



# OAI Community Engagements: The Launch of OAI Foundation and that of Duranta



Sagar Arora  
Solutions Architect  
- OpenAirInterface



Irfan Ghauri  
Director of Operations  
- OpenAirInterface

# OAI Foundation's Mission

Established in **2024**, the OAI Foundation is a **non-profit trade association** supported by corporate sponsors and public programs to **further the mission of OpenAirInterface**

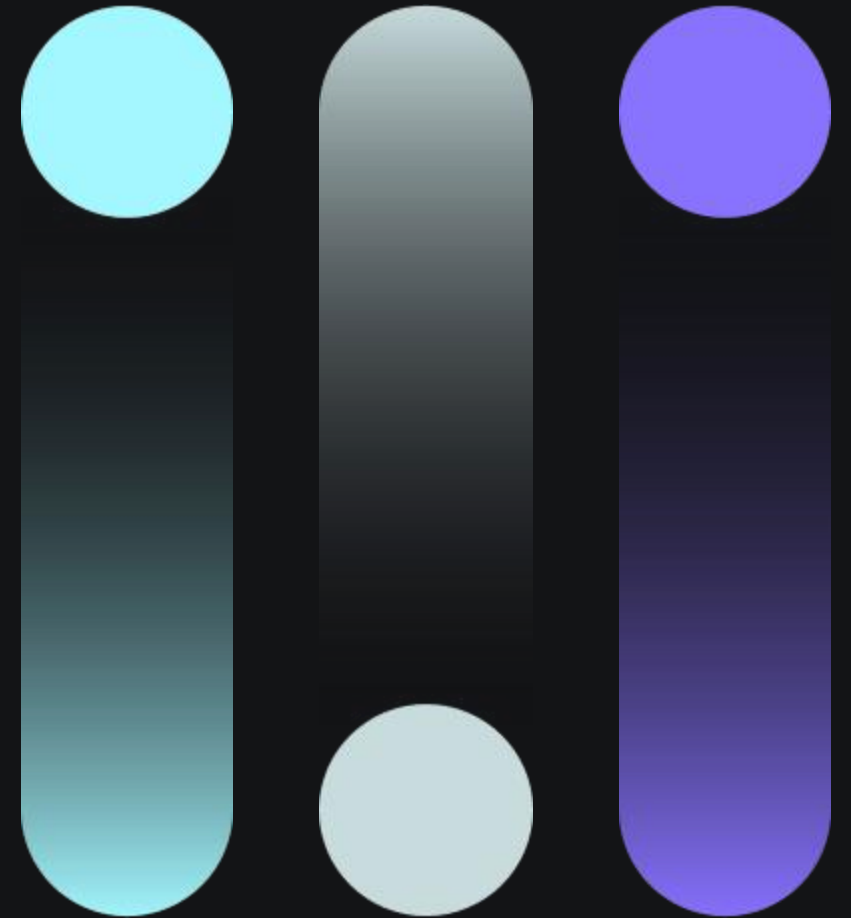
**The OAI Foundation aims to**

## **Build Generations of Cellular Wireless in Open Source**

- Engage with public and private programs in the U.S. to support the creation of open and secure ICT
- Support U.S. based OpenAirInterface community
- Provide open source enablers to support economic initiatives in the U.S.
- Respond to growing needs of academic and research labs

## **Reinforce Training of Wireless Engineering Workforce**

- Industry need: new, multi-skilled engineers (communications, 3GPP, O-RAN, AI)
- OAI has a strong record of global training in universities and research centers
- The OAI Foundation will help grow talent within the U.S. academic & research ecosystem
- Goal: develop expertise in Open RAN network function development, deployment, and testing



# OAI Foundation team



**Mario Joa-Ng**  
Software engineer



**Merkebu Girmay**  
Software engineer



**Rupanjali**  
Software engineer

# OpenAirInterface team



**Camille Lerda**  
Communication manager



**Robert Schmidt**  
RAN team lead



**Sagar Arora**  
Solutions architect



**Teodora Vladić**  
Software engineer



**Jaroslava Fiedlerova**  
Software engineer



**Reem Bahsoun**  
Test engineer



**Shubhika Garg**  
Software and test engineer



**Bartosz Podrygajlo**  
Software engineer



**Francesco Mani**  
Software engineer



**Guido Casati**  
Software engineer



**Rakesh Mundlamuri**  
Software engineer

# OAI launches Duranta with LFN

 LFN NETWORKING

[ABOUT](#) ▾

[PROJECTS](#) ▾

[RESOURCES](#) ▾

[WIKI](#)

[JOIN](#)



## Duranta

**Duranta - An open, research-grade  
RAN + UE reference stack**

Built on OpenAirInterface software and hosted by LF  
Networking to accelerate Open RAN innovation.

[VIEW REPOSITORY](#)

# Why Duranta?

1

Develop 5G and nextG RAN code in the LFN environment under the “right” 3GPP compatible license, thus expand community

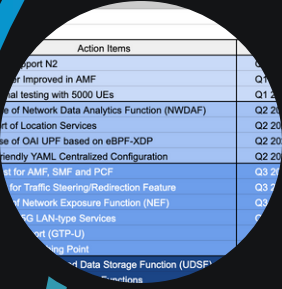
2

Expand the Technical Steering of OAI to include other technical leaders in the community, thus strengthening meritocracy

3

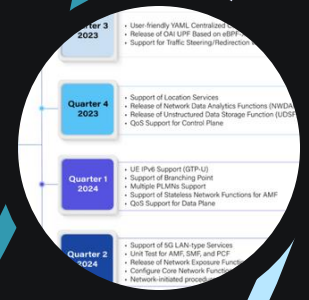
Leverage LF good practices for security, code quality, provenance, process

# What goes into Duranta?



Action Items	
Support N2	Q1 2023
Improved in AMF	Q1 2023
Testing with 5000 UEs	Q1 2023
Release of Network Data Analytics Function (NWDAF)	Q2 2023
Support of Location Services	Q2 2023
Release of OAI UPF based on eBPF-XDP	Q2 2023
Openly YAML Centralized Configuration	Q2 2023
Support for AMF, SMF and PCF	Q3 2023
Support for Traffic Steering/Redirection Feature	Q3 2023
Release of Network Exposure Function (NEF)	Q3 2023
Support of 5G LAN-type Services	Q3 2023
Support of Branching Point (GTP-U)	Q3 2023
Support of Branching Point	Q3 2023
Release of Network Data Storage Function (UDSP)	Q3 2023

- 1 Primarily OAI CU/DU and OAI UE
- 2 Eventually other components like Core Network, FlexRIC as per the needs of the nextGen architecture
- 3 Duranta will be built on top of the existing OpenAirInterface5g code base
- 4 Duranta gets a brushed up and polished edition of the OAI Public License V1.1 named Collaborative Standards Software License (CSSL)



Quarter 3 2023	<ul style="list-style-type: none"><li>Openly YAML Centralized Configuration</li><li>Release of OAI UPF based on eBPF-XDP</li><li>Support for Traffic Steering/Redirection</li></ul>
Quarter 4 2023	<ul style="list-style-type: none"><li>Support of Location Services</li><li>Release of Network Data Analytics Function (NWDAF)</li><li>Release of Network Data Storage Function (UDSP)</li><li>QoS Support for Control Plane</li></ul>
Quarter 1 2024	<ul style="list-style-type: none"><li>Support of Branching Point (GTP-U)</li><li>Support of Branching Point</li><li>Multiple PLMN Support</li><li>Support of Network Exposure Functions for AMF</li><li>QoS Support for Data Plane</li></ul>
Quarter 2 2024	<ul style="list-style-type: none"><li>Support of 5G LAN-type Services</li><li>Support for AMF, SMF and PCF</li><li>Release of Network Exposure Function (NEF)</li><li>Configure Core Network Functions</li><li>Network-initiated operations</li></ul>

# Working of Duranta

- Migrate OAI code base to a new git repository
- Existing OAI Gitlab repository will be a mirror and it will not accept any Merge Requests (MRs) or issues
- Duranta Technical Steering Committee (TSC) will be led by a TSC-Chair and Co-Chair to take formal decisions for the feature release and maintenance RoadMap
- Eligible community members will be publicly voted every year to form TSC
- Creation of technical Working Groups WG(s) (still under discussion):

RAN CU/DU

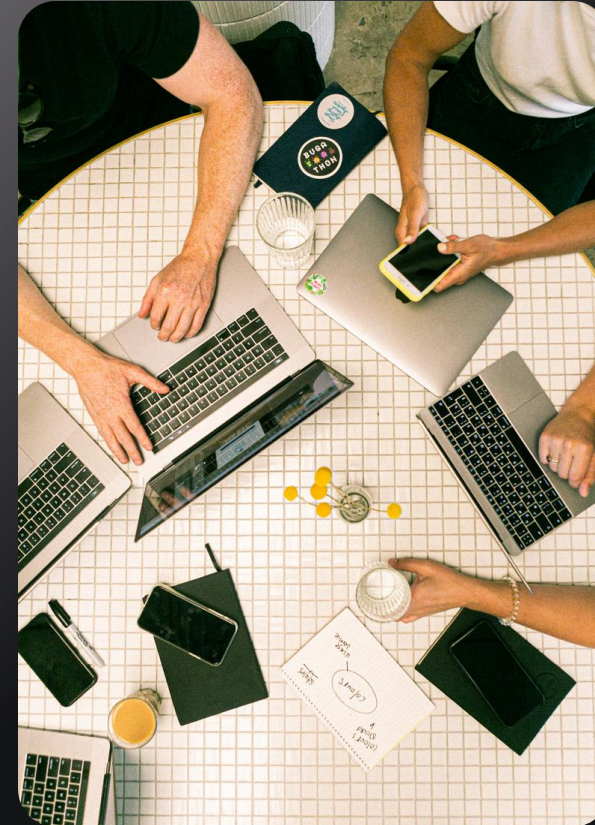
User Equipment  
(UE)

Channel  
Emulation

Security

Documentation

OAM: CI,  
Orchestration  
of RAN NFs



# What changes for developers and users?

- Code release under CSSL v1.0
- Mandatory signing of commits and new CLA
- CI/CD/CT will still be Jenkins
- The naming of the main branch will remain develop for simplicity
- Possibility to add multiple reviewers per Merge Request

## Same release process

- Integration branch every week
- 2-3 major releases per year

## Improved interactions

- Public slack or similar platforms (conversation history)
- New mailing list for the community

# Timeline

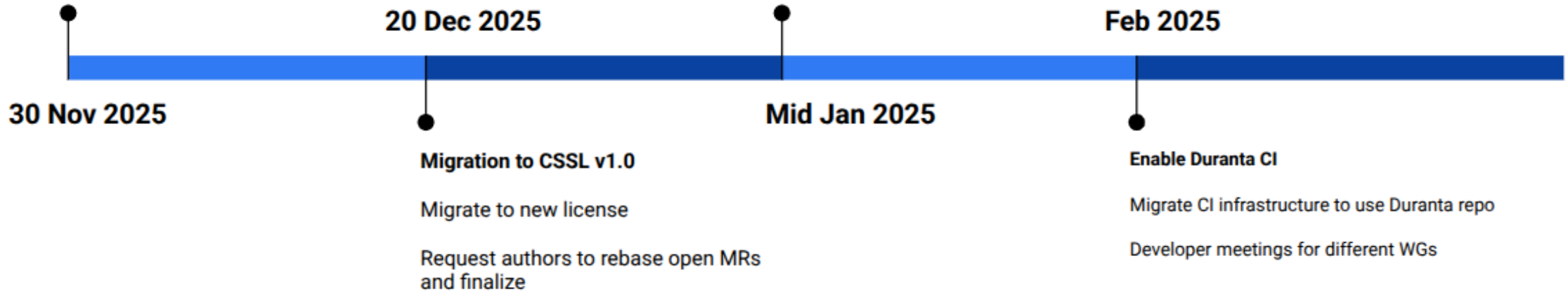
## Release v2.4.0 of openairinterface5g

The last release under OAI Public License V1.1 in our existing Gitlab repository

## Duranta Code Release

Initial code release of Duranta

Move Open MRs to Duranta



# Thank You



Duranta Confluence



CSSL v1.0

For any questions, please reach out to us at  
[contact@openairinterface.org](mailto:contact@openairinterface.org)