



IEEE ComSoc ETC Tactile Internet Sub-Committee

ICC 2017 Meeting

Meryem Simsek meryem.simsek@tu-dresden.de

Falko Dressler dressler@ccs-labs.org

Agenda

- ▶ Welcome & Introduction
- ▶ Highlights of the Sub-Committee Meeting Minutes (Globecom 2016)
- ▶ Updates on the Tactile Internet Activities
- ▶ Discussion on the Logo – Some Proposals
- ▶ Teaser Talk by Zaher Dawy
- ▶ Teaser Talk by
- ▶ Updates on the Tactile Internet IEEE standardization activities
- ▶ Any other Business

Meeting Highlights of the Globecom 2016 Meeting

- ▶ It has been requested to inform the TI chair about activities, workshops, tutorials, etc. to add this information to the website
- ▶ More publicity is requested
- ▶ Discussion on the TI logo (to be continued at ICC 2017 meeting)
- ▶ Talks by Carlo Fischione and Oliver Holland

Report of the Chair

► Multiple workshops at flagship conferences

- IEEE ICC 2015: Workshop on "[5G & Beyond – Enabling Technologies and Applications](#)"
- IEEE Globecom 2015: Workshop on "[Ultra-Low Latency and Ultra-High Reliability in Wireless Communications](#)"
- IEEE WCNC 2016: Workshop on "[IEEE International Workshop on 5G & Beyond – Enabling Technologies and Application with focus on the Tactile Internet & Vertical Industry](#)" (workshop programme)
- IEEE Globecom 2016: Workshop on "[Ultra-Reliable and Low-Latency Communications in Wireless Networks \(URLLC\)](#)"
- IEEE Globecom 2016: Workshop on "[Wireless Networking, Control and Positioning for Unmanned Autonomous Vehicles](#)"
- IEEE WCNC 2017: Workshop on "[5G & Beyond – Enabling Technologies and Applications with focus on the 5G Tactile Internet \(5G TACNET\)](#)"
- IEEE Globecom 2017: Workshop on "[Ultra-Reliable and Low-Latency Communications in Wireless Networks \(URLLC\)](#)"

Report of the Chair

► Multiple other activities

- IEEE Globecom 2015: Tutorial on [“5G Tactile Internet: Application, Challenges and First Solutions”](#).
- Globecom 2016: Tutorial on [Leveraging Big Sensed Data in the IoT: Challenges and Future Outlook](#)
- VDE ITG Fachtagung 2016 [“5G Mobile Networks – Towards the Tactile Internet”](#)
- IEEE ComSoc Technology News 2017 [„GLOBAL REACH: WILL THE TACTILE INTERNET GLOBALIZE YOUR SKILL SET?“](#) by Mischa Dohler
- IEEE ComSoc Training 2017, [„The Tactile Internet“](#) by Frank Fitzek and Gerhard Fettweis
- IEEE Globecom 2018, Tactile Internet Track within the Selected Areas of Communications Symposium, by Meryem Simsek

Report of the Chair

- ▶ Please, link the workshop websites to the TI committee website so the workshop can be counted to be supported by the TI committee
- ▶ Special issue in *Proceedings of IEEE* under preparation
 - List of guest editors:
 - Gerhard Fettweis
 - Chih-Lin I
 - Meryem Simsek
 - Most of the potential authors already contacted, some still open
- ▶ Special issue in *IEEE CommMag* Communications Standards Supplement under preparation

Report of the Chair

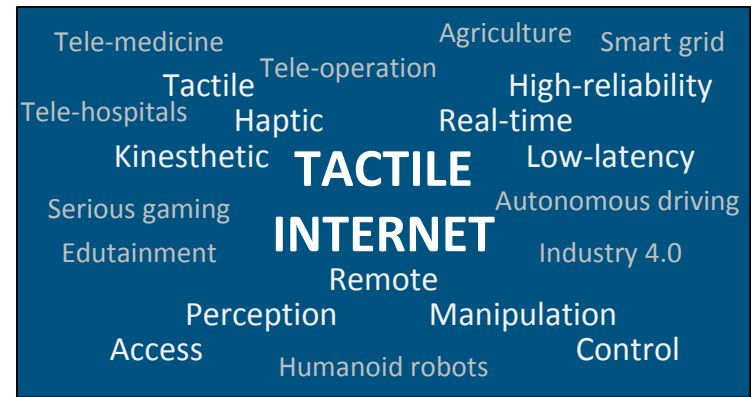
The screenshot shows a web browser window with the URL ti.committees.comsoc.org. The page header features the IEEE ComSoc logo (IEEE Communications Society) and the IEEE logo. Below the header, the text "Tactile Internet Emerging Technical Subcommittee" is displayed. A search bar with "Google™ Custom Search" and a "Search" button is present. A navigation menu includes "Home", "Officers", "Meetings", "Mailing List", "Activities", and "Standardisation". The main content area has a heading "Welcome to Tactile Internet Emerging Technologies Subcommittee" and a sub-image with the IEEE Communications Society logo and the text "Tactile Internet". Below this, there are three paragraphs of text: the first describes the committee's focus on exploring and elucidating all facets of the next generation of "Tactile Internet" technology, business and societal gaps and challenges; the second discusses the impact of extremely low latency in combination with high availability, reliability and security; the third mentions Prof. Dr.-Ing. Dr. h.c Gerhard Fettweis and his work on the tactile internet, including a link to a PDF document.

Any feedback?

<http://ti.committees.comsoc.org/>

Report of the Chair

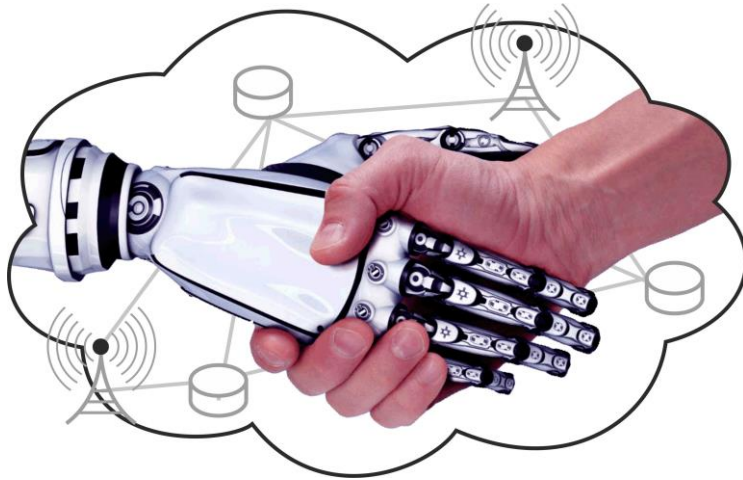
- ▶ Logo as discussed at Globecom 2016:



- ▶ Agreed that left logo is reflecting a GUI
- ▶ Right logo is rather explanatory and will be added to the website as a descriptive figure

Report of the Chair

- ▶ Proposed Logos by Venkatesha Prasad



- ▶ Any feedback?

Report of the Chair

- ▶ Proposed Logos by the chair



- ▶ Any feedback?

Report of the Chair

- ▶ Standardization activities:
- ▶ ETSI: Work item on IPv6 based Tactile Internet within the ISG IPv6
 - Lead by Meryem Simsek
 - Supported Toshiba Research Europe
 - Final version for approval towards a stable draft to be submitted summer 2017
- ▶ IEEE: Working group on the Tactile Internet continues activities; IEEE P1918.1.1 Haptic Codecs has been accepted by IEEE ComSoc Standards Development Board (SDB)

Tactile Internet Definition

“A network or network of networks for remotely accessing, perceiving, manipulating or controlling real or virtual objects or processes in perceived real time by humans or machines”

IEEE P1918.1

Teaser Talks

- ▶ Zaher Dawy, American University of Beirut

Other Business

- ▶ Annual report submitted to the ETC chair by September 30, 2016
 - Evaluation outcome: Come back in 1 year: positive outlook
- ▶ Total number of subscribers to the mailing list: 120 (It was 75 in June'16! ↑)
- ▶ Suggestions for improvements?
- ▶ Further ideas?