3G is CDMA, CDMA is 3G

TDMA Transition to 3G

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Customer Statistics YTD 2002
- 11 countries
- 246 M total POPS
- >13M subscribers
- >30% EBITDA margin
- 70% prepaid, 30% postpaid

Lines of Business
- Mobile voice
- Mobile data/internet
- Long distance, DLD & ILD
- Fixed wireless services
  - Voice & calling features
  - Broadband internet
BSI 3G Transitional Decision Tree

- **Strategy includes wireline services substitution in 2002/2003**
  - **YES** Deploy CDMA2000
  - **NO** Several paths to 3G possible

- **Unlimited spectrum Clear 5 MHz available**
  - **TRUE** Several paths to 3G possible
  - **FALSE** Deploy CDMA2000

- **Deploy 3G voice and data services in 1.8 MHz**
  - **YES** Deploy CDMA2000
Strategy Drives 3G Technology

4 Revenue Streams

- Mobile Data (MD)
- Mobile Voice (MV)
- Fixed Data (FD)
- Fixed Voice (FV)

Integrated Wireline/Wireless

2003 => 2006

- Wireless
- Wireline (copper & ADSL)

Pureplay Wireless (BellSouth International)

2003 => 2006

Wireless

CDMA2000: solution for Pureplay Wireless operator

- High capacity mobile voice/data services (1xRTT)
- Higher capacity for fixed voice service (1xRTT)
- Broadband wireless data service (1xEV-DO)
CDMA2000 = 3G Services in 2002

Disruptive Technologies
802.11, UWB, others

2004+

WCDMA
Many frequencies

Spectrum Cost ??
Spectrum Available ??

GSM EDGE prior to WCDMA is possible

GSM/GPRS
800MHz to 1900MHz

GSM
900MHz to 1900MHz

2G Overhang

CDMA2000
Many frequencies

CDMA2000 = 3G Services in 2002

Disruptive Technologies
802.11, UWB, others

2002-2004

2002-2004

GSM/GPRS
800MHz to 1900MHz

GSM
900MHz to 1900MHz

2G Overhang

cdmaOne
800MHz to 1900MHz

TDMA, Analog, iDEN, PDC 800 to 1900MHz

Up to 2001

GSM/GPRS
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TDMA, Analog, iDEN, PDC 800 to 1900MHz
BSI Transition by Market

- 2G voice capacity limits market growth
- Greenfield market
- Generate RF capacity for mobile data services
- Generate RF capacity for wireline substitution
- Deploy IS-95 or CDMA2000
  - Venezuela (’98), Argentina (’99), Uruguay (’00)
- Deploy IS-95 or CDMA2000
  - Guatemala (’00)
- Deploy CDMA2000 (1xRTT)
  - Chile, Ecuador, Colombia (’02/03)
- CDMA2000 (1xRTT & EV-DO)
  - All BSI markets in Latin America (’03/04+)

(*) Formal BSI transition press releases will occur when vendor contracts signed
CDMA2000 – Mass Market Capacity

4X to 6X gain in MOUs
Enable mass market
TDMA to CDMA Implementation

Time A
N=7 Re-Use
AMPS = 0.6 Erl
TDMA = 35.6 Erl
Total = 36.2 Erl

Time B
N=6 Re-Use
AMPS = 0.6 Erl
TDMA = 30.1 Erl
1xRTT = 25.0 Erl
Total = 55.7 Erl

Time C
N=5 Re-Use
AMPS = 0.6 Erl
TDMA = 31.9 Erl
1xRTT = 50.0 Erl
Total = 82.5 Erl

+50% +45%

CDMA2000 offers the ONLY migration strategy that adds ~50% capacity for 1st and 2nd growth carriers
# 3G Deployment in TDMA Market

<table>
<thead>
<tr>
<th>Core network</th>
<th>CDMA2000</th>
<th>WCDMA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Re-use IS-41</td>
<td>Minimal learning curve</td>
<td>Deploy MAP</td>
</tr>
<tr>
<td>Minimal learning curve</td>
<td>Full feature transparency</td>
<td>Deploy MAP/IS-41 gateway</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clear spectrum</th>
<th>CDMA2000</th>
<th>WCDMA</th>
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<tbody>
<tr>
<td>Clear 1.8 MHz</td>
<td>N=7 to N=5 transition</td>
<td>Clear 5 MHz (or 3.6 MHz GSM)</td>
</tr>
<tr>
<td>N=7 to N=5 transition</td>
<td>Voice/data in 1.8 MHz</td>
<td>N=9 to N=4 transition</td>
</tr>
<tr>
<td>Voice/data in 1.8 MHz</td>
<td>Voice only in 3.6 MHz GSM</td>
<td>Voice/data in 5 MHz WCDMA</td>
</tr>
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<table>
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<tr>
<th>Offer 3G services</th>
<th>CDMA2000</th>
<th>WCDMA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice service on max two CDMA carriers</td>
<td>Voice service in 60% spectrum</td>
<td></td>
</tr>
<tr>
<td>6-7 carriers for data</td>
<td>Only 40% spectrum available for data services</td>
<td></td>
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