



3RD GENERATION  
PARTNERSHIP  
PROJECT 2  
"3GPP2"

Summary of  
cdma2000 Technology Workshop  
14 June 2012 - Guangzhou, China

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# Background

- As chartered by the 3GPP2 SC, the SC 2012 Workshop Planning AdHoc planned and executed a 3GPP2 Workshop as follows:

**cdma2000 Technology Workshop**

**Grand Hyatt Guangzhou**

**Ballroom III**

**12 Zhujiang West Road, Pearl River New City**

**Tianhe District Guangzhou, China**

**Thursday 14 June 2012 - 9:00 AM to 6:00 PM**

# Workshop Agenda

ID	AGENDA ITEM	PRESENTER	START TIME	DURATION	STATUS	CONTRIBUTION
1	Welcome and Introductions	Cheryl Blum (SC Chair)	9:00 AM	0:15	STABLE	SC-WKSP-20120417-009
2	Agenda	David Crowe (Workshop Chair)	9:15 AM	0:10	STABLE	SC-WKSP-20120613-003
3	cdma2000 Market Overview	Sam Samra (CDG)	9:25 AM	0:15	STABLE	SC-WKSP-20120613-004
4	cdma2000 Air Interface Releases	Ed Tiedemann (TSG-C Chair)	9:40 AM	0:30	STABLE	SC-WKSP-20120613-010
<b>AM BREAK - BALLROOM FOYER</b>			10:10 AM	0:15		
5	Femtocells - Standardization	Jack Nasielski (TSG-X MMD Chair)	10:25 AM	0:15	STABLE	SC-WKSP-20120613-005
6	User Services	Marvin Bienn (TSG-X Chair)	10:40 AM	0:30	STABLE	SC-WKSP-20120613-016
7	cdma2000 Card Environments and Provisioning	Doug Dunn (TSG-C WG1 Chair)	11:10 AM	0:30	STABLE	SC-WKSP-20120613-006
8	M2M	Jun Wang (TSG-X PDS Vice-Chair) Rashid Attar (Qualcomm)	11:40 AM	0:30	STABLE	SC-WKSP-20120613-017R2
<b>LUNCH - MARKET CAFÉ (voucher required)</b>			12:10 PM	1:30		
9	Operator Network Improvements	Jane Brownley (Vision AdHoc Chair)	1:40 PM	0:20	STABLE	SC-WKSP-20120417-012
10	Interworking with LTE	Mike Dolan (TSG-X PDS Chair) Tony Lee (TSG-C SWG2.2 Chair)	2:00 PM	0:30	STABLE	SC-WKSP-20120613-009R1
11	Overview of 3GPP2 Development Strategies	David Crowe (Workshop Chair) Jane Brownley (Vision AdHoc Chair)	2:30 PM	0:20	STABLE STABLE	SC-WKSP-20120613-008 SC-WKSP-20120613-007
12	CDMA Device Work in GHRC	Baorong Li (GHRC)	2:50 PM	0:20	STABLE	SC-WKSP-20120605-026
<b>PM BREAK - BALLROOM FOYER</b>			3:10 PM	0:15		
13	Panel Discussion: User Needs - Consumer/business market trends - Popular features/phone types - Unanswered needs - Market trends (data usage, features)	Cheryl Blum (SC Chair)* Yuezhen Wang (China Telecom) Gang Nui (China Telecom) Amit Sethi (Smartfren) Marvin Bienn (TSG-X Chair)	3:25 PM	0:45	STABLE	SC-WKSP-20120605-006 SC-WKSP-20120613-011 SC-WKSP-20120613-012
14	Panel Discussion: M2M - Specific applications for wireless M2M - Network challenges for M2M - M2M Device issues - Successes/Case studies - Testing Issues	Ed Tiedemann (TSG-C Chair)* Gang Niu (China Telecom) Ping Huang (Agilent) Yonggang Fang (ZTE) Guodong Xue (Huawei) Dennis Fu (CCF) Jun Wang (TSG-X PDS Vice-Chair) Rashid Attar (Qualcomm)	4:10 PM	0:55	STABLE	SC-WKSP-20120613-013 SC-WKSP-20120613-014 SC-WKSP-20120605-020R1 SC-WKSP-20120613-015 SC-WKSP-20120605-007
15	Summary of Identified Issues	TSG Chairs	5:05 PM	0:20	NA	
16	Closing Remarks	Cheryl Blum (SC Chair)	5:25 PM	0:05		
17	Adjournment		5:30 PM			
<b>RECEPTION - BALLROOM FOYER</b>						
<b>TOTAL TIME</b>				<b>8:30</b>		

# Workshop Participation

- Meeting Planner summary of Workshop participation:
  - 97 persons attended the Workshop (including staff)
  - An estimated 45 persons attended who were not regular participants at 3GPP2 meetings
  - 6 participants from 3 non-member companies. Those are Axesstel, Inc., Eastcompeace Smart Card Co., Ltd. & PT. Smartfren Telecom Tbk.

# Identified Issues (1 of 6)

- CDMA 1x and EV-DO Network Enhancement (China Telecom) - **How to improve capacity with limited spectrum?**
- Mobile Internet Trends (China Telecom) - **Support for the following business models and applications**

- Precise Advertising
- Premium service
- Virtual goods
- Payment channel fee
- Commission fee
- Derived products

- SNS mobile OS
- Mobile payment
- Augmented Reality
- Mobile advertisement
- HTML5 based cloud apps
- SNS enabled data mining

**SNS = Social Networking Services**

## Identified Issues (2 of 6)

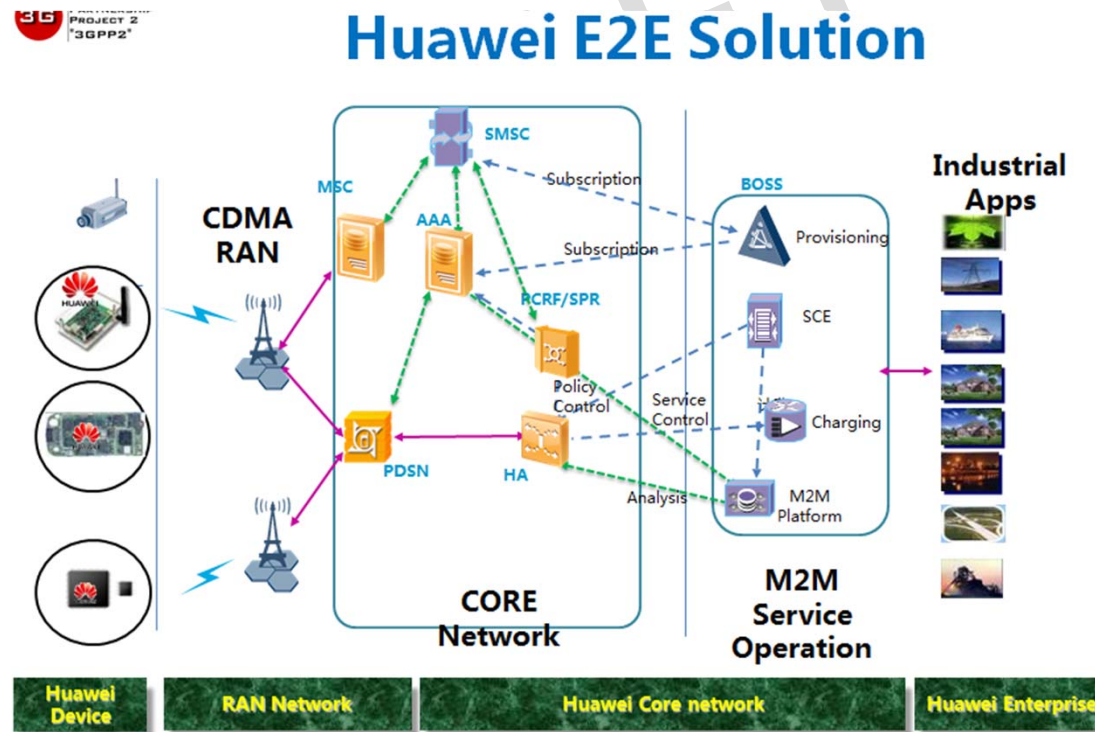
- Smartfren Requirements - Ability to send SMS over HRPD.
- Smartfren Requirements - Need to be able to aggregate more than three (3) carriers for HRPD.
- Smartfren Requirements - Need support for non-contiguous carrier aggregation across multiple bands for HRPD.

## Identified Issues (3 of 6)

- M2M Communication (China Telecom) - Telecom network should be improved to support machine-type communication.
  - Data Communication in most cases
  - A lot of small data burst
  - Terminals use uplink channels mainly
  - Automatic communication behavior because of software in terminals
- M2M Communication (China Telecom) – Need IOT Development for M2M Services.
- It's Time for “Internet of Things” (Agilent) - Need IOT Development for M2M Systems.

# Identified Issues (4 of 6)

- Key Next Big Thing-M2M (Huawei) – Consider enhanced E2E Solutions.





# Identified Issues (5 of 6)

- CCF M2M Certification: Demystifying the testing for M2M devices - **A unified and standardized approach to testing is essential.**



## Identified Issues (6 of 6)

- WiFi is a complementary yet integral part of most 3G and 4G wireless networks (China Telecom). Smart Card or Card services should be available even if using a technology like WiFi.
- Standardization activities should focus on enhancing CSIM and not R-UIM (GHRC).

# Summary of Identified Issues

ISSUES (Issues already developed or in development are noted in blue)	Potentially Impacted TSGs			
	TSG-A	TSG-C	TSG-S	TSG-X
How to improve capacity with limited spectrum?		X		
Support for future business models and applications.		X	X	X
<b>Ability to send SMS over HRPD.</b>		X		X
<b>Need to be able to aggregate more than three (3) carriers in HRPD.</b>		X		
<b>Need support for non-contiguous carrier aggregation across multiple bands in HRPD.</b>		X		
<b>Telecom network should be improved to support machine-type communication.</b>	X	X	X	X
Need IOT Development for M2M Services.		X		
Need IOT Development for M2M Systems.		X		
<b>Consider enhanced E2E Solutions.</b>			X	X
A unified and standardized approach to testing is essential.		X		
<b>WiFi is a complementary yet integral part of most 3G and 4G wireless networks.</b> Smart Card or Card services be available even if using a technology like WiFi.	X	X	X	X
Standardization activities should focus on enhancing CSIM and not R-UIM.		X		