

# Technology Options for Evolution from Existing Mobile Systems to IMT-2000

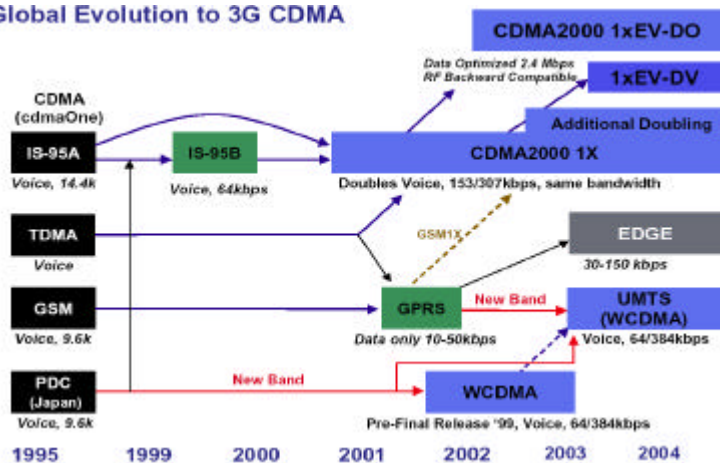
## IMT-2000 Seminar Section 3.2.2

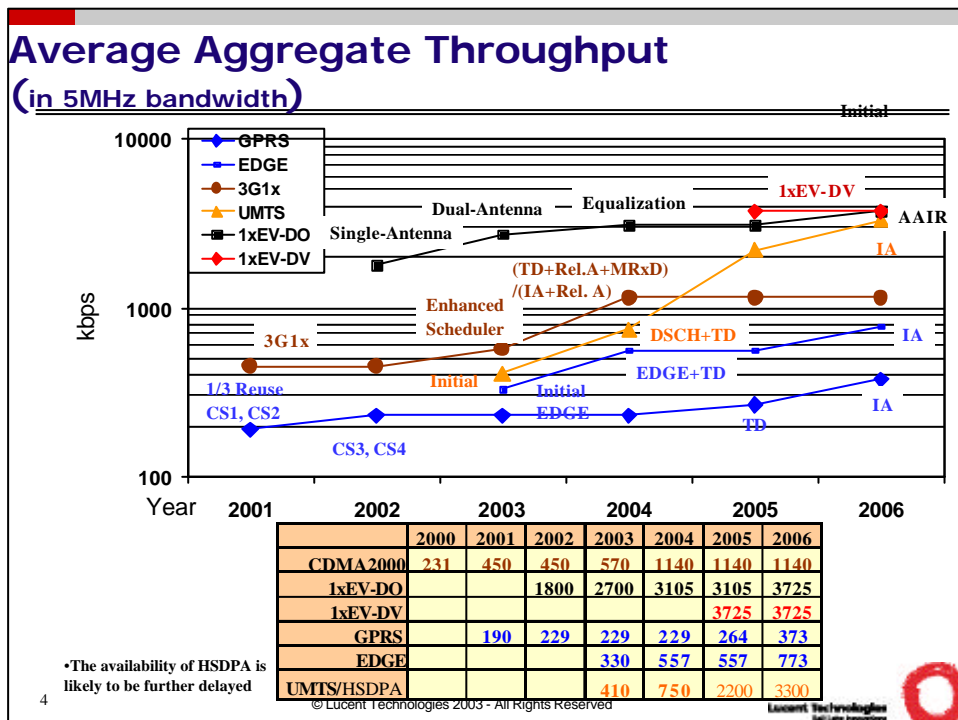
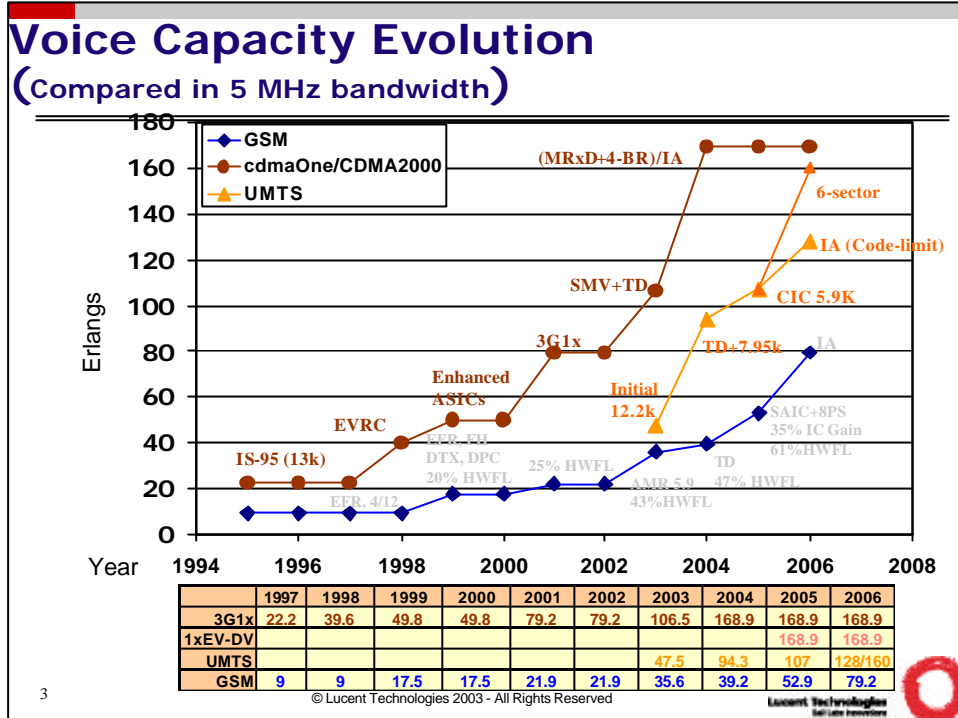
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## 2G Standards Evolution Paths

Global Evolution to 3G CDMA






## Comparison Remarks

1. All technologies improve with time
2. Technologies using spread spectrum techniques are superior in both voice and data applications for the systems considered
3. The key driver for adoption of 3G will be data applications in addition to its voice capability
4. 1xEV-DO, 1xEV-DV and HSDPA can provide data throughputs significantly higher than that from GPRS/EDGE

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## Successful 3G Technology Migration

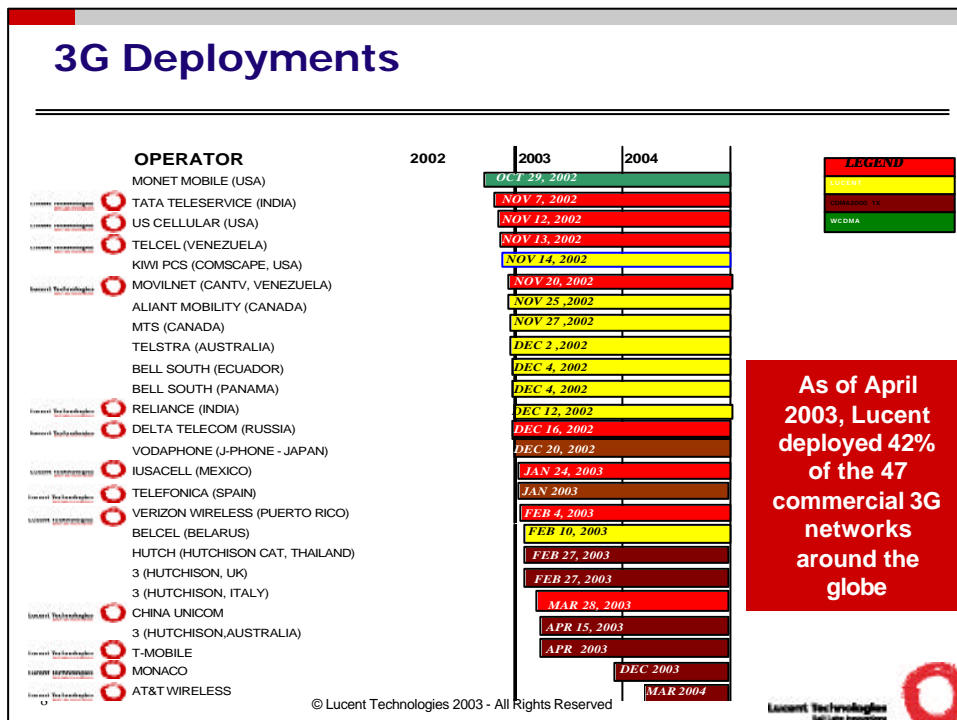
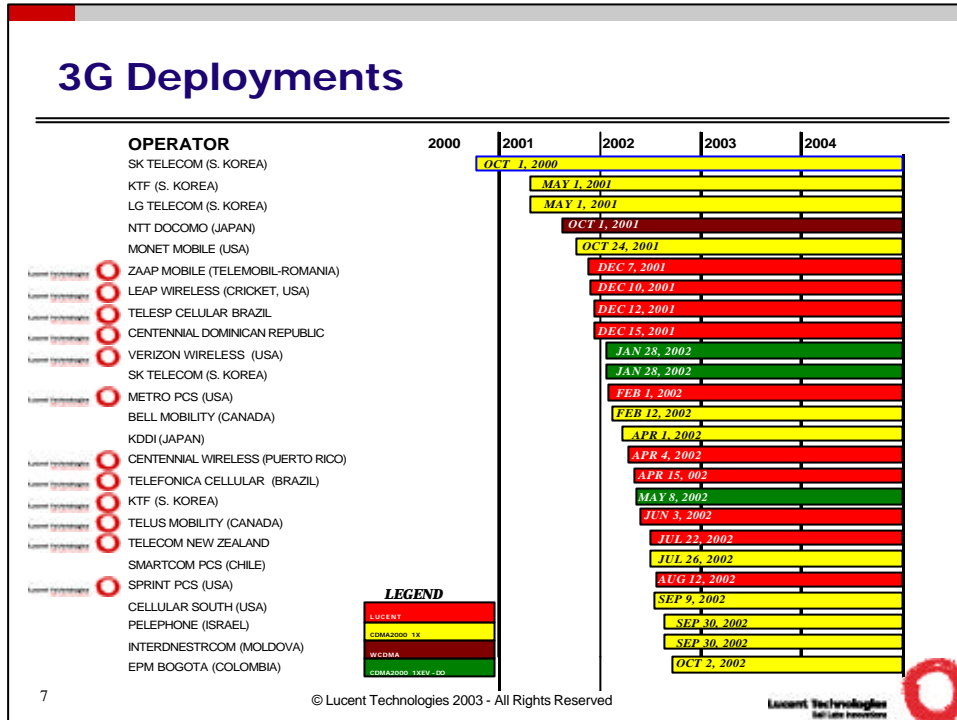
Lucent Has Completed Commercial Migration from Multiple 1G & 2G Mobile Systems to 3G CDMA

Legacy Network	1G	2G	3G CDMA Technology	Infrastructure Required	New Spectrum?
AMPS	X		CDMA2000	Radio Frame on Existing BTS	No
cdmaOne		X	CDMA2000	BTS Channel Cards	No
GSM		X	CDMA2000	Overlay Network	No
GSM		X	W-CDMA	Overlay Network	Yes
TDMA		X	CDMA2000	Overlay Network	No
NMT	X		CDMA2000	Overlay Network	No

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## **3G Services – “No Waiting”**

**Example: Reliance Infocomm – India Mobile**

- 1. Soft launch of CDMA2000 Services within 5 months of Contract signing**
- 2. Commercial launch within 1.5 months of soft launch**
- 3. Reliance Infocomm now largest mobile operator in India with over 6 Million subscribers in over 590 Cities**
- 4. India’s first 3G network providing mobile internet and other multi media features to Reliance customers**
- 5. Announced Agreement to Deploy Brew Based Data Applications**

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## **3G Services – “No Waiting”**

**Example #2: Delta Telecom – SkyLink St Petersburg Russia**

- 1. Launched CDMA2000 Services December 16 2002 Alongside NMT Analog Network in 450 MHz Band**
- 2. High Usage Voice Plans Along with High Speed Data Options**
- 3. ARPU of 3G Subscriber Almost 7x 1G Subscriber**
  - \$10 USD ARPU NMT
  - \$67 ARPU CDMA2000
- 4. Voice MoU of 3G Subscribers 21x 1G Subscribers**
  - 60 MoU NMT
  - 1315 MoU CDMA2000
- 5. Announced Agreement to Deploy BREW based Data Applications**

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**Thank you**

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