

Call for Participation

# IEEE Haptic Codecs for the Tactile Internet

**Kick-Off Meeting Collocated/Near IEEE GLOBECOM 2016**

Sponsored by IEEE Communications Society/Standards Development Board (COM/SDB), and operating within the IEEE Tactile Internet Working Group

**The IEEE Standards Association (IEEE-SA) invites all interested parties to actively participate in the standardization of Haptic Codecs for the Tactile Internet.**

This standard defines haptic codecs for the Tactile Internet (TI). These codecs address TI application scenarios where the human is in the loop (i.e. teleoperation or remote touch applications) as well as scenarios that rely on machine remote control. The standard defines (perceptual) data reduction algorithms and schemes for both closed-loop (kinesthetic information exchange) and open-loop (tactile information exchange) communication. These codecs are designed such that they can be combined with stabilizing control and local communication architectures for time-delayed teleoperation. Further, the standard also specifies mechanisms and protocols for the exchange of the capabilities (e.g. workspace, the number of degrees of freedom, amplitude range, temporal and spatial resolution, etc.) of the haptic devices. For more information visit the P1918.1.1 - Haptic Codecs for the Tactile Internet project website (<https://standards.ieee.org/develop/project/1918.1.1.html>).

## Who should participate

- Researchers, design engineers, implementers and educators who are involved in haptic signal processing, control and communication
- Manufacturers of haptic input and output devices
- Tele-X application providers (tele-surgery, tele-training, tele-rehabilitation, tele-mining, tele-robotics, etc.) and the gaming industry

## How to participate

This standard will be developed by the Haptic Codecs sub-Working-Group of the IEEE Tactile Internet Working Group. Please follow the instructions provided in the IEEE P1918.1.1 Working Group website ([http://grouper.ieee.org/groups/1918/1/haptic\\_codecs/index.html](http://grouper.ieee.org/groups/1918/1/haptic_codecs/index.html)) to join the standardization of Haptic Codecs for the Tactile Internet.

## First (Kick-Off) Meeting to be held 8-9 December 2016 in Fairfax, VA, USA

The Group's first meeting will be held close to the IEEE GLOBECOM 2016 conference, comprising the timescales 2pm - 5.30pm on the 8 December, and 2pm - 3.30pm on the 9 December (local time). For more information and a link to the registration visit the IEEE P1918.1.1 Meeting Information webpage ([http://grouper.ieee.org/groups/1918/1/haptic\\_codecs/meeting\\_information.html](http://grouper.ieee.org/groups/1918/1/haptic_codecs/meeting_information.html))

Noting that this activity is within the IEEE Tactile Internet Standards Working Group (IEEE 1918.1, <http://grouper.ieee.org/groups/1918/1/>), it is strongly preferable if you try to attend the entire two days of the meeting, i.e., 9am - 5:30pm on both days, to also participate in the IEEE Tactile Internet Standards Working Group activities. This will allow you to work towards gaining voting membership, and to follow the broad Tactile Internet standards context, e.g., the architectures being defined as some of the key contexts in which the Haptic Codecs will operate. The Haptic Codecs and the Tactile Internet standards meetings will occur in the same room/location.

Contact the Haptic Codecs Group Chair at [Eckehard.Steinbach@tum.de](mailto:Eckehard.Steinbach@tum.de)