## NX – the new waveform for 5G hype(r) technology

# Before we start (Dish)

- The original scope of 3GPP in 1998 was to produce Technical Specifications for a 3G mobile system
- The scope has evolved but the name remains, should we change it to 5GPP or 10GPP?
- Or should it be renamed to something futuristic, timeless and limitless?

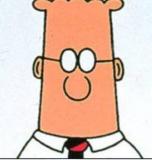


NX-GPP!

# **5GNX.COM**

- For profit collaborative organization to promote NX technology
- Personnel
  - 5G general
  - Scientific advisor
  - Experienced standardization delegate
  - Contributions from several technical experts and researchers









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5GNX	© []	Version	Date	Notes		
Specifications		<u>15.2.0</u>	2015-08-27			
	3GPP TS 56.211 V15.2.0 (2015-09)	<u>15.1.0</u> 15.0.0	2015-08-26 2015-08-25			
People	Technol Specification					
Meetings	3rd Generation Partnership Project; Technical Specification Group Radio Access Network;					
Press	NX Physical channels and modulation (Release 15)					
News	SGP?	You can propose a	CR to the specification	by sending an email		
		You can propose a CR to the specification by sending an email to <u>change-requests@5gnx.com</u>				

Cr no.	Rev.	Cat.	Rel.	Title	Source
1	-	F	Rel-15	<u>Correction of</u> <u>ultra-lean</u> <u>transmission</u>	5GNX.COM

# **NX** phasing

- Phased approach to NX deployment
- Phase 0
  - Hype(r)-lean carrier
  - Hype(r)-forward compatibility
  - Without-Software Defined hype(r) NW
- Later phases (1, 2, 3)
  - Full and enhanced 5G functionality

## Phase O availability

- 5GNX.com offers phase O compliant technology for immediate availability
- Solutions for both
  - network deployment
  - end-user terminals

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# Hype(r)-lean carrier

- extremely high energy efficiency for both networks and terminals
  - up to 100% of the energy cost of the network equipment
  - support for infinite terminal battery life time
- significant reduction of interference
  - eliminating up to 100% of the interference created by 5G NX technology.

# SPACE, THE FINAL FRONTIER Hype(r)-forward compatibility

- Allows deployment of any future technology without impacting existing NX deployments.
- Allows operators and end-users to retain their existing equipment also for when further major technology innovations (such as "6G") are deployed.

## Without-Software Defined hype(r) NW

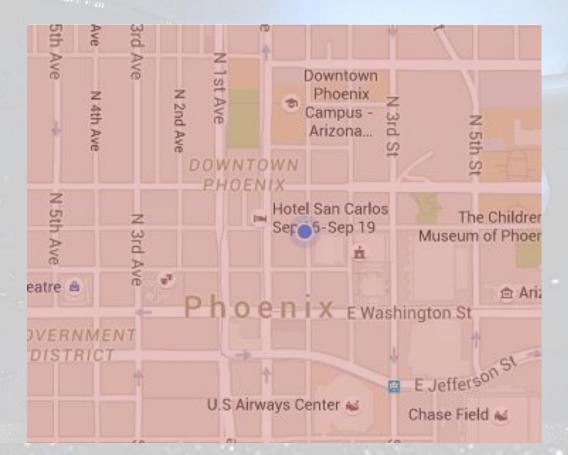
- Legacy technology like NFV and SDN need to be evolved
- WSDN has proved very efficient for developers
  - Hyper-quick time to market
  - Hyper low code size and code complexity
  - Good for hype(r) low cost devices
  - Minimization of bugs

## **Trials**

 Small scale unversal trials conducted, testing the phase O technology operation

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### Local coverage



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## **Global** coverage



## Universal coverage

You are here, clearly in coverage

# THANK YOU!