

Analog TV Switch-off in Brazil

ITU International Symposium on the Digital Switchover

Background



- In 2013, the Brazilian administration initiated the planning process to accelerate the transition and to properly plan the actions that would have to be undertaken by all stakeholders to shutdown the analog transmissions.
- It was decided to **review the deadline for analog transmissions**, first planned for July 2016.
- The Ministry of Communications established in 2014 a **new switch-off plan**, starting in 2015 and gradually being implemented until November 2018, instead of a “one shot” method, as planned before.

Background



- The pilot analog shutdown will take place in Rio Verde, a small city in the state of Goiás, in **November 2015**.
- In **April 2016**, Brasilia will be the first big city to have the analog switch-off. After that, the process will be implemented in all metropolitan zones of Brazil's state capitals until 2018.
- In 25th **November 2018**, all the remaining cities will shutdown their analog service, completing the switchover in Brazil.

Analog Switch-off in Brazil

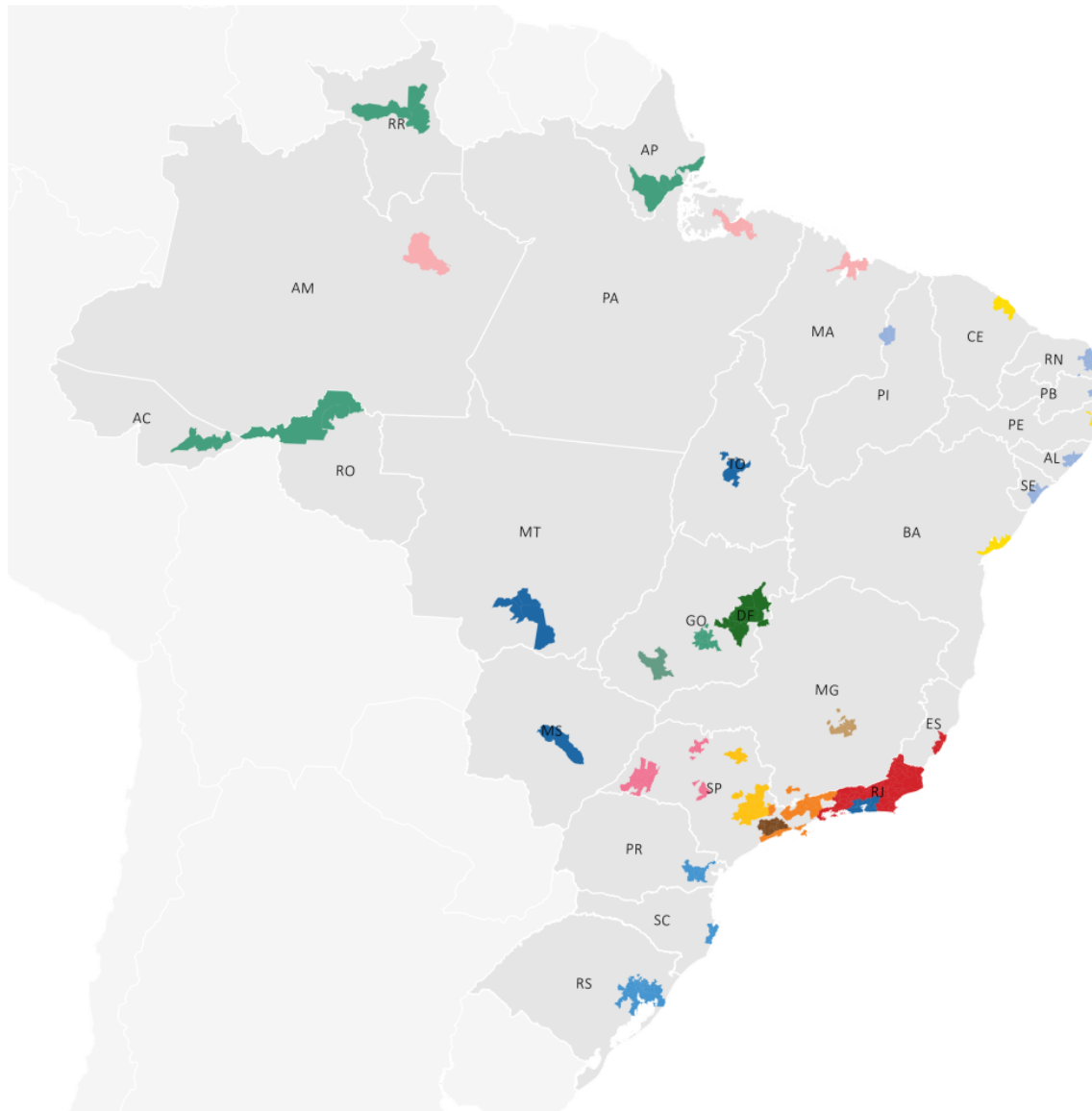


Analog TV Switch-off

Schedule

- November 29th 2015
- April 3rd 2016
- May 15th 2016
- June 26th 2016
- August 28th 2016
- November 27th 2016
- June 25th 2017
- July 30th 2017
- August 27th 2017
- September 24th 2017
- October 29th 2017
- November 26th 2017
- July 1st 2018
- July 29th 2018
- August 26th 2018
- November 25th 2018

Note: All the other non-listed regions on the grey zone will have their Analog TVs switched-off by November 25th on 2018



Analog Switch-off Monitoring Indicators



- Several parameters will be monitored throughout the transition process to trigger the decision making process.
- After discussions with interested parties, it was mandated that **93%** of the population that have access to terrestrial television services should be able to receive the digital signal before the analog shutdown is allowed.
- In November 2014, the Ministry of Communications defined as well the **conditions by which viewers should be warned of the analog switch-off.**
- It was defined that the communication of the analog switch-off date and the respective digital channel number that will replace it will start **360 days before the switch-off**, whereas the **countdown begins 60 days** prior to that date.

Communication Campaigns



<http://www.vocenatvdigital.com.br/home>

The screenshot shows a web browser window with the URL www.vocenatvdigital.com.br/home. The page features a navigation bar with the title "VOCÊ NA TV DIGITAL" and a location selector for "Brasília" with an "ALTERAR" button. Below the navigation bar is a menu with seven items: "PÁGINA INICIAL", "POR QUE A TV DIGITAL É MELHOR?", "O QUE VAI MUDAR?", "QUANDO SERÁ A MUDANÇA?", "O QUE PRECISO FAZER?", "TIRE SUAS DÚVIDAS", and "BOLSA FAMÍLIA". The main content area contains a large text block: "SE VOCÊ ESTÁ VENDO ESSE SELO NA SUA TELA, SIGNIFICA QUE O SEU SINAL AINDA É ANALÓGICO. VAMOS MIGRAR PARA O DIGITAL?". To the right of this text is an image of a television displaying a "Analógico" logo and the text "EM HD NO CANAL 4.1". Below the text is a "SAIBA MAIS" button. At the bottom of the page is a yellow banner with a downward arrow icon and the text "SUA TV JÁ É DIGITAL?".

Communication Campaigns



LOGOMARCA

Forma simplificada



Forma completa



Refarming of the Digital Dividend Band

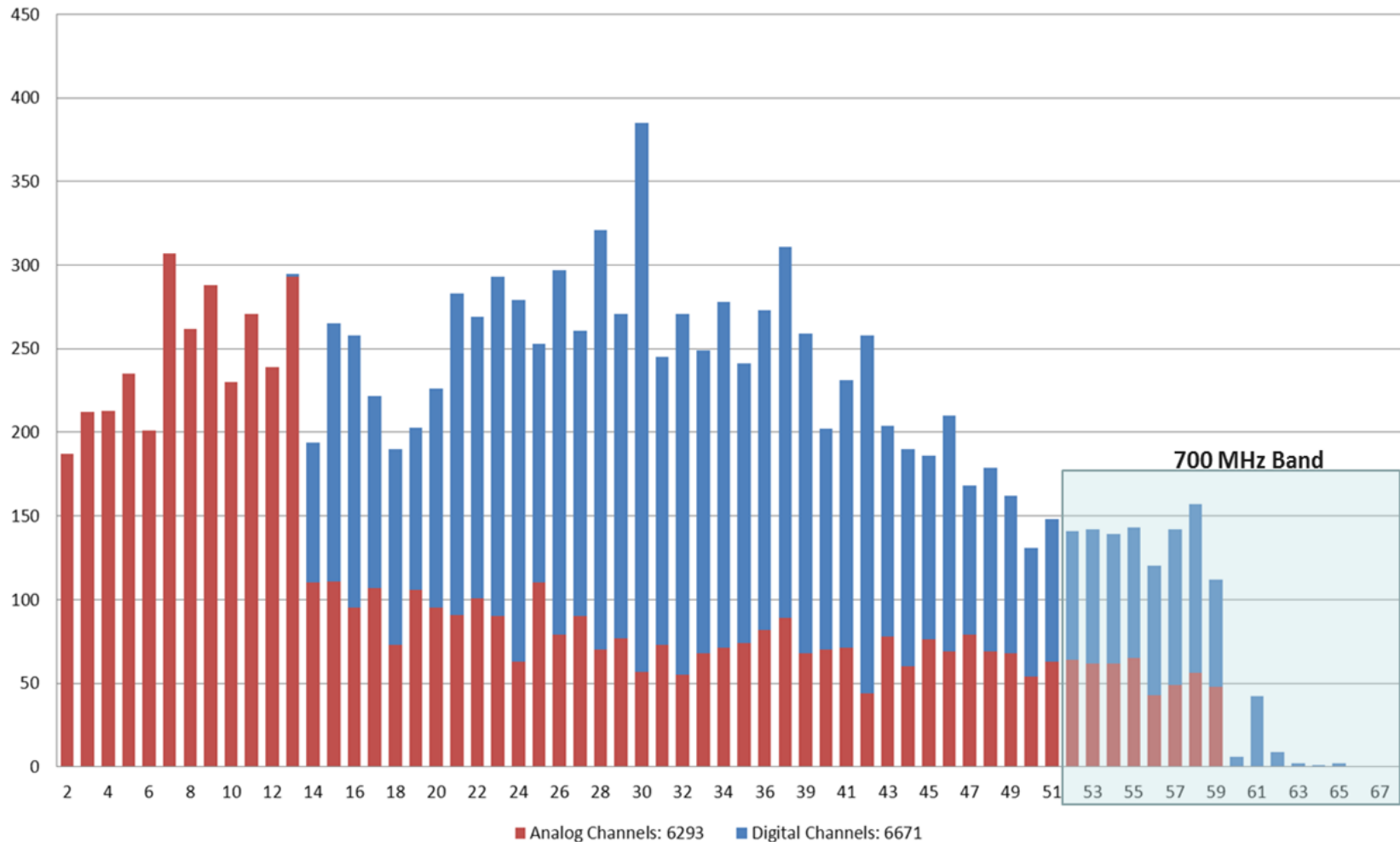


- In 2013, public policies had been defined for the 700 MHz band in Brazil.
- ANATEL began developing studies for **refarming television channels** for the purposes of releasing channels 52 to 69 for LTE implementation.
- The results indicated that would be necessary to **change the frequency of about 1000 TV channels** (both planned channels and operating stations).
- This process will be carried out during the switchover phase, and the **700 MHz band will be released gradually.**

Refarming of the Digital Dividend Band



Distribution of TV Channels in Brazil



Refarming Implementation



700 MHz Auction

- Public policies established that the costs of migrating TV channels in down to TV channels 7 to 51 would be defrayed by the Auction winners.
- The Auction was conducted in September 2014.
- Four companies won spectrum licenses in the auction, raising about R\$ 10 billion Brazilian *reais* in revenue (about \$3,2 billion American dollars)
 - National 10+10 MHz band: Telefonica (Vivo), a TELMEX (Claro) e a TELECOM ITALIA (TIM)
 - Regional 10+10 MHz band: ALGAR

Refarming Implementation



- It was also established that 36% of the amount collected by the auction would be used to:
 - Reimburse all broadcasters that are now operating in 700 MHz band, and ensure the implementation of digital transmissions;
 - Distribute digital set-top-boxes and antennas for low income viewers;
 - Develop communication campaigns to disclose the analog switch-off;
 - Mitigate possible interferences between the IMT services and broadcasting services in UHF band.
- A specific third party entity was established by the auction winners to manage the amount raised by the auction.

Current discussions



- Anatel is coordinating a Steering Committee to drive the actions to achieve the objectives established for the third party entity.
- Main discussions:
 - Criteria to reallocate TV broadcasters that are operating in the 700 MHz band (i.e., changing transmitters and antennas, logistics, time frame);
 - Set-top-box technical specifications;
 - Logistic to distribute the receiver kit (set-top-box + antenna);
 - Definition of analog shutdown measurements;
 - Campaign strategies.

Relevant documents



[1] ITU-R SG6 (Doc 6A/545) – Draft Revision of Report ITU-R BT.2140-7 , submitted by the Brazilian Administration in February 2015.

<http://www.itu.int/md/R12-WP6A-C-0545/en>

[2] ITU-D SG1 Q 8/1 (Doc 48) - Brazilian digital dividend auction process

<http://www.itu.int/md/D14-SG01.RGQ-C-0048/en>

[3] ITU-D SG1 Q 8/1 (Doc 49) - Refarming the 700 Mhz Band in Brazil, and the implications for the transition to digital broadcasting

<http://www.itu.int/md/D14-SG01.RGQ-C-0049/en>

[4] ITU-D SG1 Q 8/1 (Doc 50) - Communication strategies for a successful analogue switch-off

<http://www.itu.int/md/D14-SG01.RGQ-C-0050/en>

Thank You!

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