OVERVIEW OF TELECOMMUNICATION IN BRAZIL
NOVEMBER/2020

ANATEL

Mobile telephony	232.1mi (Nov/20)				
Prepaid 49.4%	Postpaid 50.6%	Vivo 33.5%	Claro 25.4%	Tim 22.2%	Oi 15.8% — Other 3.1%

Fixed telephony	30.3mi (Nov/20)			
Conc 53.9%	Auth 46.1%	Oi 31.5%	Vivo 29.9%	Claro 29.8% — Other 8.8%

Wired broadband	35.8mi (Nov/20)			
Fiber 45.7%	Coaxial 26.8% — Twisted-pair cable 20.3%	Other 40.4%	Claro 27.5%	Vivo 17.9% — Oi 14.2%

Pay TV	14.9mi (Nov/20)			
DTH 49.7%	TVC 42.9% — FTTH 7.4%	Claro 47.2%	Sky 30.5%	Oi 11.2% — Vivo 8.4% — Other 2.6%

313.1 Millions
contract of telecom services in **Nov/2020**

232.1 Millions accesses >80% mobile BB (Nov/20)
- 73.6% 4G
- 11.8% 2G
- 14.6% 3G

30.3 Millions of fixed telephone (Nov/20)

35.8 Millions of wired broadband accesses (Nov/20)

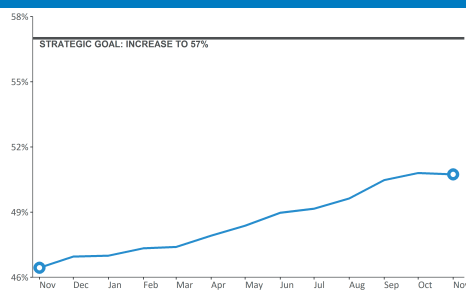**14.9** Millions of pay TV accesses (Nov/20)
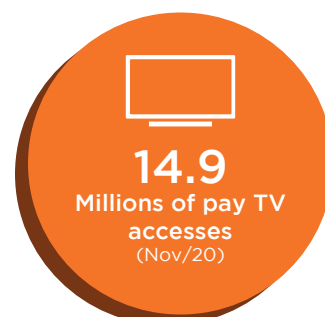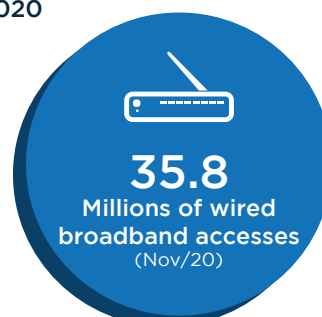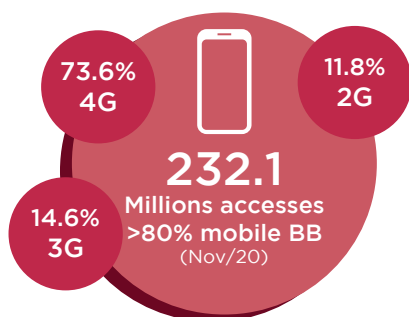
90.3 density of Mobile Telephony per 100 in habitants in Brazil

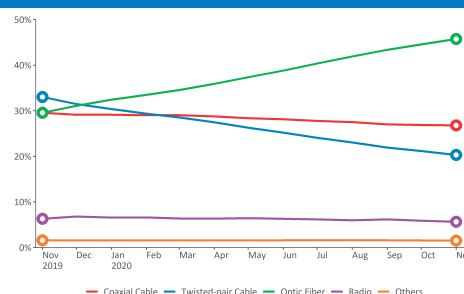42.8 density of Fixed Telephony per 100 households in Brazil

50.7 density of Fixed broadband per 100 households in Brazil

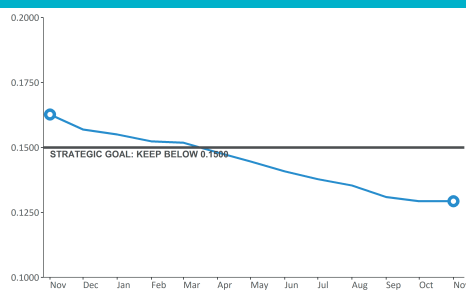21.1 density of Pay TV per 100 households in Brazil
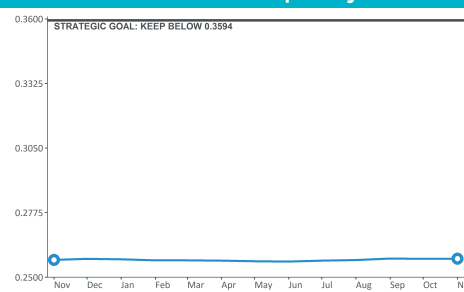
Density of Fixed Broadband
STRATEGIC GOAL: INCREASE TO 57%

Technological Evolution of Broadband Internet
Coaxial Cable — Twisted-pair Cable — Optic Fiber — Radio — Others

Market Concentration* of Fixed Broadband
STRATEGIC GOAL: KEEP BELOW 0.1500

Market Concentration* of Mobile Telephony
STRATEGIC GOAL: KEEP BELOW 0.3594

*Market Concentration is calculated using *Herfindahl–Hirschman Index (HHI).*

MOBILE TELEPHONY, PER GROUP AND TECHNOLOGY

Group	Accesses	4G	3G	2G	Market Share
VIVO	77,754,424	55,018,125	9,494,048	13,242,251	33.5%
CLARO	58,933,865	42,061,613	14,902,854	1,969,398	25.4%
TIM	51,511,609	41,483,542	5,540,484	4,487,583	22.2%
OI	36,604,087	26,527,702	3,181,858	6,894,527	15.8%
OTHER	7,251,388	5,666,365	859,661	725,362	3.1%
TOTAL	232,055,373	170,757,347	33,978,905	27,319,121	100.0%
PERCENTAGE	100.0%	73.6%	14.6%	11.8%	

Mobile telephony

ON SERVICE ACCESSES, FIXED TELEPHONY

Group	Accesses	Market Share
OI	9,527,781	31.5%
VIVO	9,034,611	29.9%
CLARO	9,013,996	29.8%
OTHER	2,674,175	8.8%
TOTAL	30,250,563	100.0%

ACCESSES PER TYPE OF GRANTS, FIXED TELEPHONY

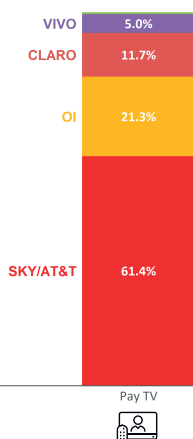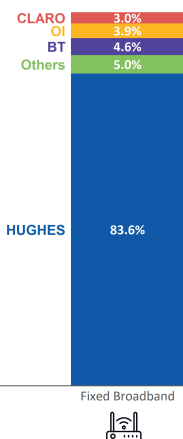| Type	Accesses	Percentual
As a public service concession	16,301,158	53.9%
As a private service	13,949,405	46.1%
TOTAL	30,250,563	100.0%

Fixed telephony

WIRED BROADBAND, PER GROUP AND TECHNOLOGY

Group	Accesses	Twisted-pair cable	Coaxial Cable	Optic Fiber	Radio	LTE	Satellite	Market Share
CLARO	9,849,956	77,014	9,299,415	448,892	14,494	0	10,141	27.5%
VIVO	6,423,040	3,017,743	0	3,405,297	0	0	0	17.9%
OI	5,086,794	2,743,325	0	2,314,424	15,864	0	13,181	14.2%
OTHER	14,479,461	1,443,799	300,91	10,222,257	1,991,544	207,120	313,830	40.4%
TOTAL	35,839,251	7,281,881	9,600,326	16,390,870	2,021,902	207,120	337,152	100.0%
PERCENTAGE	100.0%	20.3%	26.8%	45.7%	5.6%	0.6%	0.9%	

Wired broadband

PAY TV, PER GROUP AND TECHNOLOGY

Group	Accesses	DTH	FTTH	MMDS	TVA	TVC	Market Share
CLARO	7,047,629	869,869	0	0	0	6,177,760	47.2%
SKY/AT&T	4,556,426	4,556,426	0	0	0	0	30.5%
OI	1,670,321	1,580,048	90,273	0	0	0	11.2%
VIVO	1,255,833	373,755	882,078	0	0	0	8.4%
OTHER	388,354	36,019	127,400	241	64	224,630	2.6%
TOTAL	14,918,563	7,416,117	1,099,751	241	64	6,402,390	100.0%
PERCENTAGE	100.0%	49.7%	7.4%	0.0%	0.0%	42.9%	

Pay TV

MARKET SHARE - SATELLITE

Fixed Broadband
- CLARO 3.0%
- OI 3.9%
- BT 4.6%
- Others 5.0%
- HUGHES 83.6%

Pay TV
- VIVO 5.0%
- CLARO 11.7%
- OI 21.3%
- SKY/AT&T 61.4%

Number of satellite service accesses, Broadband Internet

337,152

Number of satellite service accesses, Pay TV

7,416,117

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