

AGENCIA BOLIVIANA ESPACIAL

Bolivia's National Satellite Program

Tupac Katari I

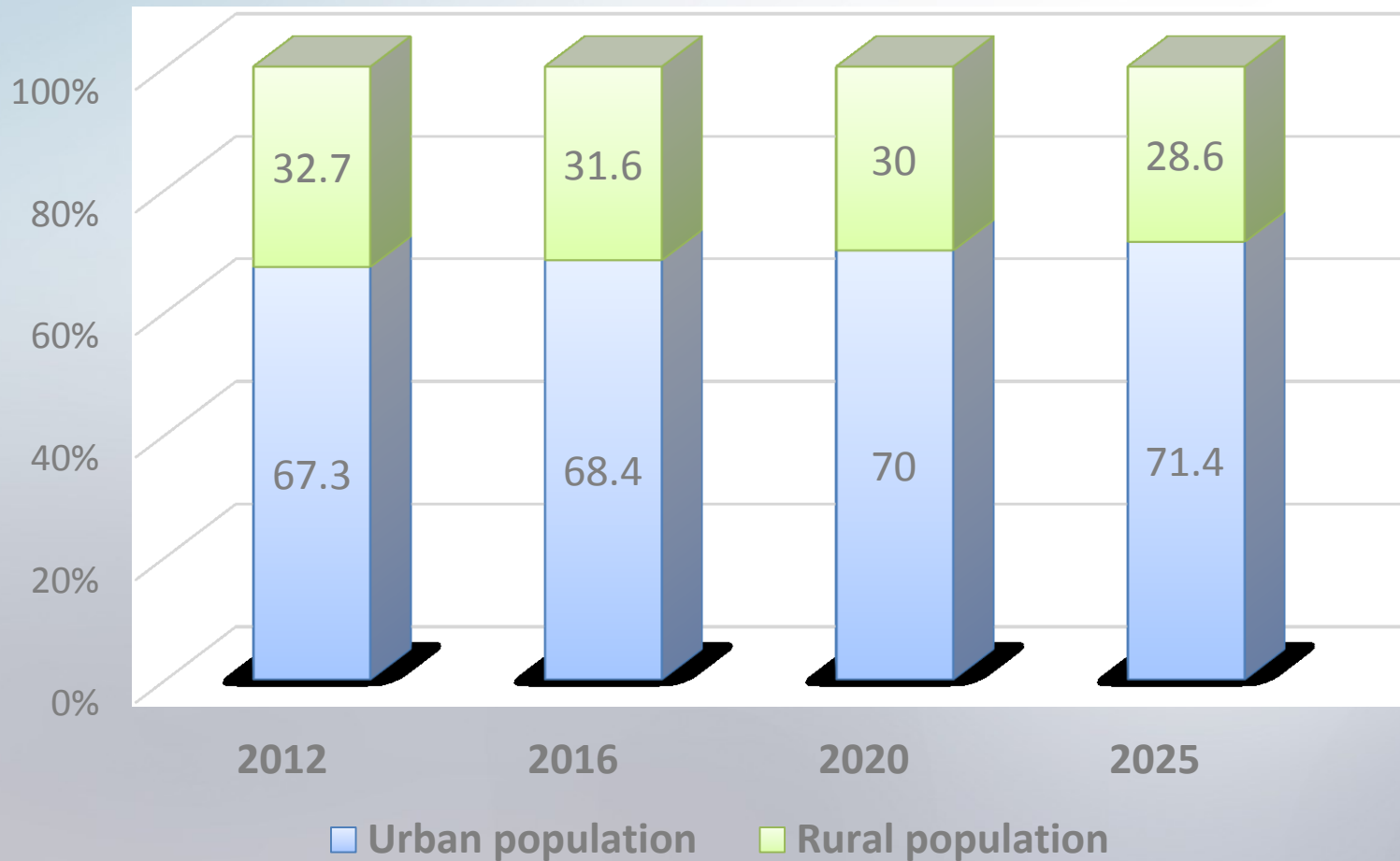
ITU Satellite Communications Symposium 2017 - Bariloche,
Argentina, 29-31 May 2017



J. Alexis Andrade Romero
Operations Director

BOLIVIA

- **Demographic distribution estimation**



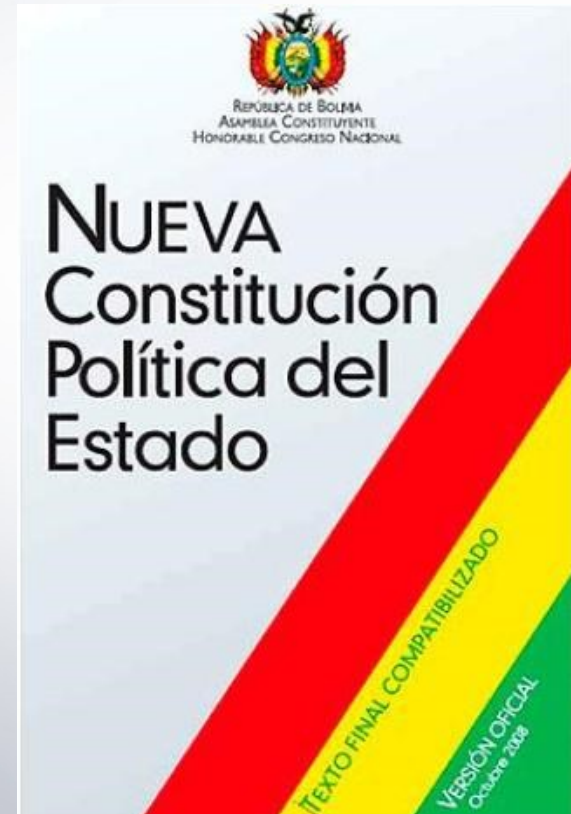
BOLIVIA

- Bolivia has **three geographic zones**: the mountains and Altiplano in the west, the semitropical and temperate valleys of the eastern mountain slopes, and the tropical lowlands or plains (llanos) of the eastern lowlands.
- Bolivia has many areas **with difficult access** (e.g. surrounded by mountains or by the amazons).



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- **The constitution of the State**, adopted in February 2009, establishes as basic services the telecommunications access, establishing as a responsibility of the State the provision of this services, although it may be provided through private companies.
- **Bolivian 2025 agenda** establishes universal access to basic services such as telecommunications.

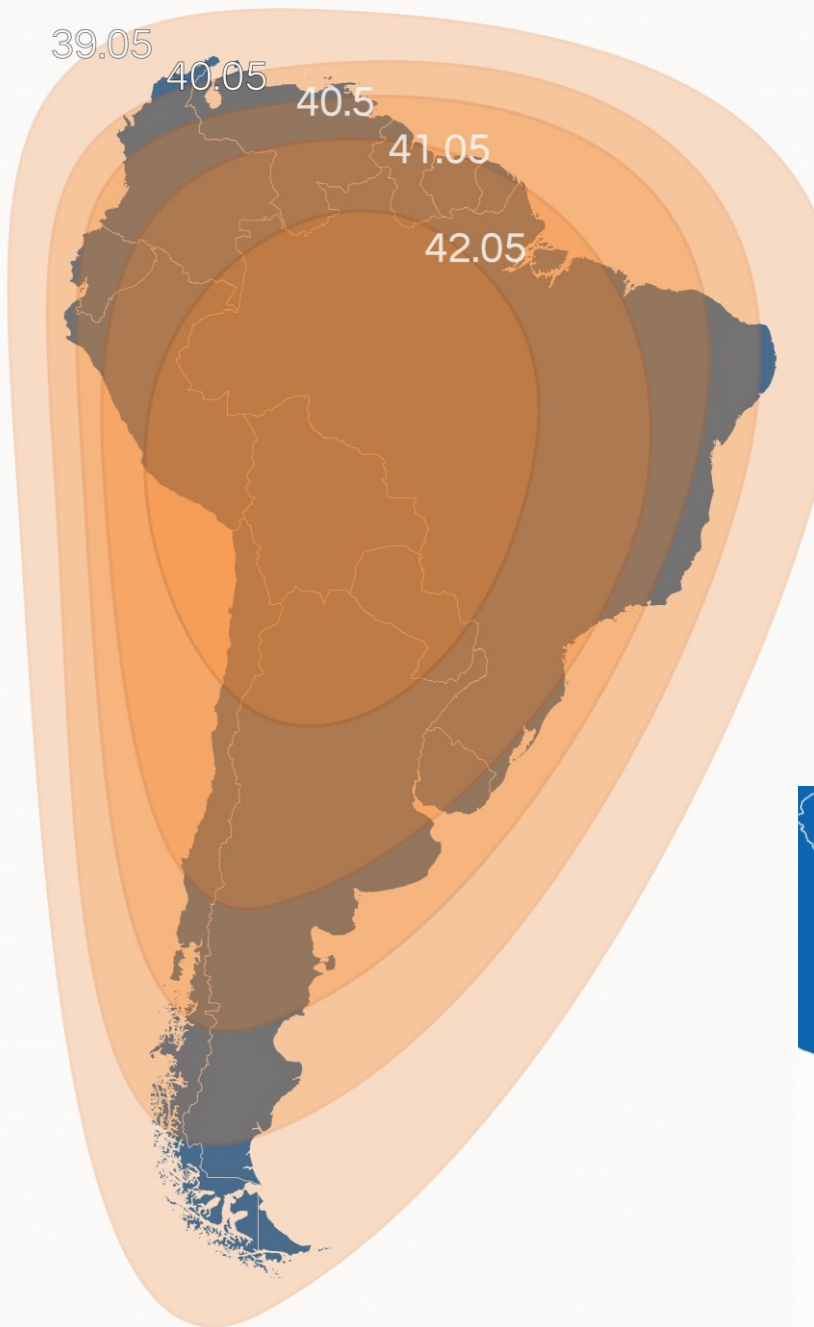


TKSAT-1 Programme

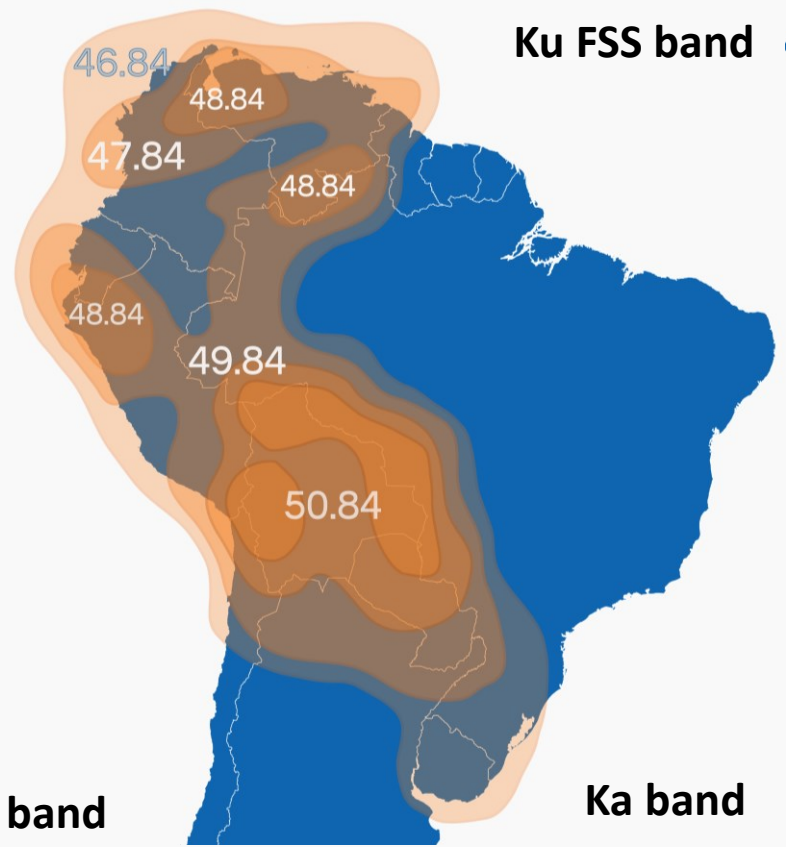
- The **Bolivian Space Agency (ABE)** was created on February 10th, 2010.
- On December 11th, 2010, ABE **signs the contract** for the Tupac Katari satellite TKSAT-1 with China Great Wall Industries Corporation (CGWIC).
- On December 20th, 2013, the TKSAT-1 **was launched** from China.
- On April 1st, 2014, the TKSAT-1 **begins commercial operations.**



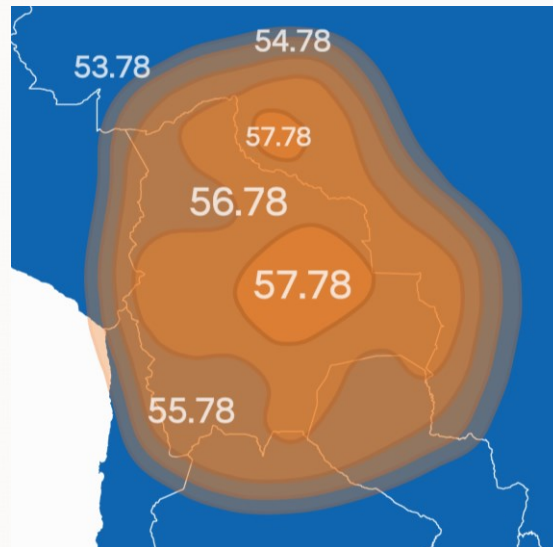
C band



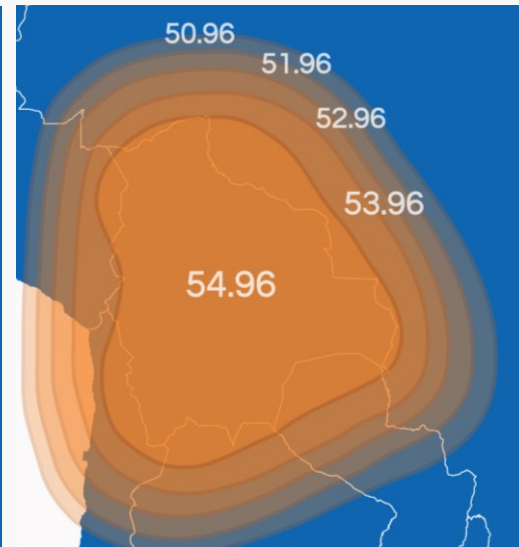
Ku FSS band



Ku BSS band



Ka band



TKSAT-1 Programme Results

- Universal access to TV and radio channels (FTA), it is estimated that more than 100.000 homes receive the FTA channels.
- 2.500 “Telecentros” have been implemented in the last years. “Telecentros” are places where people have access to Internet, satellite TV and telephony services.
- Cellular Backhaul (more than 600 BTS connected)



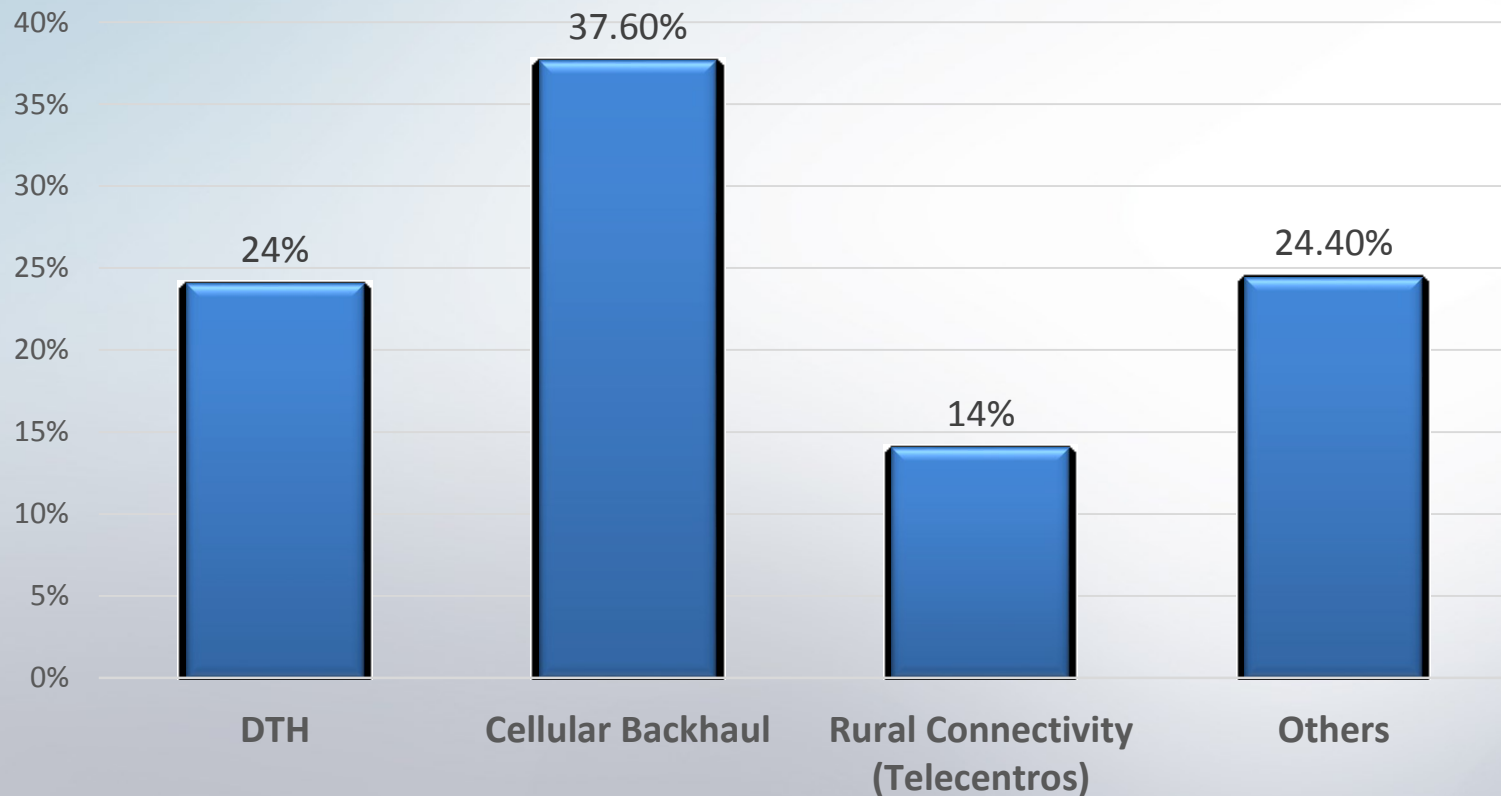
TKSAT-1 Programme Results

- A national programme of tele-education was implemented.
- A national programme of telehealth was implemented.
- Several projects implemented for modernize government services (Mobile ID offices along the country, Toll roads administration, Customs office at borders, among others)



TKSAT-1 Programme Results

- TKSAT-1 Capacity distribution



- As of May 2017, about **70%** of the total capacity is occupied.

Future projects

- A second communications satellite (TKSAT-2). HTS for universal access to telephone and broadband internet services in remote and rural areas. To be launch between 2021 and 2025
- A remote sensing satellite, it will be named Bartolina Sisa, for now postponed until the next administration (2020).

Gracias por su atención!



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