

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

**Panel on Review of the National Institute of Standards and Technology (NIST)
Communication Technology Laboratory (CTL)**

AGENDA

September 16, 17, 18

Day 1 – September 16th <i>Location: NIST Boulder: 325 Broadway, Boulder, CO Building 81, Rm 1A116</i>		
When (MST)	What	Participants
9:00 am - 10:00 am	NIST Welcome & Overview <i>Location: NIST Boulder, Building 81, Rm 1A116</i>	Shyam Sunder, <i>Associate Director for Laboratory Programs</i> <i>Communications Technology Laboratory:</i> Ari Feldman, <i>Acting Director</i> Kristine Tadros, <i>Executive Officer</i> Anne Lane, <i>Chief of Staff</i>
10:00 - 10:15 am	Break	
10:15 - 10:45 am	Strategic Planning <i>Location: NIST Boulder, Building 81, Rm 1A116</i>	<i>Communications Technology Laboratory:</i> Ari Feldman, <i>Acting Director</i> Kristine Tadros, <i>Executive Officer</i> Anne Lane, <i>Chief of Staff</i> CTL Division Chiefs
10:45- 11:15 am	Advanced Communications Standards	Nada Golmie, <i>NIST Fellow</i>
11:30 am - 1:30 pm	Lunch and Poster Session with Early Career Staff <i>Location: NIST Boulder, Building 81, Rm 1A116</i>	Bishal Thapa, <i>Chair</i> Elizabeth Zeitler, <i>The National Academies</i> CTL Staff
1:30 - 2:30 pm	Building Capabilities <i>Location: NIST Boulder, Building 81, Rm 1A116</i>	Ari Feldman, <i>CTL Acting Director</i>
2:30 – 2:45 pm	Break	
3:00 – 4:00 pm	Facilities <i>Location: NIST Boulder, Building 81, Rm 1A116</i>	Ari Feldman, <i>CTL Acting Director</i>

Day 2 – September 17th (3 concurrent sessions)

Location: See each session for location

When (MST)	Agenda Item	Participants
8:30 am - 3:00 pm	<p>Public Safety Communications Research Division Location: PSITC and NIST Building 3</p> <p>8:30-11 am: Location: Meet inside the lobby at the Public Safety Immersive Test Center, FirstNet Authority Headquarters 3122 Sterling Circle, Boulder, CO 80301</p> <ul style="list-style-type: none"> 8:30 am: Arrival and Introductions PSCR Overview & Program Management User Experience Overview & Demo <p>11-11:30: Commute from PSITC back to NIST campus</p> <p>11:45-3 pm: Location: NIST Building 3, Floor 2 Red Rocks 3-2A124</p> <ul style="list-style-type: none"> 11:45 am: Working Lunch (Building 3, Floor 2, Red Rocks Conference Room) – Uncrewed Aircraft Systems Overview Mission Critical Services Overview Location-Based Services Overview Innovation Lab Tour 3:00 pm Return to group in 81-1A116 	<p>Dereck Orr, Public Safety Communications Research Division Chief</p> <p>Brianna Huettel, Deputy Division Chief (Acting)</p> <p>Kerianne Gibney, Strategic Engagement Program Manager</p> <p>Scott Ledgerwood, User Experience Portfolio Lead</p> <p>Terese Manley, Uncrewed Aircraft Systems (UAS) Portfolio Lead</p> <p>Don Harriss, UAS Project Lead</p> <p>Lisa Soucy, Mission Critical Services (MCX) Portfolio Lead</p> <p>Alison Kahn, MCX QoE Project Lead</p> <p>Joe Grasso, Location-Based Services Portfolio Lead</p> <p>Alex Dimopoulos, 3D Object Detection Project Lead</p> <p>John Beltz, Innovation Lab Portfolio Lead</p>
8:30 am - 3:00 pm	<p>Spectrum Technology & Research Division Location: NIST Boulder (Buildings 1, 3, and 24) Meet at the end of Building 1, Wing 3, and walk to 1-3304</p> <ul style="list-style-type: none"> 8:30 am: Arrival and Introductions 8:45 am: Spectrum Technology and Research Division Overview 9:15 am: Optical Time Transfer technical presentation 	<p>Jason Coder, Spectrum Technology and Research Division Chief (Acting)</p> <p>Ian Coddington, Group Leader, Fiber Sources and Applications Group</p> <p>Laura Sinclair, Project Leader, Optical Time Transfer</p>

	<ul style="list-style-type: none"> • 10:00 am: Break • 10:10 am: Take elevator to Optical Time Transfer Laboratory • 10:15 am: Optical Time Transfer lab tour <p>10:45 am: Walk to Building 3 <i>Location: Building 3, Flatirons, 3-1A109</i></p> <ul style="list-style-type: none"> • 11:00 am: National Advanced Spectrum and Communications Test Network (NASCTN) overview and technical presentation (CBRS Sharing Ecosystem Assessment) • 12:00 pm – 1:00 pm: Lunch • 1:00 pm: Walk to Building 24 • 1:10 pm: Lab tours <ul style="list-style-type: none"> ○ Outdoor spectrum measurement system tour ○ National Broadband Interoperability Testbed tour • 1:50 pm: Walk to Bldg 3 <p><i>Location: Building 3, Flatirons 3-1A109</i></p> <ul style="list-style-type: none"> • 2:00 pm: In-situ spectrum measurements • 2:30 pm: Spectrum Sensing and Noise Metrology • 3:00 pm: Return to group in 81-1A116 	<p>Duncan McGillivray, Program Director, NASCTN</p> <p>Adam Wunderlich, Group Leader, Applied Systems Metrology</p> <p>Dan Kuester, Project Leader, Spectrum Sensing and Noise</p> <p>Dazhen Gu, Project Leader, Spectrum Sensing and Noise</p>
8:30 am - 3:00 pm	<p>Radio Frequency Technologies Research Division</p> <p><i>Location: NIST Boulder Building 1, Wing 6 Rm 4604</i> <i>Meet at end of Bldg 1, Wing 6 and walk to 1-4604</i></p> <ul style="list-style-type: none"> • 8:30 am: Arrival and division overview • 8:45 am – 10:15 am RF Metrology and Calibration <ul style="list-style-type: none"> ○ Impedance + Power presentation (Long) ○ Field Strength/Rydberg presentation (Holloway) ○ Power lab tour (Hagerstrom -wing 6) ○ SRI lab tour (Rufenacht- bldg. 81) • 10:15 am: Break • 10:30-Noon 6G Communications <ul style="list-style-type: none"> ○ Channel Measurements presentation (Berweger) ○ Waveform Metrology presentation (Jamroz) ○ High-Frequency Electronics lab tour (Cheron-bldg81) ○ Antenna lab tour (Gordon- Bldg 24) 	<p>Jim Booth, RF Technologies Division Chief (Acting)</p>

	<ul style="list-style-type: none"> • 12:00 pm – 1:00 pm: Lunch in 1-4604 • 1:00 –1:30 pm High Speed Microelectronics Metrology <ul style="list-style-type: none"> ○ Materials presentation + lab tour (Stelson, Afko, Orloff wing 6) • 1:30-3:00 pm Quantum Standards for Communications <ul style="list-style-type: none"> ○ Quantum Standards (Benz) ○ Cryogenic RF Calibrations and Waveform Sampling (Hopkins) ○ Rydberg lab tour (Holloway, Artusio-Glympse, Prajapati, wing6) ○ Quantum Networking (Dennis) • 3:00 pm: Return to group in 81-1A116 	
3:30 pm -5:00 pm	Q&A <i>Location: NIST Boulder, Building 81, Rm 1A116</i>	NASEM Panel, CTL Lab HQ, Division Chiefs

Day 3 – September 18th <i>Location: NIST Boulder, Building 3, Floor 1</i>		
When (MST)	Agenda Item	Participants
12:00 – 1:00 pm	Observations, fact checking, and Q&A <i>Location: NIST Boulder, Flatirons Conference Room</i>	NASEM Panel, CTL Lab HQ, Division Chiefs
1:00 pm	Adjourn	