

26 September 2002

Nokia in 3G

Nokia is a leading supplier of 3G WCDMA technology. Our market share in 3G exceeds 30 per cent, and Nokia is on par with the closest competitor. Nokia has 32 public WCDMA references and has also announced frame agreements with **Orange/France Te lecom**, **T-Mobile International**, and **Telia Nordic**.

32 public deals

- Hutchison 3G Austria, Austria, 29 April 2002
- **BT Cellnet**, UK, 16 April, 2002
- **Digifone**, Ireland, 16 April, 2002
- E-Plus Mobilfunk, Germany, 12 March, 2002
- Proximus Belgacom Mobile, Belgium, 18 January, 2002
- 3G Infrastructure Services, Sweden, 25 October 2001
- Hong Kong CSL, Hong Kong, 25 September 2001
- Europolitan Vodafone, Sweden, 30 August 2001
- Omnitel Vodafone, Italy, 18 July 2001
- VIAG Interkom, Germany, 10 July 2001
- Radiolinja, Finland, 20 April, 2001
- Orange, Switzerland, 10 April, 2001
- Orange, UK, 3 April, 2001
- OrangeFrance (Itineris), France, 3 April, 2001
- MobilCom, Germany, 3 April, 2001
- Hutchison 3G, UK, 2 April, 2001
- Cable & Wireless Optus, Australia, 2 April, 2001
- Telia Mobile, Finland, 8 March, 2001
- One, Austria, 2 March, 2001
- NetCom, Norway, 2 March, 2001
- Cegetel, France, 21 February, 2001
- Telenor, Norway, 21 February, 2001
- One-2-One, UK, 21 December, 2000
- **T-Mobil**, Germany, 21 December, 2000
- Sonera, Finland, 4 December, 2000
- AT&T Wireless, USA, 30 November, 2000
- **Mobile One**, Singapore, 20 November, 2000
- WIND, Italy, 12 October, 2000
- **J-Phone**, Japan, 3 October, 2000
- StarHub, Singapore, 23 May, 2000
- Viag EuroPlattform AG, Liechtenstein, 28 April, 2000
- Suomen 2G and 3G, Finland, 17 February, 2000

By end of June 2002

- 26 roll-outs in 14 countries
- 42 trials in 23 countries

Nokia 3G milestones

- 3G system trial deliveries started in April 2001 with commercial hardware
- First 3GPP end-to-end voice call (AMR) in August 2001 (based on 3GPP Rel99 ver. 12/00)
- Nokia single-mode WCDMA system release R1 available September 2001
- Commercial pre-release R1.5 with WCDMA/GSM intersystem hand available March 2002



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- Commercial release R1.5 available June 2002
- Nokia dual-mode WCDMA/GSM terminal introduced September 2002

3G/EDGE

- In **USA**, major TDMA operators such as AT&T Wireless, Cingular Wireless and VoiceStream have chosen EDGE for 3G services in the US. The networks are currently being built.
- In Latin America, GSM is a growing technology. In addition, Telcel/Mexico has chosen GSM/GPRS/EDGE path, having previously been a TDMA operator.
- In Europe and Asia, more than 10 operators are currently testing EDGE hardware. Nokia started volume deliveries of EDGE hardware to the US in the beginning of this year. Today, Nokia delivers EDGE capable hardware to all frequencies (800/900/1800/1900). We started shipping EDGE capable hardware (only software upgrade needed) to the US frequencies in January 2002 and in Europe, these deliveries started in April 2002.