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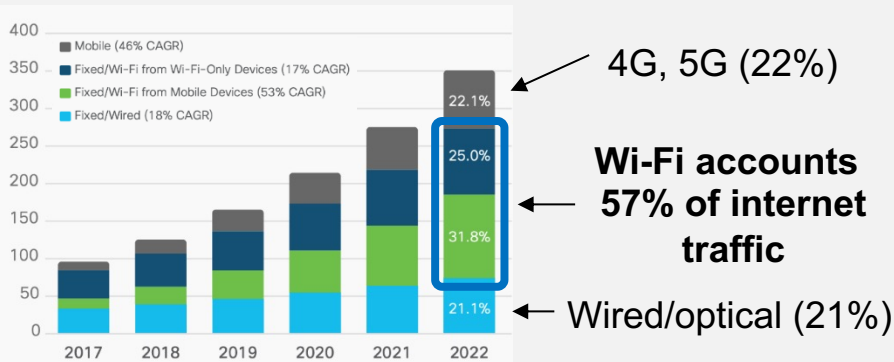
AI and Open Source vs. 6G Standardization and Regulation: Can there Be Chaos in Order?

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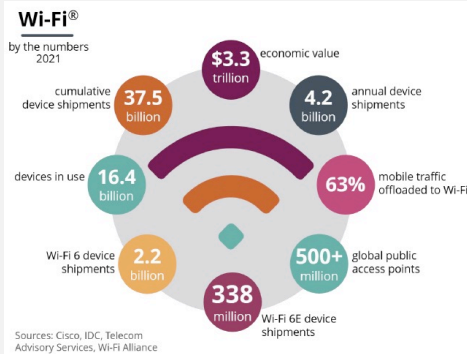
Importance and development of Wireless LANs 802.11

Most used wireless communication



Cisco VNI Global IP Traffic Forecast, 2017-2022

Widespread around the world

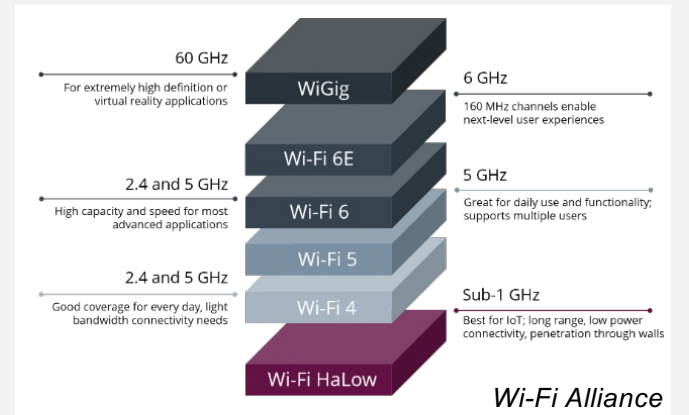


Wi-Fi devices:

- 4 billion shipped annually
- 21 billion used in the world

Wi-Fi Alliance

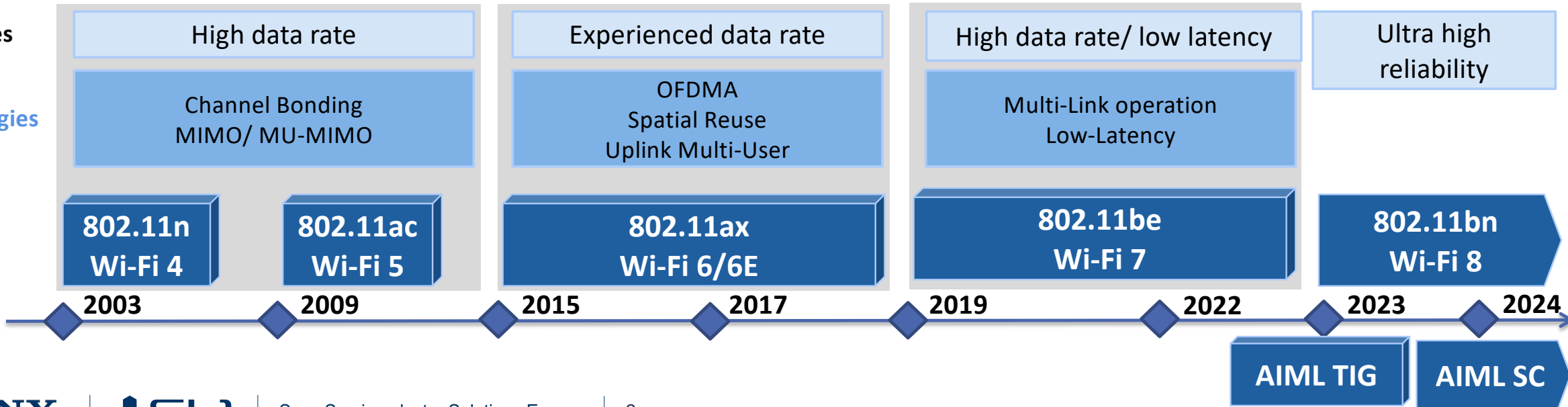
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Objectives

Technologies

Releases



Does open-source and/or AI need to go into standardization? Or they need interfaces to use protocols?

Conventional standardization vs Room for chaos in the order

- What do we mean with chaos?
 - More implementation dependent solutions to support **new technologies**
- What does standardization do?
 - Create specifications to support **new technologies**
 - Set minimal set of rules and protocols to guarantee **interoperability**

Role of AI in wireless standards

- AI can give amazing results, but they may be brittle
 - Good for **unsolved problems** or **highly complex** solutions
 - Not needed for well understood functioning systems

Open source: An opportunity or a threat?

- Opportunities: New Ideas
 - Not just for technical features
 - To **Identify key use cases** with great **market value** potential
- Risk: Performance degradation
 - Lack of **interoperability**
 - No compliance with **regulatory** specifications

Open source and/or AI in wireless networks benefits end-users?

- Opportunities to solve **relevant and complex problems** of current networks
 - Optimal resource allocation
 - Cross-layer optimization
- Explore entirely **new use cases** and evaluate **market potential**

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