

**LIAISON STATEMENT****Title:** Liaison on Complete Platform Integrity for 3GPP Infrastructure**Date:** 28 December 2014**From:** TCG Trusted Mobility Solutions WG**Contacts:** Alec Brusilovsky ([alec.brusilovsky@interdigital.com](mailto:alec.brusilovsky@interdigital.com)) TCG TMS Co-ChairCarlin Covey ([carlin.covey@freescale.com](mailto:carlin.covey@freescale.com)) TCG TMS Co-ChairIra McDonald ([blueroofmusic@gmail.com](mailto:blueroofmusic@gmail.com)) TCG TMS Co-Chair**To:** 3GPP SA3 (security)**Contacts:** [Anand](mailto:anand@BQ.JP.NEC.COM) Prasad (anand@BQ.JP.NEC.COM)[Mirko](mailto:Mirko.Cano@ETSI.ORG) Sovero Cano (Mirko.Cano@ETSI.ORG)3GPP Liaisons ([3gppliaison@etsi.org](mailto:3gppliaison@etsi.org))

Response To: See above contacts

Actions Requested: Yes – see below

Attachments: TCG Liaison Agreement template

Greetings,

TCG Trusted Mobility Solutions (TMS) WG is pleased to learn of 3GPP SA3 interest in TCG technologies. The purpose of this Liaison Statement is to propose the establishment of a formal liaison relationship between 3GPP and TCG. In addition, TCG TMS WG would like to inform you of our ongoing work item relating to complete platform integrity for 3GPP Infrastructure in MNO networks.

Key benefits of our proposed formal liaison between TCG and 3GPP are:

- Early access to new TCG draft standards
  - Adoption of NFV requirements in TCG standards
  - Identification of gaps for 3GPP technologies support in TCG standards
- Accelerated development of new TCG draft standards
  - New and revised specifications for 3GPP support using TCG standards
- Framework for complete platform integrity for MNO-Infrastructure using COTS servers
  - Boot-time – trusted boot, trusted hypervisor load, and trusted OS load
  - Run-time – integrity assessment, reporting, and active maintenance
  - Crash-time – mitigation of state/data loss and real-time fail-over

The TCG TMS WG (Trusted Mobility Solutions) has recently adopted a new NFV work item and started our requirements analysis, with the following target timelines:

- Identify applicable *\*existing\** TCG technologies for NFV Infrastructure  
- 30 days
- Identify NFV Infrastructure best practices and solution approaches  
- 60 days
- Identify necessary *\*new\** TCG protocols or protocol extensions  
- 30 days
- Specify requirements and high-level designs for *\*new\** TCG protocols  
- 90 days
- Facilitate rapid designs of *\*new\** TCG protocols by TCG Technical WGs  
- 90 days
- Facilitate reference implementations of *\*new\** TCG protocols (e.g., by TCG academic members)  
- 90 days

**Actions Requested:** TCG TMS WG kindly requests 3GPP SA3 to:

- Review and consider information in this Liaison Statement and the attached materials.
- Start internal discussions about establishing a formal liaison relationship with TCG.
- Notify TCG TMS about actions for TCG to take for establishing a formal liaison relationship between TCG and 3GPP SA3.

#### **Next TCG Members Meeting**

- Date: 23-27 February 2015
- Location: Catamaran Resort Hotel, San Diego, California, USA

#### **Regular TMS WG Teleconferences**

- Date/Time: Mondays and Fridays at 12-1pm US Eastern time
- Access Info: Available upon request

Cheers,

- Alec Brusilovsky, Carlin Covey, Ira McDonald (co-chairs of TCG TMS WG)

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### **Background**

#### **Trusted Computing Group (TCG) – Where trust begins...**

- Trusted Computing Technologies
  - Trusted Platform Module (TPM) – hardware root-of-trust & key storage
  - Trusted Network Connect (TNC) – access control & endpoint compliance
  - Self-Encrypting Drive (SED) – hardware encryption & fine-grained locking
  - Interface specs across multiple OSs and platforms for trusted data, devices, and networks
- Trusted Computing Platforms
  - Cloud/SDN, Virtual Machines, Servers, Desktops, Mobile Devices, Automobiles, Embedded Systems, Internet of Things, and more
- Formal Liaisons
  - Global Platform, Mobey Forum, ISO, IEEE, IETF, DMTF, OASIS, and more

#### **TCG Trusted Mobility Solutions (TMS) – End-to-end Solutions and Best Practices**

- Consumer, enterprise, and MNO end-to-end mobile solutions
- Coordination and collaboration with all TCG WGs and external standards bodies
- Formal Liaisons
  - Global Platform, Mobey Forum, ETSI and Open Mobile Alliance (both in progress)
- Current work items
  - Mobile Device Use Cases v2 – collaboration w/ Mobey Forum on mobile banking and mobile payments
  - Mobile Device Framework v1 – end-to-end enterprise mobile device solutions framework
  - NFV Framework v1 – complete platform integrity for NFV in MNO networks

### **TCG Work Groups – relevant for 3GPP Infrastructure**

- MPWG – Mobile Platform WG – trusted mobile devices
  - TPM 2.0 Mobile Reference Architecture – firmware & discrete TPMs
  - TPM 2.0 Mobile CRB Interface – cross-platform TPM driver interface
- IWG - Infrastructure - integration of TCG technologies into enterprises
  - Platform Trusted Services Interface - remote attestation
- PC Client WG – desktop/laptop/tablet architecture, interfaces, and profiles
  - PC Client Specific Platform TPM 2.0 Profile
- Server WG - high-availability servers
  - Generic Server, Server ACPI, EFI Platform, EFI Protocol
- Storage WG
  - Opal SED – Self-Encrypting Drives – highest data security w/ locking partitions
- TMI WG – Trusted Multi-Tenant Infrastructure – trusted Cloud/SDN solutions
  - TMI Use Cases, TMI Reference Model
- TNC WG – Trusted Network Connect – access control and endpoint compliance
  - TNC posture protocols contributed to IETF NEA - published as IETF RFCs
  - TNC metadata repository, industrial security metadata, SWID tags, compliance
- TPM WG – Trusted Platform Module – hardware-based root of trust
  - TPM 2.0 Library, TCG Algorithm Registry
- VPWG – Virtualized Platform – multi-persona, isolation, migration
  - Virtualized Trusted Platform Architecture - virtual TPMs