

Status of the Implementation of Digital Terrestrial Television Broadcast in the Americas

ITU Workshop on The Future of Television for the Americas
November 17th 2023

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CITEL PCC.II

What is CITEI?

- The Inter-American Telecommunications Commission (CITEI) is an entity of the Organization of American States, established by the General Assembly, in accordance with article 53 of the Organization's Charter.
- 35 member states
- Private sector, Academia

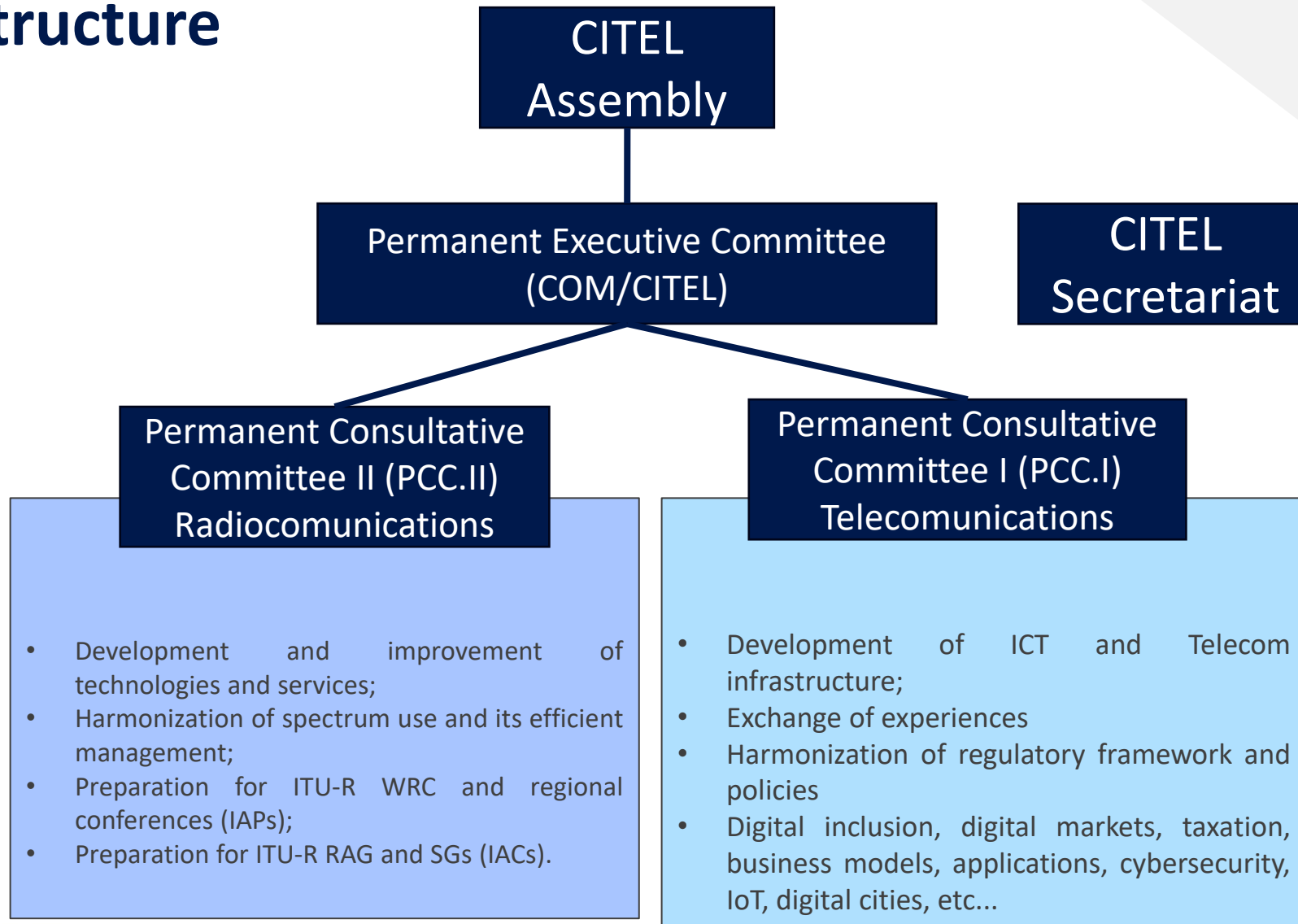


CITEI/RES.88 (VII-18)
Annex I – CITEI STATUTE - Ch.1
Annex 2 – CITEI REGULATIONS - Ch.1

www.citel.oas.org

The screenshot shows the official website of the Inter-American Telecommunication Commission (CITEI). The header includes the OAS logo, the text 'Organization of American States | More rights for more people', and language options for English and Español. A search bar is also present. The navigation menu lists: HOME, ASSEMBLY, COM/CITEI, PCC.I, PCC.II, SECRETARIAT, COLLABORATIVE SPACE, VIRTUAL COMMUNITY, and 2030 ICT ALLIANCE. The left sidebar contains a table of contents with sections: About CITEI (Mission Statement, Institutional Framework, Structure, Strategic Plan (2014-2018), Annual Reports, Cooperation Agreements), Membership (Members States, Associate Members, Directory of Associate Members), Observers (OAS Observers, CITEI Observers), Capacity Building (Training Courses, Scholarships), and Meetings (Next Meetings). The main content area features a large banner for the 'REUNIÓN DEL COMITÉ CONSULTIVO PERMANENTE I: TELECOMUNICACIONES/ TECNOLOGÍAS DE LA INFORMACIÓN Y LA COMUNICACIÓN' held from May 21 to 24 in Lima, Peru. Below the banner, there is a section for a 'High Level Meeting on "Digital Inclusion for Development in the Americas"' held on March 12, 2018, at the Hotel Emperador in Buenos Aires, Argentina. The text describes the meeting's objective: to bring together senior government officials, private sector experts, and representatives of international organizations to exchange information and best practices. A list of topics includes Digital Economy, Infrastructure, Connectivity and 5G, Reduction of Roaming's charges at Regional level, and Issues with theft of Equipment. At the bottom, it mentions the 'VII Regular Meeting of the Assembly of CITEI' held from March 13-15, 2018, at the Hotel Emperador in Buenos Aires, Argentina. A 'Tweets' section is visible on the right side of the page.

CITEL Structure



WG on Broadcasting

- Considers issues related to broadcasting development;
- Television Broadcasting;
- Second-generation DTTB systems;
- Sound Broadcasting;
- Spectrum Usage for Broadcasting;
- Report on ITU-R activities related to second-generation DTTB systems;

Relevant Deliverables

- 41th meeting (may/23, Mexico):
 - Res. 151:
 - Invite countries to report on the progress of their second-generation DTTB systems in the PCC.II meetings;
 - Dec. 228:
 - Establish a rapporteurship at CITEI on the progress of second-generation DTTB systems carried out in ITU-R Study Group 6.
 - Rapporteur - Luiz Fausto (B)
 - Business Intelligence panel on DTTB deployment status by CITEI administrations;
- Consistent status reports by administrations;

PCC.II/RES. 151 (XLI-23)¹

IMPLEMENTATION OF SECOND-GENERATION DIGITAL TERRESTRIAL TELEVISION BROADCASTING (DTTB) SYSTEMS IN THE AMERICAS

The 41 Meeting of Permanent Consultative Committee II: Radiocommunication (PCC.II),

• • •

RESOLVES:

1 To invite CITEI Member States working on the implementation of second-generation DTTB systems to share their experiences and relevant information at the PCC.II meetings; and

To invite CITEI Members, in particular Member States, to consider actively participating in the studies related to second-generation DTTB systems both in the meetings of the PCC.II working group on broadcasting and in the meetings of ITU-R Study Group 6 (Broadcasting Service) and its corresponding Working Parties.

PCC.II/DEC. 228 (XLI-23)¹

ESTABLISHMENT OF A RAPPOURSHIP ON SECOND-GENERATION DIGITAL TERRESTRIAL TELEVISION BROADCASTING (DTTB) SYSTEMS

The 41 Meeting of Permanent Consultative Committee II: Radiocommunication (PCC.II),

DECIDES:

1. To establish a rapporteurship for the purpose of reporting to the PCC.II Working Group on Broadcasting on the activities being carried out in ITU-R Study Group 6 (Broadcasting Service) and its related Working Groups related to second generation digital terrestrial television broadcasting (DTTB) systems;

2. To appoint Luiz Fausto from Brazil as rapporteur; and

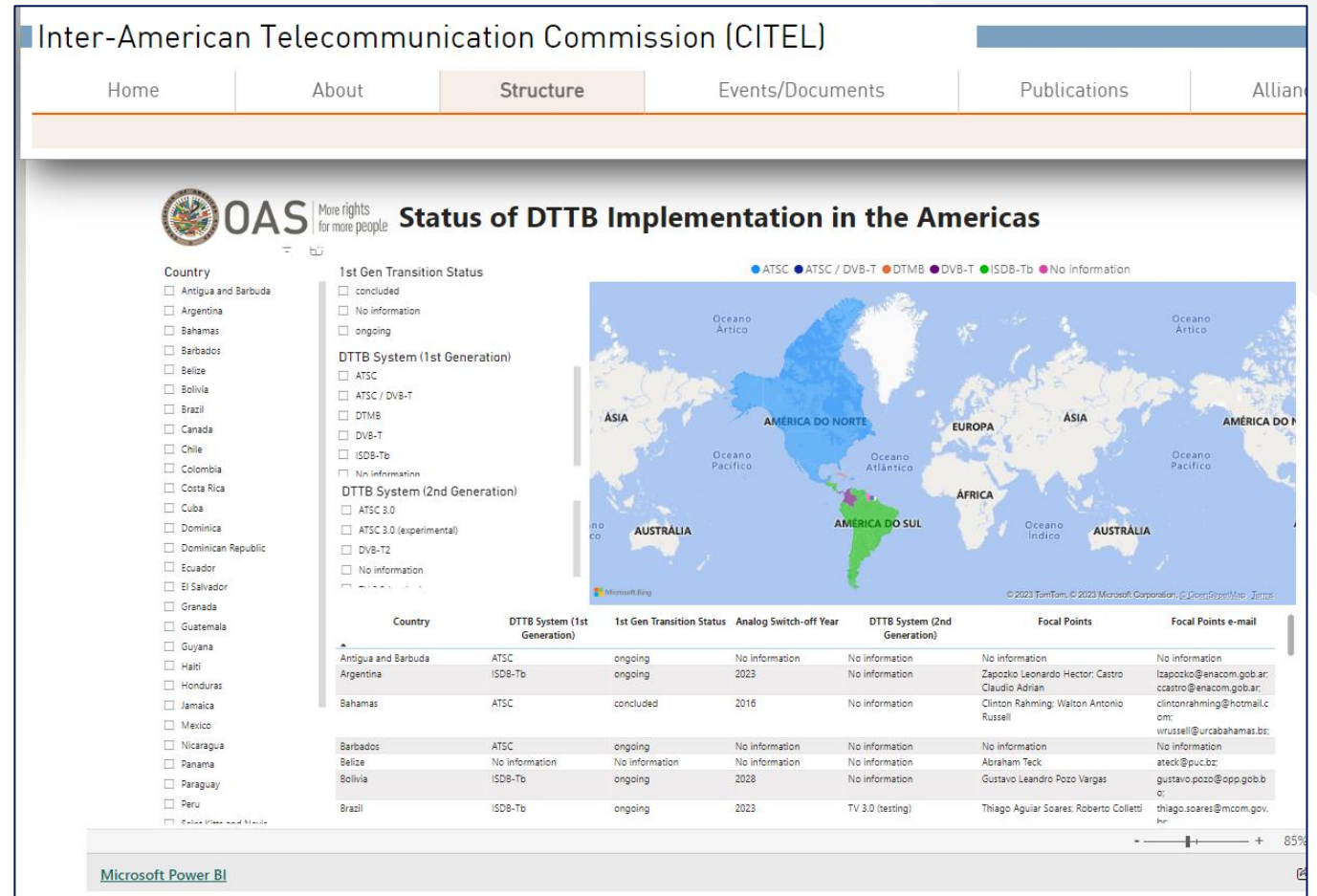
To request the designated rapporteur to present the corresponding reports at PCC.II meetings.

Relevant Deliverables

- BI dashboard on the CITEI website to present the status of DTTB deployment in CITEI administrations;
- Kick-off in May 2023;



- Updates/corrections:
 - Thiago.soares@mcom.gov.br



DTTB systems in CITELE administrations

- North America:
 - ATSC (1.0/3.0);
 - Canada testing an experimental ATSC variant;
- South America:
 - Mostly ISDB-T;
 - Colombia uses DVB-T2;
 - Guiana uses both ATSC and DVB-T2;
- Central America has mixed technology adoption:
 - ISDB-T, ATSC and DVB-T;
 - Suriname uses both ATSC 1.0 and DVB-T2;
 - Little or no information on some Central American countries.



Source: CITELE DTTB database

Second Generation DTTB Systems

- ATSC 3.0:
 - ATSC 3.0 committee (International organization);
 - ITU-R recommendation BT.2033-2, ITU-R Report BT.2495-0;
- DVB-T2:
 - Issued by DVB consortium/standardized by ETSI;
 - ITU-R recommendation BT.2254-5;
- Advanced ISDB-T:
 - Developed by Japan's NHK;
 - Ongoing standardization (planned launch 2025);

Second Generation DTTB Systems

- ATSC 3.0:
 - The United States, Jamaica and Trinidad and Tobago;
- DVB-T2:
 - Colombia, Suriname (along with ATSC);
- In process of choosing/developing technologies for 2nd-gen DTTB:
 - Brazil;



Source: CITEL DTTB database

Analog Switch-off



- Concluded:
- BAH, CAN, CLM, USA, SLV, HND, MEX, SUR



- Ongoing:
- All South American administrations, except for CLM (concluded) and GUY (no info);



- No information:
- 11 administrations: BLZ, DOM, GUY, HTI, JAM, NCG, KNA, LCA, VCT, TRD.
- Updates are welcome.

Released Bands?

- VHF/UHF bands released after the analog switch-off may have different allocations:
 - Broadcasting (DTTB), Fixed or Mobile services;
 - 470-694 MHz: some CITEL administrations have shown a preference for the identification to IMT;
 - **Agenda item 1.5: NOC in region 2.**
- Many administrations still lack an official plan for the use of the released spectrum below 600 MHz, including VHF.
- CITEL recommendation on Sound Broadcasting:
 - Use of the 76-88 MHz band for the provision of FM Sound Broadcasting Services should consider a 200 kHz channel separation and provide 60 channels

76-88 MHz (VHF)

BROADCASTING
Fixed
Mobile

174-216 MHz (VHF)

BROADCASTING
Fixed
Mobile

470-698 MHz (UHF)

BROADCASTING
FIXED/MOBILE for some
administrations

What comes next?

- CITEI addresses concerns from administrations and is committed to development:
 - Views, case studies and proposals are always welcome;
 - Next PCC.II meeting – April 15th to 19th, Montevideo, Uruguay
- WRC:
 - Agenda item 1.5 – spectrum use and needs in the 470-960 MHz band for existing services and possible regulatory actions in the 470-694 MHz band - **NOC for region 2**
 - Agenda item 10 – new agenda items for the upcoming WRCs
 - Challenges and opportunities to guarantee spectrum availability for the deployment and evolution of broadcasting services;



Thank you!



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