



WiFi Vs. 3G

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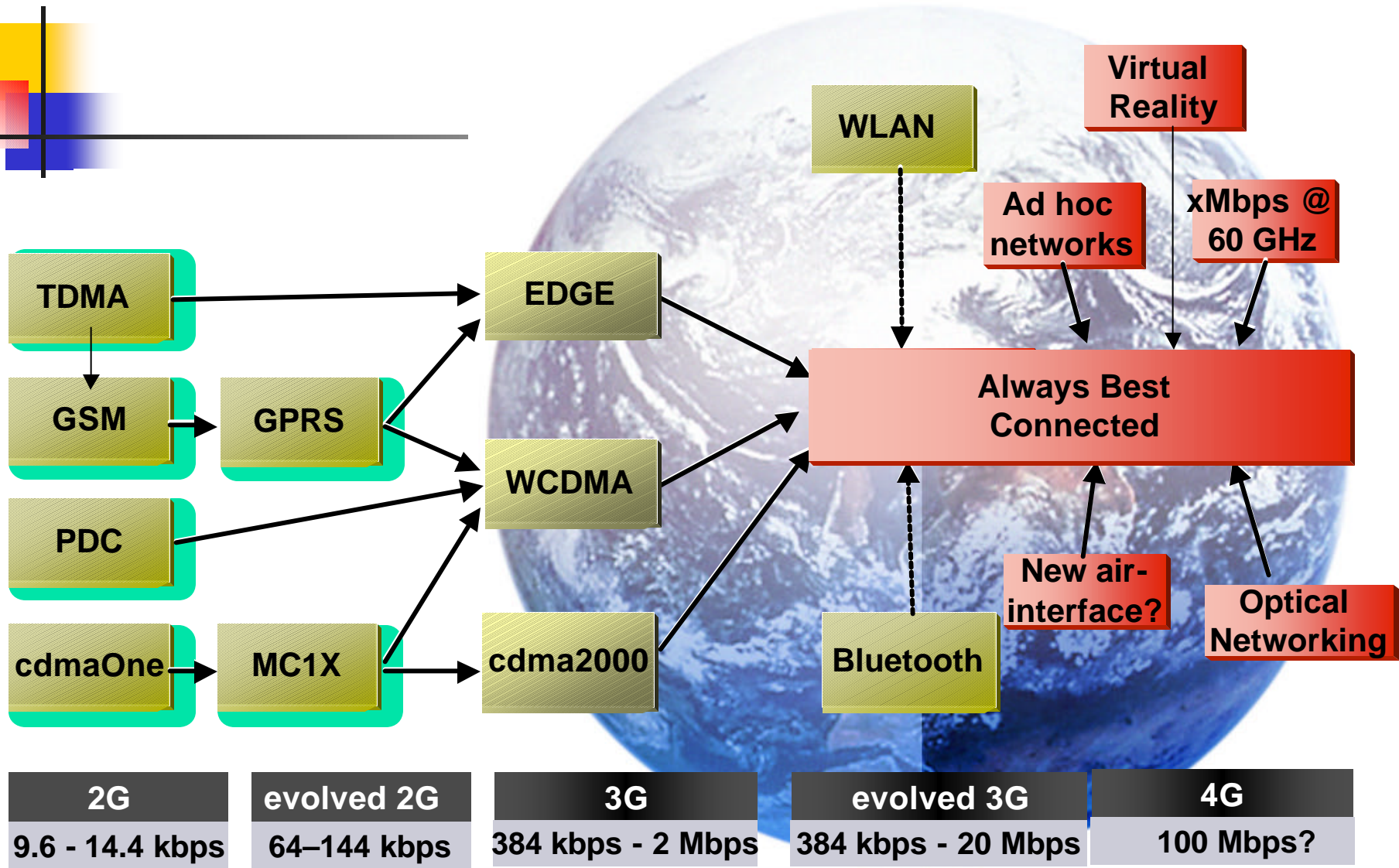
www.cellynk.com

Agenda

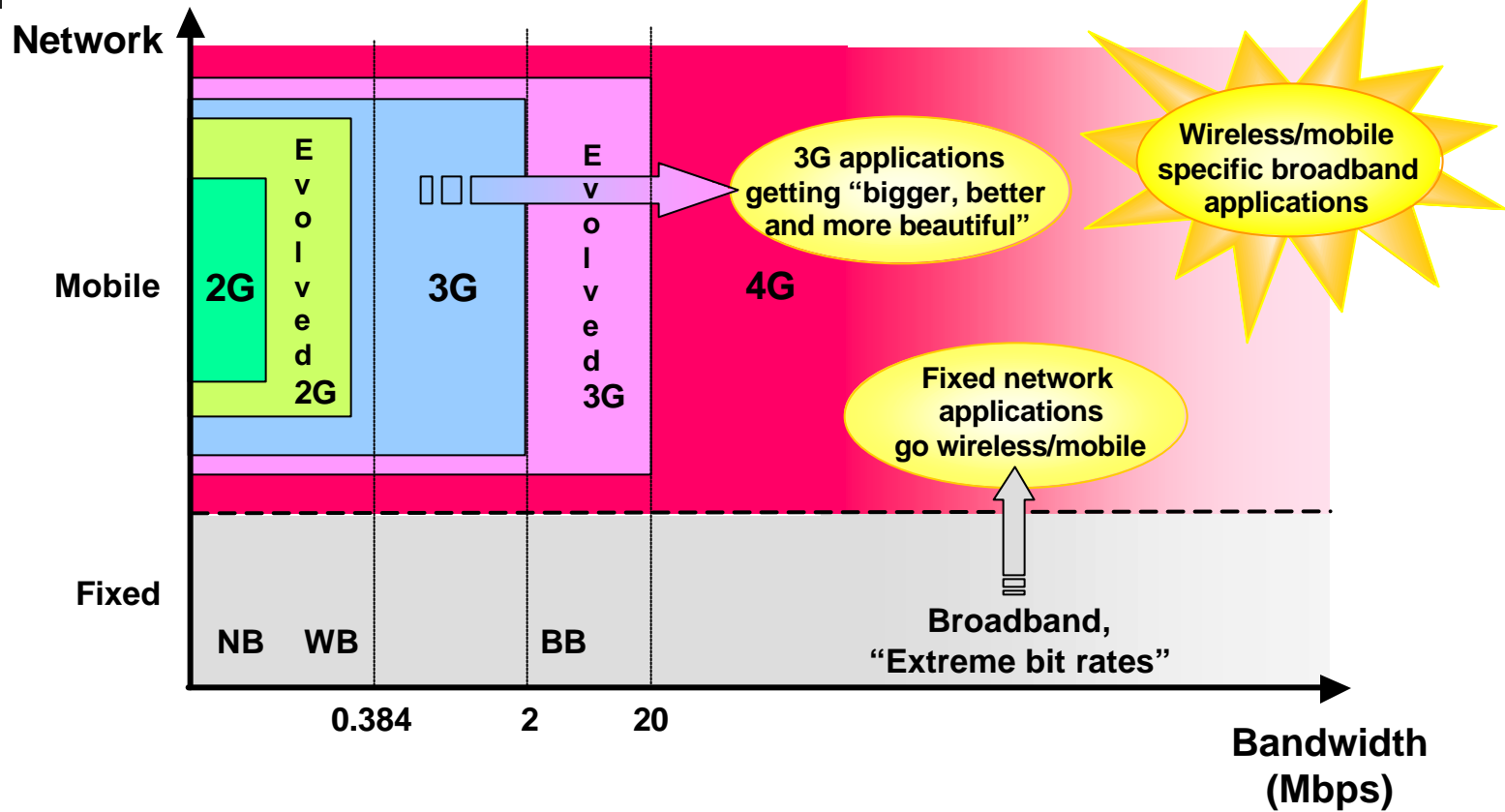
- Introduction
- Technology
- Comparisons
- Business & Marketing Opportunities
- The Future
- Conclusion



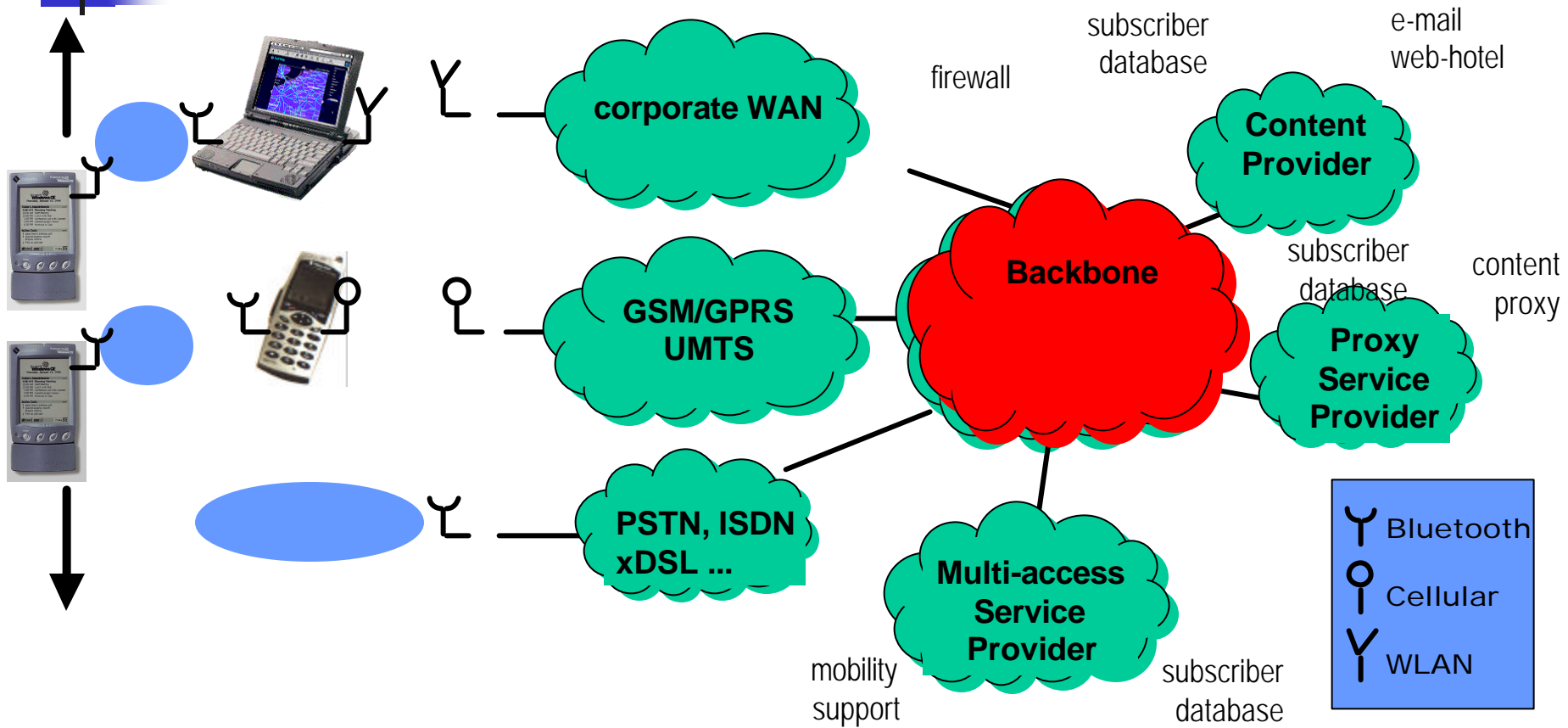
Introduction & Technology



Cellular Technology & Evolution



All Access IP e2e Network

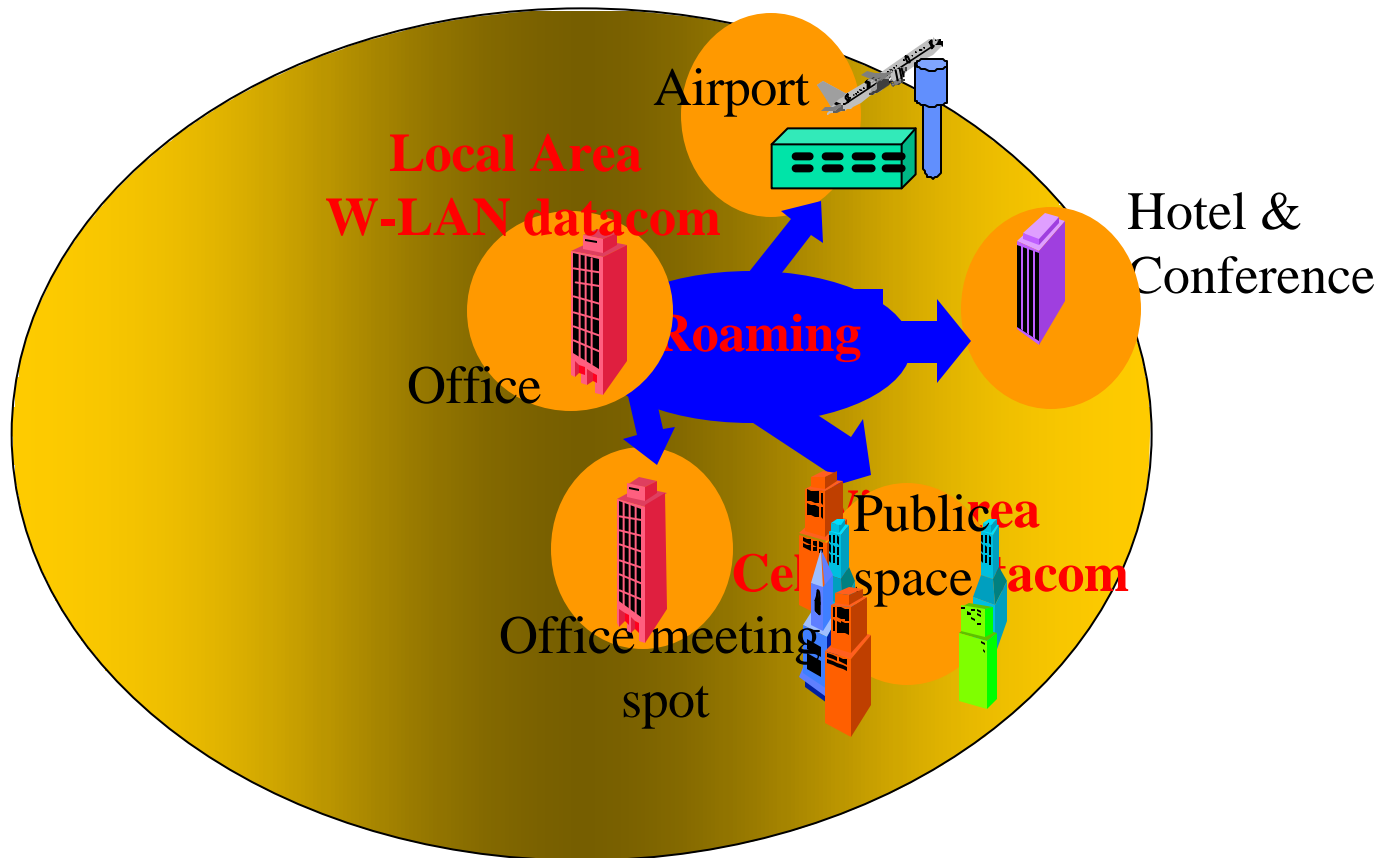




Summary

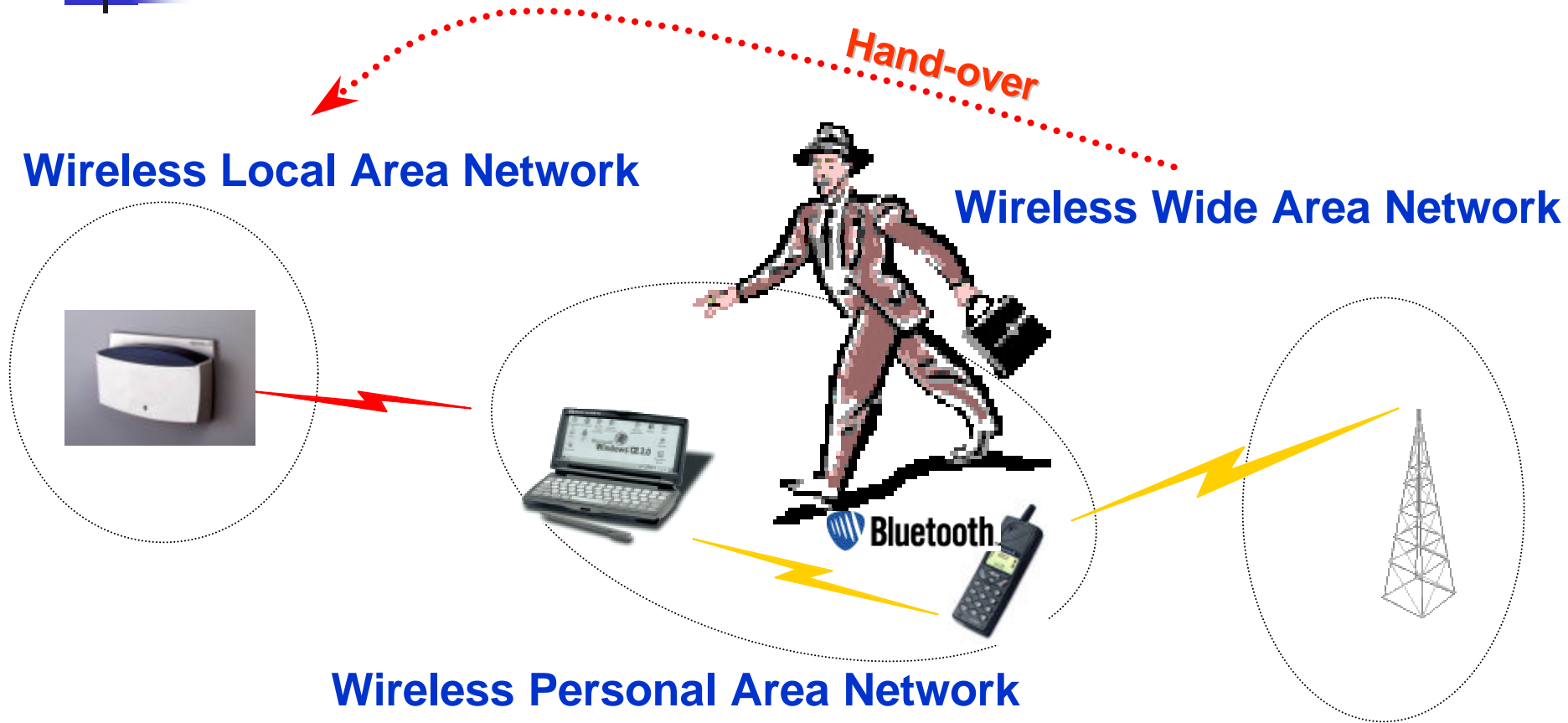
- 3G & Evolved 3G
 - PAN based on Bluetooth
 - Seamless Services over multiple accesses (integrate Bluetooth and WLAN in the 3G family)
 - Improvements of existing Air-Interfaces (including new spectrum)
- 4G
 - Virtual & Augmented Reality
 - High Capacity Optical Networking
 - New Air-Interface (xMbps @ 60 GHz)
 - Advanced Antenna Systems and/or Multi-hop systems

Telco WLAN Vision



Telco Vision

Wireless Interworking Technologies





WLAN Technologies/Protocols

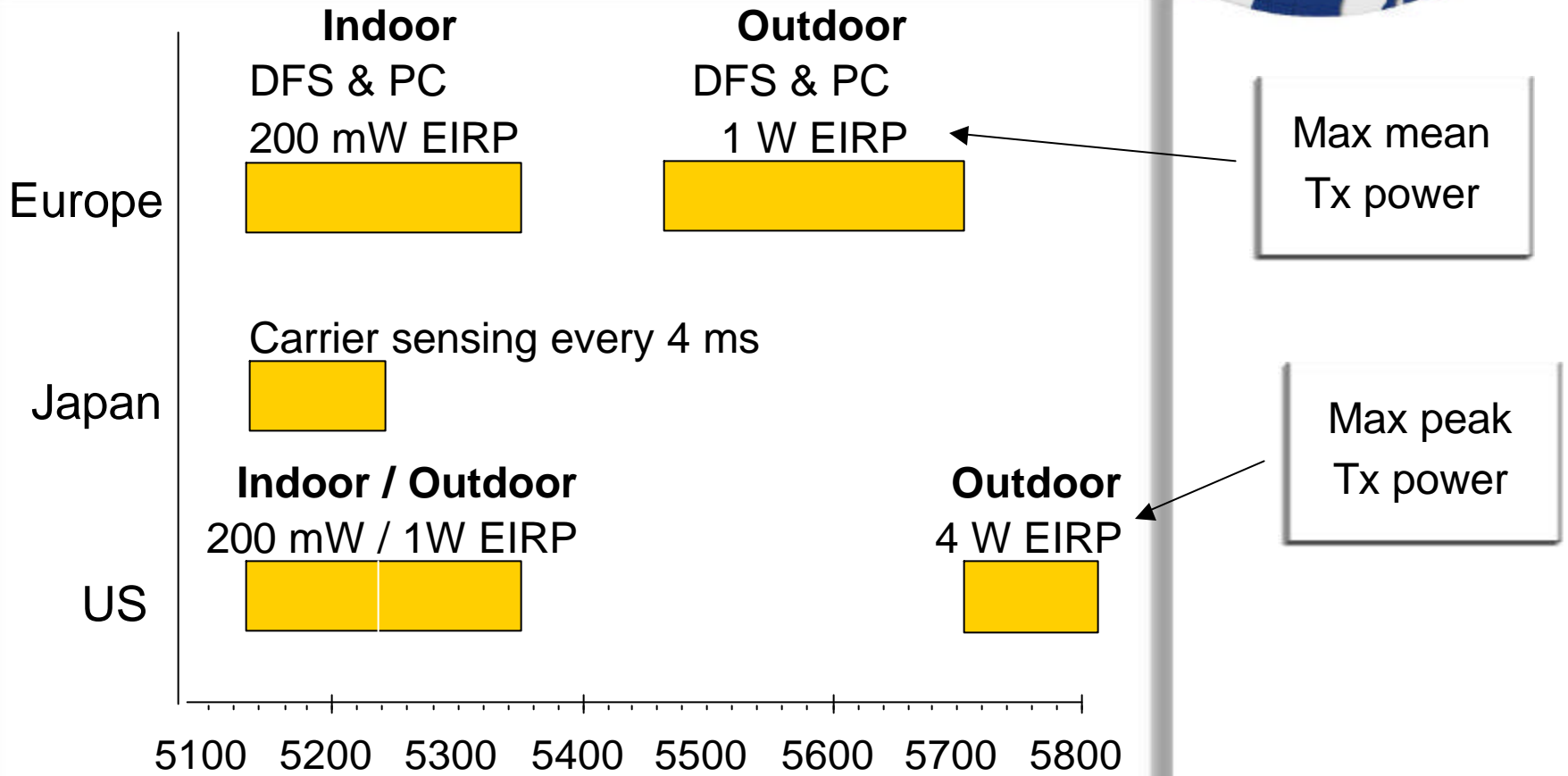
- IEEE 802.11 (b,g & a) --WiFi
- IEEE 802.16 (a) -- Wi -Max or Wider - Fi
- IEEE 802.20 -- Mobile - Fi



IEEE 802.11 Specs. (WiFi)

	802.11b	802.11g	802.11a
Max. Speed	11 Mbps	54 Mbps	54 Mbps
Modulation	CCK	OFDM & CCK	OFDM
Frequencies	2.4 – 2.497 Ghz	2.4 – 2.497 Ghz	5 Ghz band
Approval	July 1999	June 2003	July 1999

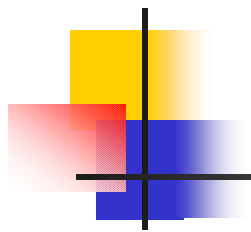
Spectrum Rules on 5 GHz





Summary

	IEEE 802.11	IEEE 802.16a
Max Speed	54 Mbps (11a & g)	70 Mbps
Range	100 m	40 km
QoS	None	Yes
Coverage	Indoor Opt.	Outdoor Opt.
Users	Hundreds	Thousands
Service Levels	None	Yes



Comparisons

Comparisons: 3G vs. WiFi

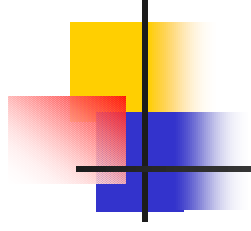
	3G	WiFi
Standard	WCDMA,CDMA2000	IEEE 802.11
Max Speed	2 Mbps	54 Mbps
Operations	Cell phone companies	Individuals, WISP
License	Yes	No
Coverage Area	Several km	About 100m
Advantages	Range, mobility	Speed, cheap
Disadvantages	Relatively slow Expensive	Short range

Comparisons: 3G vs. Wi-Max

	3G	Wi-Max (Wider-Fi)
Standard	WCDMA,CDMA2000	IEEE 802.16
Max Speed	2 Mbps	10 to 100 Mbps
Operations	Cell phone companies	Individuals, WISP
License	Yes	Yes/No
Coverage Area	Several km	Several km
Advantages	Range, mobility	Speed, long range
Disadvantages	Relatively slow Expensive	Interference issues?

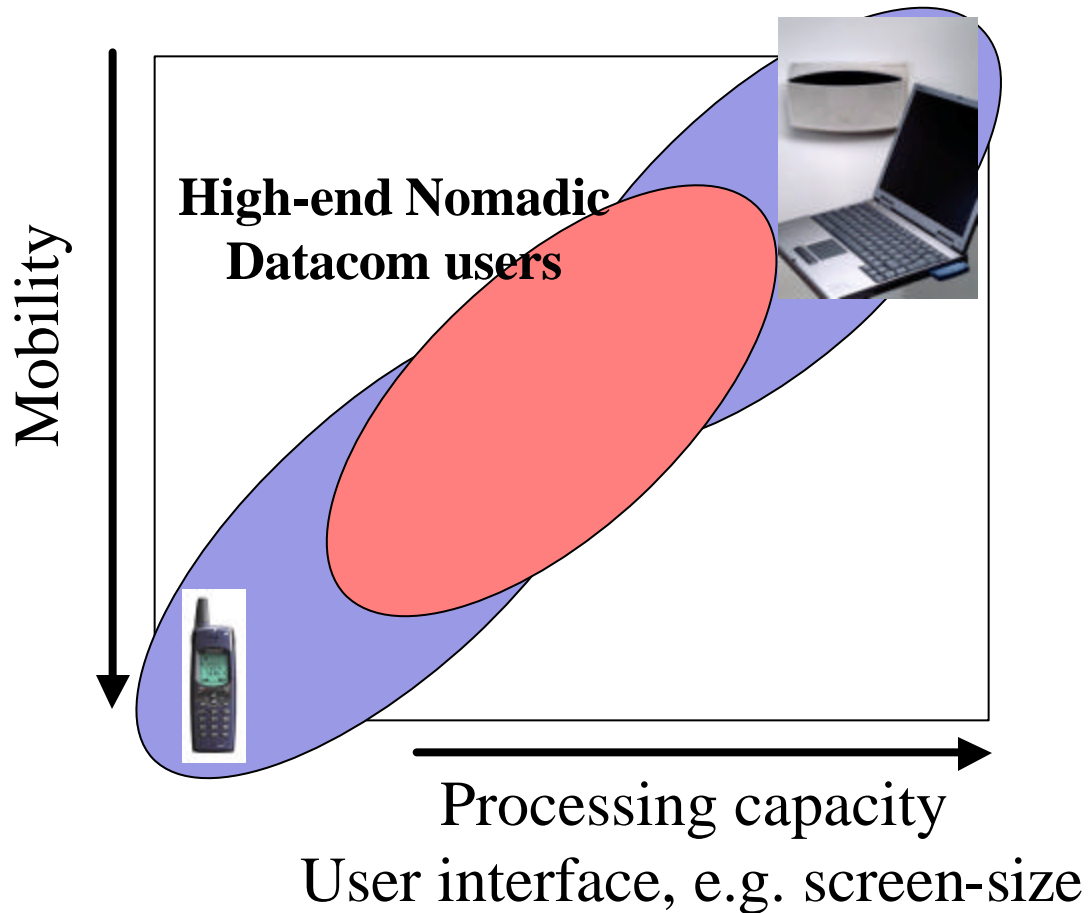
Comparisons: 3G vs. Mobile-Fi

	3G	Mobile-Fi
Standard	WCDMA,CDMA2000	IEEE 802.20
Max Speed	2 Mbps	16 Mbps
Operations	Cell phone companies	WISPs
License	Yes	Yes
Coverage Area	Several km	Several km
Advantages	Range, mobility	Speed, mobility
Disadvantages	Relatively slow Expensive	Cost?



Business & Marketing Opportunities

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Business & Marketing Opportunities

....UMTS forum

- Location based services
- Internet access
- Multimedia Messaging
- Customized infotainment
- Intranet/Extranet access



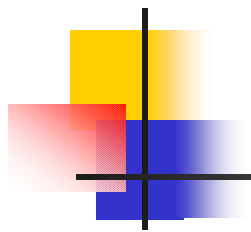
Business & Marketing Opportunities

Cellular niches

- Location based services
- Security
- Impulsive transactions
- Customized infotainment

Mobility, subscriber identity





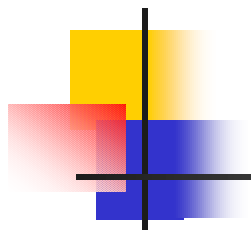
The Future

The Future



The Future





Conclusion

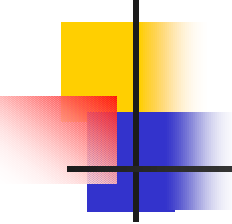
Conclusion

- Threat or complement
- Who will win
- Your contribution



It's all about the money





Thank You 😊

Questions?

Comments!

Discussions!!