

# CMR-15 AI 1.1

Espectro adicional para las IMT y el futuro de la banda C

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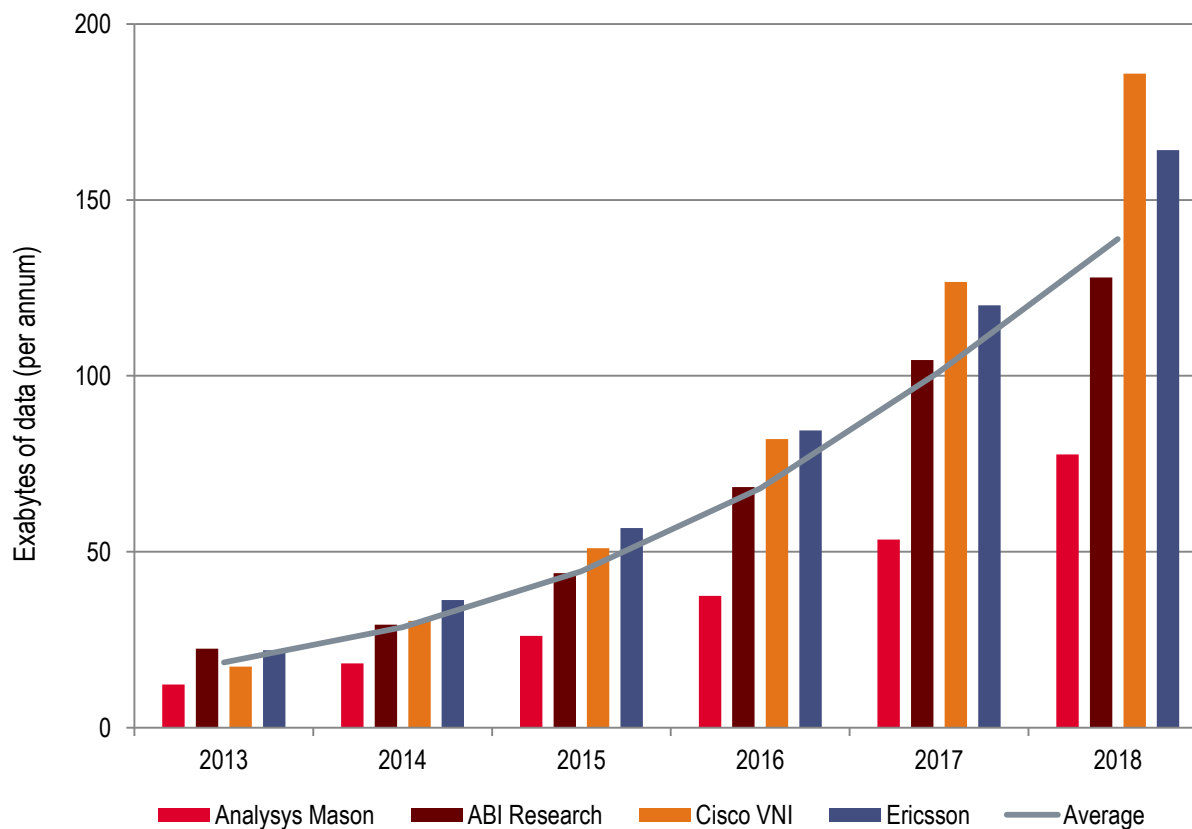
31 Julio 2015



# ESTIMATIVA GLOBAL DE TRÁFEGO DE DATOS



## EL TRÁFEGO GLOBAL DE DATOS DEBE AUMENTAR 10 VECES ENTRE 2013 Y 2018



Los datos móviles están creciendo exponencialmente y pueden exceder las estimativas drásticamente

### Sources

Analysys Mason, Global Mobile Network Traffic, Nov 2013

ABI Research, Mobile Data Traffic & Usage, July 2013

Cisco VNI Mobile Forecast, Feb 2014

Ericsson Mobility Report, June 2014

Nb. ABI Research data missing for 2014-2016 so has been estimated

# LATINOAMÉRICA NO ES LA EXCEPTION



## UNIQUE MOBILE SUBSCRIBERS



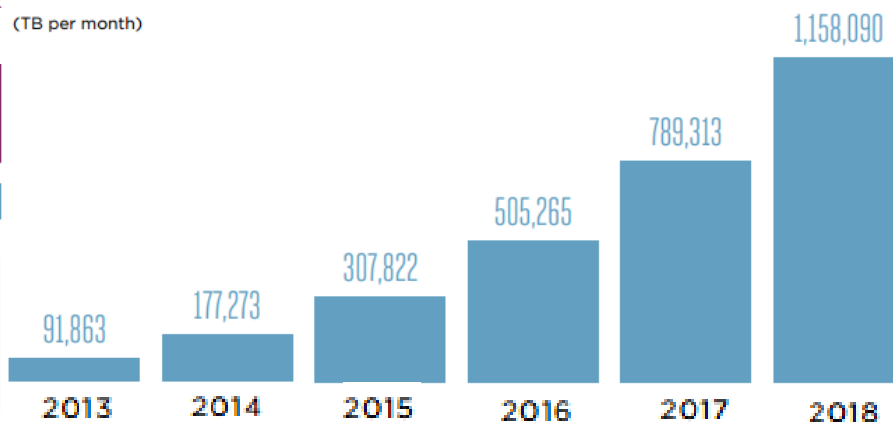
## CONNECTIONS\*

\*Excluding M2M



## Latin American mobile data traffic

(TB per month)



## Technology shift fuelling data traffic growth across Latin America

3G/4G connections to increase from a third of total in 2013 to almost

**80%**  
BY 2020



By 2020 there will be

**605M**  
SMARTPHONE CONNECTIONS

up from 154 million at the end of 2013

Data traffic in Latin America to grow at a CAGR of 66% out to 2018

# LOS REQUISITOS DE ESPECTRO - LATAM



| PAÍS      | BAJO USO | ALTO USO |
|-----------|----------|----------|
| Argentina | 1093 MHz | 1628 MHz |
| Brasil    | 1129 MHz | 1676 MHz |
| Chile     | 893 MHz  | 1327 MHz |
| Colombia  | 1057 MHz | 1578 MHz |
| México    | 977 MHz  | 1454 MHz |

**LICENSED** mobile spectrum  
in 2013<sup>1</sup>

270MHz

**1340MHz**

**REQUIRED** mobile spectrum  
by 2020<sup>2</sup>

# NUEVAS BANDAS PARA LAS IMT

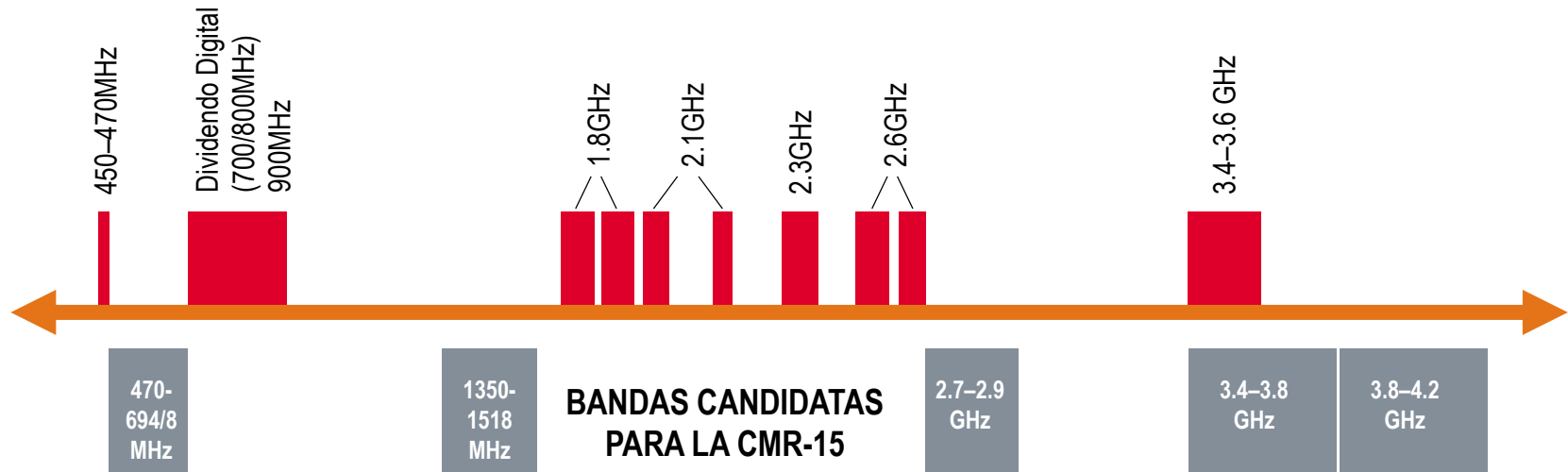


- **La GSMA apoya 4 bandas para satisfacer el punto 1.1 de la CMR-15**

- Sub-700MHz UHF (470-694/8MHz)
- 2.7-2.9GHz
- L-Band (1350-1518MHz)
- C-Band (3.4-4.2GHz)

- **Hay que proveer capacidad y cobertura**

- **Las bandas deben ser armonizadas mundialmente para bajar los costos**



# LA BANDA C (3.4-4.2 GHz): DECISIÓN DE LA CMR-07



**PAÍSES CON  
ATRIBUCIÓN  
AL SERVICIO  
MÓVIL EN  
3.4-3.5 GHz  
POR LA NOTA  
5.432B**

**3.5-4.2 GHz YÁ  
ES ATRIBUIDO**

**LA MAIORIA DE LOS  
PAISES DE  
LATINOAMERICA Y DEL  
CARIBE OPERA WI-MAX  
EN LA PARTE BAJA DE  
LA BANDA C**

**5.432B** *Different category of service:* in Bangladesh, China, French overseas communities of Region 3, India, Iran (Islamic Republic of), New Zealand and Singapore, the band 3 400-3 500 MHz is allocated to the mobile, except aeronautical mobile, service on a primary basis, subject to agreement obtained under No. 9.21 with other administrations and is identified for International Mobile Telecommunications (IMT). This identification does not preclude the use of this band by any application of the services to which it is allocated and does not establish priority in the Radio Regulations. At the stage of coordination the provisions of Nos. 9.17 and 9.18 also apply. Before an administration brings into use a (base or mobile) station of the mobile service in this band it shall ensure that the power flux-density (pfd) produced at 3 m above ground does not exceed  $-154.5 \text{ dB(W/(m}^2 \cdot 4 \text{ kHz))}$  for more than 20% of time at the border of the territory of any other administration. This limit may be exceeded on the territory of any country whose administration has so agreed. In order to ensure that the pfd limit at the border of the territory of any other administration is met, the calculations and verification shall be made, taking into account all relevant information, with the mutual agreement of both administrations (the administration responsible for the terrestrial station and the administration responsible for the earth station) with the assistance of the Bureau if so requested. In case of disagreement, the calculation and verification of the pfd shall be made by the Bureau, taking into account the information referred to above. Stations of the mobile service in the band 3 400-3 500 MHz shall not claim more protection from space stations than that provided in Table 21-4 of the Radio Regulations (Edition of 2004). This allocation is effective from 17 November 2010. (WRC-12)

# EL FONDO DE LA DISCUSIÓN



# LA POSICIÓN ACTUAL



| BANDA       | IMT                                                                              | NOC                                                                                                                                            |
|-------------|----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| 3.4-4.2 GHz | Brasil, Colombia, Costa Rica, Ecuador:<br>3.4-3.6 GHz<br>Canadá, US: 3.4-3.7 GHz | Belize, Bolivia, El Salvador, México,<br>Nicaragua, Panamá: 3.4-4.2 GHz<br>Guatemala: 3.5-4.2 GHz<br>Brazil, Ecuador Venezuela:<br>3.6-4.2 GHz |

# LA SOLUCIÓN PARA LA REGIÓN



## PROPUESTAS REGIONALES SÓN CLAVE PARA EL SUCESO EN LA CMR-15

- La última reunión de CITEC PCC.II se dará el 17 a 21 de Agosto, en Ottawa, Canadá

| BANDA       | QUÉ PEDIMOS                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3.4-4.2 GHz | <p>Apoyo a una solución convergente para el uso de IMT en la parte baja de la banda C con protección en la frontera:</p> <ul style="list-style-type: none"><li>- 9.21</li><li>- 9.17</li><li>- 9.18</li><li>- Límite de pfd</li><li>- Tabela 21-4</li></ul> <p>Para que cada país pueda decidir cual servicio va a implementar en su país pero siempre protegiendo el uso de FSS en los países vecinos.</p> |

# GRACIAS!

