IEEE ComSoc™

Tactile Internet Technical Committee

Prepared by:

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Third face-to-face meeting as a Technical Committee

Tuesday May 21, 2019, 10:00-11:30 local time, Shanghai, China

❯ Welcome & Introduction

  ❯ Falko Dressler welcomed participants to the meeting and introduced the meeting. An attendance register was circulated. There were 14 attendees

❯ The Agenda was introduced as follows:
>   Welcome & Introduction
>   Highlights of the Globecom 2018 Meeting
>   Discussion on new activities
>   Discussion on P&Ps
>   Report on standards activities
>   Report on conferences
>   Any other Business

❯ The Agenda was approved by uninimous consent

❯ Highlights of the Globecom 2018 Meeting were given by Falko Dressler
  ❯ TI TC is off to a promising start based on the activities in the past two years
  ❯ Recruiting a webmaster to update a website
  ❯ Start focus groups once enough strength in multiple directions
  ❯ Dr. Giordino presented projects on TI
  ❯ Dr. Holland presented updates on TI standards
  ❯ Proposal on starting a liaison with IEEE 802.1 TSN
  ❯ Potential newsletter
  ❯ Adding best readings to the website

❯ Minutes of the Globecom 2018 meeting were approved by unanimous consent

- ❯ Falko reported on recent activities
  - ❯ New Tactile Internet track at IEEE Globecom 2018 + 2019 SAC Symposium and newly at IEEE Globecom 2020
  - ❯ Discussion on having a joint symposium with IoT starting at ICC 2021
  - ❯ Special issue in JSAC – published
  - ❯ Special issue in Proceedings of IEEE – published
  - ❯ Standardization activities are ongoing
  - ❯ Proposition paper to distinguish from IoT and 5G
    - ❯ Upcoming editorial in Proceedings of IEEE has been published
    - ❯ This and other articles from the special issue can be used for citation
  - ❯ The website has been updated
    - ❯ A new tab on ‚Best readings' has been added
    - ❯ List of various articles has been added
    - ❯ Hint to contact the officers for listing a related article
    - ❯ Meetings including slides and minutes are listed

- ❯ There was discussion on creation of a Newsletter. Most TC have a Newsletter. Falko called for a volunteer. There will be a yearly Newsletter to start, perhaps two per year later. Mithun Mukherjee volunteered

- ❯ Discussion on P&Ps
  - ❯ It was noted that a first draft has been prepared
  - ❯ Key items in P&Ps:
    - ❯ Officers selection and term
    - ❯ TC membership (active and voting member definition)
    - ❯ Voting and election procedure
    - ❯ TC meetings
    - ❯ Maintaining membership lists
    - ❯ Supporting activities
    - ❯ Awards (service, technical contribution, best paper)
  - ❯ It will be considered for approval in the next meeting

- ❯ Oliver Holland reported on standards activities:
  - ❯ IEEE P1918.1 working group on the Tactile Internet continues activities: There has been significant contribution to the use cases and architecture within IEEE P1918.1 and it is close to completion of baseline standard. IEEE 1918.1.1 making good progress on the Tactile Codec, having completed the zero-delay Kinaesthetic Codec work
  - ❯ He highlighted activities within IEEE 802 on Time-Sensitive Networking (TSN) and related white paper on low-latency communications that is being formed therein

- ❯ Falko reported on conferences. The following activities were highlighted:

- ›› 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 program)
- ›› 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)"
- ›› IEEE ICC 2018: Workshop on "5G & Beyond – Enabling Technologies and Applications with focus on the 5G Tactile Internet (5G TACNET)"
- ›› IEEE Globecom 2018: Workshop on "Ultra-Reliable and Low-Latency Communications in Wireless Networks (URLLC)"
- ›› IEEE Globecom 2018, 2019, 2020: TI track in Selected Areas of Communications (SAC) Symposium
- ›› IEEE ICC 2021: Joint symposium with IoT under discussion
- › There was discussion on the TI joint symposium with IoT for ICC 2021. Toktam suggested that support from the Internet TC might be a good alternative. Meryem mentioned that this is difficult as it is only based on the submission number. Falko highlighted that the Adhoc and Sensor Networks TC will swallow IoT. There were two options seriously considered, to be decided later:
  - › Internet TC Co-Sponsoring
  - › IoT TC Merger
- › Finally, the title on the symposium was discussed. The following was arrived at: **Networking for latency-sensitive interaction—enabling AR/VR, gaming, machine remote-control, and human or machine interaction**

- › Items of Other Business were discussed. This included the following:
  - › Total number of subscribers to the mailing list: 157
  - › Website administration
  - › Suggestions for improvements?
  - › Further ideas?

- › The meeting concluded with a well-received invited lecture by Prof. Frank Fitzek, presenting the newly initiated research cluster on the Tactile Internet with human-in-the-loop