NSF Workshop on Future Research Infrastructure for the Wireless Edge Agenda

Hyatt Regency Washington DC Hotel Thursday, November 13 and Friday, November 14, 2014

THURSDAY, NOVEMBER 13

08:30 am - 09:00 am 09:00 am - 09:30 am Keynote (Congressional B) Preston Marshall, Google Q & A and general discussions about what large-scale wireless infrastructure could look like (Congressional B) 10:00 am - 10:30 am 10:30 am - 12:00 pm 10:30 am - 12:00 pm 12:00 pm - 01:00 pm 01:00 pm - 02:00 pm 01:00 pm - 03:30 pm 02:00 pm - 04:00 pm 03:30 pm - 04:00 pm Coffee Break (Congressional B) Breakout Session 1 Reports (Congressional B) Breakout Sessions 2 (Congressional B/C/D) Coffee Break (Congressional C/D Foyer)
Preston Marshall, Google O9:30 am - 10:00 am Q &A and general discussions about what large-scale wireless infrastructure could look like (Congressional B) Coffee Break (Congressional C/D Foyer) Breakout Sessions 1 (Congressional B/C/D) Lunch (Congressional B) O1:00 pm - 02:00 pm O2:00 pm - 03:30 pm O2:00 pm - 04:00 pm Coffee Break (Congressional C/D Foyer) Coffee Break (Congressional B/C/D) Coffee Break (Congressional C/D Foyer)
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04:00 pm - 05:00 pm Breakout Session 2 Reports (Congressional B)
05:00 pm - 05:30 pm Planning for Friday (Congressional B)

FRIDAY, NOVEMBER 14

07:30 am - 08:30 am 08:30 am - 10:00 am	Breakfast (Congressional B) Panel (Congressional B) Vanu Bose (Moderator), NSC
	Joseph Soriaga, Qualcomm
	Michael Ha, FCC
	Nada Golmie, NIST
	Rangam Subramanian, NTIA
10:00 am - 10:30 am	Coffee Break (Congressional C/D Foyer)
10:30 am - 12:00 pm	Breakout Sessions 3 (Congressional B/C/D)
12:00 pm - 01:00 pm	Lunch (Congressional B)
01:00 pm - 02:00 pm	Breakout Session 3 Reports (Congressional B)
02:00 pm - 02:30 pm	Closing Remarks (Congressional B)
03:00 pm - 05:00 pm	Report Writing Activities (Congressional B)

TOPICS FOR BREAKOUT SESSION 1

- Research: What new research can be enabled (dream big)?
 - New network architectures? 5G?
 - Low latency applications?
 - Computation to the edge?
 - Mobile cloud and cloud RAN

o **Applications:** What applications can such infrastructure enable

(this is related the previous topic, but focusing more on the end result than the research itself)

- Internet of things research (ubiquitous wireless, highly granular, real-time big data)
- Cyber physical systems (ditto & low latency cloud), cloud based robotics
- Potential for augmenting GPS positioning by local wireless precision time/location
- Health applications
- Network security (better or worse)?
- o Partnership: Drivers for partnership between industry-academia for building city-scale infrastructure
 - Model city

TOPICS FOR BREAKOUT SESSION 2

Outreach and Education: New opportunities for outreach and education

(Think of areas of national priorities)

- Scientific domains
- Public safety, FirstNet
- -Transportation

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- o Operations: Operationalizing, sustenance, and evolution strategies of such infrastructure
- o Policy:
 - Spectrum
 - Security and privacy

INSTRUCTIONS FOR WIRELESS NETWORK CONNECTION

- 1. Check for available wireless signal.
- 2. Connect to SSID: HYATT-MEETING
- 3. Launch a web browser.
- 4. When prompted, enter the Network Key: UOW2014 and click on "submit".
- 5. The conference Welcome Page will display and you can now browse the Internet.

Network Name: **HYATT-MEETING** Network Key/Passkey: **UOW2014**