



CESCON
BARRIEU

DIGITAL
INFRASTRUCTURE
TRENDS

2026

MARKET OVERVIEW

DIGITAL INFRASTRUCTURE

ECONOMIC OVERVIEW

The Brazilian telecommunications sector showed robust dynamics in 2025, consolidating its position as a hub for attracting international investment. According to Central Bank data analyzed by the Ministry of Communications, foreign investment grew 20.4% in 2025, totaling R\$39.1 billion (US\$7.44 billion), compared to R\$32.4 billion in 2024.

INDICATOR	DATA
Foreign Investment	R\$39.1 billion (+20.4%)
Mobile Access	270.2 million (+2.6%)
5G Access	58.1 million (+46.6%)
5G Population Coverage	64.94% (2,019 municipalities)

Source: Anatel

According to a McKinsey study (February 2026), AI infrastructure represents a new growth avenue for telecommunications operators. The accelerated adoption of generative and agentic is driving demand not only for centralized computing, but for distributed infrastructure close to end users.

Between 2012 and 2025, global mobile data traffic grew more than 50% per year, while telecommunications service revenues grew only 1% annually. This dynamic reinforces the need for new business models based on open APIs, network slicing and per-service monetization, not just connectivity.

DIGITAL INFRASTRUCTURE

TRENDS: AI MEGACLUSTERS

The dominant paradigm until 2023 assumed that AI computing would progressively migrate to the network edge. The experience of 2024-2025 corrected this hypothesis, as a significant portion of inference continues to require large centralized clusters, due to volume and per-unit processing costs. This completely reconfigured the business models of data center operators.

GPU CAPACITY AS A STRATEGIC ASSET

Brazil will host one of the largest Blackwell GPU deployments outside the US — Project Ceiba (AWS), with more than 20,000 units in Fortaleza. The Federal Government allocated US\$4 billion for AI infrastructure, including the supercomputer instalado em Goiás. Empresas de diferentes setores passaram a incluir capacidade de processamento de IA em seus planos de infraestrutura.

GROWTH IN RACK DENSITY

Cooling and electrical density requirements per rack have jumped from 10-20 kW to 30-100 kW in AI-focused projects, requiring retrofits of existing infrastructure and new construction standards.

LOGICAL CORE/EDGE SEPARATION

The boundary between core data centers and computing is increasingly defined by workload type and latency requirements, rather than geographic location. High-performance workloads remain close to submarine cables; Real-time workloads (autonomous vehicles, connected healthcare, Industry 4.0) migrate to the edge.

DIGITAL INFRASTRUCTURE

TRENDS: GEOGRAPHIC DECONCENTRATION

São Paulo has historically concentrated more than 40% of national capacity, but 2025-2026 mark the emergence of a more distributed map:



Fortaleza consolidated as the main submarine cable hub, connection point between North America, Europe and Africa. The cable Firmina (Google) and the BRICS Cable position Ceará on the priority transoceanic route. The city now competes with Marseille and Miami as a global landing hub;

Porto Alegre, Belém, Recife and Brasília are positioning themselves as hubs for distributed workloads, regional AI clusters and domestic traffic. The new generation of terrestrial optical routes enables competitive latency from these points;

The interior of the state of **São Paulo and Goiás** attract projects due to energy availability, cheaper land and lower risk of electrical grid congestion compared to the state capital;

The Northeast as an energy + edge, as the combination of abundant wind and solar energy, lower operating costs and submarine connectivity creates a competitive advantage for large-scale edge computing projects.

DIGITAL INFRASTRUCTURE

TRENDS: BRAZIL AS AN AI HUB IN LATIN AMERICA

Brazil has been consolidating a structural position as the main hub for the development, adoption and processing of artificial intelligence in Latin America, supported by a combination of market scale, data availability and accelerated expansion of digital infrastructure.

The country concentrates

74%

**OF AI FUNDING IN
LATIN AMERICA**



This movement is accompanied by a strong expansion of supporting infrastructure. The expectation is that Brazil will move beyond being merely a technology consumer market to position itself as a regional processing platform.

Expected investments

30 ^{US\$}

**BILLION IN DATA CENTERS
BY THE END OF THE DECADE**

LEGAL AND REGULATORY OVERVIEW

DIGITAL INFRASTRUCTURE LEGAL AND REGULATORY OVERVIEW

The international regulatory agenda tends to be organized around three axes:



Acceleration of very-high-capacity network rollout



Improvement of cybersecurity and resilience standards, including supply chain and critical infrastructure



Integration of cloud, data and energy efficiency into the regulatory perimeter of digital infrastructure

In Brazil, these axes result in the following scenarios with high potential impact on infrastructure and telecommunications:

- Coverage flexibility and access expansion
- Explicit spectrum pipeline and auctions
- Shared physical infrastructure regulation
- Sector guidelines for AI use
- Satellite sustainability
- Cybersecurity and data governance
- Energy and sustainability
- Project Finance

The background features a dark, moody illustration. A hand is shown holding a smartphone, with a finger touching the screen. From the phone, several vertical dashed lines extend upwards, each topped with a cloud icon and a series of concentric arcs representing a wireless signal. A large, thin white arc is positioned on the left side of the image, partially enclosing the hand and phone.

TELECOMMUNICATIONS

ASPECTS

TELECOMMUNICATIONS SPECTRUM: RUE REVIEW

Anatel proposed a re-evaluation of the current spectrum use regulation to ensure the efficient use and management of spectrum, given the relevance of spectrum for the new business models of the telecommunications sector.



MANAGEMENT

Anatel intends to amend the provisions related to spectrum management, in order to address aspects such as coordination, unwanted emissions and unintentional emitters, including industrial, scientific and medical applications.



EFFICIENCY

According to the new draft, the efficient and adequate use of the radio frequency spectrum must consider not only technical aspects, but also economic, functional and social ones. Such aspects may be used as evaluation criteria by Anatel in procedures related to the authorization of radio frequency use, including prior to the approval of merger or acquisition processes and in prior consents for the transfer of use authorizations, for the industrial exploitation of the network (EIR).



SECONDARY MARKET

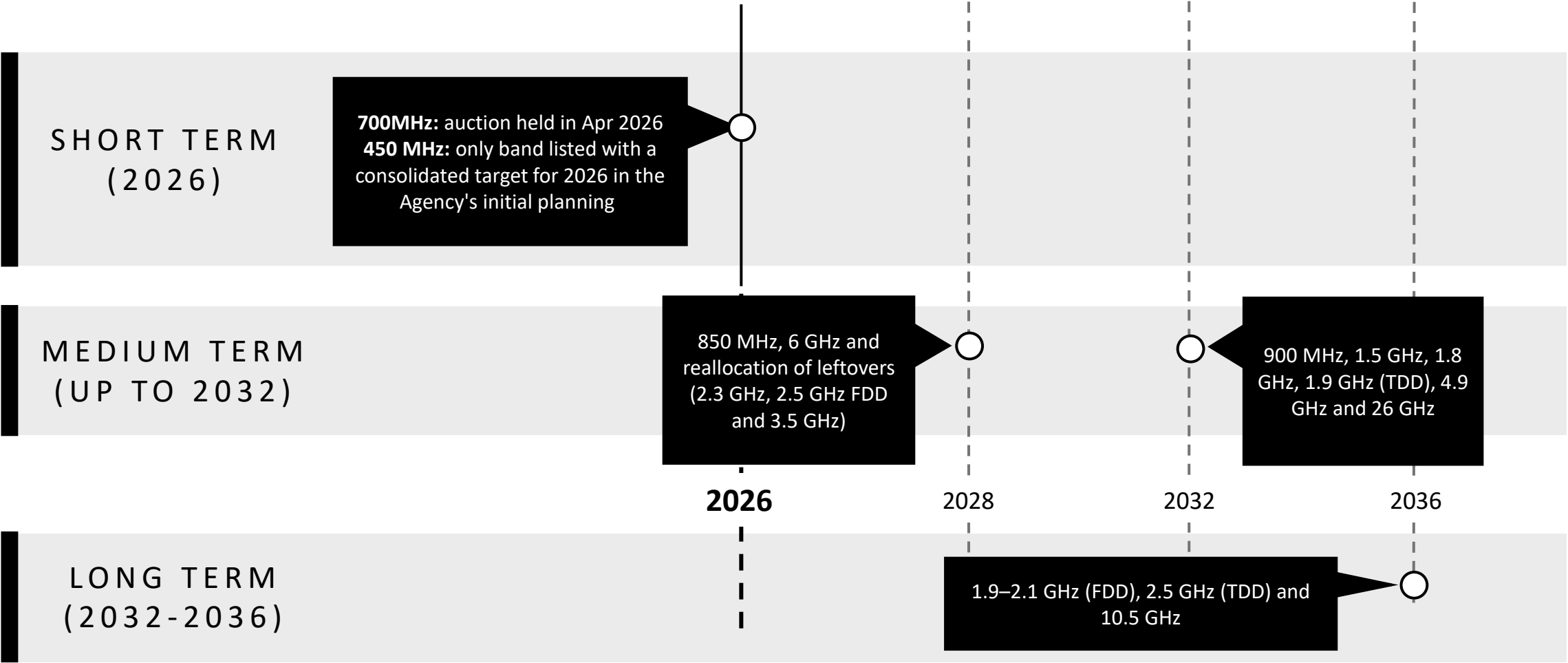
Access to spectrum in the secondary market may be authorized by Anatel, subject to prior consent, through industrial exploitation of the radio access network (EIR) and transfer of ownership of radio frequency use authorizations, with a proposed extension of the term from 6 to 60 months. However, this secondary use does not apply to radio frequencies obtained through auctions while service, geographic coverage or target commitments associated with the respective authorization term remain in effect, as in the case of the 5G auction.



Status: Draft under review by the Board of Directors

TELECOMMUNICATIONS

SPECTRUM: WINDOW OF OPPORTUNITIES

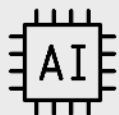


TELECOMMUNICATIONS CYBERSECURITY

Anatel is re-evaluating the Cybersecurity Regulation for the Telecommunications Sector, in order to update it to address new elements, new technologies and new points of criticality.



The main points under discussion include:



Regulation of artificial intelligence-based applications, providing technical safeguards against malicious use of algorithms



Multi-layer vulnerability management across the network, with end-to-end security requirements



Inclusion of cloud computing services and data centers in the scope of regulation



Environmental sustainability and energy efficiency, to encourage cleaner technologies and sustainable practices



Status: Draft being prepared by Anatel's technical area

TELECOMMUNICATIONS OBLIGATIONS OF USERS

Anatel has been conducting, since 2023, a regulatory process aimed at publishing the aforementioned regulation, based on public consultations, regulatory impact analysis and requests for information from digital ecosystem stakeholders.



Status: Under review of contributions to Call for Contributions No. 1/2026

TELECOMMUNICATIONS INFRASTRUCTURE SHARING

Pole sharing between the electricity and telecommunications sectors is currently regulated by Joint Resolution No. 4/2014. The regulatory agencies deemed it necessary to improve the regulatory framework, particularly regarding the following aspects:

ORDERING

PRICING

MANAGEMENT

ISONOMY

In view of this, public debate on the topic began:

2021-2022

Aneel and Anatel submit a proposed Joint Resolution to Public Consultation

2023

- Anatel approves proposed new regulation, providing for the mandatory transfer of the right to commercially exploit the infrastructure.
- Mcom and MME publish Interministerial Ordinance No. 10,563/2023, establishing the National Pole Sharing Policy - “Poste Legal” between electricity distributors and telecommunications service providers.

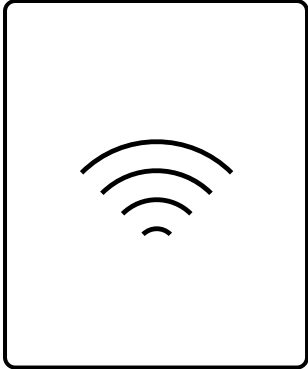
2025

- Aneel approves new version of the pole sharing regulation, providing that the transfer of the right to commercially exploit the infrastructure is optional.



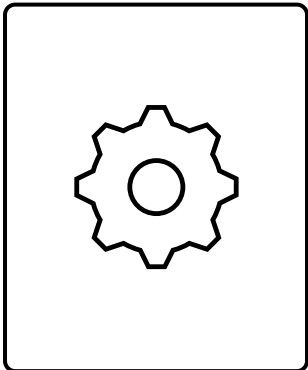
The approval of the final regulation will depend on consensus between the Agencies

TELECOMMUNICATIONS INCENTIVIZED AND INFRASTRUCTURE DEBENTURES



INCENTIVIZED DEBENTURES (LAW NO. 12,431/2011)

Debt securities issued by companies to finance infrastructure projects considered priorities, with income tax exemption for individuals and reduced rates for foreign investors.



INFRASTRUCTURE DEBENTURES (LAW NO. 14,801/2024)

New modality that expands the scope and tax incentives, granting benefits to the issuers themselves and expanding the interest of institutional investors, with a focus on long-term strategic projects.

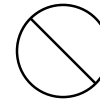
DECREE NO. 11,964/2024

Decree No. 11,964/2024 unified the regulation of Incentivized Debentures and Infrastructure Debentures, making the general rules and priority sectors common to both modalities.

Among the main innovations, the following stand out:



Waiver of prior ministerial approval as a general rule for projects in the listed priority sectors

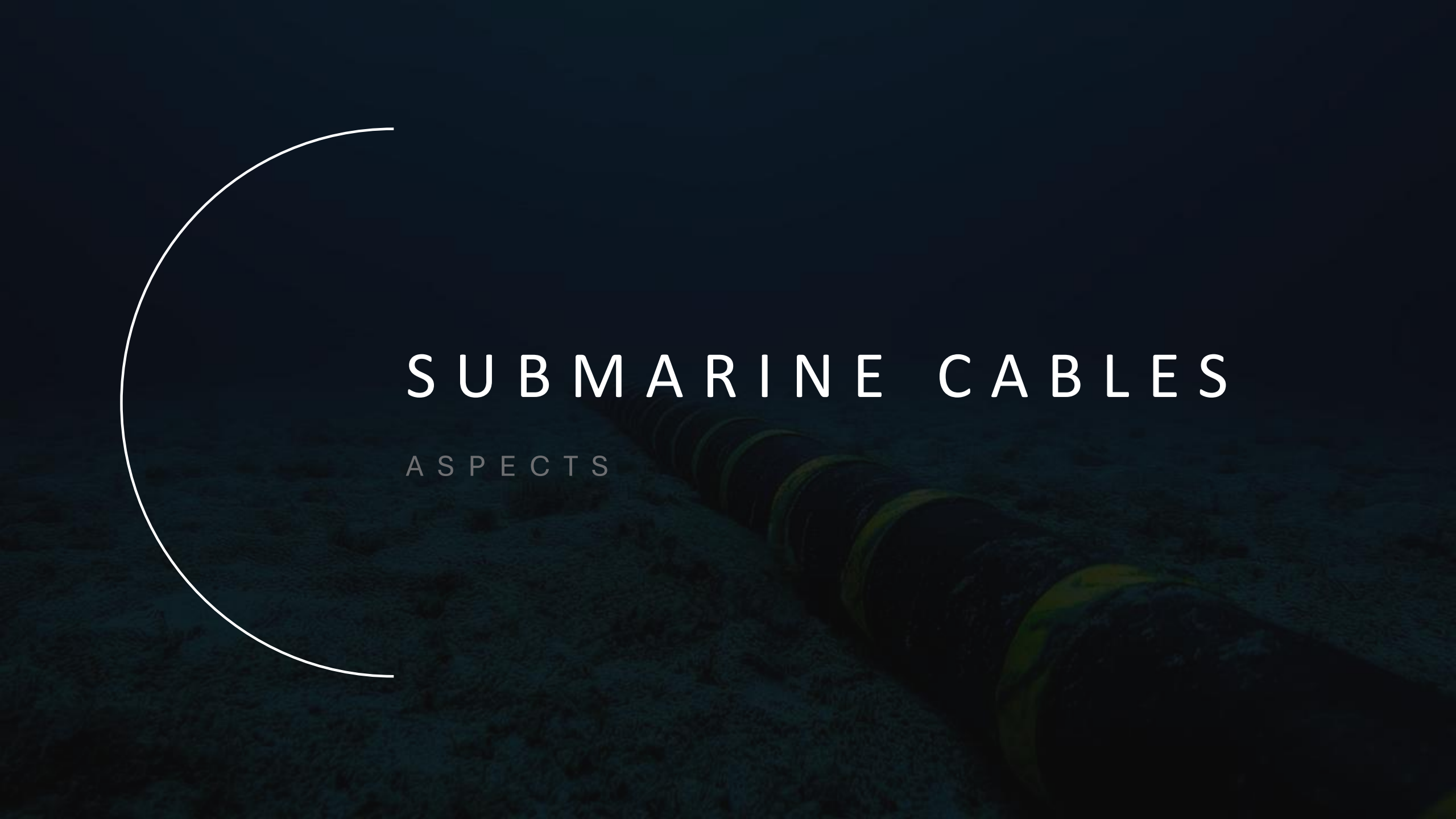


Ban on cumulating the benefits of both laws in the same debenture, but the same project may be financed under both modalities, provided it does not exceed the capital expenditure limit



Foreign exchange variation clause permitted exclusively for Infrastructure Debentures, focused on attracting foreign capital

The Ministry of Communications is drafting a new Ordinance to replace Ordinance No. 6,197/2022, which will regulate priority projects in telecommunications and broadcasting infrastructure under the new rules.



SUBMARINE CABLES

ASPECTS

SUBMARINE CABLES

NEW STRATEGIC FRAMEWORK FOR INTERNATIONAL CONNECTIVITY

The National Submarine Cables Policy is in its formulation and consolidation phase, reflecting the elevation of this infrastructure to the status of a strategic asset for connectivity, the digital economy and national security. The process is being led by the Ministry of Communications, with regulatory interface from Anatel and growing involvement of defense and planning agencies.

- The Ministry of Communications announced, in May 2025, the development of the National Submarine Cables Policy, with a call for contributions open to society, companies and specialists.
- The consultation was structured around five axes: strategic location of new Anchoring Zones of Interest (ZIAs), governance and federative coordination, tax and regulatory incentives, environmental and social sustainability, and network security and resilience.
- The government is studying tax incentives to boost the installation of cables in new regions, with the aim of diversifying the infrastructure and increasing its resilience.



Brazil is a very attractive country for data center infrastructure. In addition to having abundant water and energy, we have a strategic position in international data traffic, driven by the submarine cable network that connects continents. For this, we need to ensure that the entire connectivity engine is prepared: from the selection of fiber optic landing points to the distribution of energy at scale”

(Minister of Communications Frederico de Siqueira Filho)



The draft bill is in its final drafting stage and is expected to be completed in 2026

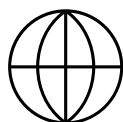
SUBMARINE CABLES REGULATION BY ANATEL

ANATEL INCLUDED IN THE 2025–2026 REGULATORY AGENDA THE CONSOLIDATION AND UPDATE OF THE RULES APPLICABLE TO SUBMARINE CABLES.

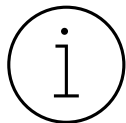
The Agency intends to assess the need for and terms of regulation regarding the following main topics:



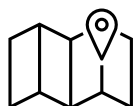
minimum physical and cybersecurity requirements



compliance with national and international recommendations



information obligations



measures to mitigate risks arising from geographic concentration.



interinstitutional governance



Geographic concentration as a vulnerability:

Currently, most of the infrastructure is concentrated in Fortaleza, Rio de Janeiro, Salvador, Santos and Praia Grande, in addition to 12 other coastal cities in the Southeast and Northeast. The North and South regions have no landing points.



Anatel's goal is to publish the RIA report and the proposed regulation in H2 2026



DATA CENTER

ASPECTS

DATA CENTER

NATIONAL DATA CENTER POLICY

The National Data Center Policy emerges as one of the central pillars of Brazil's digital infrastructure strategy, with the explicit objective of positioning the country as a global data processing hub, leveraged by renewable energy, territorial scale and international connectivity.

Special Tax Regime for Data Centers – REDATA: established in September 2025 by Provisional Measure No. 1.318/2025 as one of the main instruments of Brazil's National Data Center Policy, with the objective of enhancing data center activities in the country (effective as of January 2026). The benefit provides for the suspension of Import Tax, Excise Tax (IPI) and PIS/Cofins. **As a provisional measure, it was constitutionally required to be converted into law within the prescribed period. Since this did not occur, it expired and ceased to have prospective legal effect.**

To preserve the policy initiative, Bill No. 278/2026 was introduced in the Chamber of Deputies to replace the provisional measure and formally incorporate REDATA into the Brazilian legal framework. **The bill preserves the core structure of REDATA**, including the suspension of certain federal taxes on the acquisition and importation of equipment and infrastructure for qualified data center projects, subject to compliance with defined investment and sustainability requirements. **The bill was signed into law on September 15, 2026 as Law No. 15,504/2026.**

Initiatives to foster the production chain of data centers:

(1) BNDES launched in 2024 a specific credit line of R\$2 billion for investments in data centers, focused on expanding installed capacity in Brazil.

DATA CENTER

NATIONAL DATA CENTER POLICY

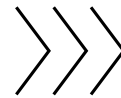
The National Data Center Policy emerges as one of the central pillars of Brazil’s digital infrastructure strategy, with the explicit objective of positioning the country as a global data processing hub, leveraged by renewable energy, territorial scale and international connectivity.

INITIATIVES TO FOSTER THE DATA CENTER PRODUCTION CHAIN:

(2) Bill No. 1,680/2025 aims to establish the National Data Center Policy (PNPAD) to stimulate the expansion of data centers in the country. The text provides for the implementation of **priority areas** for the development of public policies aimed at the installation of companies and other entities linked to the chain of products and services focused on digital processing and storage – **the Special Digital Processing and Storage Zones (“ZEPAD”)**.



Fostering the expansion of data centers in Brazil



Encouraging the joint action of the Union, States and Municipalities and private entities, with a view to creating a national data center infrastructure



suggested amendment to the Bidding Law to allow, in **public procurement** for IT systems and infrastructure considered strategic, that the bidding process may be restricted to **(i)** goods and services with technology developed in Brazil, provided they are produced in accordance with the basic productive process, and **(ii)** services rendered through infrastructure located in ZEPADs.



Status: Approved by the Science, Technology and Innovation Committee (jun/2026)

DATA CENTER

NATIONAL DATA CENTER POLICY

The National Data Center Policy emerges as one of the central pillars of Brazil’s digital infrastructure strategy, with the explicit objective of positioning the country as a global data processing hub, leveraged by renewable energy, territorial scale and international connectivity.

INITIATIVES TO FOSTER THE DATA CENTER PRODUCTION CHAIN:

(3) Bill No. 2,080/2025 aims at the development and operation of data centers with energy and water efficiency, reducing environmental impacts and maximizing the social benefits of these infrastructures

Proposal aligned with concerns about the environmental and social impacts of data centers

Presents objective criteria and targets, non-compliance with which may lead to sanctions against data center operators

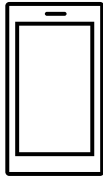
Suggests establishing tax incentive mechanisms and technical support for data center operators, through the creation of specific credit lines and tax incentives

Among the main aspects of Bill No. 2,080/2025, the monitoring and reporting obligations for data center operators with installed demand equal to or greater than 100 kWh per month stand out. The text also provides for a **Data Center Energy Efficiency Fee** (“TEED”), and the possibility of establishing **tax incentive mechanisms**, including through the creation of specific credit lines.



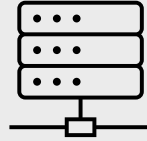
Status: Under review by the Science, Technology and Innovation Committee (since 2025)

DATA CENTER REGULATION BY ANATEL



RESOLUTION NO. 715/2019

- Establishes the rules for the certification of telecommunications products in Brazil.
- Telecommunications products are equipment, devices or components that serve as essential or sufficient means for telecommunications.
- The use and sale of telecommunications products in Brazil generally requires prior approval by Anatel through homologation.

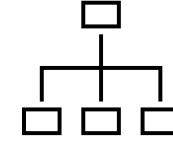


RESOLUTION NO. 780/2025

- Extends certification requirements to include data centers connected to telecommunications networks.
- Prohibits telecommunications providers from building or contracting new data center facilities without prior Anatel certification.
- Requires existing facilities to comply with the certification rules within three years.



The regulation is currently suspended by Anatel pending further developments, following an industry annulment request filed through administrative proceedings.



PUBLIC CONSULTATION NO. 48/2025

- Submits to public comment the preliminary operating procedures and corresponding technical requirements,
- Details the criteria, stages and parameters applicable to the certification and regulatory supervision of these infrastructures.

SATELLITES

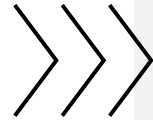
ASPECTS



SATELLITES

SUSTAINABILITY IN THE USE OF ORBITAL RESOURCES

Orbital debris has been a topic of international debate. It is estimated that more than 600,000 fragments larger than 1 cm orbit the Earth, posing a real risk to operational satellites and the International Space Station.



From a legal standpoint, Brazil faces obligations regarding:

- **Debris mitigation:** The UN (UNCOPUOS) and ITU debris mitigation guidelines recommend that LEO satellites be decommissioned within 25 years after the end of operation. **Brazil does not have legislation requiring compliance with these guidelines as a licensing condition.**
- **Liability for damage:** Fragments of Brazilian space objects or objects launched from Brazil that cause damage to third parties generate State liability under the 1972 (Liability) Convention.

Anatel is assessing the need for the inclusion of rules related to the sustainability of orbital resource use, in accordance with international body guidelines and the various aspects involved, such as environmental and competitive ones. The topic was included in the 2025-2026 Regulatory Agenda.

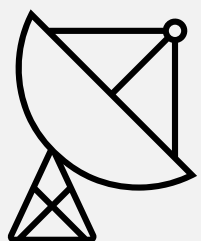


The goal is for the RIA report and the proposed regulation to be published in H2 2026

SATELLITES

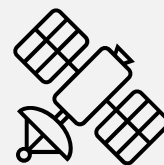
DIRECT-TO-DEVICE REGULATION

Direct-to-Device (D2D), which enables direct communication between low Earth orbit (LEO) satellites and conventional handsets, without any intermediary terrestrial infrastructure, represents the most significant disruption in the satellite sector in recent decades. In Brazil, Anatel has been conducting an innovative and progressive regulatory agenda, positioning the country as a potential regional leader in this emerging market.



In 2024, Anatel's Board of Directors approved the creation of the Experimental Regulatory Environment (sandbox) for the experimental provision of satellite mobile telephony in the D2D modality.

The experimental regulatory environment is set to remain in force until October 2026 – a deadline that, according to the Agency itself, may be extended based on the results of the experiments.



Personal Mobile Service (SMP) providers holding spectrum authorization may apply to join the sandbox for testing purposes, provided they maintain Private Limited Service (SLP) grants in the corresponding geographic areas.

The closing of the initial sandbox in 2026 should unlock the transition of D2D from a purely experimental regime to a more stable regulatory framework, with the definition of rules on grants, spectrum use and service model.

SATELLITES

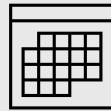
MIGRATION FROM SMGS TO SATELLITE SMP

The National Telecommunications Agency initiated, with the entry into force of the new General Regulation of Telecommunications Services (RGST), a structural process of migrating grants from the Global Mobile Satellite Service (SMGS) to satellite Personal Mobile Service (SMP).



GUIDELINES

- no new grants or authorizations will be issued for SMGS
- existing authorizations must be adapted to SMP; and
- any non-migrated grants will be extinguished at the end of the transition period.



TRANSITION DEADLINE

28
October
2027

The year 2026 marks the moment when operators must, in practice, internalize the migration.

From a regulatory standpoint, this transition materializes a structural change: satellite ceases to be treated as a standalone service (SMGS) and is absorbed into the SMP regime, consolidating a **unified mobile connectivity model**, regardless of infrastructure (terrestrial or non-terrestrial).

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