

**IEEE**  
**Future**  
**NETWORKS**

**Enabling 5G and Beyond**

**FNIC: Future Networks  
Industry Consortium**

**Testing 5G and 6G Networks**

# IEEE Future Networks Initiative

Collaboration



IEEE SA



20+ IEEE societies

Content

IEEE Future Networks Tech Focus  
Issue 11, November 2020

technical newsletter, podcasts,  
videos, articles

Events

IEEE  
**5G WORLD FORUM**

+ vertical/topical workshops,  
standards forums

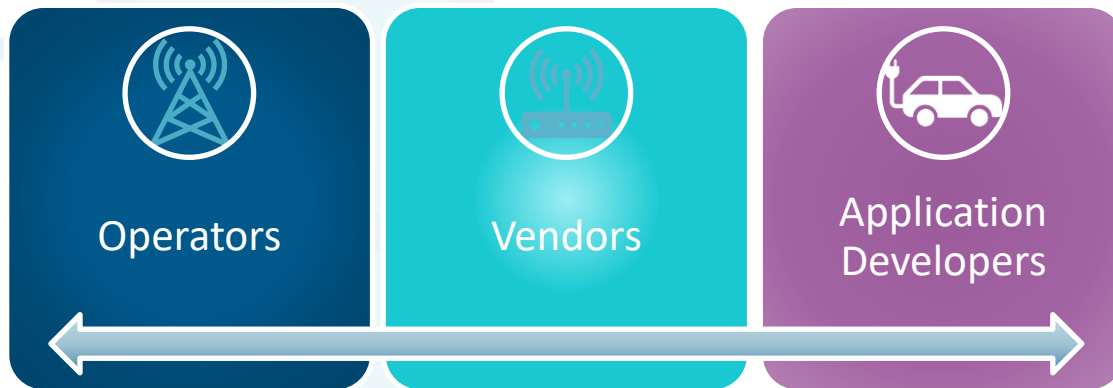
Research &  
Education



**International Network  
Generations Roadmap**

+ eLearning, webinar series,  
white papers, tutorials,

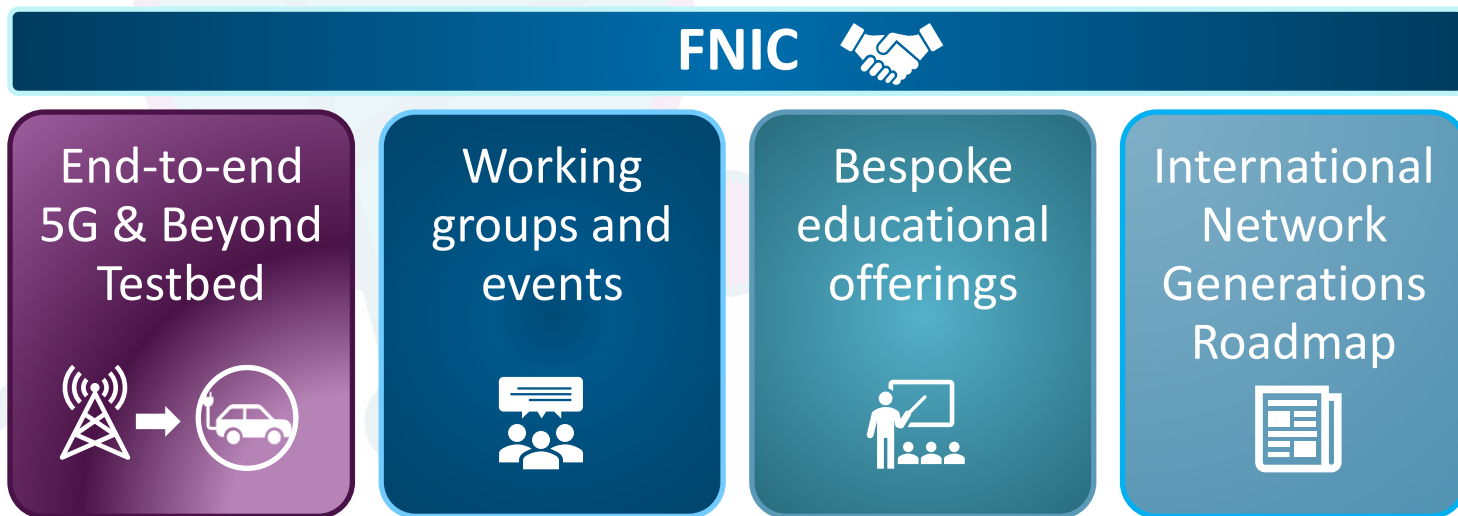
# The Future Networks Industry Consortium



The IEEE Future Networks Industry Consortium (FNIC) will bring together industry participants across the broad range of 5G/6G technologies to enable win-win collaboration opportunities and contribute to the roadmap for future technological direction.

# Value to FNIC Members

The FNIC will leverage the global trust and expertise of IEEE and a unique platform of services that offer direct, tangible value to members and allows for reduced-cost innovation through collaborative projects.



# 5G & Beyond Testbed

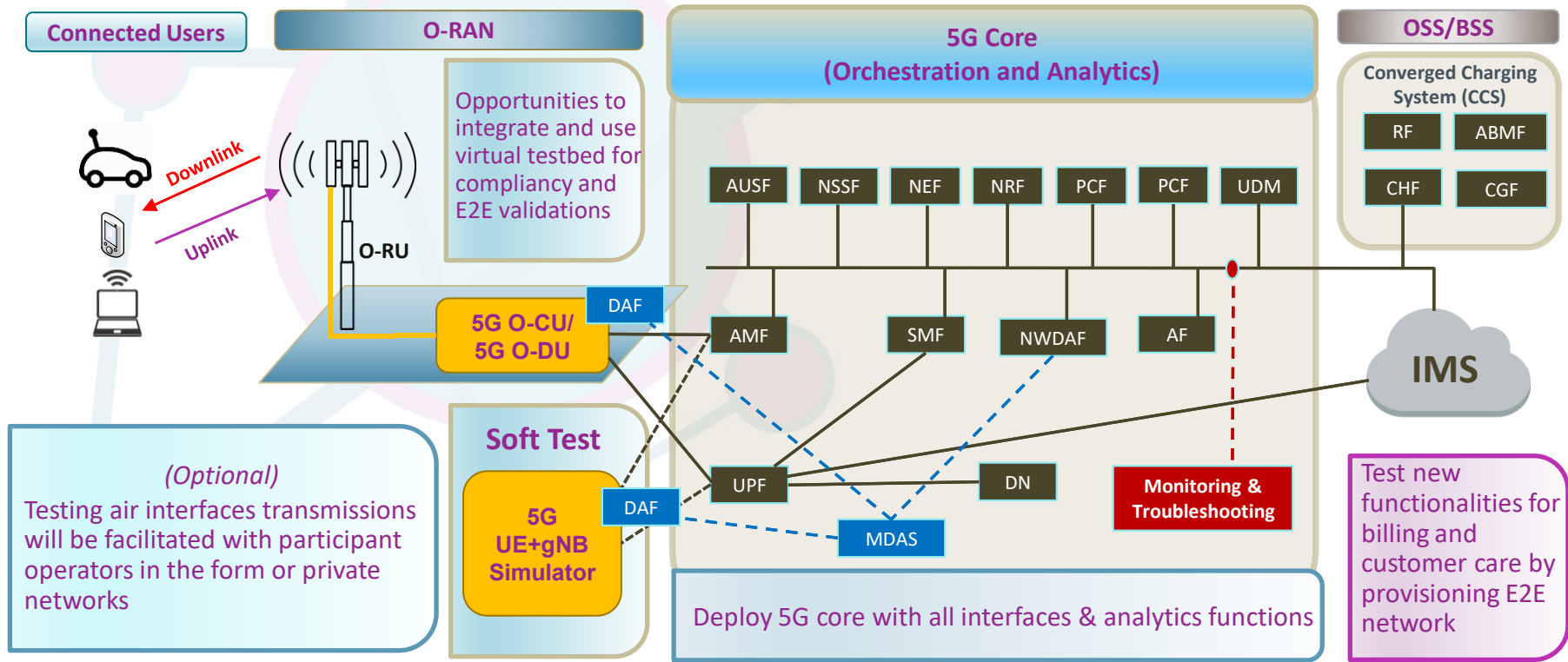


# The FNIC 5G and Beyond Testbed

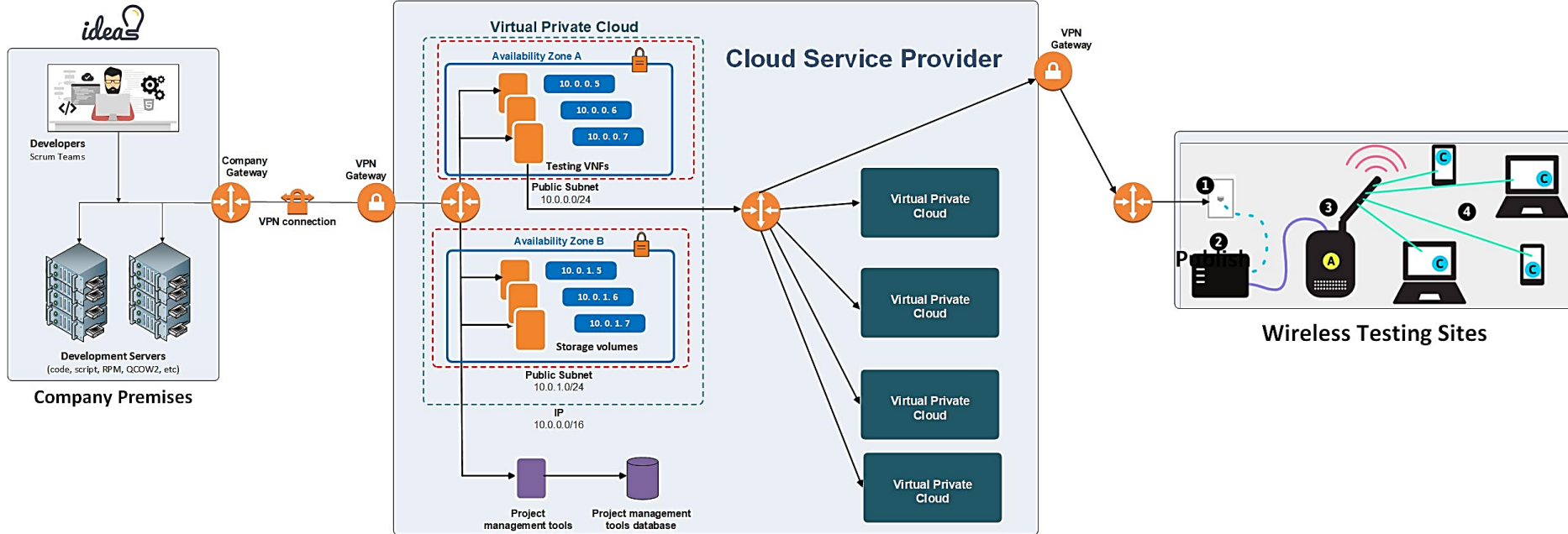
The core component of the FNIC is a collaborative effort between IEEE and industry partners to build a virtual/hybrid end-to-end network testing and innovation platform.



# Platform Scope



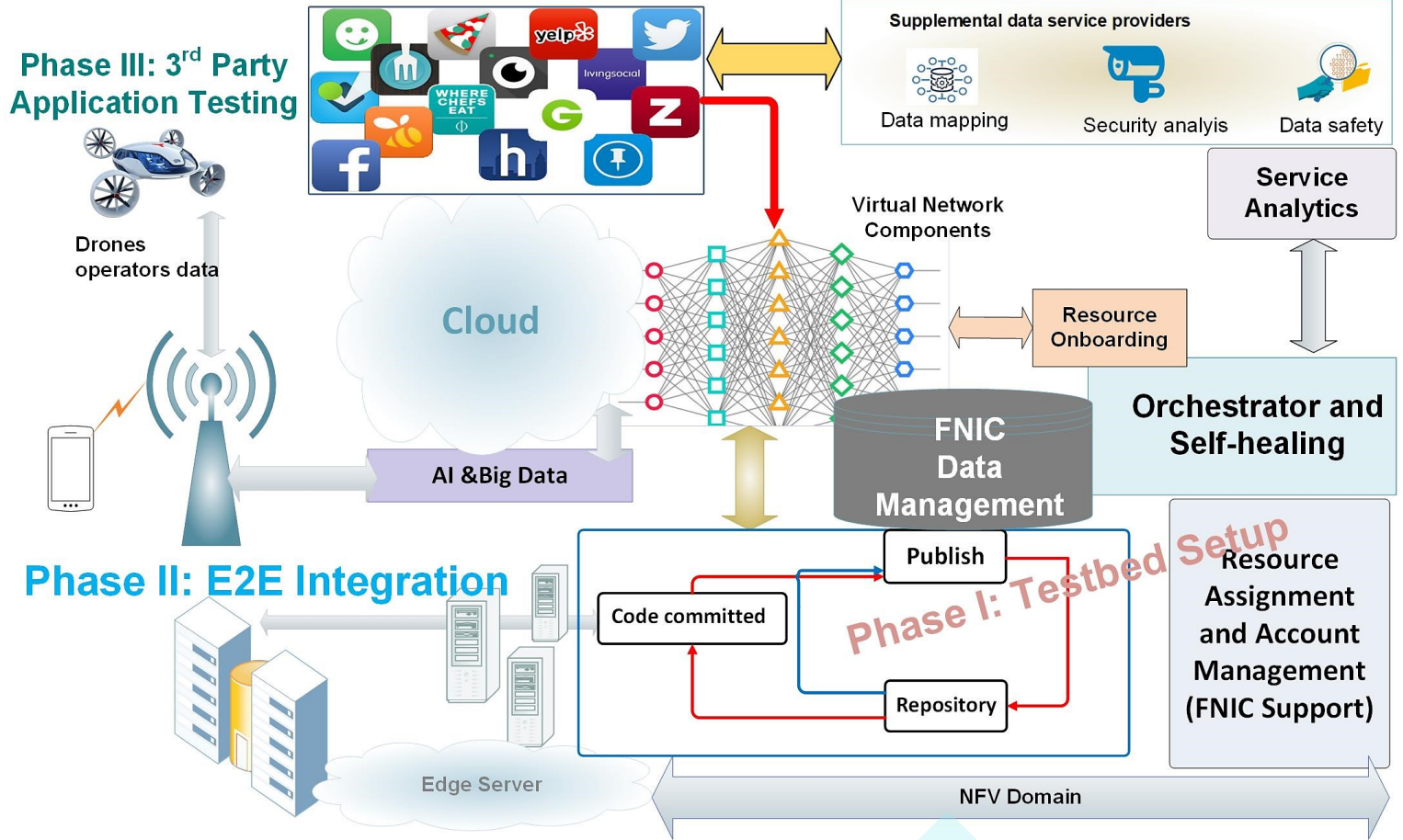
# Process Flow





# Architecture and Components

**Phase III: 3<sup>rd</sup> Party Application Testing**



# FNIC Testbed Unique Value

- Covers the network end-to-end, in a virtual CI/CD platform
- Collaborative testing and experimentation with other global FNIC member companies
- Flexible:
  - Standard or non-standard
  - Private and shared components
  - Able to connect to physical hardware
- Scalable computational resources are available to testbed participants
- Opens the door for close collaborations to define new products and standards
- Governed by IEEE Industry Standards and Technology Organization (ISTO) privacy and IP policies

A technical document highlighting network technology evolutions over 3-, 5- and 10-year horizons. Created by 100+ international experts from industry, academia, etc.



## International Network Generations Roadmap (INGR)

An IEEE 5G and Beyond Technology Roadmap

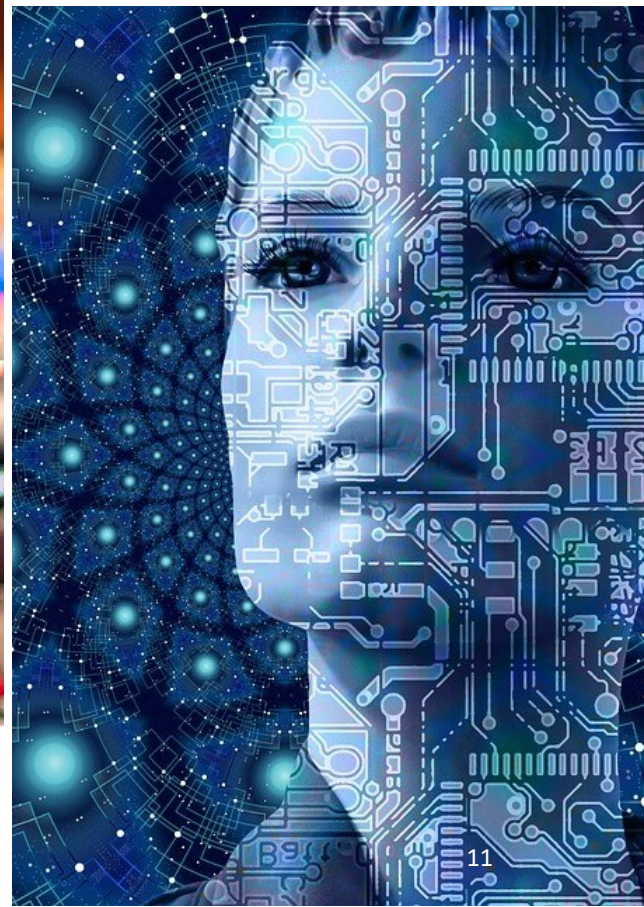
Executive Summary

1<sup>st</sup> Edition

[FutureNetworks.ieee.org/roadmap](https://futurenetworks.ieee.org/roadmap)



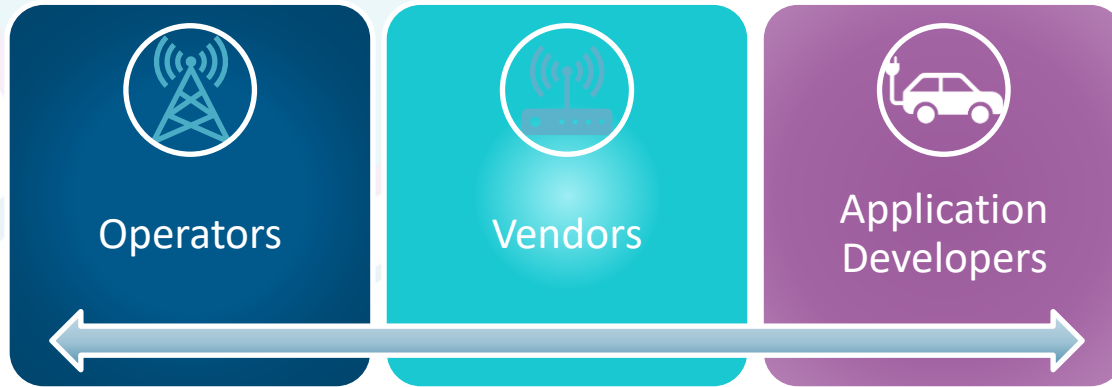
Industry Expert Speaker Program with technical experts who provide specialized training to participant companies



Develop working groups and speak at major 5G & 6G events

Enabling 5G and Beyond | [futurenetworks.ieee.org](https://futurenetworks.ieee.org)

# IEEE FNIC Membership



# FNIC Participation Model

- FNIC participation is open to any vendor, operator, or organization specialized in mobile communications and the future network ecosystem
- IEEE will provide primary financial support for the development and maintenance of the 5G and Beyond Testbed for the first two years
  - **Year 1: complimentary**
  - Year 2: no more than \$25,000, scaled for company size
  - Year 3+: Tiered fees to be introduced, likely capped at \$50k

# Future Networks Industry Consortium

## Questions / Feedback



**Join Us for Free Complimentary Year by Sending us  
a Letter of Intent**

The Future Networks Industry Consortium  
LETTER OF INTENT

The purpose of this Letter of Intent is to invite the "Participant" and the IEEE Future Networks Consortium (FNC) to establish a relationship as a member of the Future Networks Industry Consortium (FNIC) for the next year (the "Partnership").

By accepting this Letter of Intent, the Participant (FNIC) is acknowledging that it is a member of the FNIC and is committed to the FNIC's mission and vision. The Participant is also acknowledging that it is a member of the FNIC and is committed to the FNIC's mission and vision.

The FNIC, its members, and its staff do not warrant the FNIC's performance in any specific activity or endeavor.

Name: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Organization: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_  
 State: \_\_\_\_\_  
 Zip: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Email: \_\_\_\_\_

Signature: \_\_\_\_\_  
 Date: \_\_\_\_\_

# Future Networks Industry Consortium

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- **Anwer Al-Dulaimi** – EXFO
- **Brad Kloza** – IEEE staff
- **Josh Kirschner** – IEEE consultant