PCG9(02)18

The EDGE Operators' Forum

** Overview of EOF*

** EDGE White Paper*

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2002 Program

- **Target Audience:**

  - operators in key global markets needing assistance/supportive material for business & deployment planning of the EDGE component of 3GSM vs. other 3G migration paths (e.g. 1X RTT)
  - application developers needing better understanding of market requirements for wireless mobility and enhanced services (data ,video, MMS) via EDGE
  - regulators requiring better information regarding EDGE as it relates to spectrum allocation to support 3G Service deployment

- **Planning Group:**

  - 2002 planning driven by operators and vendors committed to EDGE development and deployment: initial planning group consists of

    Operators: **AT&T, Cingular**

    Vendors: **Ericsson, Motorola, Nokia, Nortel, Siemens**

  - shared discussions and planning with GSA, GSMA and 3G Americas regarding support for specific events, endorsement/participation, marketing communications, etc.

➢ **Key Attribute of EOF: a *partnership* of the key EDGE operators and vendors**

EOF 2002: Key Events

- ✓ EDGE Operators' Forum in Cannes: February 19
- ✓ EDGE Operators' Forum in Orlando: March 17
- ✓ EOF Activity in Rome: GSMA Plenary #47 (April 15)
- ✓ EOF Activity in Singapore: CommunicAsia 2002 (June 19)
- ✓ EOF Activity in Singapore: 3GSM Asia Pacific (Sept. 16)
- ➢ GSMA Plenary #48: Turkey (Oct. 14-17) *(report)*
- ➢ EOF Activity in Sao Paulo: 3GSM Americas (Dec. 3)

2003 EOF events in planning; demand and opportunity driven

EDGE: Taking GSM to 3G

- **EDGE/EGPRS as the next logical investment to enhance GSM/ GPRS in current bands**
  - small incremental cost and rapid time-to-market
  - becomes default for all new radio: no more GSM/GMSK only

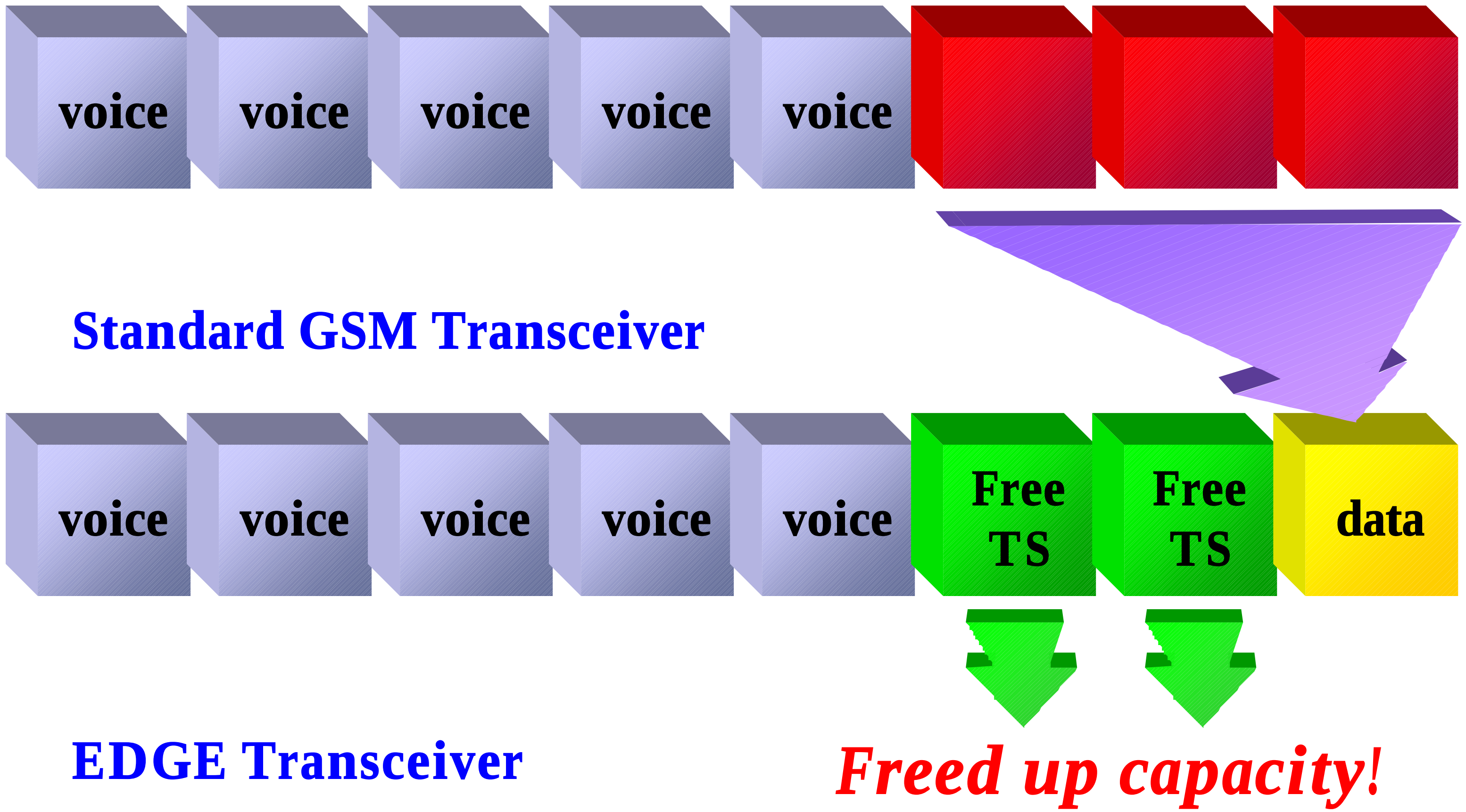
- **EDGE as the In-Band 3G component of 3GSM, to complement WCDMA/ UMTS in wideband spectral markets**
  - shift focus to service transparency, global device mobility, enhanced service roaming, multi-mode/multi-band/"inter-generational" service delivery

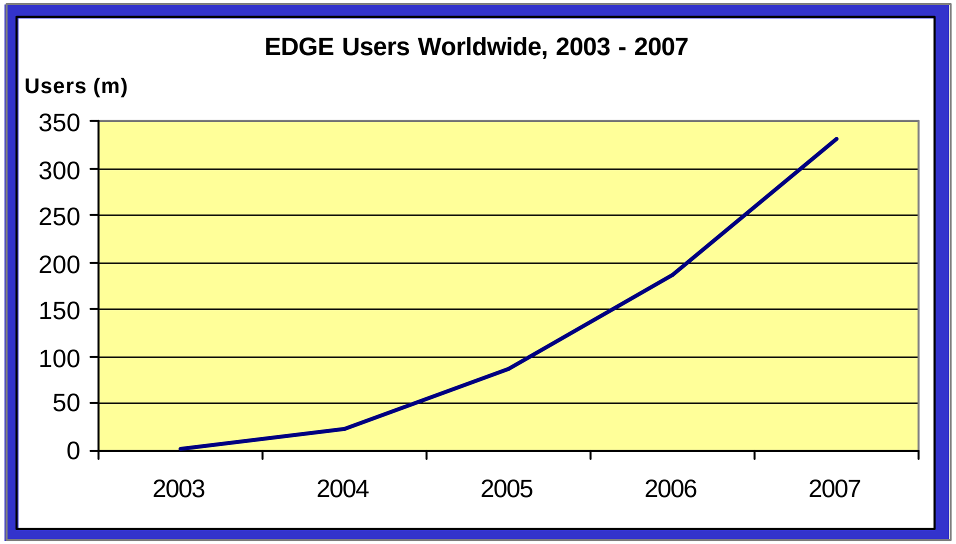
- **Forward Evolution of GERAN and UTRAN access and mobility solutions on a common 3GPP Core Network**

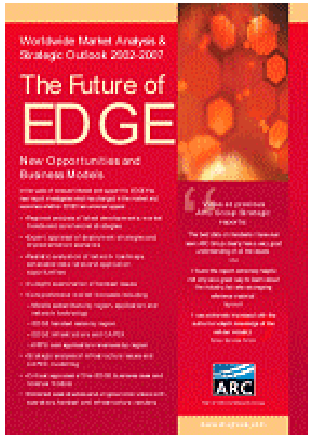
EDGE White Paper:

The EDGE Option for GSM Operators

EDGE as Capacity Multiplier

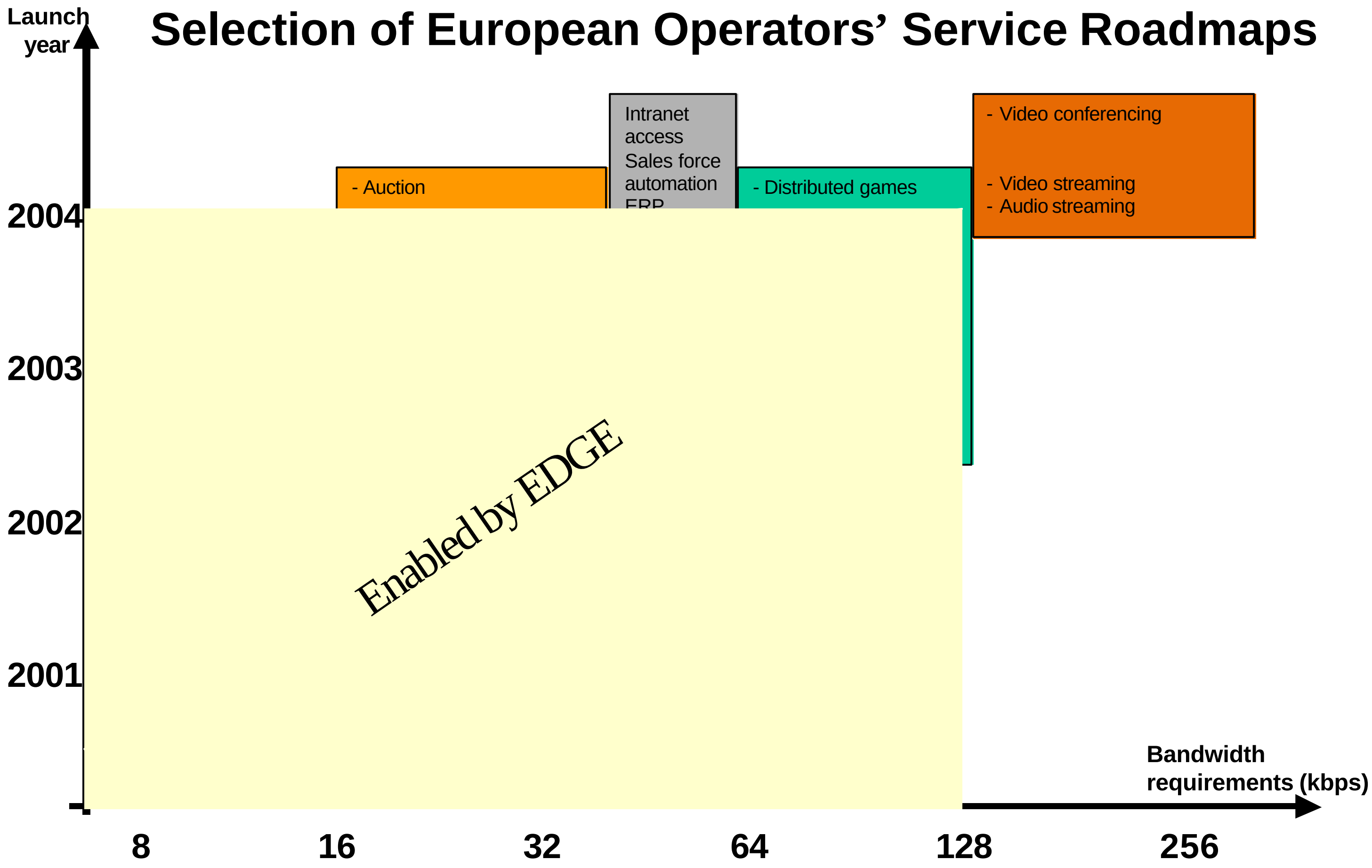






- **EDGE users worldwide** to reach 331.4m by 2007, including user base of 164m in Europe & 108.8m in North America
- **EDGE ARPU to reach US$48.99 by 2005**; data accounts for 27% of the total
- **The market for mobile entertainment services** to grow exponentially with revenues of US$34 billion in 2007
- **Shipments of EDGE-enabled handsets** to top 201.6m by 2007

Selection of European Operators' Service Roadmaps

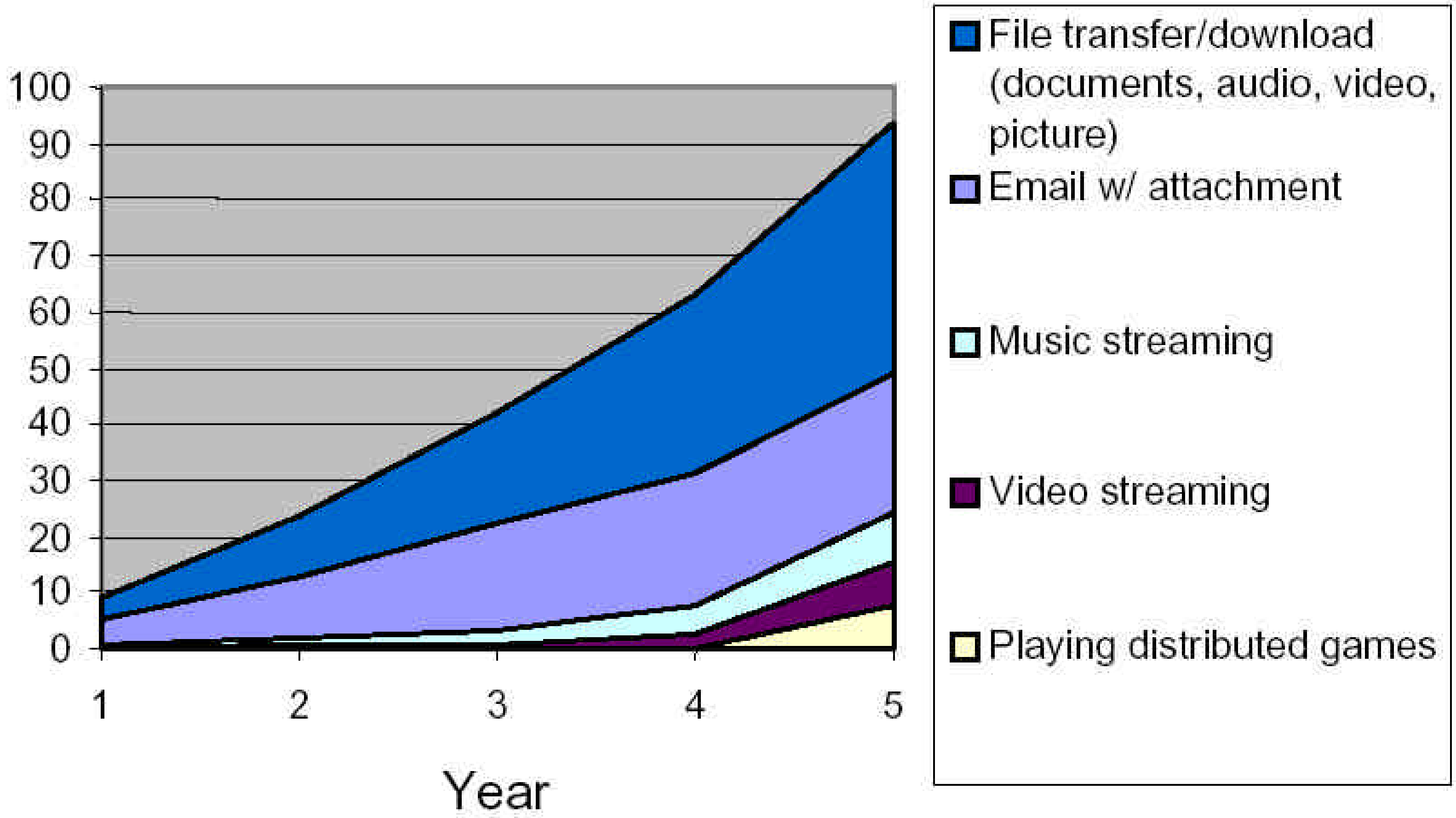


Source: EDGE Operators' Forum

Global EDGE Revenues (US$m)

	• 2003 • ($m)	• 2007 • ($m)
• PIM (Messaging)	• $48.83	• $16,256.82
• M-Commerce/ Retail	• $3.25	• $1,689.70
• Financial Services	• $9.54	• $2,724.27
• Intranet Access	• $29.87	• $7,928.17
• Internet Access	• $7.91	• $3,552.50
• Entertainment	• $43.93	• $34,551.88
• Location	• $13.57	• $6,083.65
• Total	• $156.91	• $72,786.99

Revenue per EDGE enabled Service (over EDGE)



Source: EDGE Operators' Forum

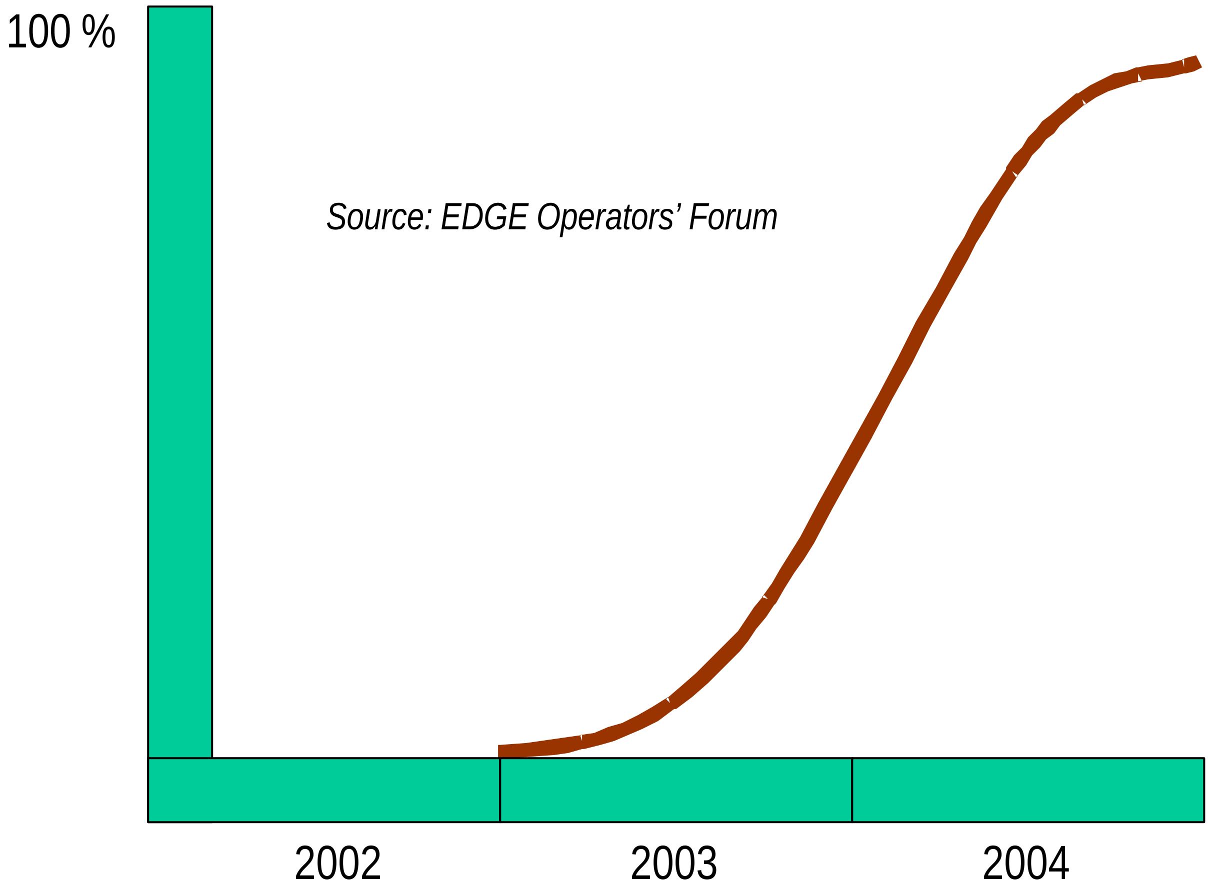
- *30% of ARC survey respondents cited uncertainty about future of technology as the key barrier to deploying EDGE*

FACT: EDGE is market reality now
FACT: EDGE is a global standard for 3G services (3GPP, ITU/IMT-2000)

- *20% of ARC survey respondents cited lack of handset supply demand*

FACT: Industry has publicly committed to Infrastructure and Terminals availability - this is no longer a concern

EDGE in new GSM/GPRS terminals



Source: EDGE Operators' Forum

2004: All new GSM/GPRS terminals foreseen to support EDGE

2003: Commercial volumes multi-sources

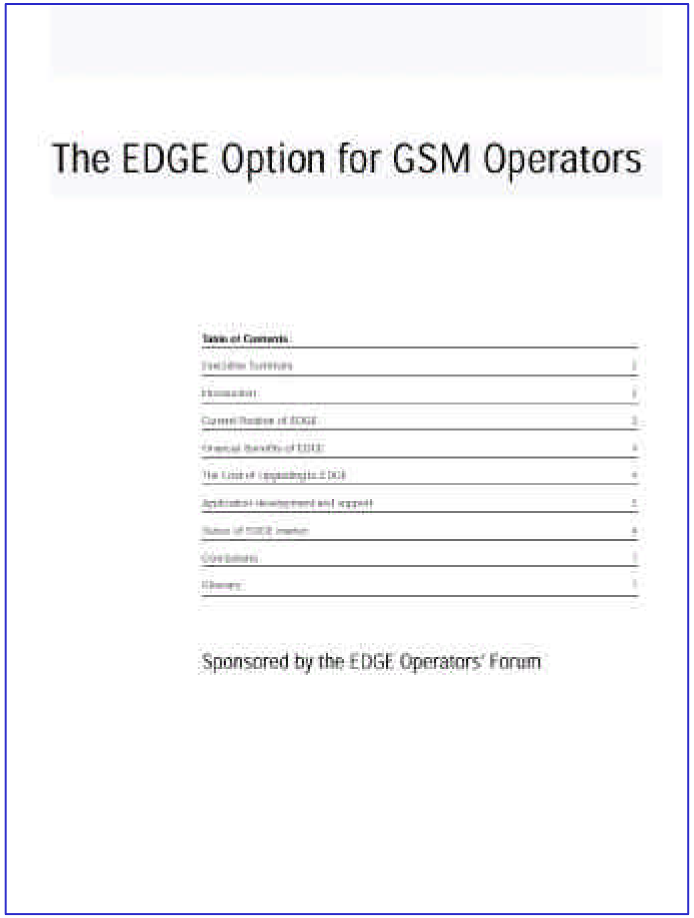
2002: First terminals

Download White Paper via:

www.gsacom.com/gsm_3g/opinion_papers.htm

Press release (September 19, Singapore):

www.gsacom.com/news/gsa_126.htm



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