



RTG-OPASTCO 700 MHz Workshop Ericsson LTE 700 MHz Overview

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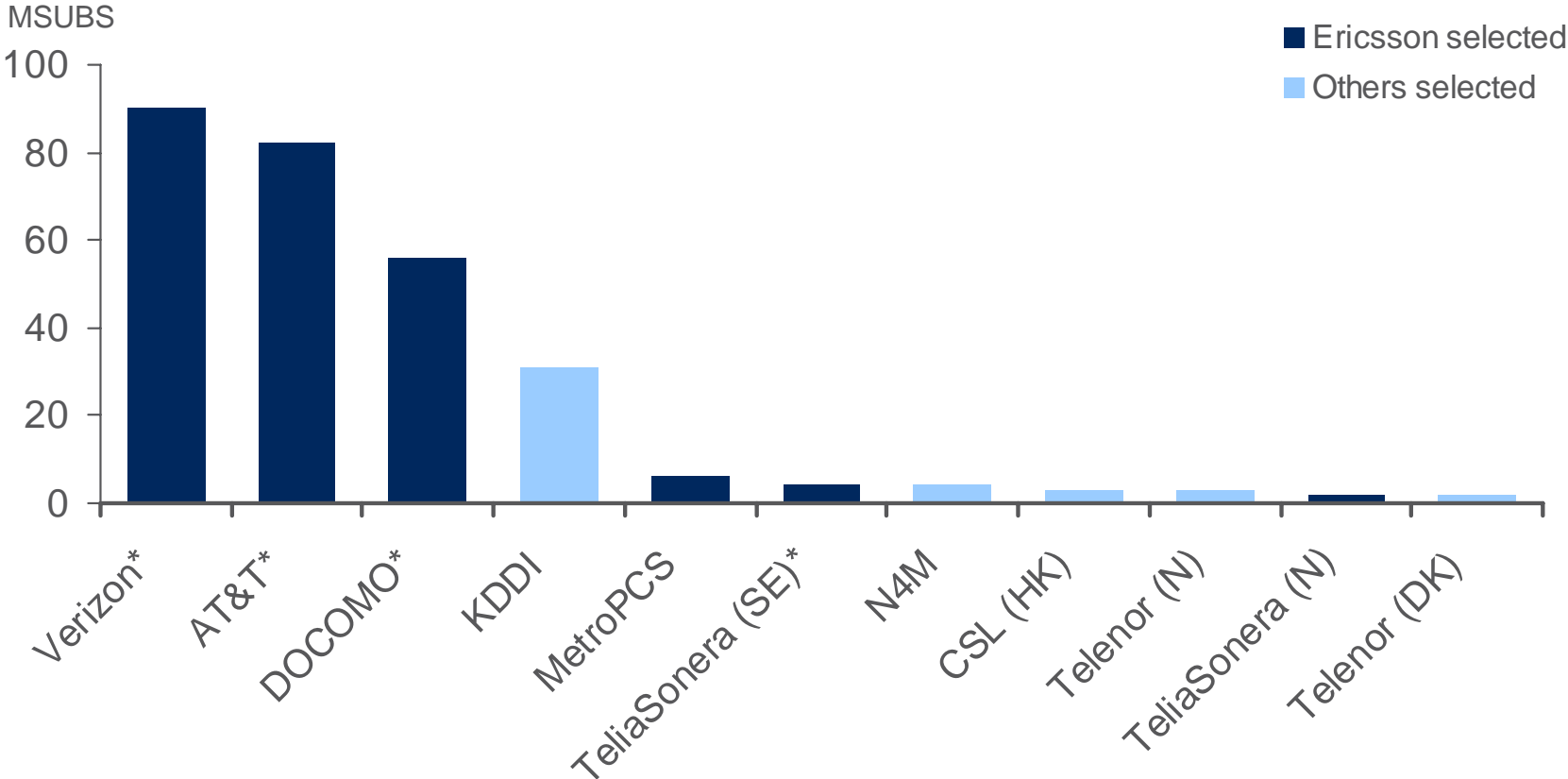
Topics

LTE market and industry update

Live LTE experiences

Ericsson LTE 700 MHz program

LTE Commercial contracts BY OPERATOR SIZE



Subscriber figures from World Cellular Information Services, 12/2009

*=Other vendor involved in contract in addition to Ericsson

EARLY LTE bands

FDD		
Band	"Identifier"	Frequencies (MHz)
1	IMT Core Band	1920-1980/2110-2170
2	PCS 1900	1850-1910/1930-1990
3	GSM 1800	1710-1785/1805-1880
4	AWS (US & other)	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	GSM 900	880-915/925-960
9	1700 (Japan)	1750-1785/1845-1880
10	3G Americas	1710-1770/2110-2170
11	1500 (Japan #1)	1428-1448/1476-1496
12	US 700	698-716/728-746
13	US 700	777-787/746-756
14	US 700	788-798/758-768
17	US 700	704-716/734-746
18	850 (Japan #2)	815-830/860-875
19	850 (Japan #3)	830-845/875-890
20	Digital Dividend	832-862/791-821
21	1500 (Japan #2)	1448-1463/1496-1511

TDD		
Band	"Identifier"	Frequencies (MHz)
33 34	TDD 2000	1900-1920 2010-2025
35 36	TDD 1900	1850-1910 1930-1990
37	PCS Center Gap	1910-1930
38	IMT Extension Center Gap	2570-2620
39	China TDD	1880-1920
40	2.3 TDD	2300-2400

Additional being specified (FDD&TDD)		
Band	Identifier	Frequencies (MHz)
	3.5 GHz	3400-3600
	3.7 GHz	3600-3800

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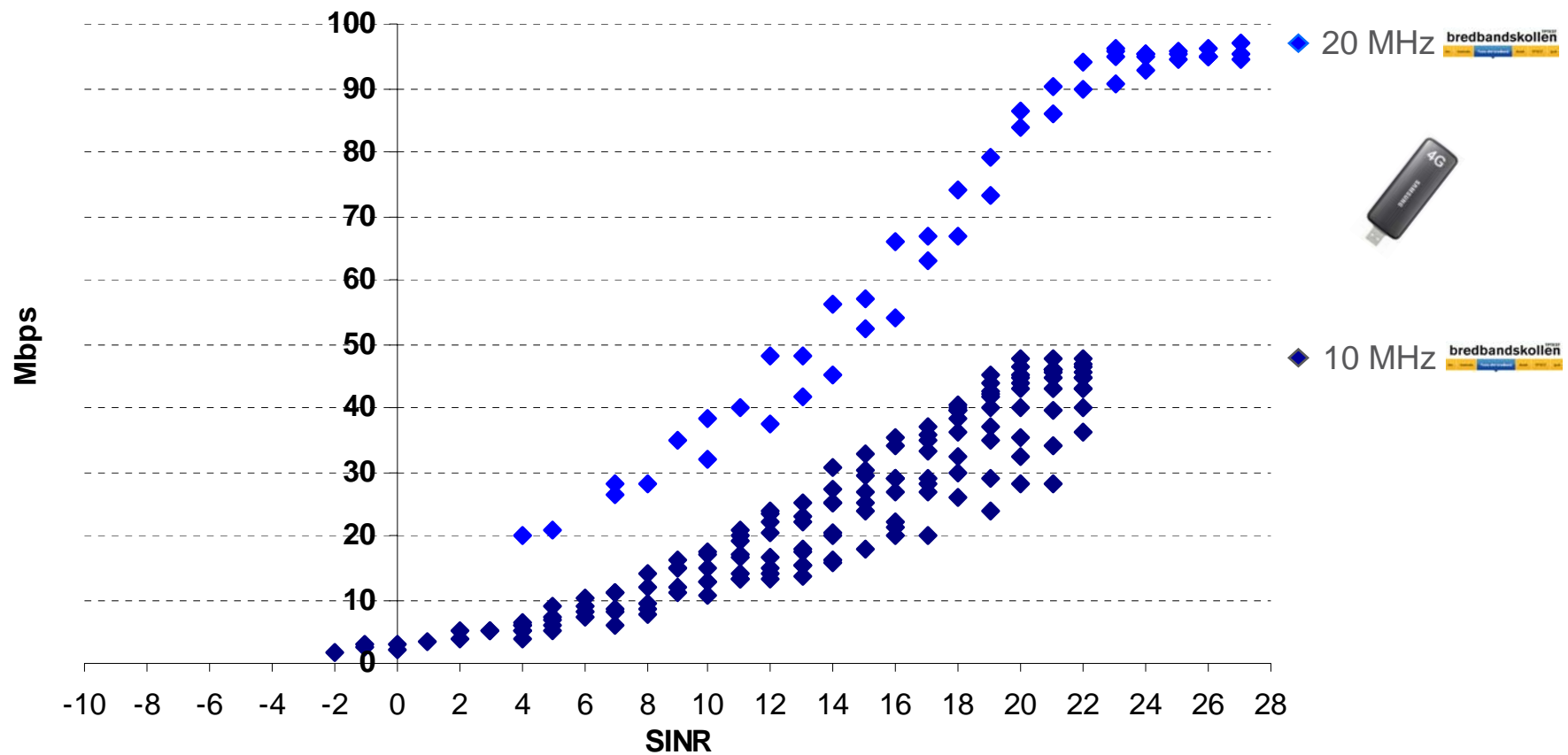
Ericsson LTE 700 MHz program

Worlds largest COMMERCIAL LTE network



Throughput in varying radio conditions

Downlink Throughput Stockholm Independent Consumer Broadband Evaluation Site



Handover Performance

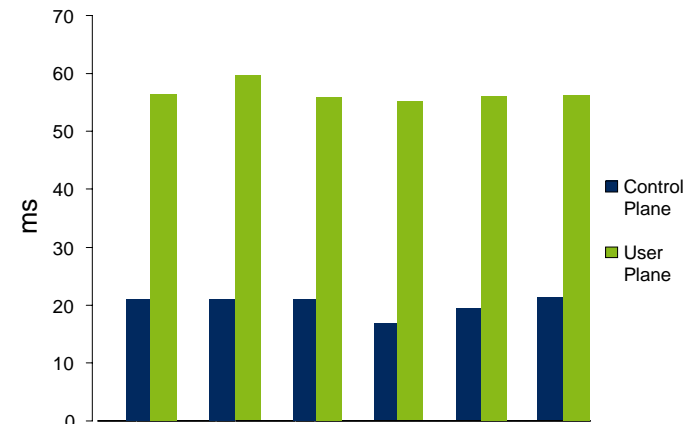
- › S1 Handover functionality verified at different speeds, 30 km/h and 100 km/h, with different services:

- › Average Handover Interruption time

	Control Plane (ms)	User Plane (ms)
– 30 km/h:	20.3	56.8
– 100 km/h:	21.4	57.3

- › Application handover experience:

- Web browsing excellent performance
- Internet Video, e.g. YouTube, excellent performance
- VoIP good performance



COMMERCIAL User Experience

Total experience better than ADSL2+
- DL, UL, Latency

Excellent HO performance
- 30 km/h, 100 km/h

All your internet services
- Real-time web, online gaming, VOIP etc



Rollout and operations experiences

- › Smooth rollout process
 - Re-use of existing sites
- › Auto-integration
- › Full O&M
 - No site visits for SW upgrades
 - OSS support
- › NTP sync
 - Proven for LTE
- › e2e QoS
 - Mapping and solutions for radio/transport/core networks



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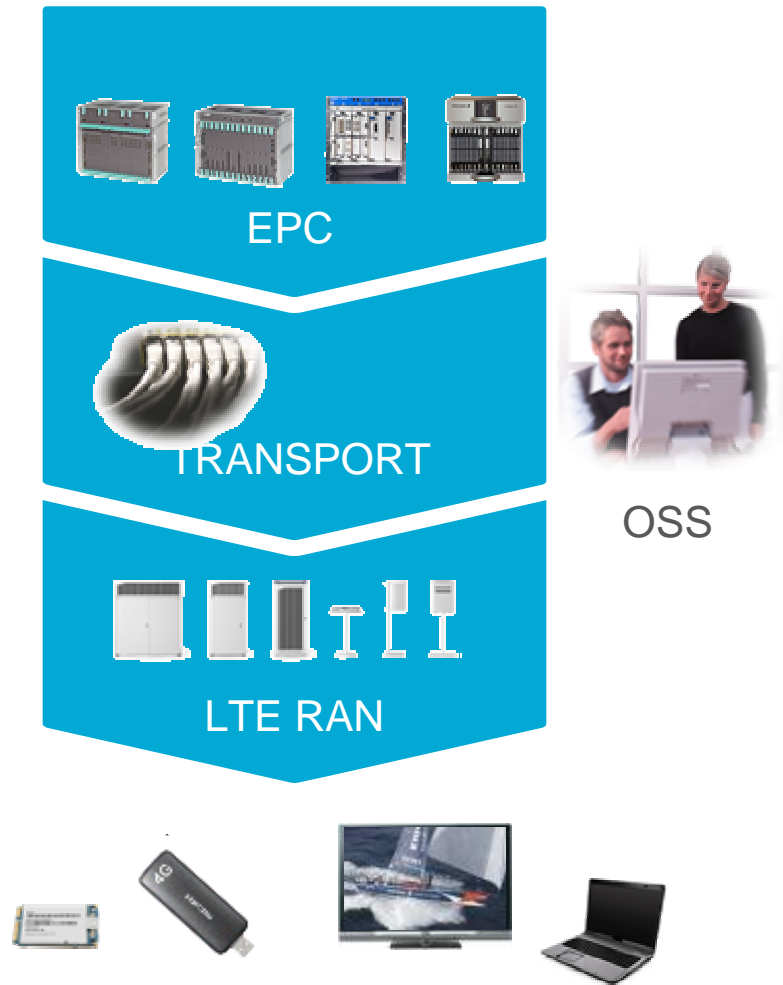
Ericsson LTE700 MHz program

Ericsson LTE EPC system offering

ALIGNED FUNCTIONALITY AND TESTING

SERVICES

IODT PROGRAM WITH CHIPSETS & TERMINALS

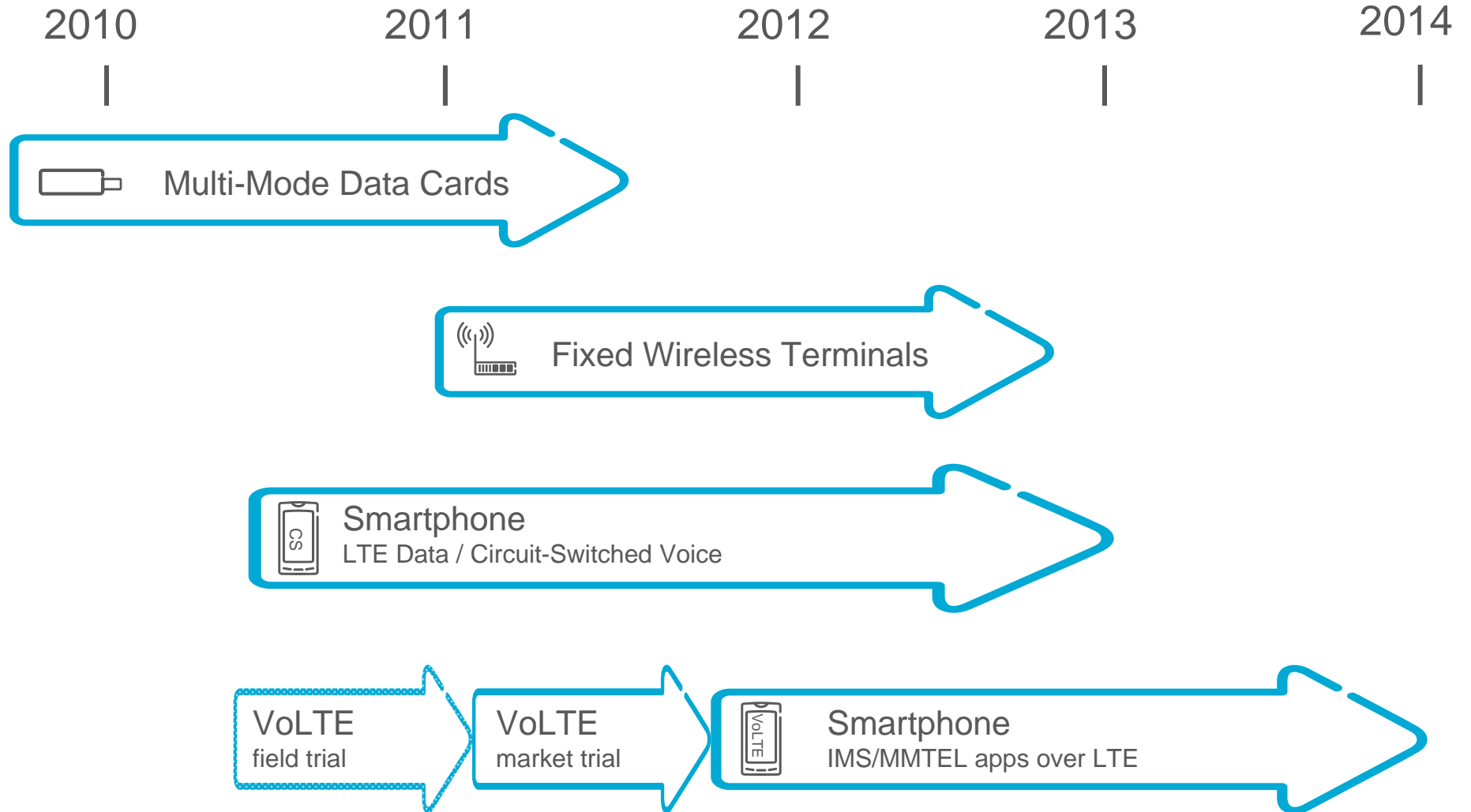





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Market Timelines



SUMMARY

LTE/EPC 700 MHz product availability

- › Ericsson is today shipping 700 MHz Band 12 and Band 13 eNBs, Core Network, and service layer products – Full end to end system
- › The Ericsson Specific Roadmaps are available and we look forward to discuss them on an individual basis



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