Certification News

Board Elections

Representatives of BlackBerry, China Mobile, NTT DOCOMO, Samsung, Sprint and Telefonica elected to GCF Board

Page 2

Performance Metrics

Standardised reporting on device attributes that are complementary to interoperability

Page 3

Meeting Schedule

Find out where GCF will be meeting during 2015

Page 4

CDMA certification transfers to GCF

The Certification of CDMA2000 (3GPP2) devices transferred to the Global Certification Forum (GCF) on 1 December 2014. Since this date, the certification scheme operated by the CDMA Certification Forum (CCF) has been closed to new devices. Certification of CDMA2000 devices submitted to CCF before 1 December will be completed under the prior scheme. GCF is now the recognised certification scheme for all future CDMA2000 devices.

Responsibility for the ongoing maintenance and future development of CDMA2000 device certification and the associated test case development is now the responsibility of two new GCF agreement groups - the Conformance and Interoperability Group 2 (CAG2) and Test Case Development Agreement Group (TCAG2).

Extending the certification scheme for 3GPP wireless technologies (LTE, 3G/WCDMA and GSM) to include CDMA2000 devices builds on GCF's core philosophy of 'test once, use anywhere'. A common certification scheme embracing 3GPP and 3GPP2 wireless technologies has the potential to realize efficiencies and generate benefits across mobile telecommunications and other industries using mobile technologies.

The maintenance and development of CDMA device certification is fast becoming "business-as-usual" within GCF. The fifth CAG2 meeting (CAG2#5) took place at the end of October, hosted in Washington D.C. by CTIA. The meeting attracted 37 attendees who signed-off a number of IT and process initiatives which paved the way for the formal transfer of CDMA certification to GCF. Looking forward, Chris Hiesberger of Sprint was elected Chair and Luis Magana of PCTest Lab Vice-Chair for 2015-16.

New M2M Task Force

Some industry analysts are predicting that the number of products connected to 3GPP/3GPP2 networks could vastly exceed the number of in-service mobile devices by 2020. GCF's Strategy 2015+ Task Force concluded this gives Certification an opportunity to support the emerging M2M business models of current and potential members while helping to ensure M2M devices are of sufficient quality, are interoperable with networks and do not present threats to network stability.

GCF's Steering Group has established a task force to consider in greater detail the strategies that need to be put in place if GCF Certification is to fulfill this potential and benefit the M2M/Internet of Things (IoT) business environment.

As well as considering standards relevant to network-to-M2M device interoperability and network stability

Steering Group meets in Malta

GCF members gathered in Malta in early December 2014 for the 61st meeting of the Steering Group. SG#61 was hosted by Setcom.

Several Work Item Proposals (WIPs) were approved based on enhancements to 3GPP standards. By bringing enhancements introduced through successive 3GPP releases within GCF Certification, a manufacturer is able to demonstrate that its devices can deliver the enhanced functionality for the benefit of operators and end-users.

LTE security: 3GPP RAN5 has created an additional test case to close a validation gap relating to the "separation bit", an important LTE security feature. This proposal recommends adding this test case to GCF Certification.

EPS TDD-UMTS FDD Inter-RAT RRM: 3GPP Rel-8 and Rel-9 introduced enhancements to facilitate mobility between LTE TDD and 3G FDD radio technologies. Two work item proposals have been approved covering Rel-8 and Rel-9 Enhancements respectively.

A new NFC WIP - **Continued Evolution of UICC-based NFC Services -** will update GCF's Certification Criteria to reflect the latest refinements to GSMA NFC Handset Testbook V5.0 TS.27 due to be published in Q1 2015. The Work Item proposal covers UI behaviour & deployment, tag reading/writing, communication protocol, NFC device capabilities and NFC service remote administration.

The meeting also approved a new CDMA-related Work Item – **MMSS.** Based on the CCF Multi-Mode System Selection Test Specification, this allows for Operators deploying devices supporting both 3GPP and 3GPP2 technologies to choose and select the most appropriate bearer technology during various mobility management scenarios in both home and roaming networks.

The process for **3GPP2 Reduced Core Device Endorsement,** which defines a reduced certification test requirement for devices based on certain agreed platforms, was also discussed. GCF's certification requirements have been developed to be open and transparent, and it was agreed that the concepts in this new process could benefit

from a further review against GCF processes and principles. The work will be done by GCF's certification process experts in the long-standing MMCP Task Force.

Five Directors elected to GCF Board

GCF is required by its Articles of Association to hold an Annual General Meeting (AGM) to complete various governance formalities including the election of Board Directors. GCF's AGMs are typically co-located with the final SG meeting of the year. AGM#7 took place in Malta during SG#61.

GCF's Board includes six directors elected by Manufacturer Members and another six elected by Operator Members. Directors are elected for two-year terms and three board seats from each group fall due for election every year. Five candidates stood for the three operator vacancies.

Xiao Shanpeng of China Mobile, Nick Baustert of Sprint and Colin Hamling, Telefonica Moviles (*left-to-right above*) were elected.

Charlie Bishop of BlackBerry and Stoyen Baev of Samsung (*left-to-right above*) were elected to the Board by Manufacturer Members. An Extra-Ordinary General Meeting will be co-located with SG#62 in March to fill the one remaining vacancy for a Manufacturer Board Member.

Tim Evans of NTT DOCOMO (*left*), who has been elected to serve as Steering Group Vice Chair from 1 January 2015 (and SG Chair in 2016), will also sit on the Board as an ex-officio Director alongside the SG Chair, Juergen Meyer of BlackBerry. The full GCF Board is listed on the GCF website.

Conformance & Interoperabilty Agreement Group

7 Layers hosted the 40th meeting of the Conformance & Interoperability Group at Newport Beach, CA, USA in mid Octobe 2014.

Valerie Townsend (Panasonic) and Wolfgang Schubert (Rohde & Schwarz) were re-elected to the roles of CAG Chair and Vice-Chair respectively, for a two-year period (2015-16) covering the meetings CAG#41 to CAG#48.

The following Work Items, which are used to manage GCF certification requirements, were activated for certification at CAG#40, and are included in the GCF Certification Criteria from GCF-CC v3.56.0:

- E-UTRA/EPC Dual mode (FDD/TDD) Rel-9 FDD Band 01 - TDD Band 41
- E-UTRA/EPC Dual mode (FDD/TDD) Rel-9 FDD Band 26 - TDD Band 41
- Carrier Aggregation for LTE (Release 10 and later) for the following band combinations:
  - 01&19, 03&19, 03&05, 03&07, 07&20
- E-UTRA MBMS Rel-9 FDD Band 04
- Single Radio Voice Call Continuity in alerting phase (aSRVCC) for LTE bands 01, 03, 19
- Release 10 EPS & EUTRA Enhancements FDD for Bands 03, 04, 07, 13, 20, 25, 26
- Release 10 EPS Enhancements EPS TDD-GERAN Inter-RAT Protocol Conformance Testing
- A5/4 Conformance Testing
- GEA4 Conformance Testing

Field Trials Agreement Group

The Field Trials Agreement Group also met in Newport Beach, CA, USA, immediately after CAG#40

Michael Ciplajevs of 7Layers and Martin Sauter of Deutsche Telekom were elected as FTAG Chair and Vice Chair respectively for 2015–16 covering meetings FTAG#38 to FTAG#45.

In addition to the regular maintenance of work items to ensure on going alignment of GCF Field Trials to GSMA TS.11, two new work items covering RCS 5.1 (joyn Blackbird) and VoLTE Field Trial requirements were activated in GCF Certification.

Field Trial Qualified Operator (FTQ) declarations were also updated to enable FTQ Operators to support the introduction of these new field trials.

GCF Office expands

GCF has expanded its technical support and operations team to support CDMA-related activities and the activities emerging from the strategy review endorsed by SG#60 in September 2014.

Bruce Jolly, former General Manager of the CDMA Certification Forum, joins GCF as Business Development Manager to engage with the mobile industry in the growth markets of Latin America and Africa as well as supporting existing initiatives in other regions.

Dennis Fu will complement this activity as GCF's representative in the large, important and influential Chinese market. Asif Hamidullah takes up the role of CDMA technical lead to support CAG2 and TCAG2. Both Dennis and Asif also join GCF from CCF.

Richard Machin, who joins from IOTAS, will support regional and M2M development activities with market analytics.

Key Performance Metrics

GCF's Key Performance Metrics programme is optional and complementary to GCF Certification and allows manufacturers to quantify and report in a standardized way on agreed aspects of mobile device performance that do not necessarily, or directly, relate to interoperability.

Current GCF Key Performance Metrics cover battery life, acoustic performance, OTA antenna performance, and data throughput.

The programme allows manufacturers to choose which performance characteristics to quantify - giving them flexibility to address performance attributes most relevant to the device and its intended use while maintaining control of the commercially sensitive performance data. Test results are only available to GCF's Operator members under the Manufacturer's control.

The programme is maintained by the Performance Agreement Group (PAG). Roy Church of Samsung has recently taken over as PAG Chair after Ramin Afchar of Vodafone stepped down. A new PAG Vice Chair will be elected at the Group's next meeting in April.

PAG is promoting awareness of the GCF Key Performance Metrics programme by publishing more in-depth information in a new dedicated section of GCF's public website. An overview of all the metrics can also be downloaded as a White Paper.

Membership Matters

The following companies have joined GCF during the last three months.

Associate Operators
- DISH Network, USA

Manufacturers
- Bullitt Mobile, UK
- Kazam Mobile, UK
- LG Innotek, Korea
- Shenzhen Fortuneship, China
- Zebra Technologies, USA

Observers
- Alcatel Lucent, USA
- KEOLABS, France
- Shanghai Anywhere Testing, China
- Skylink Design, USA

A record total of 46 companies have joined GCF during 2014.

Membership Fees for 2015

Membership fees for 2015 (displayed, right) have been held at 2014 levels. A supplementary Participation Fee is payable by members involved in GCF's CDMA-related activities. For 2015, the CDMA Participation Fee is 50 per cent of the annual fee for the relevant membership category.

the Task Force will also consider how to ensure GCF certification can be made relevant to the M2M ecosystem. Input is being sought from all stakeholders and interested parties.

The M2M Task Force will build on the Automotive Task Force's research into the impact of "connected vehicles" on mobile networks. With vehicles being mass-produced in factories that supply multiple countries, a large proportion of connected vehicles will typically operate in a "permanent roaming state" and have an explicit need for interoperability.

The Automotive Task Force will present its final report on the needs of the automotive sector and operators' M2M business units to SG#62 in March 2015.

Acoustics Harmony Task Force

Minimising duplication of testing is central to the ethos of GCF. SG#61 established a Task Force to investigate broader harmonization of audio test plans and test cases with industry fora such as CTIA, PTCRB and GSMA.

Success could mean manufacturers and operators will be better equipped to efficiently and cost-effectively evaluate audio characteristics while allowing for different levels of implementation.

Membership Category	2015 Annual Fee
Operator Member	€11,000
Associate Operator Member	Complimentary
Manufacturer Member	€11,000
Associate Manufacturer Member	€5,500
Client Vendor Member	€5,500
Observer Member	€5,500

2015 Meeting Schedule

Q1
CAG#41 / FTAG#38:
① Dubai, UAE, Jan

CAG2 / TCAG2#6:
② San Diego, CA, USA, Feb

SG#62:
❶ Orlando, FL, USA, Mar

Q3
CAG#43 / FTAG#40:
⑤ Malaga, Spain, Jul

CAG2 / TCAG2#8:
⑥ Portland, OR, USA, Jul

SG#64:
❸ Germany, Sep

Q2
CAG#42 / FTAG#39:
③ Minneapolis, USA, Apr

CAG2 / TCAG2#7:
④ Kansas City, KA, USA, Apr

SG#63:
❷ Shanghai, China, Jun

Q4
CAG#44 / FTAG#41:
⑦ Beijing, China, Oct

CAG2 / TCAG2#9:
⑧ Dallas, TX, USA, Nov

SG#65 / AGM#8:
❹ Italy, Dec