

## Third annual GNSS Raw Measurements Taskforce Workshop

Room 156, GSA Headquarters, Prague, 26 June 2019

- 09:00 – 9:30 **Welcome coffee**
- 09:30 – 9:40 **Welcome by the Head of Market Development Department**  
*Fiammetta Diani, GSA*
- 09:40 – 9:50 **What`s New in GNSS Raw Measurements Task Force**  
*Martin Sunkevic, GSA*
- 9:50 – 10:20 **New Tools for Android GNSS Measurements**  
*Frank van Diggelen, Google*
- 10:20 – 10:45 **GNSS Raw Measurements Experience from App Competitions**  
*Justyna Redelkiewicz, GSA*  
  
*Paolo Crosta, European Space Agency*
- 10:45 – 11:00 **Low Power Tracking Demonstration Toolset**  
*Franco de Lorenzo, uBlox*
- 11:00 – 11:15 **Coffee break**
- 11:15 – 12:45 **GNSS Raw Measurements for Robustness**  
  
*Yoav Zangvil, Regulus Cyber, “A Close-up on Regulus’ GNSS Resiliency Report: Testing the Effects of Spoofing on Android Systems and other Applications”*  
  
*Luis Serrano, STMicroelectronics, “Teseo V: an OS-NMA Enabled Dual-band Chipset”*  
  
*Sophie Damy, JRC, “JRC Testing Capabilities for OS-NMA Enabled Receivers”*  
  
*Moises Navarro-Gallardo, Airbus, “OS-NMA Implementation in Smartphones”*  
  
*Annekatrien Debien, SpaceTech, “Enabling the Digitalisation of Agri-government Controls through Galileo and EGNOS”*  
  
*Flavio Sbardellati, GSA, “Upcoming R&D Funding Opportunities”*
- 12:45 – 13:45 **Lunch**



13:45 – 15:15

**GNSS Raw Measurements for High Accuracy Applications (Part 1)**

*Miquel Garcia-Fernandez, Rokubun, “Smartphone Dual-frequency GNSS Data Pre-processing for High Accuracy Applications”*

*Jannes Wubbena, GEO++, “Smartphone (PPP-) RTK: First Results and Challenges”*

*William Roberts, NSL, “FLAMINGO: Encapsulation of High Accuracy Positioning Service for Smartphones and IoT”*

*Lotfi Massarweh, O ThiSaVRoS, “GADIP3 app: GNSS Android-based Dual-frequency Iono-estimated Precise Point Positioning”*

*Jorge Morán, ESSP, “EDAS Differential GPS Corrections for Smartphones”*

*Roland Wagner, President of the Association of Geoinformatics, “Mobile 2.0 with Location Based Apps (LBA) 2.0: From Read to Write with “Groundediting”*

15:15 – 15:30

Coffee break

15:30 – 17:00

**GNSS Raw Measurements for High Accuracy Applications (Part 2)**

*Arnaud Ginestet, CS Systemes D`Information, “Multi-constellation Navigation Messages Introduction Inside a Mobile Application”*

*Julia Diekert, Reiner Jäger, University of Applied Sciences Karlsruhe, “NAVKA SmartphOne RTK: Cycle Slip and Ambiguity Robust GNSS Algorithms & Software for GNSS Raw Data on the Smartphone”*

*Himanshu Sharma and Mohamed Bochkati, University of Bundeswehr, “RTK with Smartphone and the Need of Sensor Fusion”*

*Pavel Vaclavovic, RIGTC, “Analyses of Raw GNSS Observations Collected by the Android Device Xiaomi Mi8”*

*Antoine Grenier, Celine Ragoin, Valerie Renaudin, IFSTTAR, “Enabling Precise Point Positioning on GNSS Dual-frequency Smartphones”*

*Marco Fortunato, “Sapienza” University of Rome, “GNSS-Based Heading and Velocity Precise Estimation for Smartphone Pedestrian Navigation”*

17:00 – 17:15

**Final Remarks**

*Justyna Redelkiewicz, GSA*