

US Ambassador for Cyberspace cites Workforce Development as 'Most Powerful Catalyst for Open RAN Adoption' at MWC 2023 April 2023

The Asia Open RAN Academy (AORA) is at the vanguard of accelerating awareness and adoption of Open RAN through workforce development, according to Nathaniel Fink, US Department of State Ambassador at large for the Bureau for Cyberspace and Digital Policy. AORA is the only institution of its kind to offer a full complement of the training needed to produce engineers and computer scientists in Open RAN, the technology which will enable the Internet of Things (IoT).

At the MWC23 in Barcelona, Ambassador Fink was joined by several top thought leaders to illustrate the importance of Public-Private Partnerships (PPP) to address issues hindering open, interoperable, and reliable telecoms networks:

- Azita Arvani, North American CEO for Rakuten Symphony
- Vishal Mathur, Global Head of Engagement for the Telecom Infra project (TIP), and
- Yoko Nakata, Adviser to the Global Strategy Bureau Director-General at the Japanese Ministry of Internal Affairs and Communications.





To open, Ms. Arvani reminisced on the journey from 2G to 5G, "the speeds then were 9.6 mbps and we thought that was good, now we are running at 1gbps – 100,000 times faster." She highlighted the fact that the way networks are designed and built, however, has not changed much or if at all in the past decade. "What we thought was acceptable in 2G/3G/4G is no longer acceptable. We cannot [achieve our goals] with having heavy equipment, few vendors, and all that. It is simply

This article is made possible by the support of the American People through the United States Agency for International Development (USAID). The contents of this article are the sole responsibility of the authors and do not necessarily reflect the views of USAID or the United States Government.

not possible." Now is the time to change, particularly to achieve all the promises of 5G.

When discussing how Open RAN is on the critical path for the IoT, Ambassador Fick highlighted the challenge of inclusive accessibility to reach global scale, "Our shared digital future must be inclusive we cannot forget the several billion people on the planet not enjoying [or even having access to] technology." He continued by discussing that the issues we are facing are, "intrinsically transnational and it is imperative we recognize that no one country or company can do this alone." The power is in working together to



build coalitions that include companies, civil society, and public sector entities and that the telco space is where they come together to introduce more innovation, bring healthy competition to the market, provide better results for consumers, and lower costs.

In addition to AORA, the United States government has several other Open RAN supported initiatives including in Peru with three rural Amazon communities, the Democratic Republic of Congo, Brazil, and Türkiye. The CHIPS and Science Act will support continued deployment of secure ICT networks and more Open RAN initiatives. And finally, the USD\$1.5-billion-dollar Innovation Fund, set to be distributed over the next ten years, will help drive U.S. wireless innovation, foster competition, and strengthen supply chain resilience. It will also help unlock opportunities for companies, particularly small and medium enterprises, to compete in a market historically dominated by few foreign suppliers, including high-risk suppliers that raise security concerns.

As the Academy continues to build relationships with academic institutions, mobile network operators (MNOs), and internet service providers (ISPs), eyes are set on working collaboratively across various industries by developing Public-Private-Partnership relationships. Originally started as an initiative under the Biden-Harris Indo-Pacific Economic Framework, it is key for the Academy to develop stand-alone revenue streams and foster in-kind support for sustainability. However, as highlighted by Ambassador Fick, governments cannot act alone, industry needs to become involved to support continuing market development and innovation. New ventures are risky, and PPPs allow government and industry to share risk.

<u>But what is the need?</u> Vishal Mater from TIP touched on this when discussing how the industry needs to drive forward targeted and concerted efforts from just *testing open RAN readiness* to actual *testing for certified systems* that can be procured easily on the market. But in order to do that, there needs to be an available workforce with the skills and knowledge on what openness really means and how the industry can drive forward in a pragmatic way. This is where the Asia Open RAN Academy comes in with the open RAN curriculum and enrichment activities to educate

This article is made possible by the support of the American People through the United States Agency for International Development (USAID). The contents of this article are the sole responsibility of the authors and do not necessarily reflect the views of USAID or the United States Government.

the next generation of engineers and provide upskilling for current engineers through continuing professional development credits. Bringing to the sector the skilled workforce needed to test and deploy open network architectures.

The Academy's founding partners include Philippine universities, operators, associations, and government ministries. International partners include Japan's Ministry of Internal Affairs and Communication (MIC), Japanese companies (NEC, NTT Docomo, Rakuten Symphony), Indonesia's Telkom University, Samsung, and Parallel Wireless.