

ERICSSON PRODUCT READINESS AND CONSIDERATIONS ON NETWORK DEPLOYMENT

Ming Chen, Ph. D
Portfolio Expert
Ericsson Great China and North East Asia

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AGENDA



Global LTE Market Update

Considerations on B39 Deployment

B39 Product Availability



ERICSSON TD-LTE MARKETS



INITIAL DEPLOYMENTS IN BAND 38 (2.6GHZ) AND BAND 40 (2.3GHZ)

North America

- › Discussions on-going



China

- › Good performance in CMCC field trial

India

- › First contract awarded, [Augere](#)
- › LTE TDD performance advantage proven in trials

Latin America

- › Trials

Saudi/Middle East

- › Main Supplier to [STC](#)
- › LTE TDD Performance advantage in service

SEA/Australia

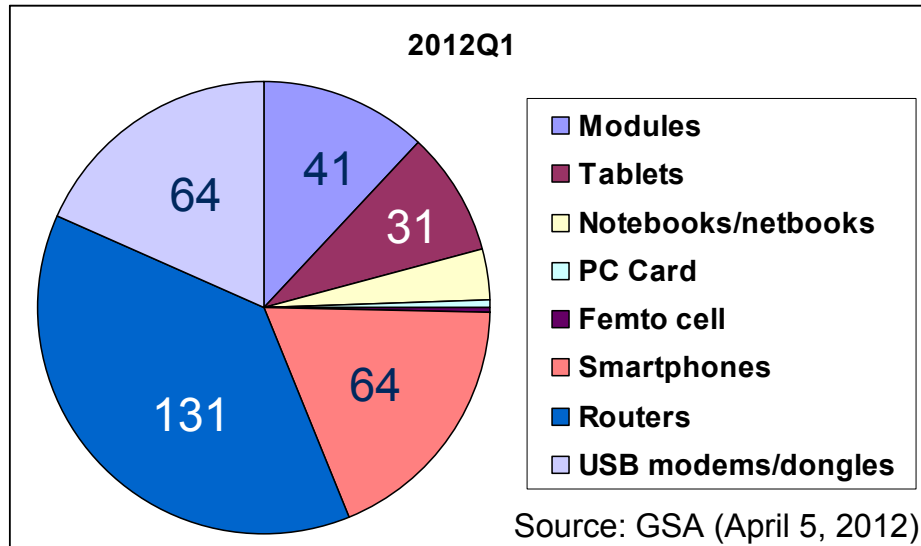
- › [NBN](#) rolling out

TD-LTE IS NOW A
REALITY FOR UNPAIRED
SPECTRUM GLOBALLY

LTE ECOSYSTEM QUICKLY DEVELOPING



~350 LTE UEs

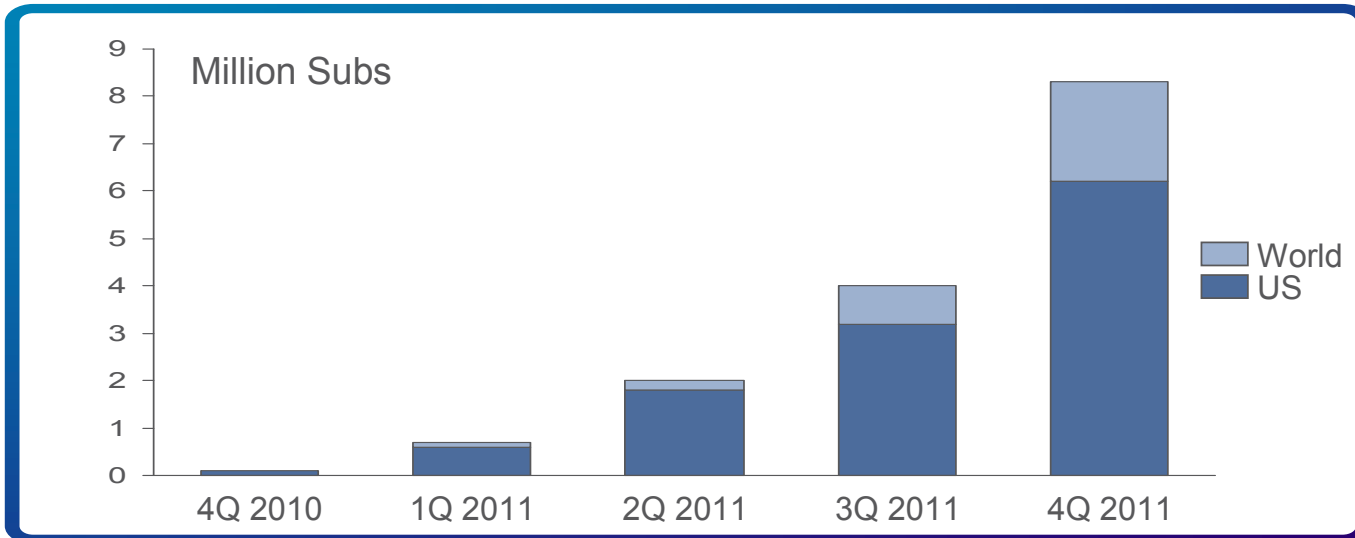


LTE FDD	
700 MHz	142 devices
800 MHz	52 devices
1800 MHz	50 devices
2600 MHz	65 devices
800/1800/2600 MHz	43 devices
AWS	51 devices

LTE TDD	
2300 MHz <i>Band 40</i>	36 devices
2600 MHz <i>Band 38</i>	36 devices
2600 MHz <i>Band 41</i>	5 devices



LTE SUBSCRIBER GROWTH AND SMARTPHONES



75% of LTE subscribers in USA

Rapid growth in Korea ~1.2 million in six months

World net addition in Q4 ~ 48K/day

Smartphone growth exceeding all prior estimates

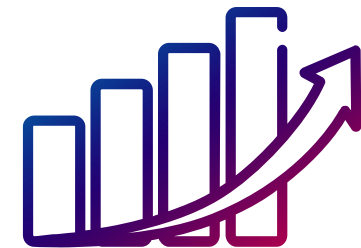
* Source: Wireless Intelligence, WCIS, Ericsson Analysis



Verizon (1Q2011)



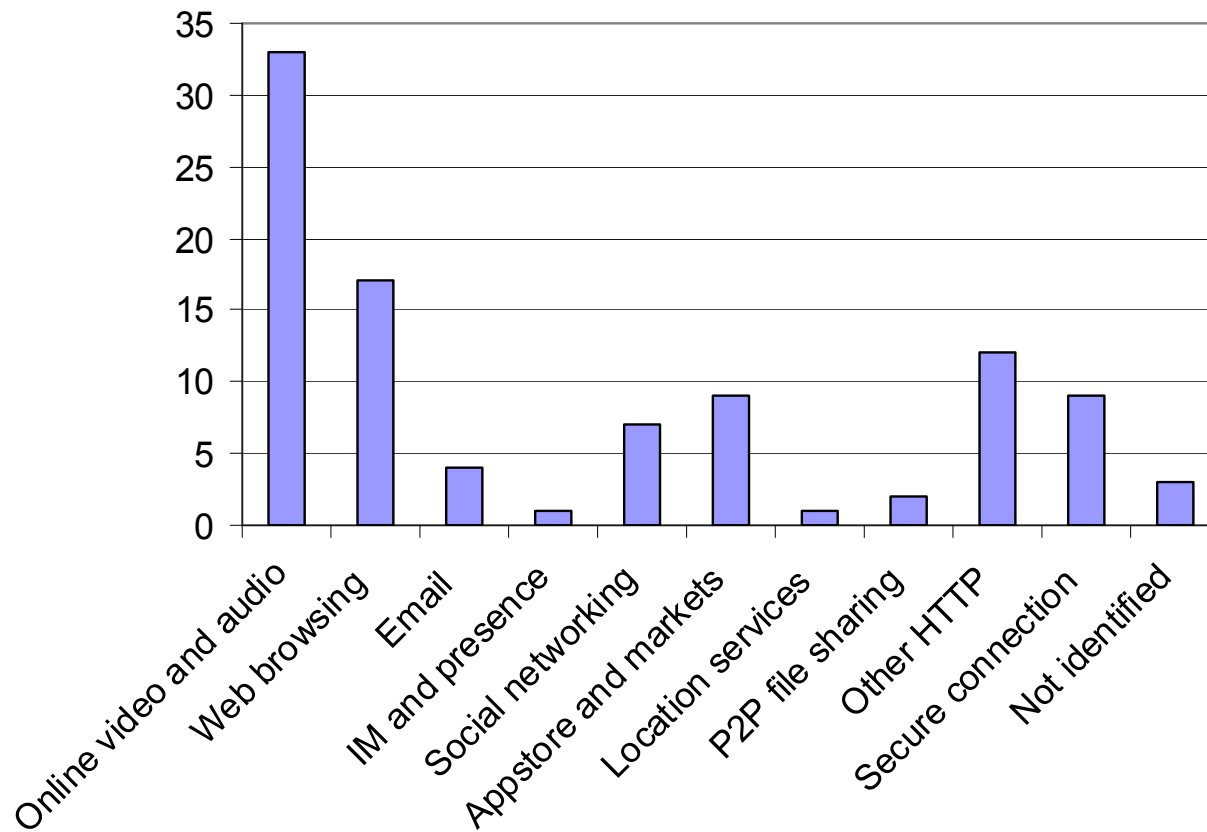
Korea (3Q2011)



APPLICATION NETWORK LOAD



Application share of network load (User data) [Percent]



[Online media (Video) & web drive data volume]

3GPP LTE BANDS



FDD		
1	IMT Core Band	1920-1980/2110-2170
2	PCS 1900	1850-1910/1930-1990
3	1800	1710-1785/1805-1880
4	AWS	1710-1755/2110-2155
5	850	824-849/869-894
6	850 (Japan #1)	830-840/875-885
7	IMT Extension	2500-2570/2620-2690
8	900	880-915/925-960
9	1700 (Japan #2)	1749.9-1784.9/1844.9-1879.9
10	3G Americas	1710-1770/2110-2170
11	1500 (Japan #3)	1427.9-1447.9/1475.9-1495.9
12	US 700 Lower A, B, C	699-716/729-746
13	US 700 Upper C	777-787/746-756
14	US 700 Upper D	788-798/758-768
17	US 700 Lower B,C	704-716/734-746
18	850 (Japan #4)	815-830/860-875
19	850 (Japan #5)	830-845/875-890
20	CEPT 800	832-862/791-821
21	1500 (Japan #6)	1447.9-1462.9/1495.9-1510.9
23	US S-band	2000-2020/2180-2200
24	US L-Band	1626.5-1660.5/1525-1559
25	PCS 1900G	1850-1915/1930-1995
26	E850	814 – 849 / 859 - 894

TDD		
33	TDD 2000 lower	1900-1920
34	TDD 2000 upper	2010-2025
35	TDD 1900 lower	1850-1910
36	TDD 1900 upper	1930-1990
37	PCS Center Gap	1910-1930
38	IMT Extension Gap	2570-2620
39	China TDD	1880-1920
40	2300	2300-2400
41	US 2600	2496-2690

TDD Work in Progress		
42	3500	3400 - 3600
43	3700	3600 - 3800
TBD	APT 700	698 - 806

FDD Work in Progress		
22	3500	3410-3490/3510-3590
TBD	850 lower	806-824/851-869
TBD	APT700 LTE	703-748/758-803

■ <2012
■ 2012

TD-LTE NETWORK DEPLOYMENT



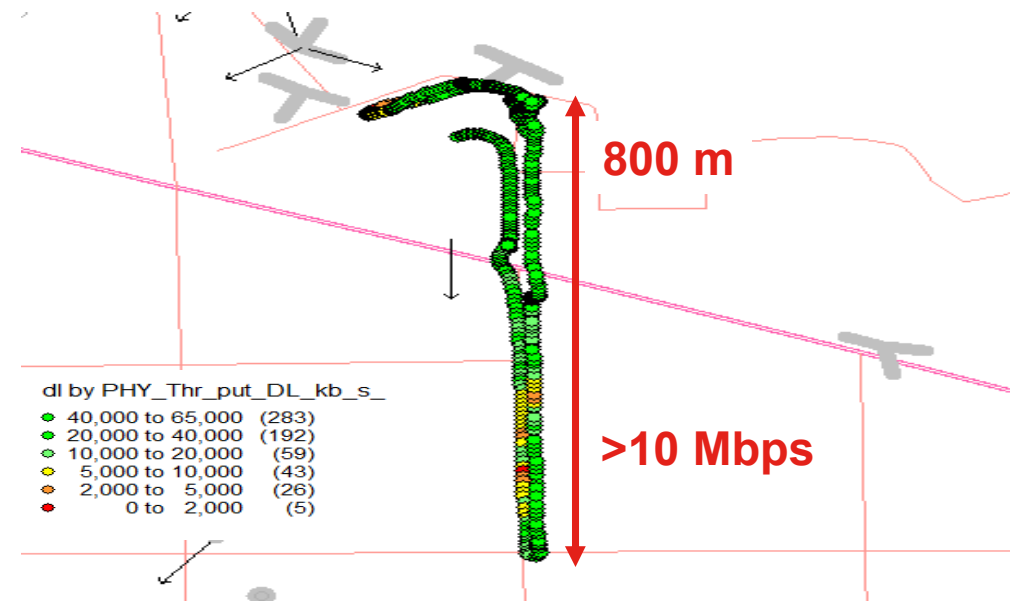
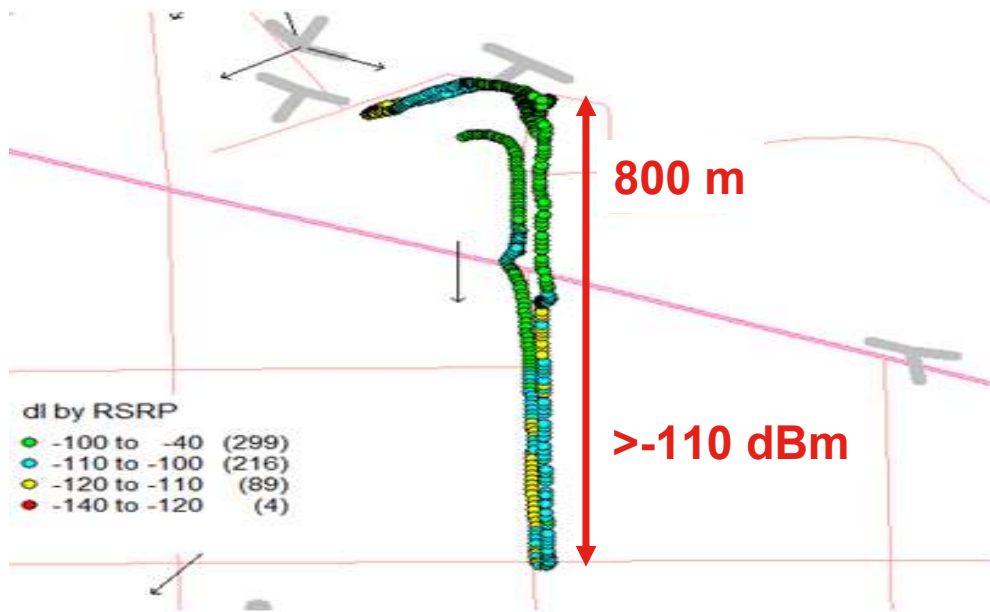
› Co-site with 2G/3G networks

- Fast and easy deployment
- Low cost
- Sharing site solutions

› Performance

- Decouple from legacy systems
- One network strategy

TD-LTE PERFORMANCE ON GSM GRID



[TD-LTE coverage is good with very few measurements below 10 Mbps]

GSM COVERAGE UNAFFECTED



Red circle is the location of eNB

GPS Drift

Color - RxLev Sub
-10.00 - 10.00
10.00 - 20.00
20.00 - 30.00
30.00 - 40.00
40.00 - 100.00



Before

Color - RxLev Sub
-10.00 - 10.00
10.00 - 20.00
20.00 - 30.00
30.00 - 40.00
40.00 - 100.00



After

[TD-LTE and GSM co-site does not affect GSM performance]

RBS 6000 FULL FLEXIBILITY AND COMPATIBILITY



1

Select radio



2

Select baseband



3

Select cabinet



6601



6302



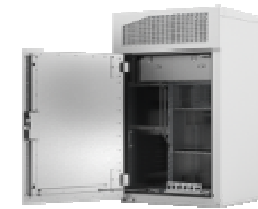
6301



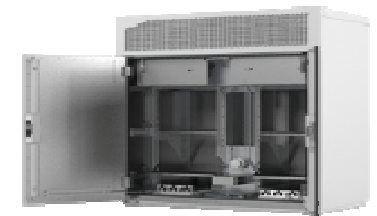
6202



6201



6101



6102

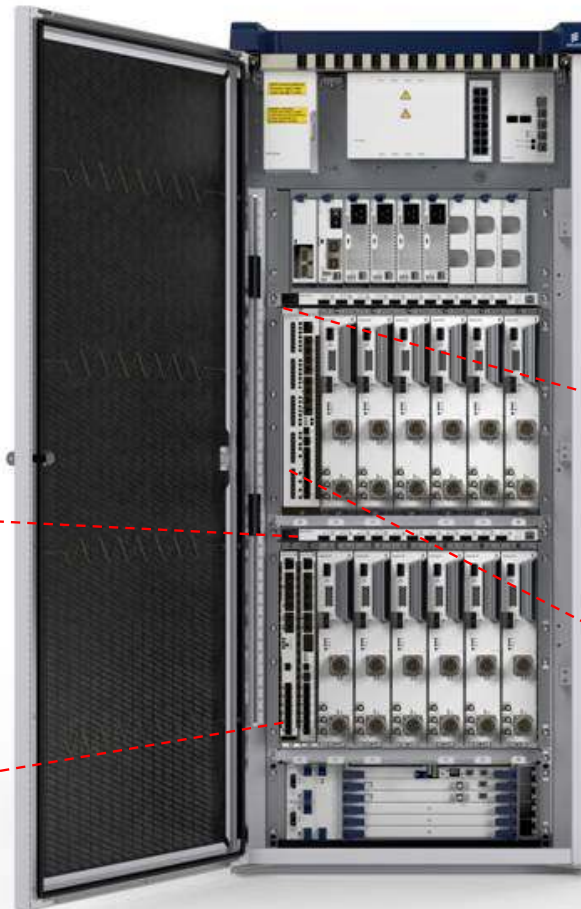
MULTI STANDARD RBS WITH TD-LTE



Digital Unit
(WCDMA)



Radio Unit
(WCDMA)



2 and 8TX/RX Radio
(TDD)



Digital Unit
(GSM)



Radio Unit
(GSM)



Digital Unit
(TDD/FDD)



Radio Unit
(FDD)

SUMMARY



- › Ericsson pushing the TD-LTE market
- › Ericsson supports all TDD bands including B39
- › TD-LTE can be deployed on 2G/3G grid with good performance
- › The Ericsson multi-standard RBS solution fully supports TD-LTE



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