

HISPASAT GROUP

Assisting Broadcasters

Business Development

May 2013



1. Hispasat Group: present and future



hispasat 

1. Hispasat Group

The company



Satellite communications operator with a significant presence in the Iberian Peninsula and Latin America.

Leader in broadcasting of contents in Spanish and Portuguese.

8th operator in the world, with over 20 years of experience.

4th satellite operator in terms of income in Latin America.

Firmly ranked in high growth markets with a stable portfolio of strategic clients.

Main telecommunications gateway between Europe and America.

More than 1,250 TV and radio channels, including major DTH platforms.

1. Hispasat Group

Satellite Fleet



A modern fleet of satellites, equipped with the most advanced technology, makes HISPASAT a benchmark satellite operator.

Spainsat satellite at 30° W and Xtar-EUR satellite at 29° E, operated through HISDESAT and dedicated to military communications.

Recently launched Amazonas 3 satellite providing the first Ka Band payload in Latin America



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Satellite Coverage

2 OPERATIONAL ORBITAL POSITIONS

30°W

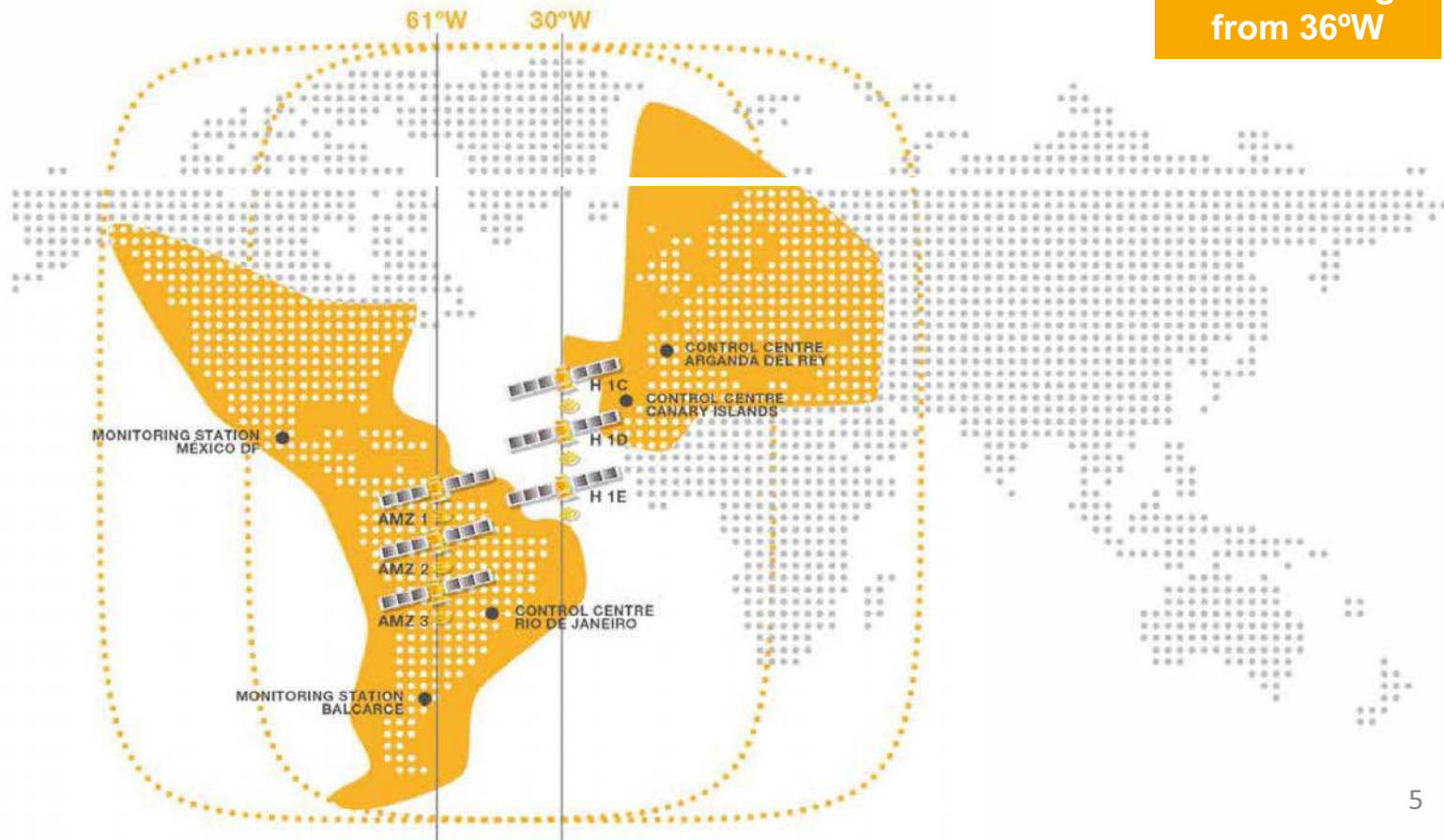
+

61°W

+

1 ORBITAL POSITION IN PROGRESS

New coverage from 36°W



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Future Launches

4 SATELLITES
UNDER
CONSTRUCTION



AMAZONAS 4A

2014



HISPASAT AG1

2014



AMAZONAS 4B

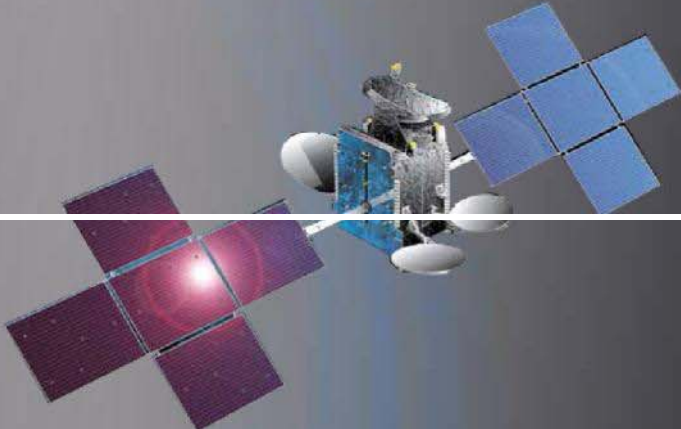
2015



HISPASAT 1F

2016

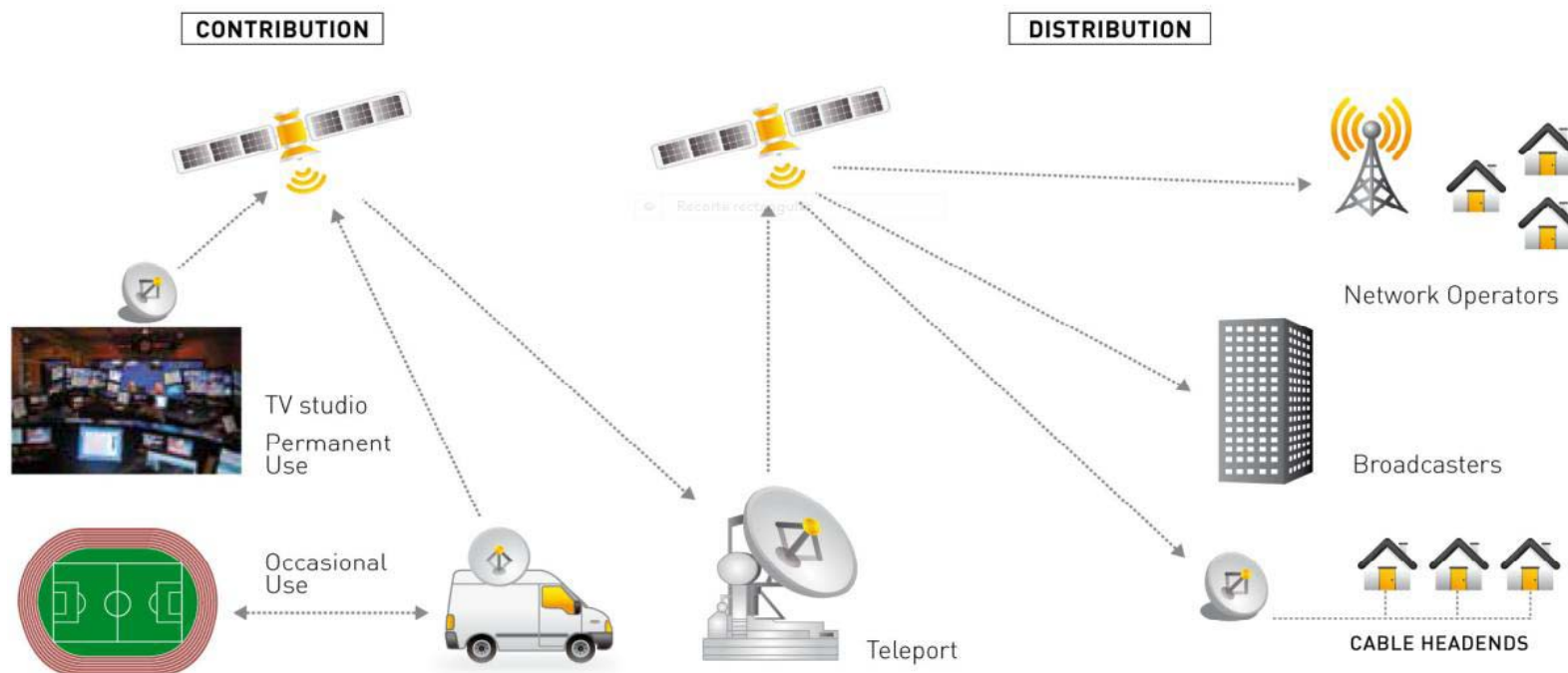
2. Hispasat Group: Broadcast Market



2. Broadcast Market

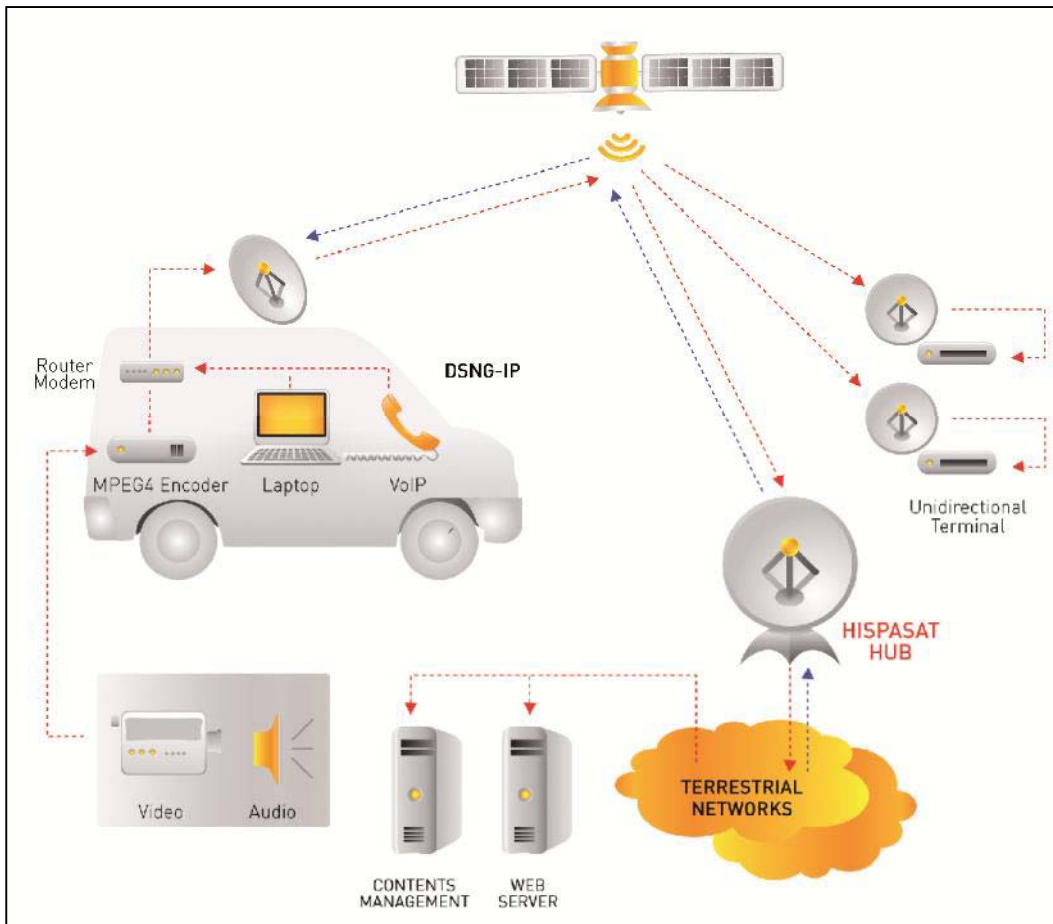
Satellite Distribution and Contribution services

HISPASAT provides TV and radio distribution and contribution services within the footprint of its satellites located at 30°W and 61°W in any of its connectivities: Europe-Europe, America-America, Europe-America, America-Europe.



2. Broadcast Market

Satellite Occasional Contribution Services

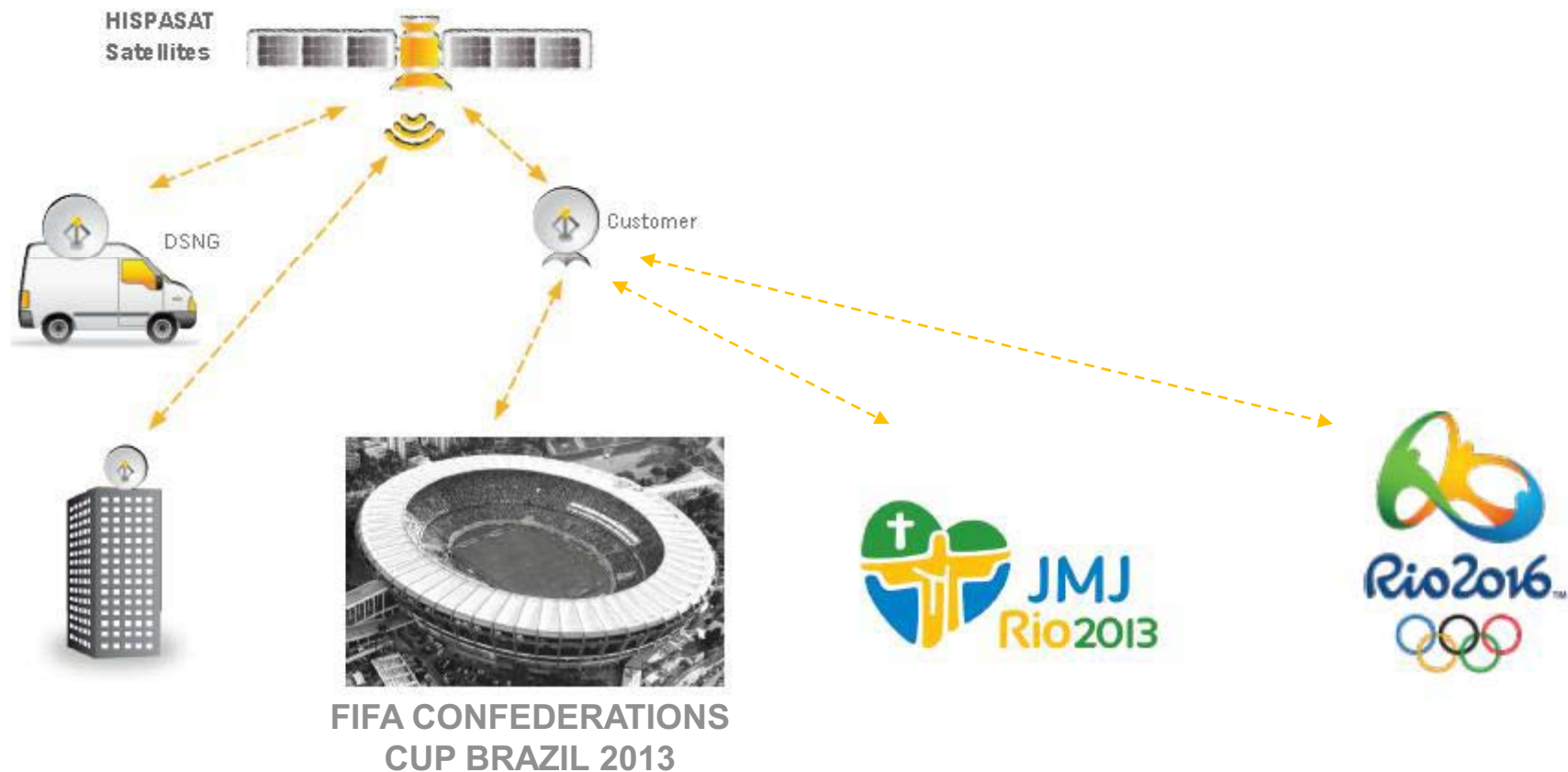


- Hispasat is able to offer DSNG IP services to its customers using its transportable units, equipped with an IP modem that enables bidirectional communications between the remote unit and TV headquarters using Hispasat HUBS
- Hispasat HUBS are located at Hispasat's Control Centers in Guaratiba (Brasil) & Madrid (Spain)
- The service is offered in the US in partnership with OVERON, that operates DSNG IP equipment in the country and have Teleport facilities in Miami.

2. Broadcast Market

Satellite Occasional Contribution Services

Hispasat is preparing its satellite fleet to attend the demand of satellite capacity that will be boosted by the coming big worldwide events in Brasil

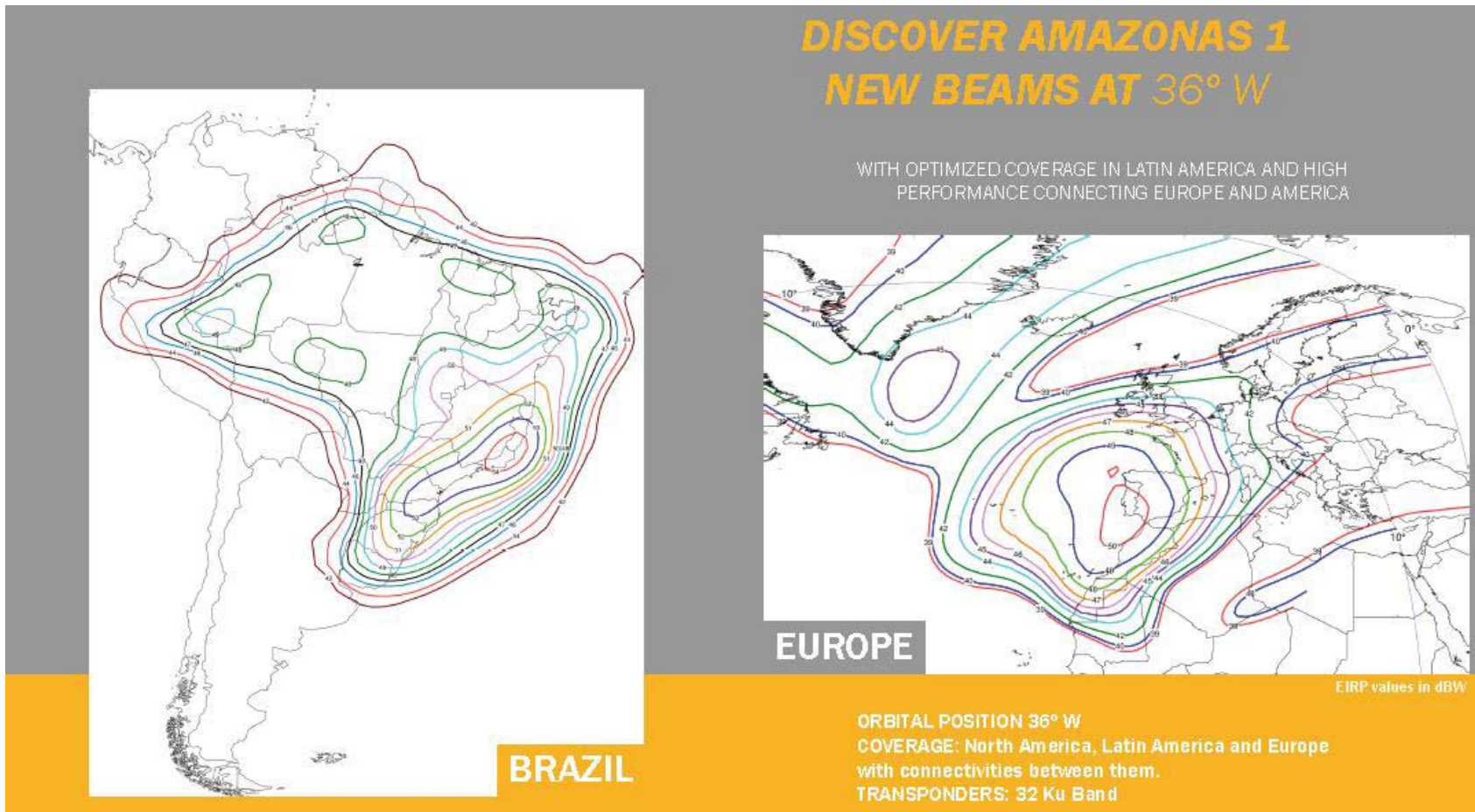


2. Broadcast Market

Enhancing satellite coverage for the next big worldwide events

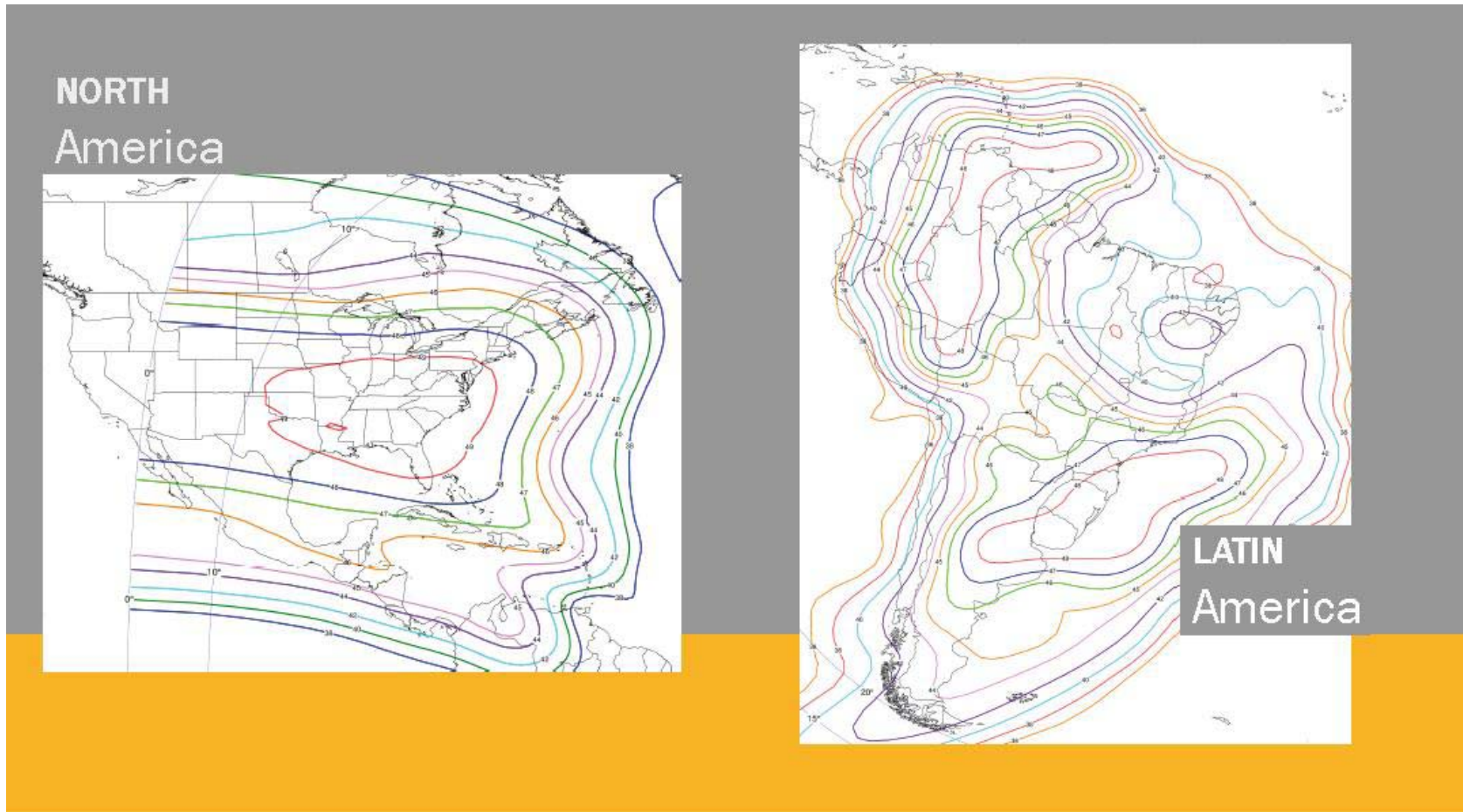


Amazonas 1 satellite is travelling from 61°W to 36°W in order to offer new Ku Band capacity to Europe, North America, and Latina America with connectivities between them



2. Broadcast Market

Enhancing satellite coverage for the next big worldwide events



This new capacity is ideally designed to offer occasional services

36° W

2. Broadcast Market

Ultra High Definition

Hispasat is launching a 4K promotional channel in Europe and Central / North America in Q2 2013. Extension to LATAM is planned shortly.

- Objectives:
 - Promote the adoption of UHD. Create awareness.
 - Facilitate tests.
 - Linking brand to new technology. Claim innovation.
- Done in cooperation with partners: TV Set manufacturers, encoders' manufacturers, content providers...
- Content will be built over time:
 - A piece from RTVE (Spanish Public Broadcaster) is already available
 - Ongoing discussions with content providers to add more content. Brazil WC 2014 target

4K promotional permanent channel



Primeira transmissão 4K via satélite feita no Brasil

No dia 9 de maio aconteceu no Rio de Janeiro uma mesa de debates para comemorar o início das operações do satélite [Amazonas 3](#).

O evento, realizado pela [Hispasat](#) (grupo espanhol de comunicação de satélites), contou com a participação de executivos da LG, Ericsson, Fox e Mome. Entre os temas debatidos, a distribuição de conteúdos no futuro, o que obviamente envolve os aparelhos com resolução Ultra HD (4K).

2. Broadcast Market

Satellite Distribution Services



The myth of C-Band enabled distribution services

If you are using BUD (Big Ugly Dish) systems (C-Band) for satellite distribution, try Ku Band dishes...it can be BUD too, but cheaper capacity !!!

- Ku vs. C band Comparison - Hypotheses
 - 29.86 Msps
 - 36 MHz transponders
 - DVB-S2, 8PSK $\frac{3}{4}$
 - Target availability: > 99,95% average year

→Ku band offers more robust performance with smaller antennas for the same target availability.

→C Band has small margin and is more sensitive to interferences.

	C Band	Ku Band
Antenna Diameter	> 2,4 m	1,2 m
Clear Sky Margin	~ 2 dB	> 6 dB
Availability (% a.y.)	> 99,95 	> 99,95 

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