

# 3.5 GHZ AUCTION AND THE FUTURE OF SATELLITE DISTRIBUTION

This panel will present the possible impacts on a national level of tv content distribution by satellite starting with auction of the 3,5GHz wavelength scheduled for March 2020. According to IBGE data, Brazil has 22 million homes with satellite dishes, of which 10,5 million only have this signal as a source for audio visual content. Will the auction of the 3,5 GHz wavelength result in the extinction of these domestic satellite dishes? We will go deep into the results of the coexistence tests, the propositions to ensure continuity of access to open signals by these homes and the actions to protect the professional contribution and distribution operations on the C Band.

Chair: **Ana Eliza Faria e Silva** - *Strategy and Regulatory Manager in Technology Area of Globo TV*

- **MYTHS AND REALITIES ABOUT THE COEXISTENCE OF SERVICES ON THE 3.5 GHZ BAND AND ON THE SATELLITE C BAND**

Speaker: **Vicente Bandeira de Aquino Neto** - Member of the Board of Anatel

There is no truth in the news that fifth-generation (5G) terrestrial services on the 3.5 GHz band have rendered unfeasible satellite services on the C band or vice-versa. With all scientific rigor, the opposite has been demonstrated in the “Coexistence Tests between IMT operating on the 3.5 GHz Band and Satellite Systems Operating on an Adjacent Band” recently undertaken. Studies in other countries corroborate the possibility of the coexistence of 5G services on the 3.5 GHz band and satellite services on the C Band. In some of these countries (e.g. Switzerland and Germany) coexistence is even more complicated than in Brazil because the bands in question are superimposed. In recent bidding processes for the 3.5 GHz band in those countries, the call notices gave details of the recommended coordination measures. With the separation of the 3.5 GHz and the C band, as will be the case here, the coexistence between the various professional services using those radiofrequency bands will be easier, including the distribution of radio and TV signals by satellite. On the other hand, the report of the “Coexistence Tests” already mentioned provided proof of the possibility of interference that would adversely affect domestic reception of satellite broadcasting signals known as TVRO (TV receive only). The same report also indicated viable solutions for preventing or mitigating such problems of interference. Anatel and MCTIC have repeatedly recognized the importance of TVRO for Brazilian society. After taking depositions from all stakeholders, and in alignment with the Agency, the MCTIC is drafting public policy guidelines for the proper protection of TVRO users. These public policies will be an integral part of the final version of the Call for Tenders for Radiofrequencies on the 700 MHz, 2.3 GHz, 3.5 GHz and 26 GHz Bands.

- **COEXISTENCE TESTS - IMT OPERATING IN THE 3.5 GHZ RANGE AND C-BAND SATELLITE SYSTEMS**

Speaker: **Paulo Bertram Vieira** - Satellite Engineering Consultant / Communications Systems Management - Star One

- Speaker: **Vinicius Oliveira Caram Guimarães** – Superintendent at ANATEL

- Speaker: **Marcio Silva Novaes** - President of ABRATEL



**Chair: Ana Eliza Faria e Silva - Strategy and Regulatory Manager in Technology Area of Globo TV**

An electrical engineer from UNICAMP, she holds a Master's in subjective evaluation of video from UNICAMP, an MBA in Management from the Dom Cabral Foundation and an MBA in Telecommunications from IBMEC. She has been involved in several groundbreaking projects in video transmission and Digital TV standardization in Brazil. She is currently Strategy and Regulatory Affairs manager in the technology department at TV Globo. Former Director of Technology of SET, Ana is an active contributor to the UIT where she is deputy coordinator of the Broadcasting Study Group.



**Vicente Bandeira de Aquino Neto - Member of the Board of Anatel**

Vicente Bandeira de Aquino Neto has been a member of Anatel's Board of Directors since January 2019. He has held the position of special advisor to the Presidency of the Banco do Nordeste do Brasil and Advisor to the Brazilian Bar Association (OAB) in Ceará. Aquino is from Ceará, graduated in Law from the Federal University of Paraíba and master in Constitutional Law from the University of Fortaleza. He is a PhD student in Advanced Political Science at the University of Lisbon, Portugal, and in Constitutional Law at the University of Fortaleza. Has experience in Law, focusing on Electoral Law.



**Paulo Bertram Vieira - Satellite Engineering Consultant / Communications Systems Management - Star One**

Obtained a degree in Electronic Engineering from the IME – Military Institute of Engineering in 1979. Worked at FURNAS – Centrais Elétricas S.A. in the Communications Division with commutation systems, PLC (Power Line Carrier), HF, VHF, UHF and SHF. Joined EMBRATEL in 1984 in Domestic Satellite Communications Department, with responsibility for planning, coordination and operational support for ground stations ever since the first generation of domestic communication satellites in Brazil (Brasilsat A1, A2). Currently works as a consultant in satellite engineering at Embratel Star One, in the Communication Systems Department of the Engineering Division, developing calculation models, designing carrier monitoring systems, specification, testing and engineering support on satellite communications systems.



**Vinicius Oliveira Caram Guimarães – Superintendent at ANATEL**

Vinicius has a degree in Telecommunications Engineering and a graduate degree in Telecommunications Management from the University of Brasília (UnB). Specialist in Governance and Regulation Control from Escola Nacional de Administração Pública – ENAP (National School of Government). Telecommunication Networks Consultant between 1998 and 2011. Professor on Electrical Engineering courses in private universities in Brasília. He has built a career at Anatel since 2011, having worked in the regulation area and has held the positions of coordinator in Critical Infrastructure Management, manager of Quality Obligations Control and adviser on Quality Management. In the Agency, he also coordinated projects for broadband quality measurement, the implementation of the Anatel Monitoring Center, critical infrastructures, natural disaster warning notification and the registration project for pre-paid user information.



**Marcio Silva Novaes - President of ABRATEL**

Lawyer, journalist and a graduate degree in Civil Law. Born in Paraguaçu Paulista (SP), he has been Corporate Director of Rede Record TV since 2006. He is a member of the Council on Social Communication of the Brazilian Congress and current president of ABRATEL. He was responsible for setting up the Communication Social Hub of the Federal Courts in the state of São Paulo and worked on the strategic communication of the different state and national bodies for over twenty years.