

International Open RAN Symposium

September 17 – 19, 2024, in Golden, Colorado, USA

Day 1: All Participants

On day 1, all participants will be together in the same room. The morning will have introductory talks and prior successful projects.

The afternoon **lightning talks** will give participants time to explain who they are, what they are working on, and what joint projects they want to support, as described below.

Lightning Talks		
Format	Purpose	Avoid
1 speaker 1 slide 3 minutes or less Slides due 8/23	<ul style="list-style-type: none">• Introduce your organization• Facilitate workshop discussions on days 2 and 3• Consistent, repeatable, worldwide Open RAN testing<ul style="list-style-type: none">○ Summarize your current collaborations○ Propose topics for future collaborations	<ul style="list-style-type: none">• Do not market a product• Do not make a sales pitch• Do not embed videos or audio

Day 1 Joint Track

Time	Title	Speaker and Details
8:00–9:00	Registration	
9:00–9:05	Introductory Remarks	Sarah Morris, Principal Deputy Assistant Secretary, U.S. Department of Commerce
9:05–9:10	Opening Keynote	To be announced
9:10–9:15	Opening Keynote	Stephan Lang, U.S. Coordinator for International Communications and Information Policy with the rank of Ambassador, U.S. Department of State
9:15–9:35	Overview: What is Open RAN, Opportunities, and the Role of Government	Diane Rinaldo (Open RAN Policy Coalition)
9:35–10:15	Panel: State of Play in Open RAN Viewed by Operators	Moderated by Diane Rinaldo (Open RAN Policy Coalition) Chris Boyer (AT&T) Svetlana Matt (EchoStar/DISH) TBC (ChungHwa Telecom) Nguyễn Trọng Công (Viettel Group)
10:15–10:35	Spotlight: NTT Docomo Global Open RAN progress	Hiroki Kuriyama, President & CEO (NTT DOCOMO GLOBAL, Inc.)

Time	Title	Speaker and Details
10:35–10:50	Break	
10:45–11:30	Panel: International Cooperation by Governments in Open RAN	Moderated by Brian Larkin (NTIA) Alex Weber (Australia) Mathieu Potter (Canada) Shinya Shimada (Japan) David Taylor (UK)
11:30–12:15	Panel: Opportunities for Open RAN Worldwide	Moderated by Megan McMillan (CLDP) Philip Varilla (DICT) Rajesh Kumar Pathak (Bharat 6G Alliance) Maggie Chao (ITRI) Francisco Troyo (MICITT) Badran Alomar (MCIT)
12:15–13:00	Lunch	
13:00–13:15	Spotlight: Deploying Open RAN in Saudi Arabia and Global Challenges and Opportunities	Tareq Amin (Aramco Digital)
13:15–13:50	Technical Successes: Consistent, Repeatable, Worldwide Testing	INTRODUCTION Eng Wei Koo (Keysight Director of RAN Standards and Technology, O-RAN TIFG and MVP-C co-chair) O-RU CONFORMANCE Binbin Chen (Singapore SUTD Associate Professor and Deputy Director of Future Communication R&D Program) Mitsuhiro Kuchitsu (Rakuten Mobile Vice Division Manager of Technology & Strategy Division) O-DU CONFORMANCE Michele Polese (Research Assistant Professor, Open6G OTIC at Northeastern University) Binbin Chen THREE O-RUs, ENERGY SAVINGS Victor Lin (Auray OTIC and Security Lab Deputy Manager in Taiwan)
13:50–14:05	Minimum Viable Profile (MVP) Update	Ojas Choksi, Principal Technologist (ATIS)
14:05–14:10	Introduce Purpose of Lightning Talks	Jeremy Glenn (NTIA) Emcee
14:10–14:46	Government and Policymakers Lightning Talks 3-minute Introductions	<ul style="list-style-type: none"> • CRAIN Lab/ITS • DFC • FutureG/DoD • i14y Lab/Deutsche Telekom • INL • ISED • ITRI/Taiwan • DSIT/Digital Catapult

Time	Title	Speaker and Details	
		<ul style="list-style-type: none"> • Ministry of Internal Affairs and Communications (MIC) Japan • MICITT • MITRE • NIST 	
14:46–15:22	Academia Lightning Talks 3-minute Introductions	<ul style="list-style-type: none"> • ARA PAWR & OTIC (North America) with Iowa State University Center for Wireless, Communities & Innovation • Asia Open RAN Academy • CCI/VT xG Testbed and OTIC Washington DC Metro Area • KyungHee University • University of Leeds • National Yang Ming Chiao Tung University (NYCU) • University of New Hampshire InterOperability Laboratory (UNH-IOL) • NC State University • Pennsylvania State University • Rutgers University • University of Utah • Yonsei University 	
15:22–15:37	Break		
15:37–17:30	Industry Lightning Talks 3-minute Introductions	<ul style="list-style-type: none"> • Airspan • Analog Devices • Booz Allen Hamilton • BT • CableLabs • Capgemini • Cohere Technologies • Deepsig • Enterprise Ireland • Ericsson • European Advanced Networking Test Center (EANTC) • EY • Fujitsu Network Communications • Globalstar • Hewlett-Packard Enterprises • Juniper 	<ul style="list-style-type: none"> • Lekha Wireless Solutions • LF-Aether • LIONS Technology Inc. • Mavenir • Nokia • OpenAirInterface • Parallel Wireless • Qualcomm • Radisys • SOLID • Tejas Networks • Viavi • Virginia Tech Applied Research Corporation • VVDN Technologies • Wind River • zTouch Networks
17:30	End of Day 1		
18:00–20:00	No Host Welcome Reception at the Golden Mill, 1012 Ford Street, Golden, CO		

Day 2: Separate tracks for technical and policy/government discussions

Interactive Workshop — Format

Each interactive workshop will have a session leader and secondary leader. The workshop will start with an interactive discussion among all attendees. Attendees will then disperse into breakout sessions, to enable small group discussion. Each breakout session will focus on a different sub-topic. Attendees can wander from one breakout session to another. All attendees will reconvene for breakout session readouts and to form an action plan. All events associated with the workshop will be outlined in a thick green line, as shown here.

Day 2 Technical Track

Time	Title		Speaker and Details	
8:00–9:00	Registration			
9:00–9:15	Introduction to Interactive Workshops		Jeremy Glenn, Emcee	
Interactive Workshop — Topics for test collaboration				
9:15–10:15	Interactive workshop discussion among all attendees		Discussion led by Paul Sludden of Digital Catapult/SONIC Labs UK, assisted by Maggie Chao (ITRI)	
10:15–11:15	Breakout Sessions	#1	What labs are already collaborating? What are their collaboration goals?	Maggie Chao (ITRI)
		#2	What types of tests should we conduct in multiple labs worldwide, to evaluate consistency and repeatability?	Vijay K. Shah (North Carolina State University)
		#3	How can we progress consistent and repeatable testing by dividing the effort among multiple labs?	N. K. Shankaranarayanan (Rutgers University)
		#4	How can existing labs provide training and workforce development to new labs?	Michele Polese (Northeastern University)
		#5	What are labs willing to share (e.g., open source code and data)?	Tracy Van Brakle (AT&T)
		#6	Security collaboration: current progress and next steps	Syed Hussain (Pennsylvania State University) and Arup Bhuyan (INL)
11:15–11:30	Break			
11:30–12:15	Reconvene, report out from breakout sessions, and form an action plan		Discussion led by Paul Sludden of Digital Catapult/SONIC Labs UK, assisted by Maggie Chao (ITRI)	
12:15–13:15	Lunch			

Time	Title	Speaker and Details	
Interactive Workshop — Consistent, repeatable, international testing			
13:15–14:15	Interactive workshop: discussion among all attendees	Discussion led by Julie Kub (NTIA/ITS), assisted by Aloizio Da Silva (Commonwealth Cyber Initiative Virginia Tech)	
14:15–15:45	Breakout Sessions	#1 What exactly are we testing, including resilience testing?	Joe Constantine (Ericsson)
		#2 What testing do MNOs want (e.g., performance parity, use cases)?	To be announced
		#3 How can we achieve and demonstrate consistent, repeatable testing?	Andreas Gladish (DT)
		#4 Quality metrics: How accurate do tests need to be, and how large of differences are significant?	Doug Montgomery (NIST)
		#5 What test frameworks and automation are needed?	Eng Wei Koo (Keysight)
		#6 How can we gather, sanitize, and maintain test data?	David Johnson (University of Utah, POWDER)
15:45–16:00	Break		
16:00–17:00	Reconvene, report out from breakout sessions, and form an action plan	Discussion led by Julie Kub (NTIA/ITS), assisted by Lauriston Hardin (NTIA/ITS)	
17:00–17:10	Break — policy track joins technical track		
17:10–17:20	Policy Track summary	Kate Dimsdale (NTIA/OIA)	
17:20–17:30	Technical track summary	Julie Kub (NTIA/ITS)	
17:30	End of Day 2		

Day 2 Policy Track

Time	Title	Speaker and Details
8:00–9:00	Registration	
9:00–9:05	Opening Remarks	Jaisha Wray (NTIA/OIA)
9:05–9:30	Summary of Day 1 and Open RAN Scene Setter	Andy Thiessen (MITRE)
9:30–9:55	Briefing on Prague Proposals on Telecommunications Supplier Diversity and 5G Security	TBD

9:55–10:55	Panel: Implementation of the Prague Proposals: Policies and Regulations to Strengthen Open RAN Adoption		Moderated by Corey Schirmer, NTIA Tom Rondeau (DOD/FutureG) Tom Rumbelow or Joe Marshall (TBC) (UK) Tiffany Lin (ITRI) Mathieu Potter (ISED)
10:55–11:15	Break		
11:15–12:15	Panel: Capacity Building and Financing to Support Open RAN Deployments		Moderated by Megan McMillan (CLDP) Mary Sloan (USTDA) Richard Matias (Asia Open RAN Academy) Sabahat Iqbal (USAID) Nakashima Hiroyuki (JBIC)
12:15–13:15	Lunch		
13:15–14:30	Panel: Importance of Standards Bodies Engagement for Policymakers		Moderated by NTIA Haseeb Akhtar (Ericsson delegate to O-RAN ALLIANCE WG1) Sophie Weston (Digital Catapult) David Young (ATIS) TBD (ETSI) TBD (3GPP)
14:30–14:50	Break		
Interactive Workshops for Policymakers			
14:50–14:55	Introduction to Breakout Sessions		Jaisha Wray (NTIA/OIA)
14:55–16:20	Breakout Sessions	#1 Investments Financial Support for Open RAN	Ean Hundley (DFC)
		#2 Policy Government Role to Enable Telecommunications Supplier Diversity	Alex Botting (TBC) (ORPC)
		#3 R&D and Testing How Policymakers Can Best Support R&D Efforts	Tom Rumbelow (UK DSIT)
		#4 International Cooperation Next Steps in Practical Cooperation Between Likeminded Governments	TBD (U.S. Department of State or CLDP)
16:20–17:00	Reconvene, Report Out from Breakout Sessions, and Next Steps		Breakout Session Moderators
17:00–17:10	Break — Policy Track Joins Technical Track		
17:10–17:20	Policy Track Summary		Kate Dimsdale (NTIA/OIA)
17:20–17:30	Technical Track Summary		Julie Kub (NTIA/ITS)
17:30	End of Day 2		

Day 3: Technical Track Continues; Site Visits for Policy and Government Attendees

Day 3 Policy Track

On Day 3, the policy track will conduct a site visit to tour DISH Wireless's new [Open RAN Center for Integration & Deployment \(ORCID\)](#) in Cheyenne, Wyoming.

The visit can only accommodate 80 people. Please indicate your interest in the tour when registering. Priority will be given to policy track attendees.



Day 3 Technical Track

Time	Title		Speaker and Details	
8:00–9:00	Registration			
9:00–9:15	Spotlight: Overcoming Open RAN Deployment Hurdles		Ajay Rajkumar (AT&T Network CTO and O-RAN Operator Advisory Team chair)	
Interactive Workshop — Confounding Issues that Impact Testing				
9:15–10:15	Interactive workshop: discussion among all attendees		Discussion led by David Debrecht (CableLabs) and Mark Poletti (CableLabs)	
10:15–11:15	Breakout Sessions	#1	Do small lab-to-lab differences produce large differences in results?	Lincoln Lavoie (University of New Hampshire, InterOperability Laboratory)
		#2	What factors matter the most?	Tim O'Shea (DeepSig)
		#3	What factors can be ignored?	Todd Loeffelholz (Airspan)
		#4	How does the priority of features for commercialization impact testing	To be announced
		#5	Lifecycle management and decoupled service management and orchestration (SMO)	Haseeb Akhtar (Ericsson delegate to ORAN ALLIANCE WG1)
		#6	CI / CD / CT	Irfan Ghauri (Open Air Interface Foundation)
11:15–11:30	Break			
11:30–12:15	Reconvene, report out from breakout sessions, and form an action plan		Discussion led by David Debrecht (CableLabs) and Mark Poletti (CableLabs)	

Time	Title	Speaker and Details
12:15–13:15	Lunch	
Interactive Workshop — Building trust		
13:15–14:00	Interactive workshop: discussion among all attendees	Discussion led by Lauriston Hardin (NTIA/ITS), assisted by Ian Wong (Viavi Solutions)
14:00–15:00	Breakout Sessions	#1 How can buyers trust that a lab produces consistent, repeatable, world-wide testing? Ganesh Shenbagaraman (Radisys)
		#2 What makes consistent testing valuable to customers? What do you get when the testing is done? Andy Thiessen (MITRE)
		#3 Are badging and certification enough? Is there something more specific that can be done to address MNO needs? Abdel Bagegni (TIP)
		#4 How do we demonstrate performance parity to legacy systems? Gustavo Correa Lima (CPQD)
		#5 Are technology readiness levels (TRL) necessary? Charles Turyagyenda (Digital Catapult/SONIC Labs UK)
		#6 System integration Monika Tarwala (Capgemini)
15:00–15:15	Break	
15:15–16:15	Reconvene, report out from breakout sessions, and form an action plan	Discussion led by Lauriston Hardin (NTIA/ITS), assisted by Ian Wong (Viavi Solutions)
16:15–17:20	Discussion on collaboration Identify projects with strongest support, ask for two people to lead each topic, arrange interim meetings to progress work	Discussion led by Ian Wong (VIAVI) as TIFG co-chair, assisted by Olli Andersson (Telecom Infra Project)
17:20–17:30	Close out	Jeremy Glenn, Emcee
17:30	End of Day 3	