



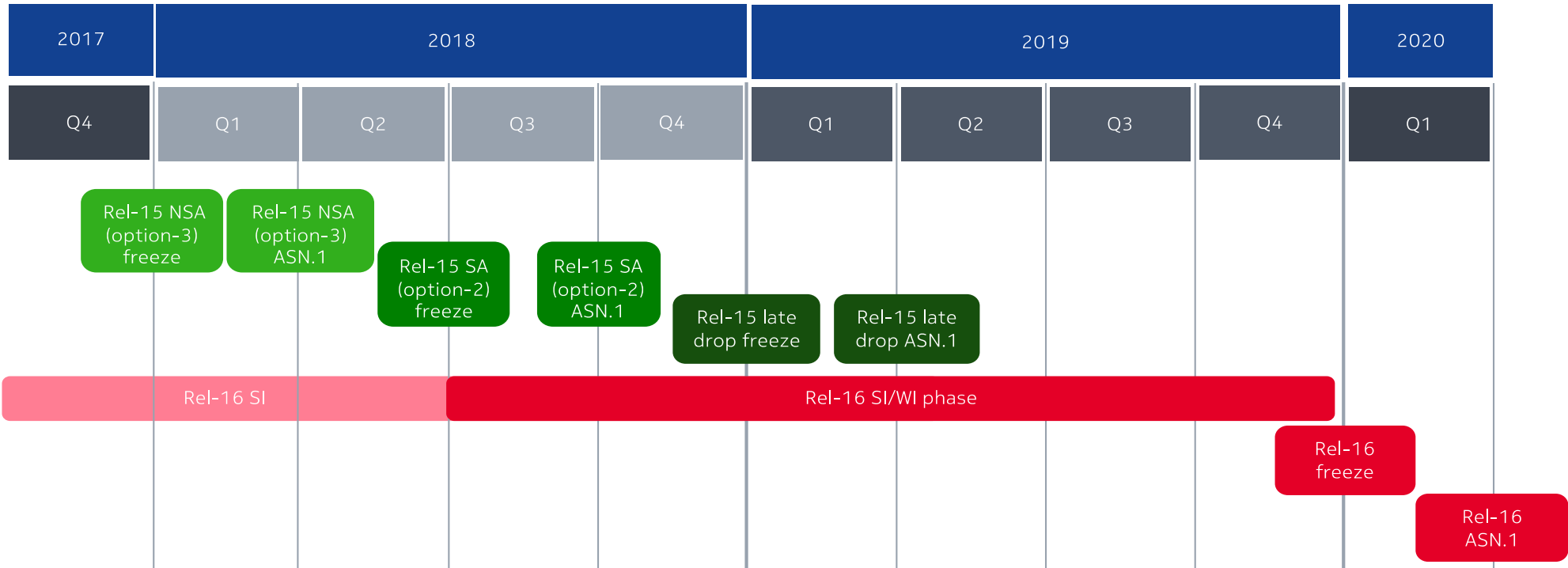
# Panel1: 5G Ecosystem: Challenges for its Development

**Dr. Colin Willcock**

Chairman of the Board, 5G IA

28<sup>th</sup> November 2018

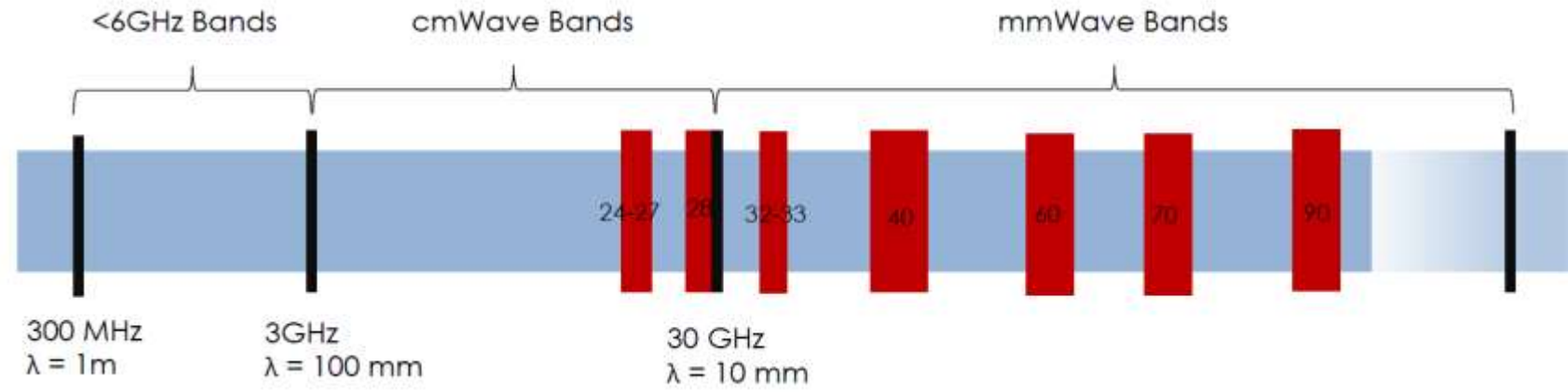
# 1. Standardization



Reality vs Hype

5G PPP  
The European path towards global next generation communication network

# 2. Spectrum



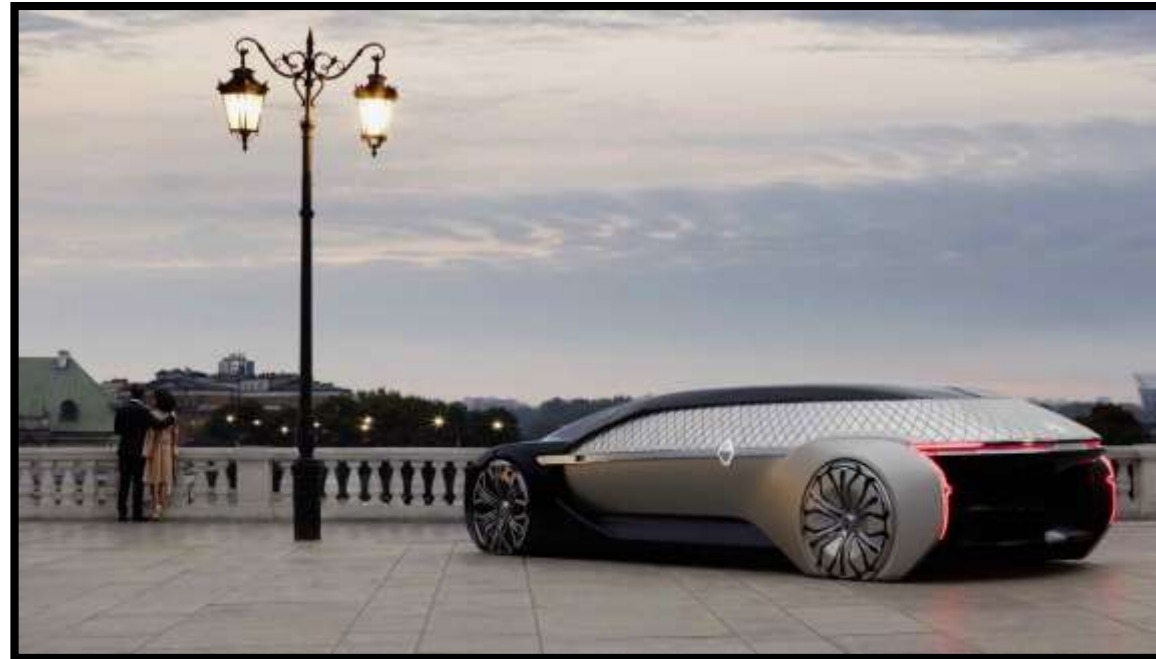
Spectrum band occupied by millimeter waves (Credit: [Qualcomm](#))

Enough Spectrum and in-time

## 5G PPP

The European path towards global next generation communication network

# 3. Business Model



Commercial vs Societal

## 5G PPP

The European path towards global next generation communication network

# Thank you for your attention

