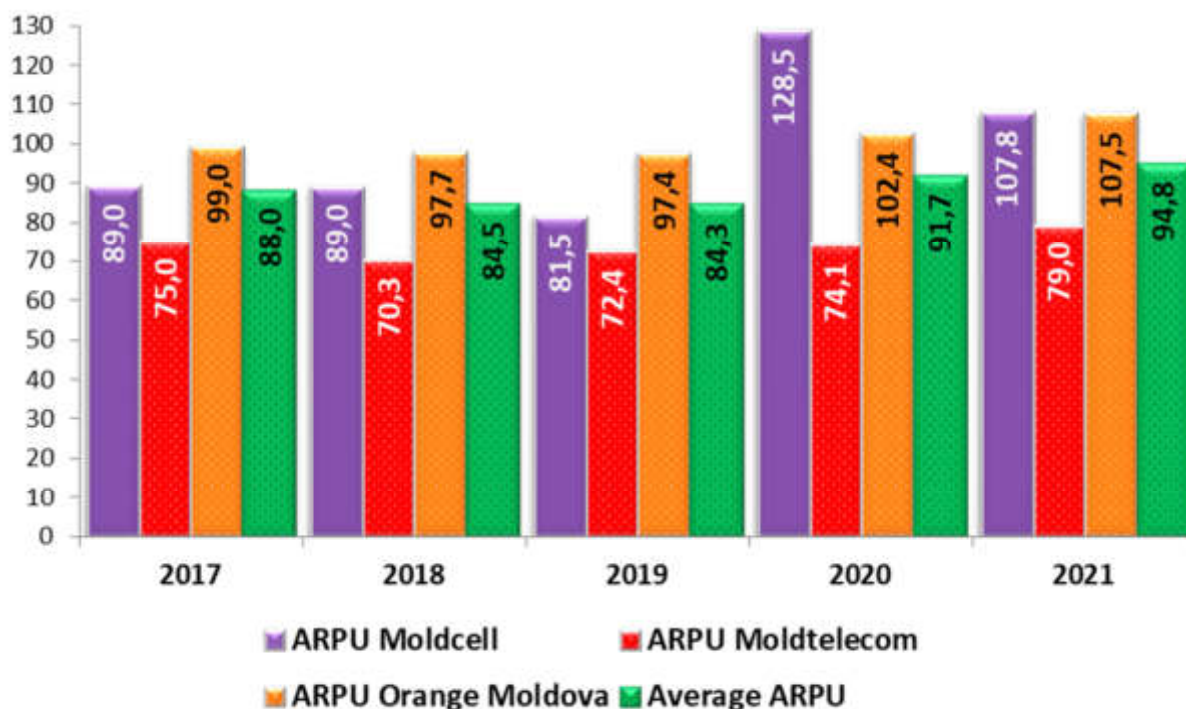


Chart 30. Evolution of average monthly revenue per users (ARPU) for data-only mobile broadband services (lei)

Source: ANRCETI

4.4 Fixed/mobile broadband subscribers and penetration

At the end of 2021, the number of fixed broadband subscribers increased, compared to the end of 2020, by 6% and totaled over 762.3 thousand, and the number of mobile broadband users increased by 13.4 % and constituted about 2.7 million. The analysis of the increase in the number of fixed and mobile connections in absolute values shows that, during 2021, the number of fixed broadband service users increased by about 43.3 thousand, and the number of mobile broadband subscribers increased by 317.8 thousand.

Compared to the end of 2020, the fixed broadband penetration rate per 100 population was 29.4% (up by 2.1 p.p.), and that of mobile broadband services – 103.5% (up by 13.7 p.p.). At the same time, the penetration rate of data-only mobile broadband services was 5.7%, down 1.7 p.p. (Table no. 8).

Table no. 8. Fixed and mobile broadband subscribers

	2017	2018	2019	2020	2021
1. Acces to fixed broadband	584 330	623 135	670 530	719 001	762 333
2. Acces to mobile broadband:	2 058 713	2 168 174	2 381 083	2 371 108	2 688 907
2.1. including subscribers o data-only mobile broadband	230 524	241 439	237 051	194 456	146 833
2.2. including users of mobile broadband via smartphones	1 828 189	1 926 735	2 144 032	2 176 652	2 542 074
1. Fixed broadband penetration per 100 population	21,0%	22,8%	25,0%	27,2%	29,4%
Fixed broadband penetration per 100 households (estimated data)	63,1%	68,5%	75,0%	81,7%	88,1%

2. Mobile broadband penetration	74,1%	79,4%	88,8%	89,8%	103,5%
2.1 Including data-only mobile broadband access	8,3%	8,8%	8,8%	7,4%	5,7%

4.5 Fixed broadband subscribers, penetration rates and technologies of access

In the reporting period, the total number of fixed broadband subscribers increased, compared to 2020, by 6% and reached 762.3 thousand. In the same period, the number of fixed broadband subscribers, connected via other technologies, increased insignificantly by 0.8%, to over 2 thousand (Chart 31).

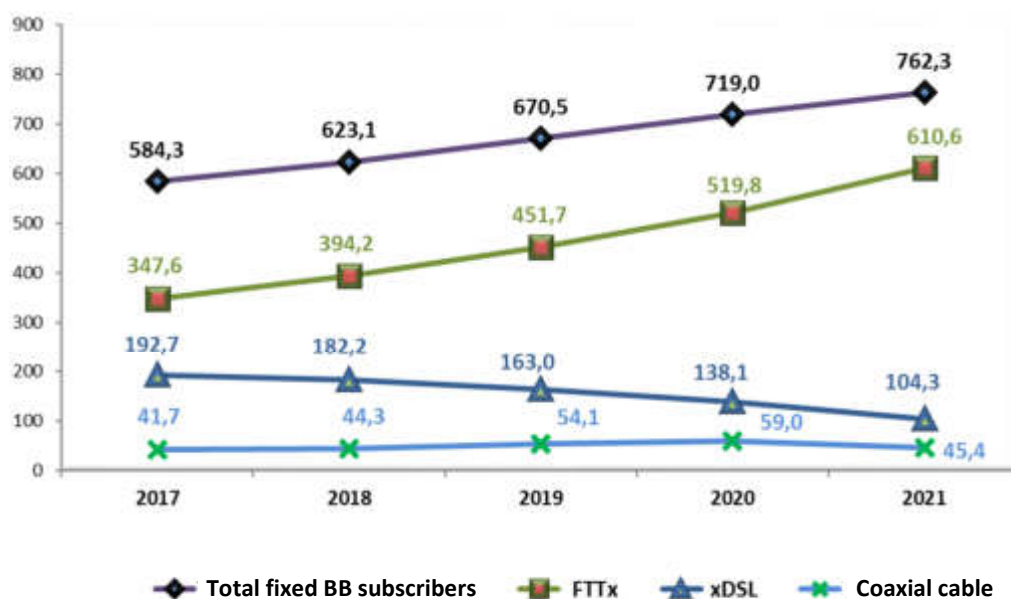


Chart 31. Evolution of fixed broadband subscribers by technology of access (thousand)

Source: ANRCETI

In terms of access technology, 80.1% (up by 7.8 p.p.) of the number of fixed broadband subscribers were connected to the network via FTTx, 13.7% - via xDSL, 5, 9% - via coaxial cable (DOCSIS) and 0.3% - via other technologies.

In 2021, the fixed broadband penetration rate per 100 population increased, compared to 2020, by 2.1 p.p. and made up 29.4% (Chart 32).

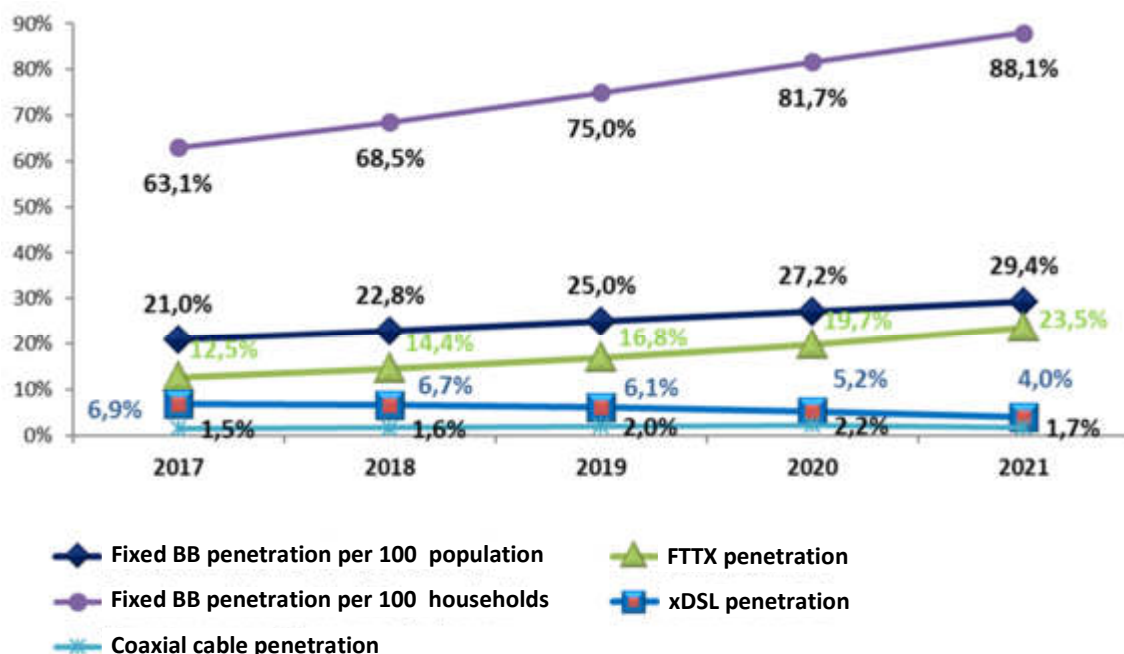


Chart 32. Evolution of penetration rates per 100 population/households

Source: ANRCETI

The market share of JSC Moldtelecom by the number of fixed broadband subscribers decreased, compared to the end of 2020, by 1.6 p.p., and the share of LLC Starnet Solutii - by 0.2 p.p.. At the same time, the market share of JSC Orange Moldova increased by 1 p.p., and that of other providers increased by 0.8 p.p. (Chart 33).

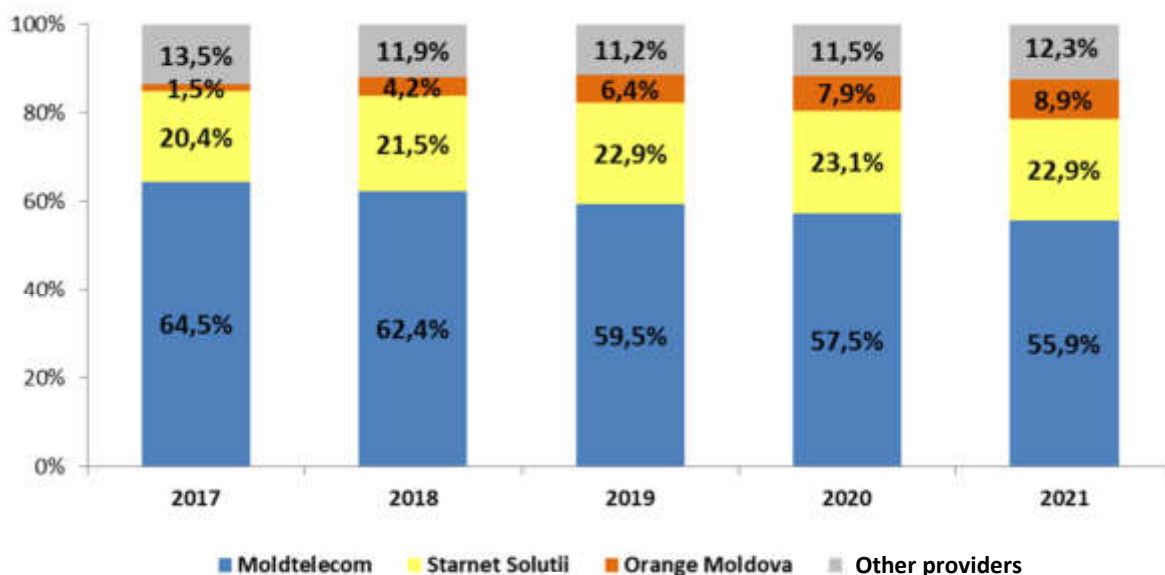


Chart 33. Market shares of providers by number of subscribers

Source: ANRCETI

About 322 thousand from the 610.6 thousand broadband subscribers via FTTx technology were customers of JSC Moldtelecom, 174.3 thousand – of LLC Starnet Solutii, 33.5 thousand – of JSC Orange Moldova, and 80,8 thousand – of other providers on this market segment. (Chart 34).

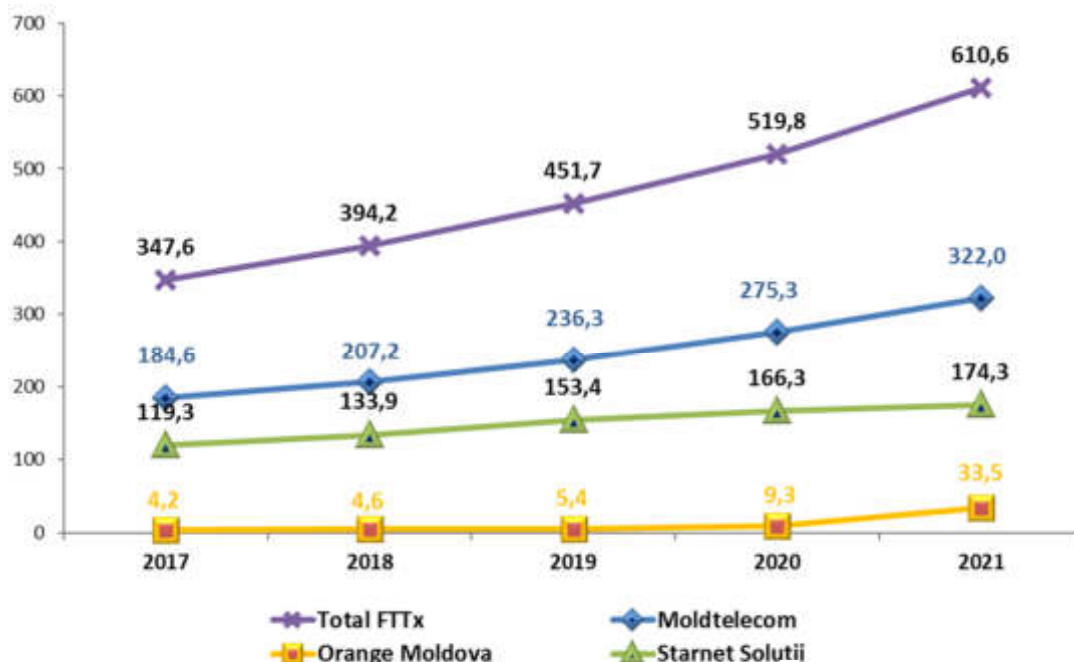


Chart 34. Evolution of number of broadband subscribers via FTTx (thousand)

Source: ANRCETI

Statistical data of 2021 show that the number of applicants to fixed broadband services of very high data transfer speeds (over 100 Mbps) increased by 50.9%, compared to the end of 2020, and was estimated at about 252.8 thousand, the number of applicants who preferred speeds between 30-100 Mbps decreased by 2% and constituted 375.7 thousand.

According to the data reported by the 112 providers on this market, 49.3% of subscribers use fixed broadband speeds between 30-100 Mbps, 15.7% use speeds between 10-30 Mbps, and 33.2 % - over 100 Mbps. Connections at speeds between 2 Mbps and 10 Mbps are used by 0.8%, and lower than 2 Mbps - 1.0%, going downward. (Table no.9).

Table no. 9. Speeds of subscribers' access to fixed broadband services

	2018	2019	2020	2021
Up to 2 Mbps	18 861	14 967	11 607	8 300
2 - 10 Mbps	8 364	7 707	7 169	6 055
10 - 30 Mbps	194 431	174 868	149 432	119 488
30 - 100 Mbps	338 871	370 035	383 258	375 715
over 100 Mbps	62 608	102 953	167 535	252 775
Total, Subscribers	623 135	670 530	719 001	762 333
Share				
Up to 2 Mbps	3,0%	2,2%	1,6%	1,0%
2 - 10 Mbps	1,3%	1,1%	1,0%	0,8%
10 - 30 Mbps	31,2%	26,1%	20,8%	15,7%
30 - 100 Mbps	54,4%	55,2%	53,3%	49,3%
over 100 Mbps	10,0%	15,4%	23,3%	33,2%

4.6 Mobile broadband subscribers and penetration rates

2.5 million of the total number of mobile broadband users accessed mobile broadband via smartphones (voice users), registering an increase of approximately 16.8%, in 2021 compared to the end of 2020 (Chart 35).

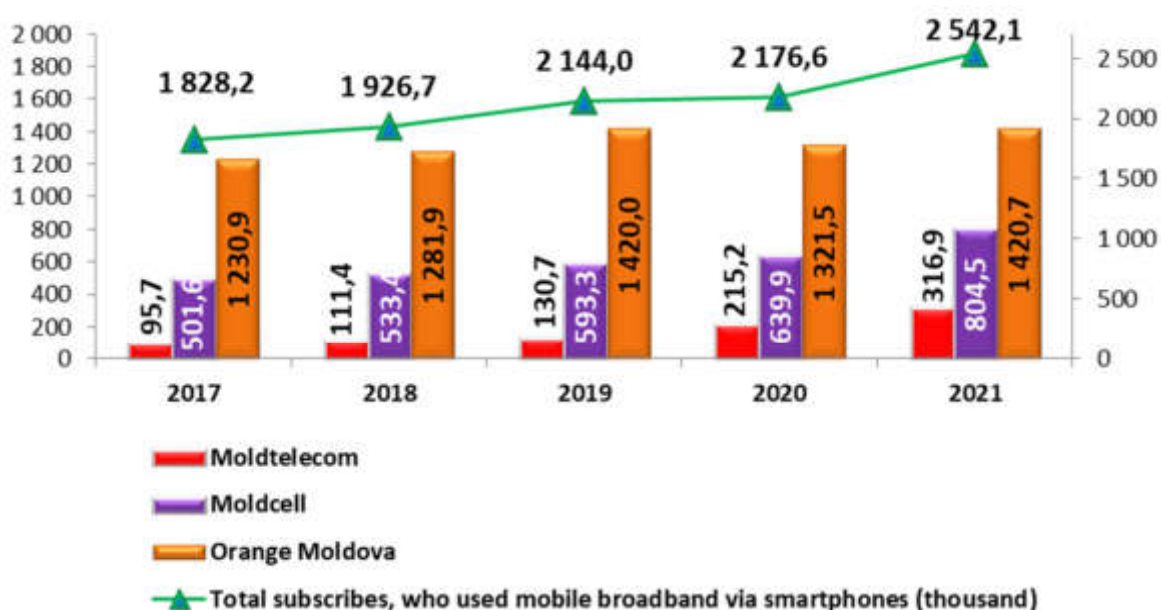


Chart 35. Evolution of the number of mobile broadband users via smartphones (thousand)

Source: ANRCETI

In 2021 the total number of data-only mobile broadband users was about 197.3 thousand subscribers, of which about 146.8 thousand were active subscribers, reduced by 24.5%, compared to the end of 2020 (Chart 36). This decrease is largely due to unified offers that contain increasingly more traffic offered in voice cards, but also due to the wider use of smartphones.

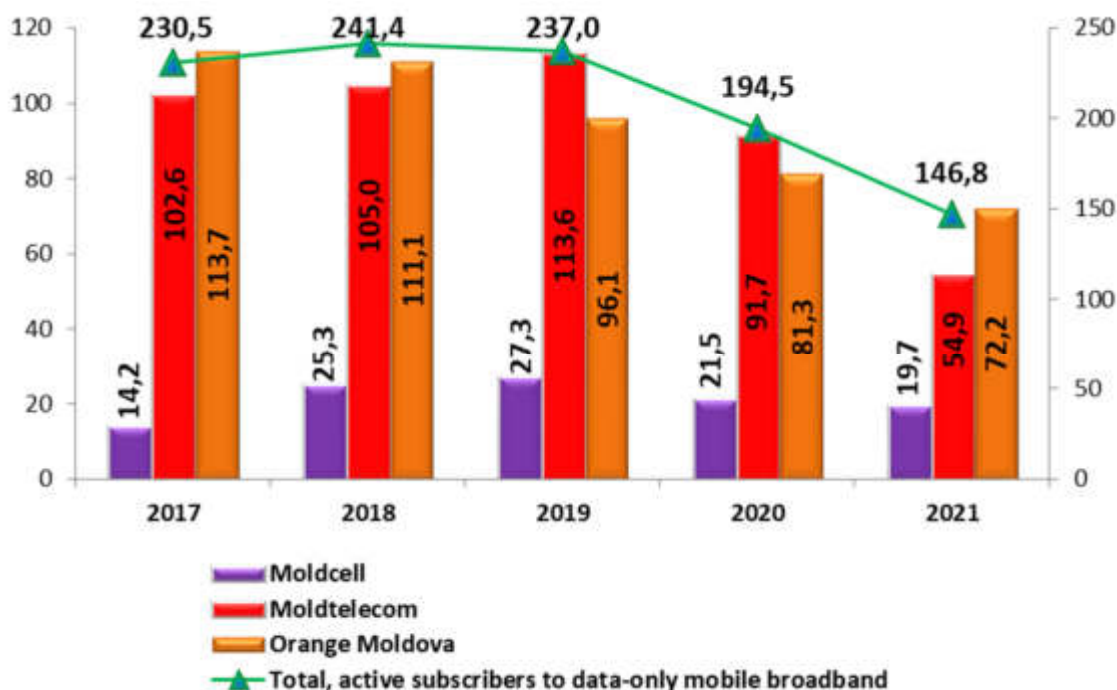


Chart 36. Evolution of the number of active data-only mobile broadband users (thousand)

Source: ANRCETI

According to the situation at the end of 2021, the market share held by JSC Orange Moldova on the data-only mobile broadband market, by number of active users, was 49.2%, JSC Moldtelecom had a share of 37.4 %, and JSC Moldcell – 13.4%.

The penetration rate of these services, per 100 population, was 5.7% (Chart 37).

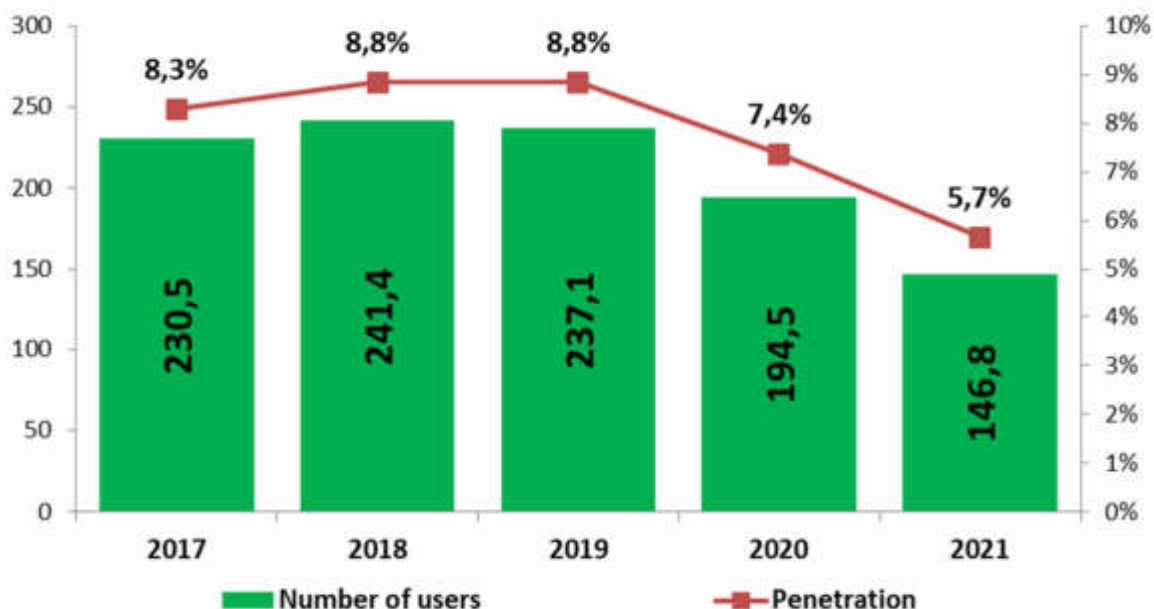


Chart 37. Number of data-only mobile broadband users (thousand) and penetration rates

Source: ANRCETI

At the end of 2021, the total number of 4G mobile broadband users increased by 346.7 thousand (21.0%), compared to the end of 2020, and constituted about 2 million. (Table no.10).

Table no. 10. Market structure by number of 4G service users

	2017	2018	2019	2020	2021
Data-only broadband users					
JSC Moldcell	2 041	7 406	8 751	9 991	9 248
JSC Moldtelecom	6 609	10 109	28 663	34 601	27 425
JSC Orange Moldova	61 680	63 967	59 217	55 090	50 243
Total, data-only broadband users	70 330	81 482	96 631	99 682	86 916
Broadband users via smartphones					
JSC Moldcell	146 345	266 328	385 795	453 318	619 572
JSC Moldtelecom	5 017	8 500	40 935	63 373	95 388
JSC Orange Moldova	458 621	663 495	1 022 939	1 035 175	1 196 415
Total, broadband users via smartphones	609 983	938 323	1 449 669	1 551 866	1 911 375
Total, 4G users	680 313	1 019 805	1 564 300	1 651 548	1 998 291

According to statistical data, in 2021, the total volume of traffic generated by mobile broadband users was about 201,563 TB, up by 34.2%, of which mobile broadband users via smartphones (voice users) generated a traffic of approximately 136,919.7 TB, an increase of approximately 68.1%, compared to the similar period of 2020, and data-only mobile

broadband users generated a traffic of approximately 64,643.5 TB, which constituted a decrease of about 6%.

A user who accessed mobile broadband via a smartphone generated an average monthly traffic (AUPU) of 4.8 GB, increased by 44.6%, and a user who accessed data-only mobile broadband generated an average monthly traffic (AUPU) of 30.9 GB, up by 15.3% compared to 2020 (Table no.11).

Table no. 11. Structure of traffic generated by mobile broadband users and average monthly traffic (AUPU)

		2017	2018	2019	2020	2021
Traffic, generated by data-only mobile broadband users (GB) / AUPU						
JSC Moldcell	traffic	2 251 506	2 535 412	3 523 463	7 413 203	7 997 491
	AUPU	11,4	12,7	11,0	26,5	32,6
JSC Moldtelecom	traffic	23 945 961	27 896 776	29 912 856	37 433 341	31 989 492
	AUPU	20,4	21,3	23,2	30,4	34,4
JSC Orange Moldova	traffic	17 528 892	18 340 683	18 833 469	23 887 280	24 656 563
	AUPU	13,0	13,6	15,3	22,7	27,0
Total, traffic, generated by data-only mobile broadband users		43 726 359	48 772 871	52 269 788	68 733 824	64 643 546
Traffic, generated by mobile broadband users via smartphones (GB) / AUPU						
JSC Moldcell	traffic	8 525 157	11 859 240	18 330 912	25 053 834	44 066 833
	AUPU	1,4	1,9	2,7	3,6	5,0
JSC Moldtelecom	traffic	1 325 764	1 916 284	2 984 586	10 761 191	24 464 615
	AUPU	1,3	1,6	2,2	5,6	7,9
JSC Orange Moldova	traffic	12 526 017	21 855 627	31 136 206	45 635 040	68 388 243
	AUPU	0,9	1,4	1,9	2,9	4,1
Total, traffic, generated by mobile broadband users via smartphones (voice users)		22 376 938	35 631 151	52 451 704	81 450 066	136 919 691
Total, traffic generated by mobile broadband users		66 103 297	84 404 022	104 721 492	150 183 890	201 563 237

4.7 Machine-to-machine or M2M services

In 2021, the revenue from the provision of M2M services increased by about 14,6%, over the similar period of last year and was estimated at approximately 16 mil. lei (Chart 38).

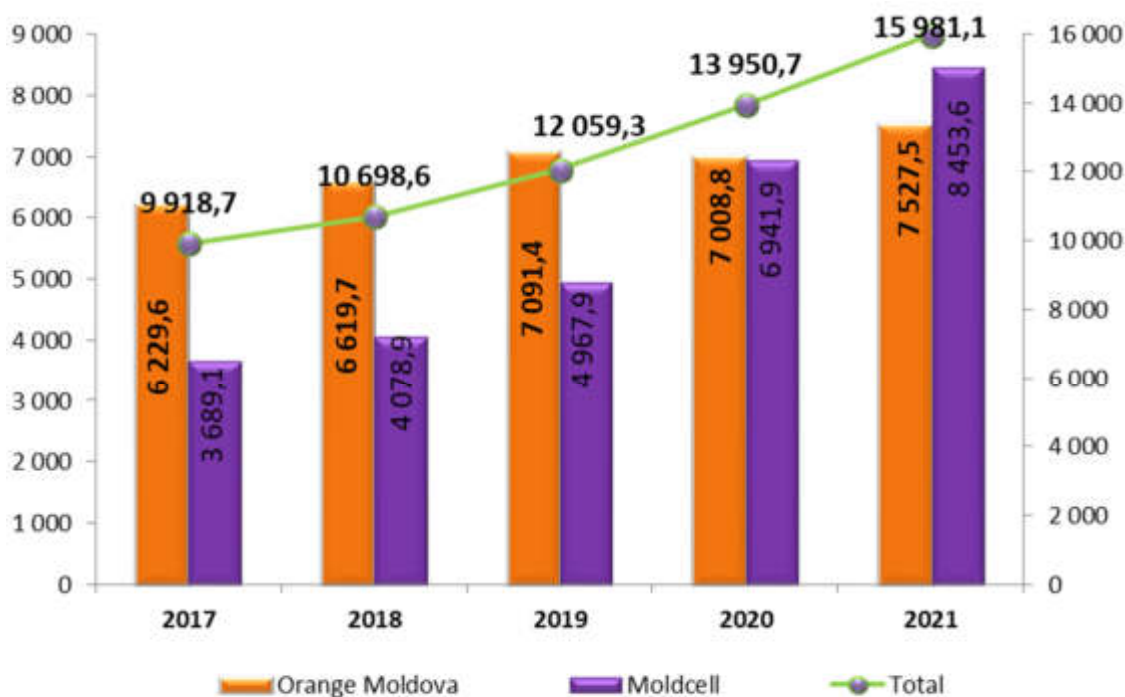


Chart 38. Evolution of revenues from provision of M2M services (thousand)

Source: ANRCETI

The number of M2M service users grew by about 15.5%, compared to the end of 2020, and reached 52.1 thousand subscribers.



Chart 39. Evolution of subscribers, who used M2M services (thousand)

Source: ANRCETI

5. Transmission and retransmission of audiovisual programs

5.1 Generale data. Market development

During 2021, the total volume of revenues from the provision of audiovisual program retransmission services was estimates at 353.9 million lei, an increase by 24.9%, compared to the previous year (Chart 40).

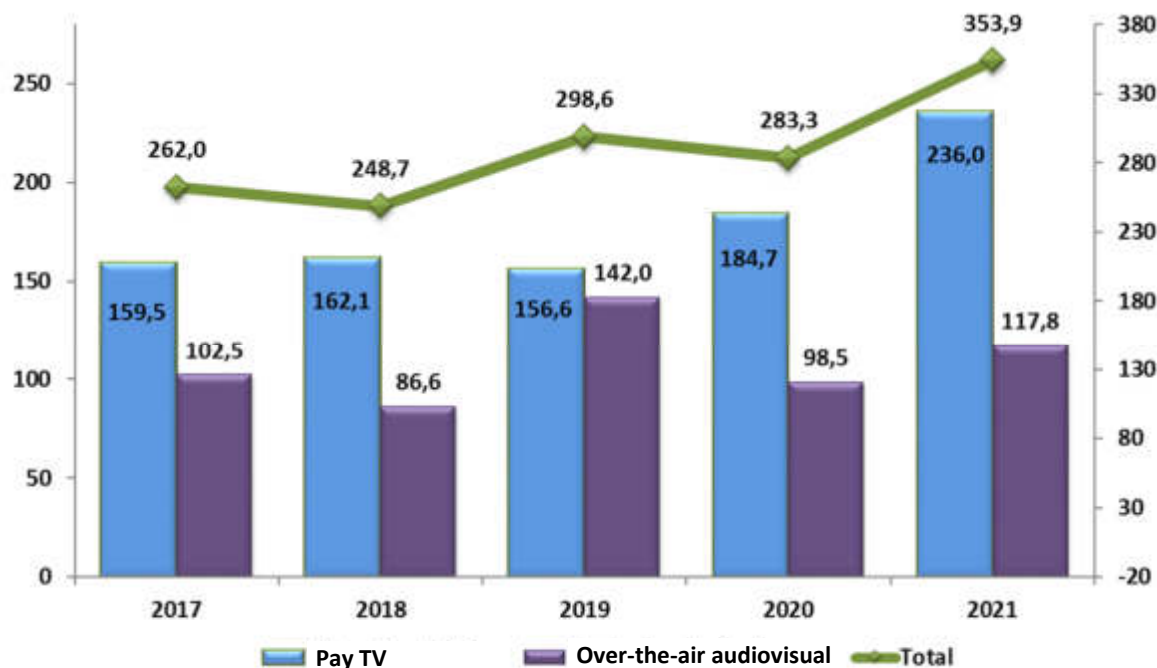


Chart 40. Evolution of revenues from pay TV on the audiovisual service market (mil. lei)

Source: ANRCETI

The average monthly revenue per user (ARPU) of pay TV service providers increased by 11.3% (Chart 41). This increase was influenced by the ARPU of Orange Moldova, which went up by 274.5% compared to the previous year, due to the revision, in 2021, of the way revenues are distributed in this sector, registering an ARPU of 62.9 lei. JSC TV Box reported ARPU of 45 lei, up by 5.6%, JSC Moldtelecom - 57.9 lei, down by 19.1%, compared to 2020.



Chart 41. Evolution of average monthly revenue per user ARPU (lei)

Source: ANRCETI

The most important shares on the pay TV market by turnover were distributed as follows: JSC Moldtelecom - 30.4%, 4.6 p.p., down compared to the previous year. JSC Orange Moldova - 21.4%, increasing by 15.8 p.p., LLC TV-Box - 28.8%, decreasing by 3.5 p.p.. The rest of the providers had a cumulative share of 19.4%, down by 7.7 p.p., compared to 2020. (Chart 42).

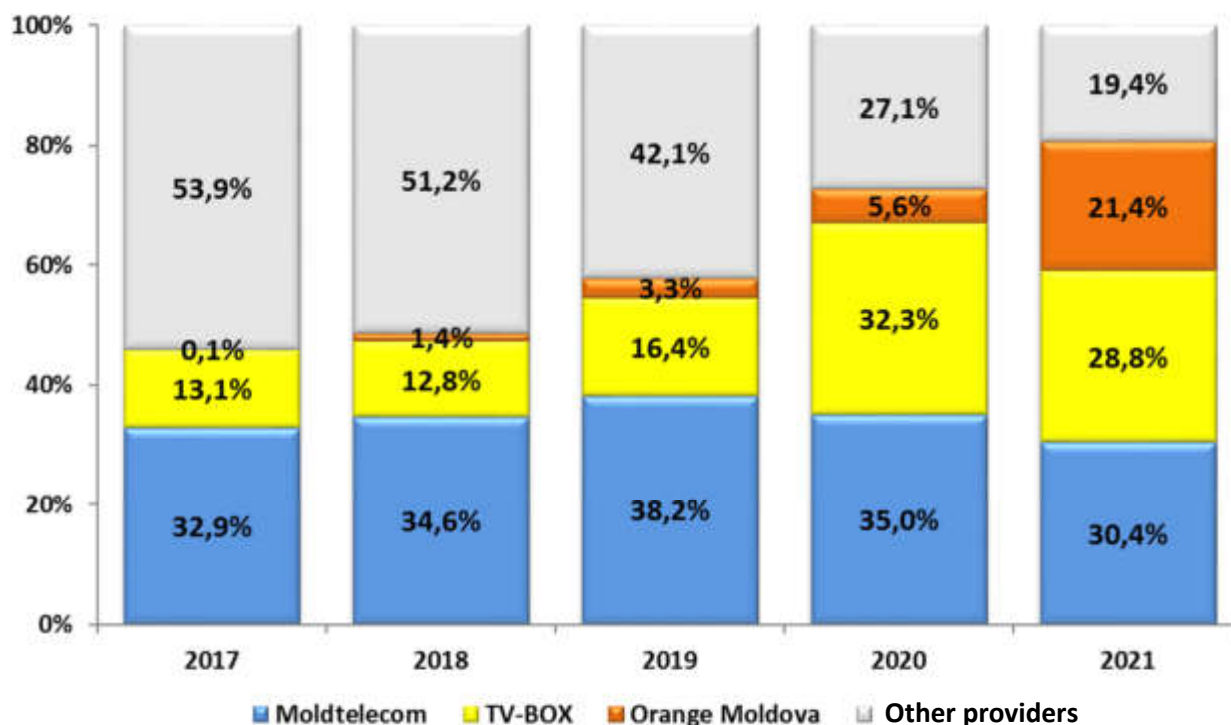


Chart 42. Evolution pay TV market structure by turnover

Source: ANRCETI

5.2 Subscribers and penetration

At the end of 2021, the number of subscribers to pay TV services was estimated at 730.6 thousand, and the penetration rate of these services, per 100 households, was 84.4%,

increased by 43.4 p.p.. This increase is due to the number of subscribers, which is 447 thousand, according to the data published by JSC "Moldtelecom" on its official page at <https://moldtelecom.md/ro/personal/Despre-companie> (Chart 43).

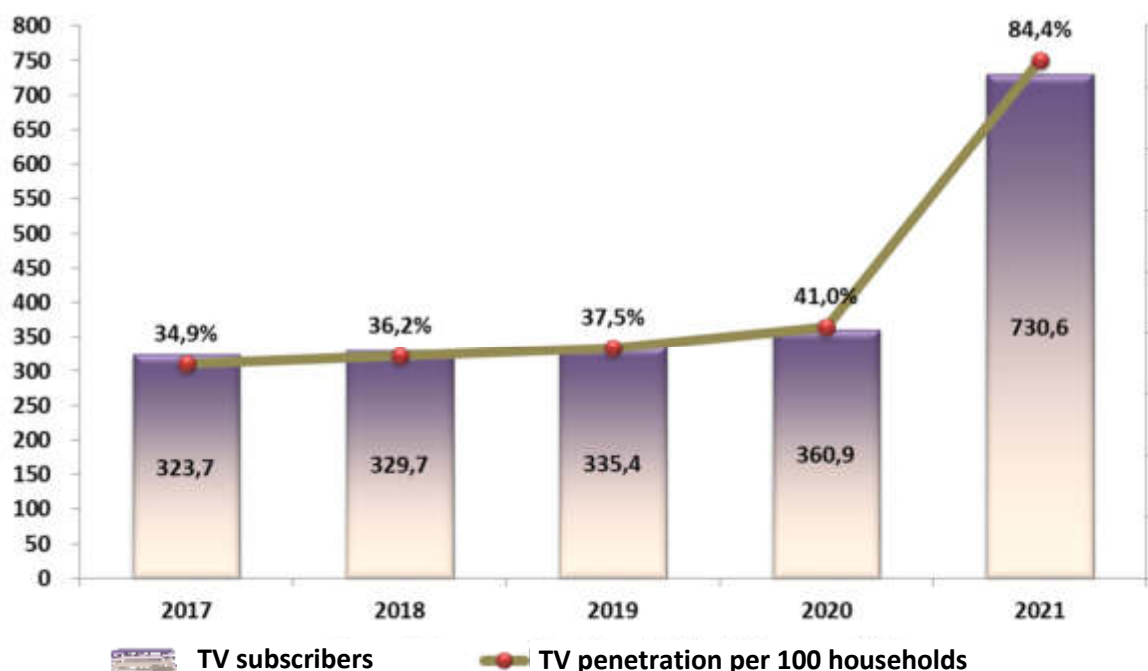


Chart 43. Number of subscribers (thousand), and penetration rates of pay TV services

Source: ANRCETI

Thus, at the end of 2021, the number of pay TV service users of LLC TV BOX constituted about 128.5 thousand, JSC Moldtelecom - 447.0 thousand, and JSC Orange Moldova - 71.5 thousand (Chart 44).

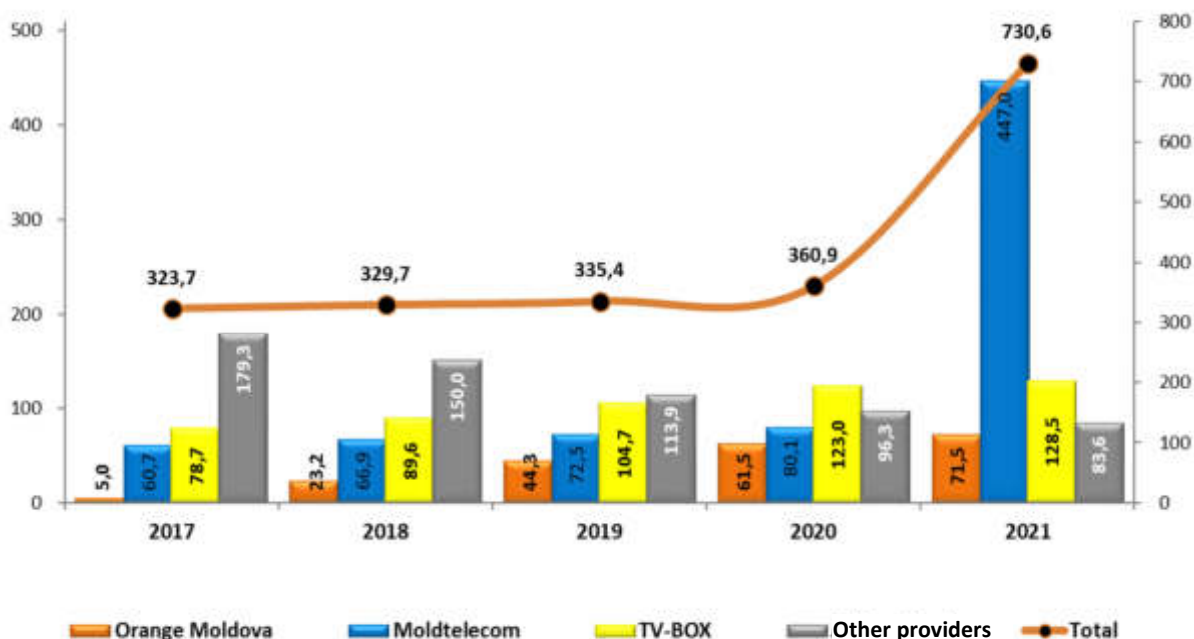


Chart 44. Evolution of the number of subscribers to pay TV services (thousand)

Source: ANRCETI

From the total number of subscribers to pay TV services, in terms of reception technology, 143.9 thousand (19.7%) are subscribers to TV services provided by coaxial cable (CATV), and 586.7 thousand (80.3 %) – subscribers of IPTV services.

During the reporting period, the number of users with access to digital TV content was estimated at 700.5 thousand, and those who receive only analog TV signal - 65.6 thousand. The share of subscribers to pay TV services in analogue/digital format is presented in (Chart 45).

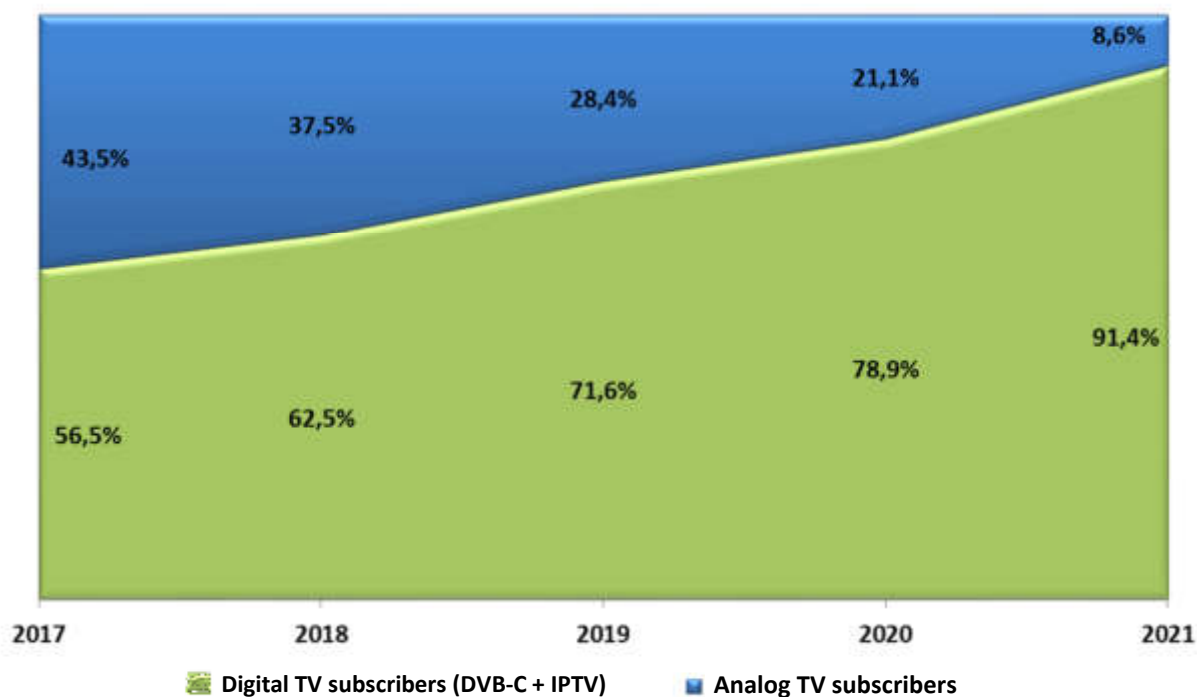


Chart 45. Structure of pay TV subscribers - analog/digital

Source: ANRCETI

The largest market share by number of pay TV subscribers was held by JSC Moldtelecom - 61%, with an increase of 39 p.p., followed by LLC TV-Box - 18% and JSC Orange Moldova - 10%. The other providers reported 16 p.p. reduction, making up a cumulative share of 11%. (Chart 46).

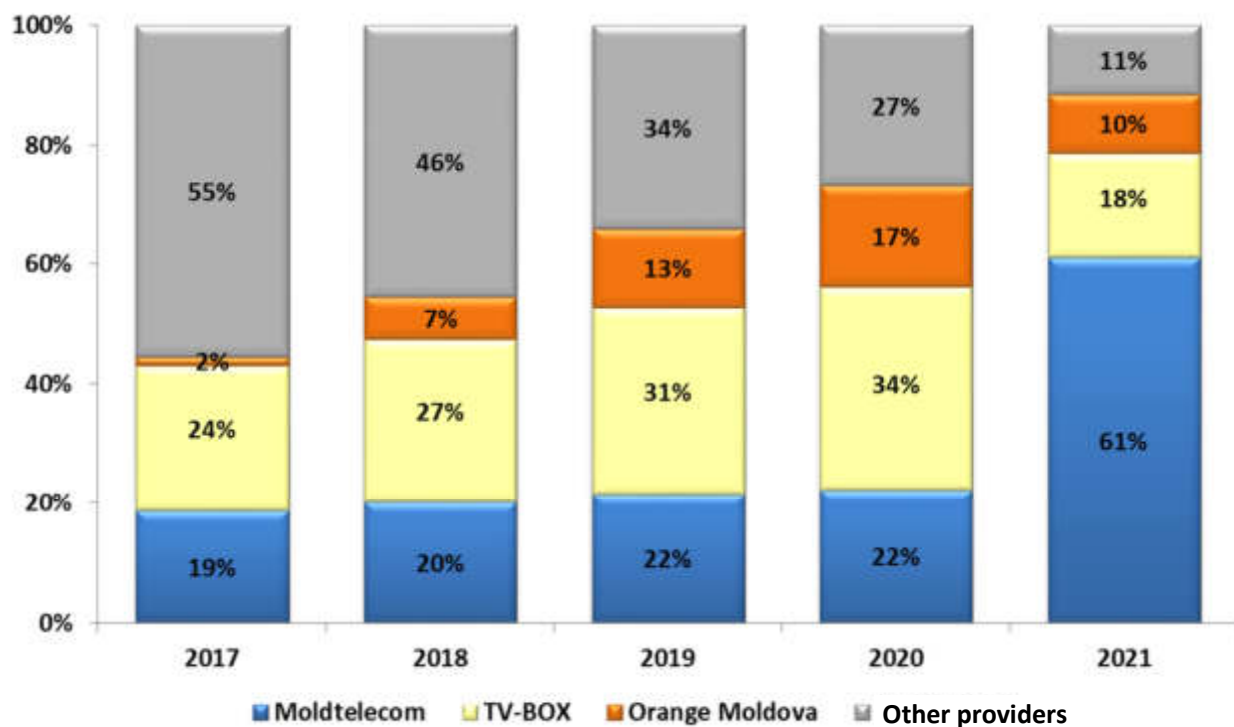


Chart 46. Structure of pay TV market by number of users

Source: ANRCETI

6. Conclusions

The data in this report show that in 2021 the total volume of revenues in electronic communications sector, after a five-year recession, for the first time, registered a slight increase of 2.9% and exceeded 6 billion 112 million lei. This trend took shape against the increase on mobile broadband, fixed broadband and audiovisual program retransmission markets. The decrease of revenues from fixed voice services was by 12%, and from mobile voice - by 0.9%.

The upward trend of the market for mobile broadband, fixed broadband and audiovisual program retransmission is enhanced by the constant increase of demand for these services, the development of broadband access infrastructure based on high-speed technologies, the boosting of competition on these markets and the launch of increasingly attractive offers for users. The number of mobile and fixed broadband users increased by about 11.7% and reached 3 million 451.2 thousand, and the cumulative volume of revenues of these services – by 5% going over 2.7 billion lei. According to ANRCETI estimates, the mobile and fixed broadband service market will continue to be the most dynamic market in the electronic communications sector. ANRCETI believes that the main trends shaped out in the timeframe 2020-2021 on the electronic communications market will continue in 2022. The reducing use of the voice services via fixed and mobile networks will continue to have a negative impact on this markets, whereas the mobile and fixed broadband markets, in the upcoming years, will keep on growing, being the main development milestones of the electronic communications field.

7. List of providers with significant market share on the electronic communications market

Table no. 12. Fixed voice service providers (15 providers)

	Provider	Annual revenue*, lei		Subscribers (tr.4)		ARPU, lei	
		individuals	businesses	individuals	businesses	individuals	businesses
1.	Altnet-CC	0	10 642	0	95	-	14
2.	Arax-Impex	378 410	2 847 082	3123	10078	10	24
3.	Calea Ferată din Moldova	21 849	119 375	2054	16	1	235
4.	Cartel-Sistem	64 210	245 103	1156	493	5	42
5.	Eurostock	2 731	197 875	0	238	-	68
6.	Inovare-Prim	2 008	747 610	4	230	51	272
7.	Moldcell	0	1 245 465	0	3151	-	34
8.	Moldtelecom	157 288 305	55 699 286	817649	76057	16	60
9.	Orange Moldova	403	5 102 654	4	27251	11	16
10.	Riscom	27 274	245 673	33	39	62	522
11.	Scortel	70 753	8 210	964	23	6	21
12.	INFORMATION TECHNOLOGY AND CYBER SECURITY SERVICE	0	1 040 831	0	4277	-	22
13.	Sicres	25 632	145 743	18	798	104	15
14.	Starnet Solutii	677 444	2 850 486	43460	6052	1	38
15.	Sun communications	27 285	9 755	2740	4	1	181

Remark: * Revenue derived from the provision of fixed voice services to subscribers by direct access.

Table no. 13. Fixed broadband service providers (20 providers)

	Provider	Annual revenue, thousand lei		Subscribers		ARPU, lei	
		individuals	businesses	individuals	businesses	individuals	businesses
1.	Adinet-com	2 744,0	82,5	1 436	20	155,4	343,9
2.	Altnet-CC	878,2	700,7	1100	145	64,1	389,3
3.	Andridan Impex	1 541,3	101,9	1270	43	99,9	202,2
4.	Arax-Impex	18 729,3	15309,3	18904	3134	83,3	400,7
5.	Click-Com	8 660,3	825,3	3150	260	186,6	250,1
6.	Danis	3 296,2	696,5	1922	65	144,1	886,1
7.	Eurotelecom	1 161,6	0,0	655	-	106,5	-
8.	IANCIUC INVEST	3 976,5	0,0	3465	-	87,1	-
9.	INET TEHNO	1 253,8	701,7	999	120	94,6	477,4
10.	INTERKIWINET	2 052,2	64,1	1260	17	135,3	314,1
11.	LARITEX-TV	1 086,3	28,8	1385	15	65,4	160,0
12.	LAROM TV	1 906,1	307,7	1297	33	124,0	807,6
13.	Metical	16 031,9	1206,1	9499	296	140,0	334,5
14.	Moldtelecom	778 680,1	109195,6	400672	19642	161,4	475,8
15.	Orange Moldova	59 552,7	26330,8	55715	6314	86,7	339,0
16.	Scortel	2 841,4	48,4	2080	19	114,1	237,2
17.	Starnet Solutii	252 301,4	49633,2	163794	6597	127,6	621,4
18.	Studio AN-TV	1 369,9	0,0	1300	-	84,6	-
19.	Sun communications	6 625,7	37,7	5008	1	114,8	1397,3
20.	Tele-Luci	1 725,8	155,6	1246	30	113,9	395,8

Remark: The other 92 providers have 3.8% share of the total fixed broadband subscribers.

Table no. 13.1. Tehnology of fixed broadband access (20 providers)

	Furnizor	Tehnologia de acces							
		Subscribers, individuals				Subscribers, businesses			
		FTTx	xDSL	DOCSIS	Other	FTTx	xDSL	DOCSIS	Other
1.	Adinet-com	1 510	0	0	0	20	0	0	0
2.	Altnet-CC	1 300	0	0	0	155	0	0	0
3.	Andridan Impex	1 335	0	0	0	44	0	0	0
4.	Arax-Impex	18 663	16	0	11	2 887	11	0	473
5.	Click-Com	5 088	0	0	0	315	0	0	0
6.	Danis	1 870	0	0	0	65	0	0	0
7.	Eurotelecom	1 410	0	0	0	0	0	0	0
8.	IANCIUC INVEST	5 162	0	0	0	0	0	0	0
9.	INET TEHNO	1 258	0	0	0	126	0	0	0
10.	INTERKIWINET	0	0	1 276	0	0	0	17	0
11.	LARITEX-TV	1 385	0	0	0	15	0	0	0
12.	LAROM TV	1 255	0	0	0	30	0	0	0
13.	Metical	9 744	0	0	0	311	0	0	0
14.	Moldtelecom	307 112	100 010	0	0	14 841	4 233	0	0
15.	Orange Moldova	27 550	0	33 570	2	5 994	0	299	700
16.	Scortel	2 070	0	0	0	15	0	0	0
17.	Starnet Solutii	167 435	0	0	0	6 837	1	0	0
18.	Studio AN-TV	0	0	1 400	0	0	0	0	0
19.	Sun communications	0	0	4 178	0	0	0	1	0
20.	Tele-Luci	0	0	1 334	0	0	0	39	0

Table no. 13.2. Fixed broadband speed (20 providers)

	Provider	Speed of access									
		Subscribers, individuals					Subscribers, businesses				
		sub 2 Mbps	2-10 Mbps	10-30 Mbps	30-100 Mbps	Over 100 Mbps	sub 2 Mbps	2-10 Mbps	10-30 Mbps	30-100 Mbps	Over 100 Mbps
1.	Adinet-com	0				1 510	0				20
2.	Altnet-CC	0				1 300	0				155
3.	Andridan Impex	0				1 335	0				44
4.	Arax-Impex	854	53	1 516	14 313	1 954	570	377	1 158	1 095	171
5.	Click-Com	0				5 088	0			315	
6.	Danis	0			109	1 761	0				65
7.	Eurotelecom	0		1 410			0				
8.	IANCIUC INVEST	0			5 162		0				
9.	INET TEHNO	0				1 258	0				126
10.	INTERKIWINET	0			1 276		0			17	
11.	LARITEX-TV	0			1 385		0			15	
12.	LAROM TV	0			1 255		0				30
13.	Metical	0		244	126	9 374	0		17	21	273
14.	Moldtelecom	5 635	303	94 345	230 334	76 505	889	2 767	11 013	4 181	224
15.	Orange Moldova	0	1	0		61 121	0	0		0	6 993
16.	Scortel	0			2 010	60	0			15	
17.	Starnet Solutii	0		874	92 503	74 058	1			1 472	5 365
18.	Studio AN-TV	0			1 400		0				
19.	Sun communications	0	0	2 688	475	1 015	0	0	0	0	1
20.	Tele-Luci	270	476	320	268		0		22	17	

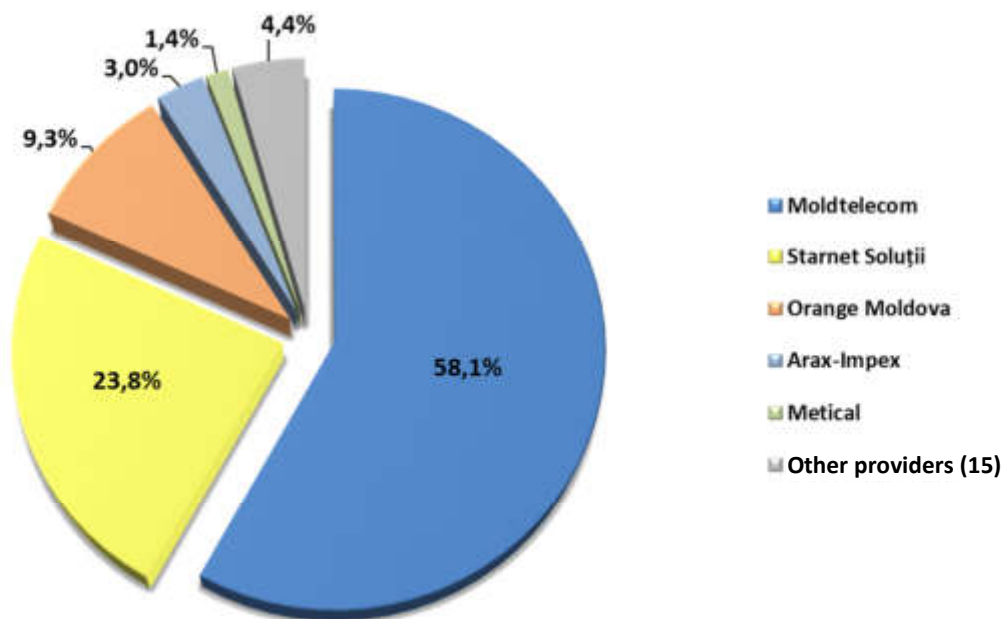


Chart 47. Market shares of fixed broadband providers (Top 20) by number of subscribers

Source: ANRCETI

Table no. 14. Pay TV services (20 providers)

	Provider	Annual revenue, thousand lei	ARPU, lei	Subscribers Total, tr.4	Subscribers by technology (qr.4)			
					Analog	Analog and digital	Digital	IP-TV
1.	Andridan Impex	645,1	41,6	1309	-	1309	-	-
2.	Arax-Impex	11005,3	60,5	15524	-	-	6200	9324
3.	ART CLUB	483,0	38,3	1050	1050	-	-	-
4.	BETATVCOM	1119,0	52,6	1750	1750	-	-	-
5.	CTV ALLIANCE	492,5	49,7	800	800	-	-	-
6.	MAXIMARIN	550,0	50,8	870	870	-	-	-
7.	Moldtelecom	71805,8	34,1	447000	-	-	-	447000
8.	Orange Moldova	50587,8	61,7	71497	-	-	71497	-
9.	Primanet	379,3	20,5	1486	-	1486	-	-
10.	Raznet	491,4	50,0	824	-	824	-	-
11.	Revafar-Com	249,9	19,8	1067	1067	-	-	-
12.	SEBIS SAT	718,8	55,5	1198	-	1198	-	-
13.	Studio AN-TV	821,0	37,1	1100	-	1100	-	-
14.	STV IT COMPANY	2808,8	72,7	3801	-	2191	640	970
15.	Sun Communications	10299,0	38,2	20306	14836	5470	-	-
16.	Tele-Luci	716,2	28,7	2085	1722	363	-	-
17.	TERINIS-PLUS	613,5	42,9	1227	-	1227	-	-
18.	TV-BOX	67928,5	44,8	128500	1701	-	-	126799
19.	TV-SAT	8191,2	33,7	18360	-	17165	-	1195
20.	Uplink	791,4	52,3	1274	-	1274	-	-

**Remark : The other 26 providers have 1.3% share of the total pay TV subscribers.*

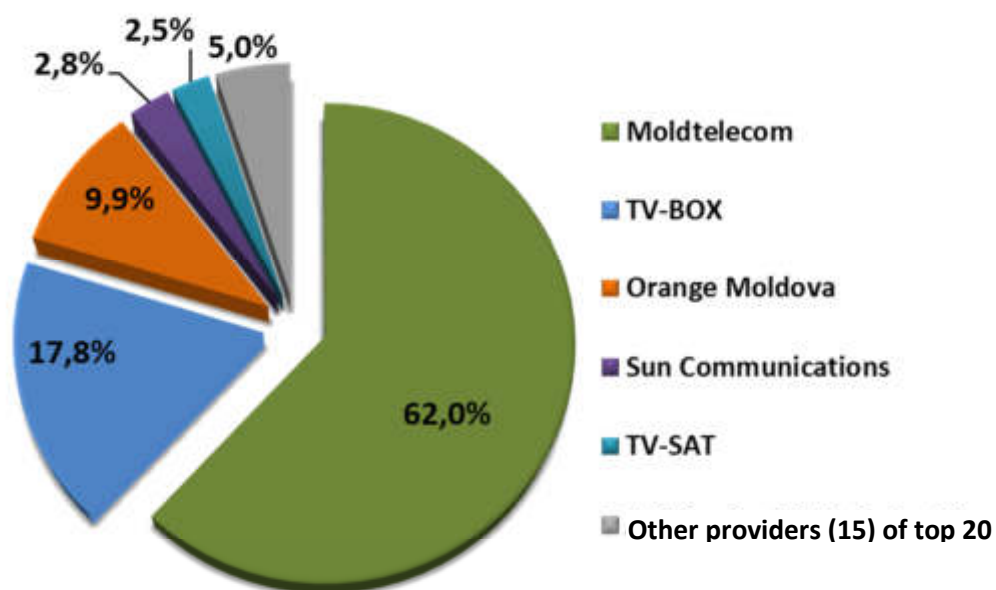


Chart 48. Market shares of pay TV service providers (Top 20), by number of subscribers.
Source: ANRCETI

8. Number of subscribers and use of fixed broadband access technologies in administrativ – territorial units of the Republic of Moldova

no	Administrative-territorial unit	Total broadband Subscribers	Subscribers				Share of broadband access technologies				Evolution of technology share (p.p.)				Increase of the number of subscribers (un.)				
			xDSL	FTTx	coaxial cable	Other technologies	xDSL	FTTx	coaxial cable	Other technologies	xDSL	FTTx	coaxial cable	Other technologies	xDSL	FTTx	cablu coaxial	Other technologies	Broadband subscribers
1	Mun. CHISINAU	287 417	2 712	249 854	33 506	1 345	0,9%	86,9%	11,7%	0,5%	-0,4	5,8	-5,4	0,0	-1 130	25 102	-13 790	168	10 350
2	Mun. BALȚI	36 954	702	32 438	3 725	89	1,9%	87,8%	10,1%	0,2%	-2,2	3,8	-1,8	0,2	-725	3 060	-431	71	1 975
3	Mun. CAHUL	9 378	526	7 873	965	14	5,6%	84,0%	10,3%	0,1%	-3,4	4,1	-0,8	0,1	-257	915	-2	6	662
4	Mun. EDINET	4 704	191	4 504	0	9	4,1%	95,7%	0,0%	0,2%	-1,7	1,6	0,0	0,1	-43	701	0	6	664
5	Mun. HINCEȘTI	4 376	175	4 194	0	7	4,0%	95,8%	0,0%	0,2%	-1,1	1,0	0,0	0,1	-36	244	0	3	211
6	Mun. ORHEI	8 538	329	7 181	1 015	13	3,9%	84,1%	11,9%	0,2%	-1,0	2,0	-1,0	0,1	-73	431	-44	5	319
7	Mun. SOROCA	7 336	396	6 869	0	71	5,4%	93,6%	0,0%	1,0%	-2,5	2,4	0,0	0,1	-149	555	0	8	414
8	Mun. STRASENI	4 032	64	3 960	1	7	1,6%	98,2%	0,0%	0,2%	-5,8	5,7	0,0	0,0	-213	476	1	2	266
9	Mun. UNGHENI	9 208	182	9 018	0	8	2,0%	97,9%	0,0%	0,1%	-1,3	1,2	0,0	0,1	-111	402	0	6	297
10	ANENII NOI	14 684	2 776	10 249	1 650	9	18,9%	69,8%	11,2%	0,1%	-9,3	7,7	1,7	0,0	-1 219	1 465	295	-6	535
11	BASARABEȘCA	5 261	585	4 529	0	147	11,1%	86,1%	0,0%	2,8%	-4,2	4,9	0,0	-0,7	-162	567	0	-23	382
12	BRICENI	13 850	3 250	10 592	0	8	23,5%	76,5%	0,0%	0,1%	-8,4	8,3	0,0	0,0	-994	1 506	0	5	517
13	CAHUL	12 101	4 254	7 847	0	0	35,2%	64,8%	0,0%	0,0%	-22,6	22,6	0,0	0,0	-2 369	3 009	0	0	640
14	CANTEMIR	9 288	4 641	4 647	0	0	50,0%	50,0%	0,0%	0,0%	-15,8	15,8	0,0	0,0	-1 107	1 661	0	0	554
15	CALARASI	11 474	3 964	7 497	0	13	34,5%	65,3%	0,0%	0,1%	-9,0	9,0	0,0	0,0	-682	1 482	0	4	804
16	CAUSENI	14 743	2 540	11 817	375	11	17,2%	80,2%	2,5%	0,1%	-20,7	20,6	0,1	0,0	-2 636	3 688	48	2	1 102
17	CIMISLIA	9 662	3 487	6 172	0	3	36,1%	63,9%	0,0%	0,0%	-4,2	4,2	0,0	0,0	-170	760	0	1	591
18	CRIULENI	15 929	2 244	13 675	0	10	14,1%	85,8%	0,0%	0,1%	-9,1	9,6	0,0	-0,5	-1 002	3 005	0	-63	1 940
19	DONDUSENI	7 429	1 325	6 102	0	2	17,8%	82,1%	0,0%	0,0%	-12,3	12,3	0,0	0,0	-479	1 917	0	0	1 438
20	DROCHIA	15 730	1 344	14 378	0	8	8,5%	91,4%	0,0%	0,1%	-6,0	6,0	0,0	0,0	-793	1 834	0	5	1 046
21	DUBASARI	5 988	941	4 494	552	1	15,7%	75,1%	9,2%	0,0%	-12,8	3,6	9,2	0,0	-523	819	552	0	848
22	EDINET	10 830	3 420	7 407	0	3	31,6%	68,4%	0,0%	0,0%	-20,6	20,6	0,0	0,0	-1 878	2 546	0	0	668
23	FALEȘTI	12 938	3 362	9 515	0	61	26,0%	73,5%	0,0%	0,5%	-9,0	8,6	0,0	0,4	-828	1 747	0	58	977
24	FLOREȘTI	14 778	4 837	9 932	0	9	32,7%	67,2%	0,0%	0,1%	-8,2	9,3	0,0	-1,1	-810	1 936	0	-153	973
25	GLODENI	9 612	2 736	6 872	0	4	28,5%	71,5%	0,0%	0,0%	-22,4	22,4	0,0	0,0	-1 674	2 613	0	3	942
26	HINCEȘTI	14 075	6 566	7 507	0	2	46,7%	53,3%	0,0%	0,0%	-8,4	8,4	0,0	0,0	-632	1 624	0	0	992
27	IALOVENI	19 621	1 605	16 874	1 134	8	8,2%	86,0%	5,8%	0,0%	-6,1	12,3	-5,7	-0,5	-968	3 592	-933	-89	1 602
28	LEOVA	8 626	2 572	6 053	0	1	29,8%	70,2%	0,0%	0,0%	-3,6	3,6	0,0	0,0	-136	664	0	1	529
29	NISPORENI	9 098	2 109	6 982	0	7	23,2%	76,7%	0,0%	0,1%	-13,5	13,4	0,0	0,1	-1 048	1 528	0	5	485
30	OCNITA	8 310	2 483	5 821	0	6	29,9%	70,0%	0,0%	0,1%	-13,4	13,4	0,0	0,0	-877	1 418	0	1	542
31	ORHEI	16 838	4 042	11 789	1 000	7	24,0%	70,0%	5,9%	0,0%	-9,7	6,8	3,0	0,0	-1 078	2 198	547	2	1 669
32	REZINA	8 328	2 341	5 981	0	6	28,1%	71,8%	0,0%	0,1%	-7,2	7,2	0,0	0,0	-375	1 015	0	3	643
33	RISCANI	11 221	3 634	7 580	0	7	32,4%	67,6%	0,0%	0,1%	-4,9	4,9	0,0	0,0	-409	796	0	4	391
34	SINGEREI	14 962	4 316	10 640	0	6	28,8%	71,1%	0,0%	0,0%	-8,1	8,0	0,0	0,0	-962	1 619	0	2	659
35	SOROCA	8 340	4 856	3 482	0	2	58,2%	41,8%	0,0%	0,0%	-12,8	12,8	0,0	0,0	-776	1 190	0	0	414
36	STRASENI	11 182	3 076	7 926	176	4	27,5%	70,9%	1,6%	0,0%	-9,3	11,6	-2,3	0,0	-621	1 963	-215	1	1 128
37	SOLDANEȘTI	6 584	2 065	4 390	0	129	31,4%	66,7%	0,0%	2,0%	-9,9	10,6	0,0	-0,7	-463	948	0	-34	451
38	STEFAN VODA	10 747	4 883	4 705	1 154	5	45,4%	43,8%	10,7%	0,0%	-8,7	7,6	1,0	0,0	-553	1 072	180	3	702
39	TARACLIA	8 038	673	7 360	0	5	8,4%	91,6%	0,0%	0,1%	-9,5	9,5	0,0	0,0	-599	1 520	0	3	924
40	TELENEȘTI	11 541	2 571	8 869	99	2	22,3%	76,8%	0,9%	0,0%	-15,5	14,6	0,9	0,0	-1 426	2 274	99	1	948
41	UNGHENI	10 898	3 354	7 544	0	0	30,8%	69,2%	0,0%	0,0%	-7,0	7,0	0,0	0,0	-507	1 175	0	0	668
42	UTAG	27 684	2 143	25 524	0	17	7,7%	92,2%	0,0%	0,1%	-9,5	9,4	0,0	0,0	-2 366	3 830	0	6	1 470
Total		762 333	104 272	610 643	45 352	2 066	13,7%	80,1%	5,9%	0,3%	-5,5	7,8	-2,3	0,0	-33 859	90 867	-13 693	17	43 332