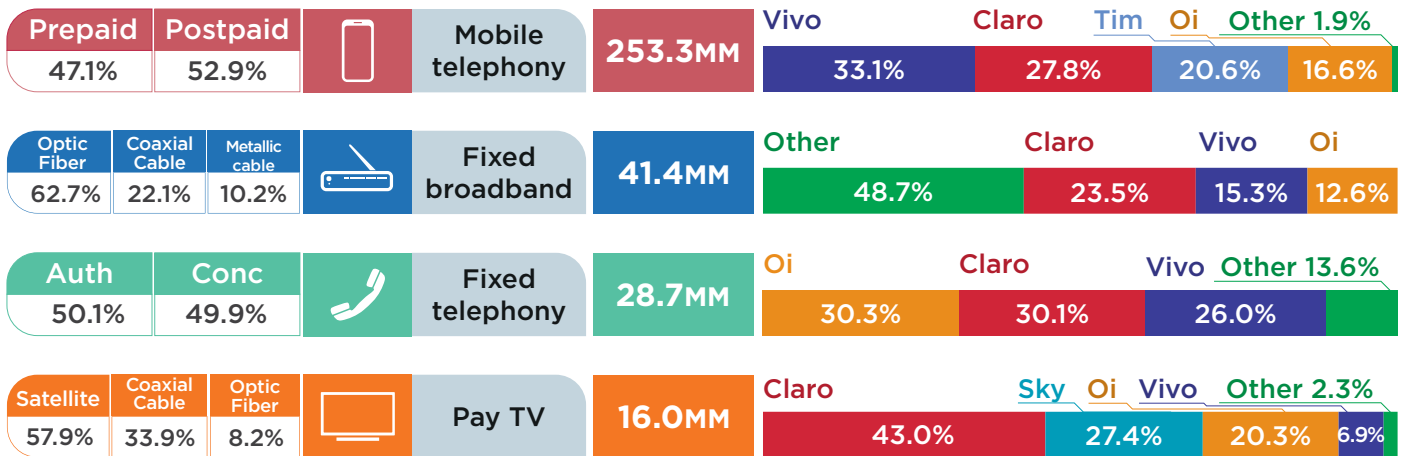


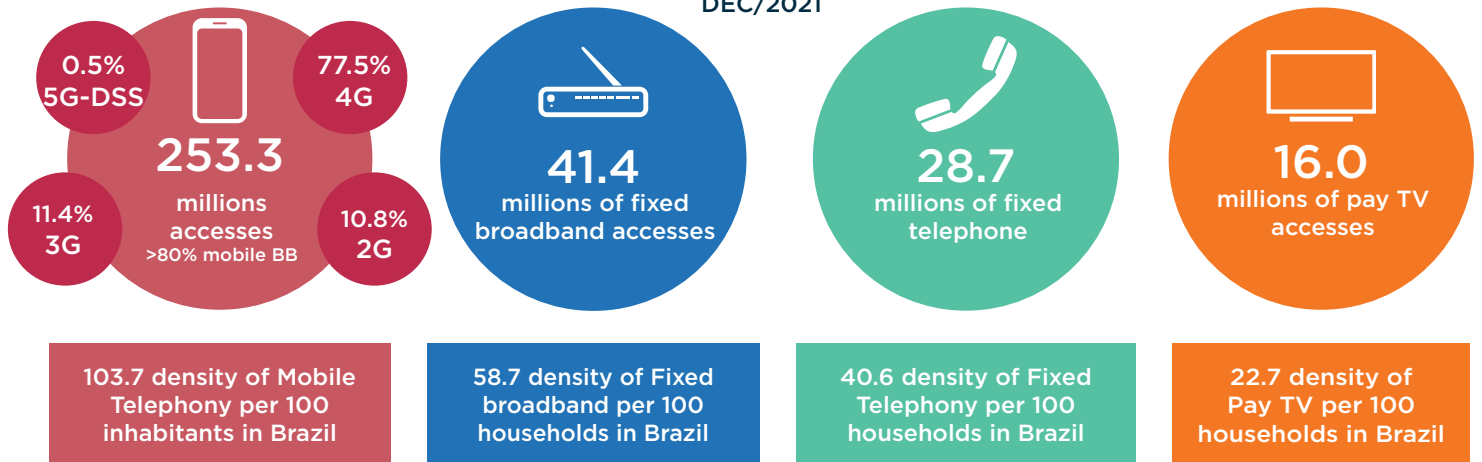


OVERVIEW OF TELECOMMUNICATIONS IN BRAZIL DEC/2021

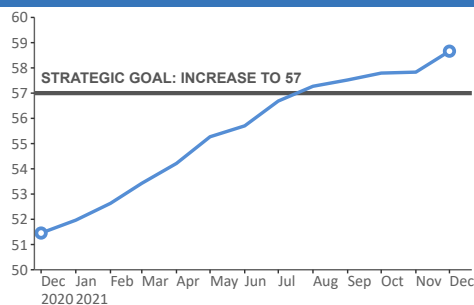


339.5 Millions

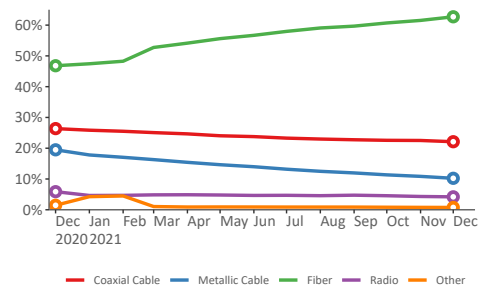
contracts of telecom services in
DEC/2021



Density of Fixed Broadband



Technological Evolution of Fixed Broadband



Market Concentration* of Fixed Broadband



Market Concentration* of Mobile Telephony



* Market Concentration is calculated using [Herfindahl-Hirschman Index \(HHI\)](#).

MOBILE TELEPHONY, PER GROUP AND TECHNOLOGY							
Mobile telephony	Group	Accesses	5G-DSS	4G	3G	2G	Market Share
	VIVO	83,920,966	470,909	61,856,003	8,502,157	13,091,897	33.1%
	CLARO	70,541,191	455,768	52,675,808	14,254,850	3,154,765	27.8%
	TIM	52,065,959	283,765	46,314,195	2,453,834	3,014,165	20.6%
	OI	42,041,387	0	32,140,301	3,196,622	6,704,464	16.6%
	Other	4,744,992	0	4,230,306	404,353	110,333	1.9%
	TOTAL	253,314,495	1,210,442	197,216,613	28,811,816	26,075,624	100%
PERCENTAGE	100%	0.5%	77.9%	11.4%	10.3%		

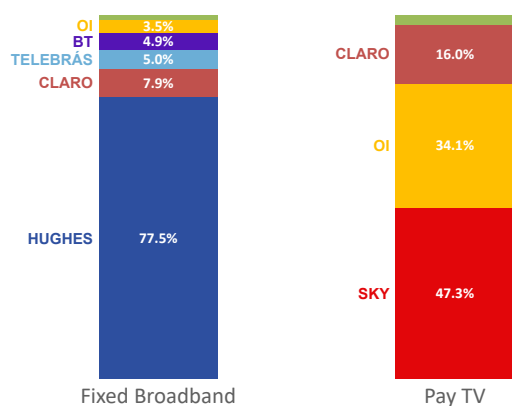
Fixed broadband	FIXED BROADBAND, PER GROUP AND TECHNOLOGY							
	Group	Accesses	Optic Fiber	Coaxial Cable	Metallic cable	Radio	Satellite	Market Share
	CLARO	9,732,056	622,930	9,003,933	74,978	5,401	24,814	23.5%
	VIVO	6,321,935	4,609,585	59	1,712,291	0	0	15.3%
	OI	5,202,420	3,694,195	122	1,484,992	12,271	10,840	12.6%
	Other	20,179,521	17,055,751	159,214	964,097	1,723,497	276,962	48.7%
	TOTAL	41,435,932	25,982,461	9,163,328	4,236,358	1,741,169	312,616	100%
	PERCENTAGE	100%	62.7%	22.1%	10.2%	4.2%	0.8%	

Fixed telephony	ON SERVICE ACCESSES, FIXED TELEPHONY		
	Group	Accesses	Market Share
	OI	8,686,277	30.3%
	CLARO	8,651,381	30.1%
	VIVO	7,471,061	26.0%
	Other	3,891,832	13.6%
	TOTAL	28,700,551	100%

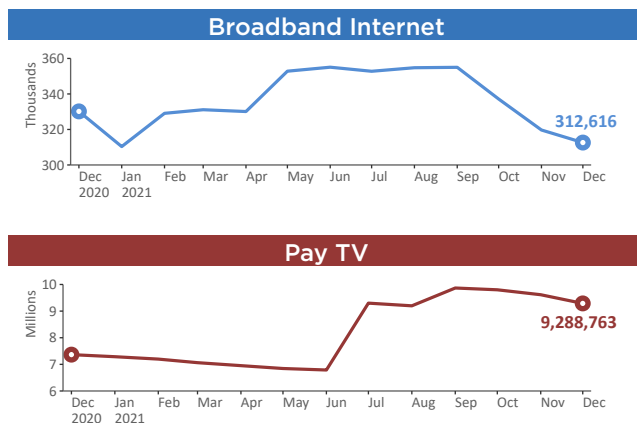
ACCESSES PER TYPE OF GRANTS, FIXED TELEPHONY		
Type	Accesses	Percentual
As a private service	14,380,030	50.1%
As a public service concession	14,320,521	49.9%
TOTAL	28,700,551	100%

PAY TV, PER GROUP AND TECHNOLOGY						
Pay TV	Group	Accesses	Coaxial Cable	Satellite	Optic Fiber	Market Share
	CLARO	6,905,051	5,332,341	1,485,815	86,895	43.0%
	SKY	4,391,819	0	4,391,819	0	27.4%
	OI	3,258,343	0	3,169,797	88,546	20.3%
	VIVO	1,114,844	0	198,008	916,836	6.9%
	Other	374,069	108,290	43,324	217,160	2.3%
	TOTAL	16,044,126	5,440,631	9,288,763	1,309,437	100%
	PERCENTAGE	100%	33.9%	57.9%	8.2%	

Market Share - Satellite



Number of satellite service accesses



Prepaid TV offers known as Sky Livre or similar were considered as Pay TV and, as of July 2021, became part of the subscriber data base made available by Anatel in its publications.