# 5G Roadmap for the Global Platform towards 2020 Realization

americas

Chris Pearson President 5G Americas



The 3<sup>rd</sup> Global 5G Event on May 24-25, 2017, Tokyo, Japan

## **5G Americas Mission**

5G Americas will advocate for and foster the advancement and full capabilities of LTE wireless technologies and their evolution to 5G, throughout the ecosystem's networks, services, applications and connected devices in the Americas.



# **Relationships Toward 5G Realization**



#### 5G Americas' International 5G Memorandums of Understanding, Relationships and Liaisons





## Liaisons, Memberships and Relationships



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GLOBAL INITIATIVE













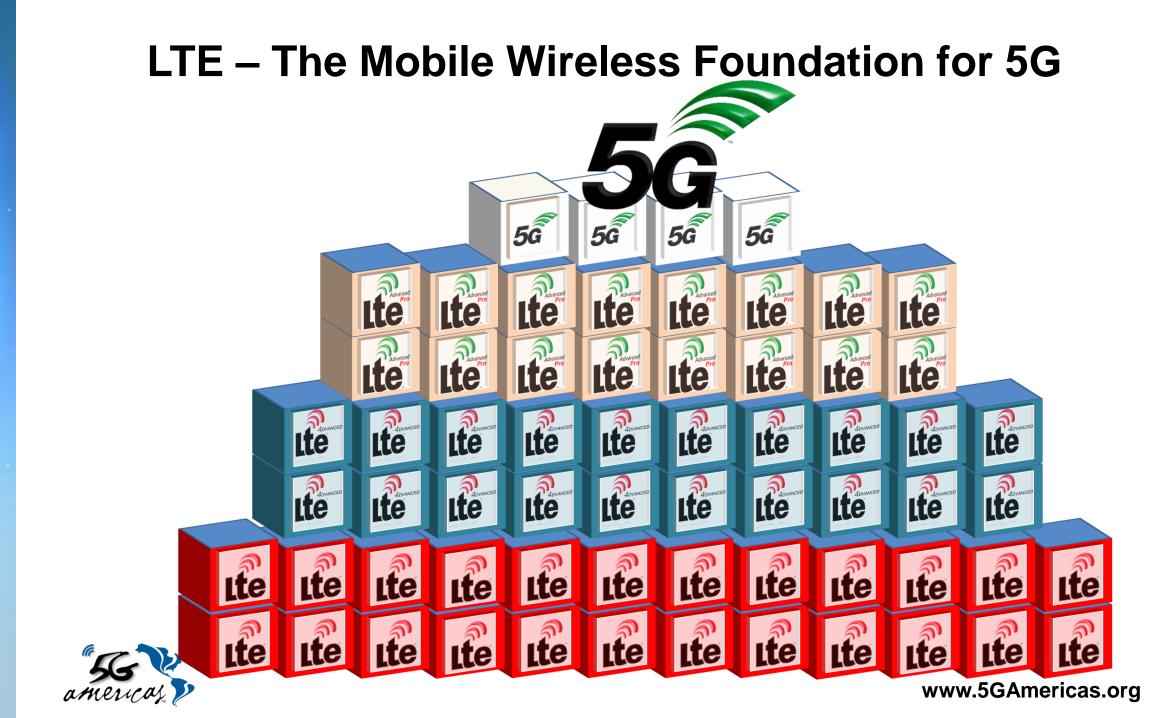


# Building a Technology Foundation for 5G Realization

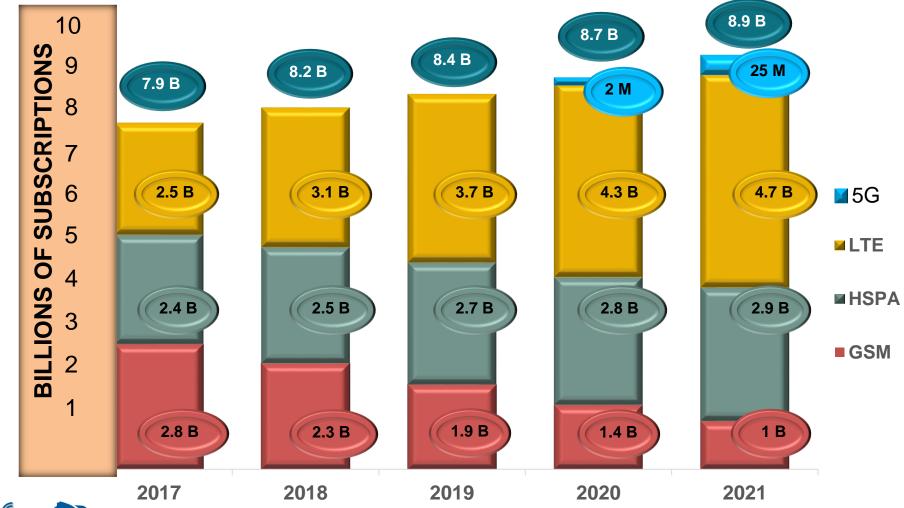
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# Global Technology Forecast Subscriptions 2017-2021





Source: Ovum, Dec 2016

## **5G Subscriber Forecasts**



#### 5G in 2022

- 550 million 5G subscribers Globally
- 125 million in North America
- 2 million in Latin America

Ericsson Mobility Report, November 2016

#### **5G Forecast**

- 2021 subs = 25M Globally
- 2021 North America Region = 11M
- 2021 North America Region = 44% Market Share

Ovum (WCIS) Mar 2017



# Spectrum Considerations Toward 5G Realization in the U.S.



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# Spectrum and the Evolution to 5G

	License Exclusive rights of		Provides reliable, secured		Licensed Provides reliable, secured	
Existing bands	an operator by regulator		spectrum for predictable quality/capacity		spectrum for predictable quality/capacity	
<6GHz	Shared Shared with incumbents		Shared Coordinated access when/where not used by incumbents		<b>Shared</b> Facilitates timely access to spectrum in shared bands	
cmWaves 6-30GHz						
mmWaves >30GHz	Unlicensed No registration or		Unlicensed Rules established to		Unlicensed Complement for LTE & 5G e.g. in small cell	
	individual perm	nission	avoid interference		deployment	
Addition harmonized sp needed in ex and new ba	ectrum isting	High frequencies for ultra-dense 5G small cell deployments			Both licensed, unlicensed exclusive and shared spectrum	



5G Americas member company

U.S. Broadcast Television Spectrum Incentive Auction

600 MHz Spectrum Range

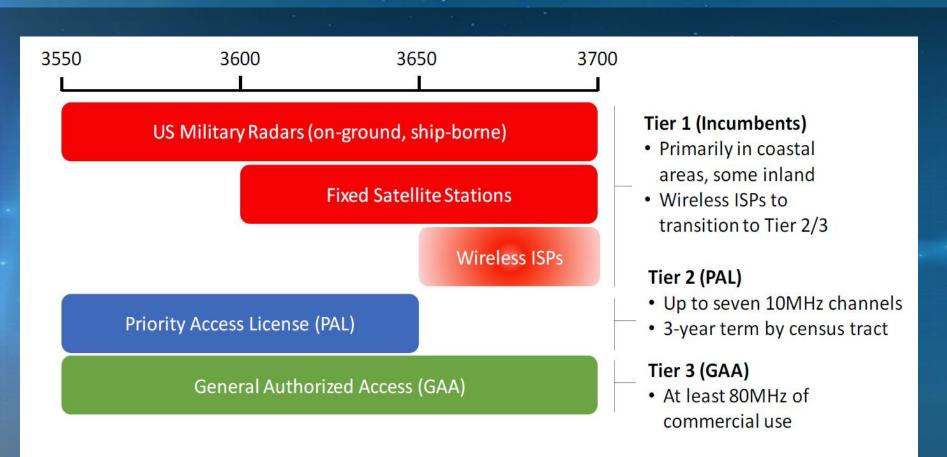
Over \$19.6 Billion raised

84 MHz Spectrum

 39 Month repacking plan to reshuffle TV spectrum



# CBRS Spectrum Framework 3.5 GHz Spectrum





## **FCC Spectrum Frontiers**

FNPRM:				
Additional Bands				
for Consideration				
Spectrum				
24 – 25 GHz				
32 GHz				
42 GHz				
48 GHz				
51 GHz				
70 GHz				
80 GHz				

#### FCC Rules on Spectrum Frontiers





# 5G Americas Work Program Towards the 5G



## 5G Americas Technology Recommendations and White Papers





#### Download free whitepapers at www.5GAmericas.org

## 5G Americas Technology Recommendations and White Papers





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**Toward Realizing 5G in 2020!** 

# Thank you!



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