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# **3G MOBILE OVERVIEW**

**John Burns**

**Aegis Systems Ltd**

*<http://www.aegis-systems.co.uk>*



**3G Mobile Workshop**  
18th April 2000



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# Structure of Presentation

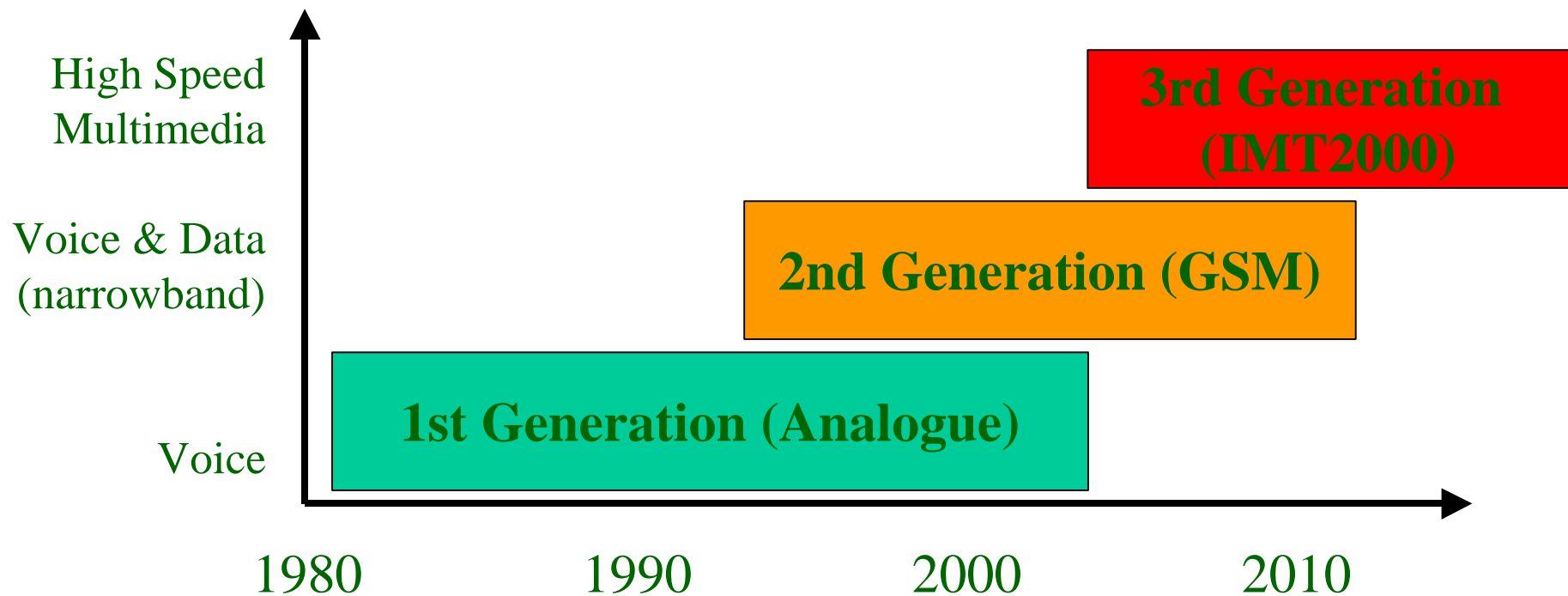
- What is 3G?
- 3G Standards and capabilities
- 3G mobile's place in the market
- Summary
- Further information



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# What is 3G mobile?

A new suite of standards to deliver **mobile multimedia**





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# IMT-2000: The Mobile Internet

“The IMT-2000 third generation mobile standard enables **mobile** users to harness the full power of the **Internet** through efficient high-speed radio transmission, optimised for **multimedia** communications”

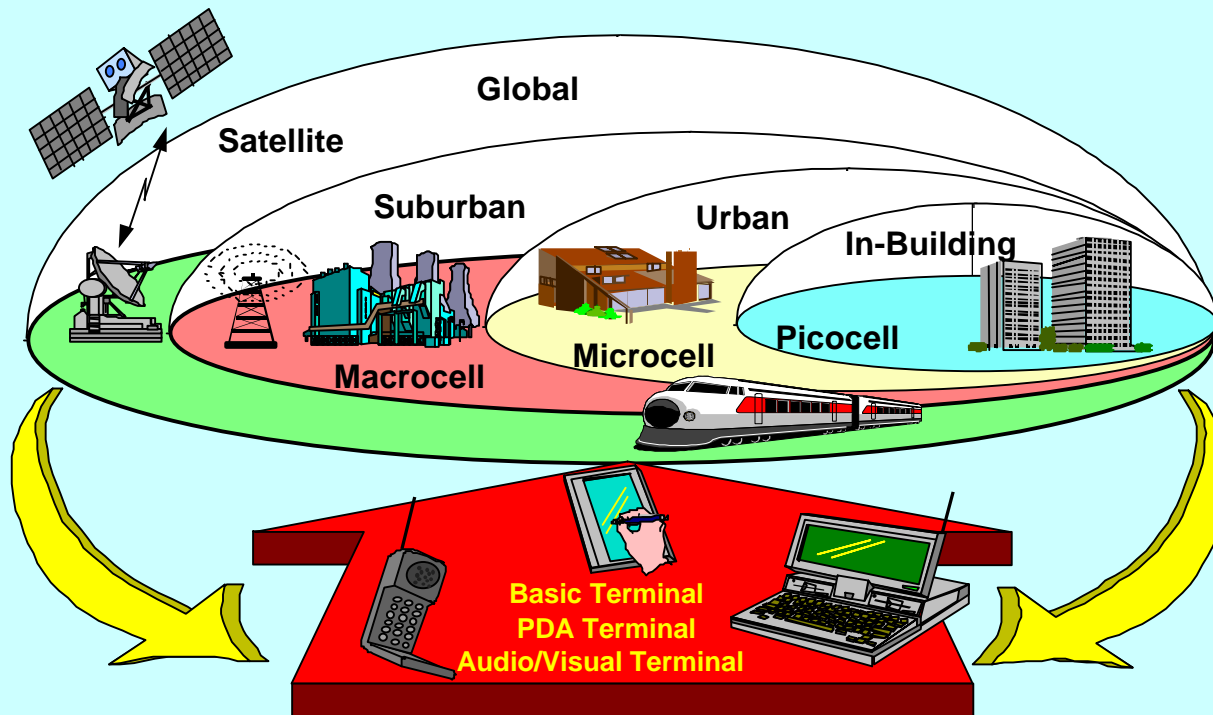
- International Telecommunications Union



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# A Global Vision

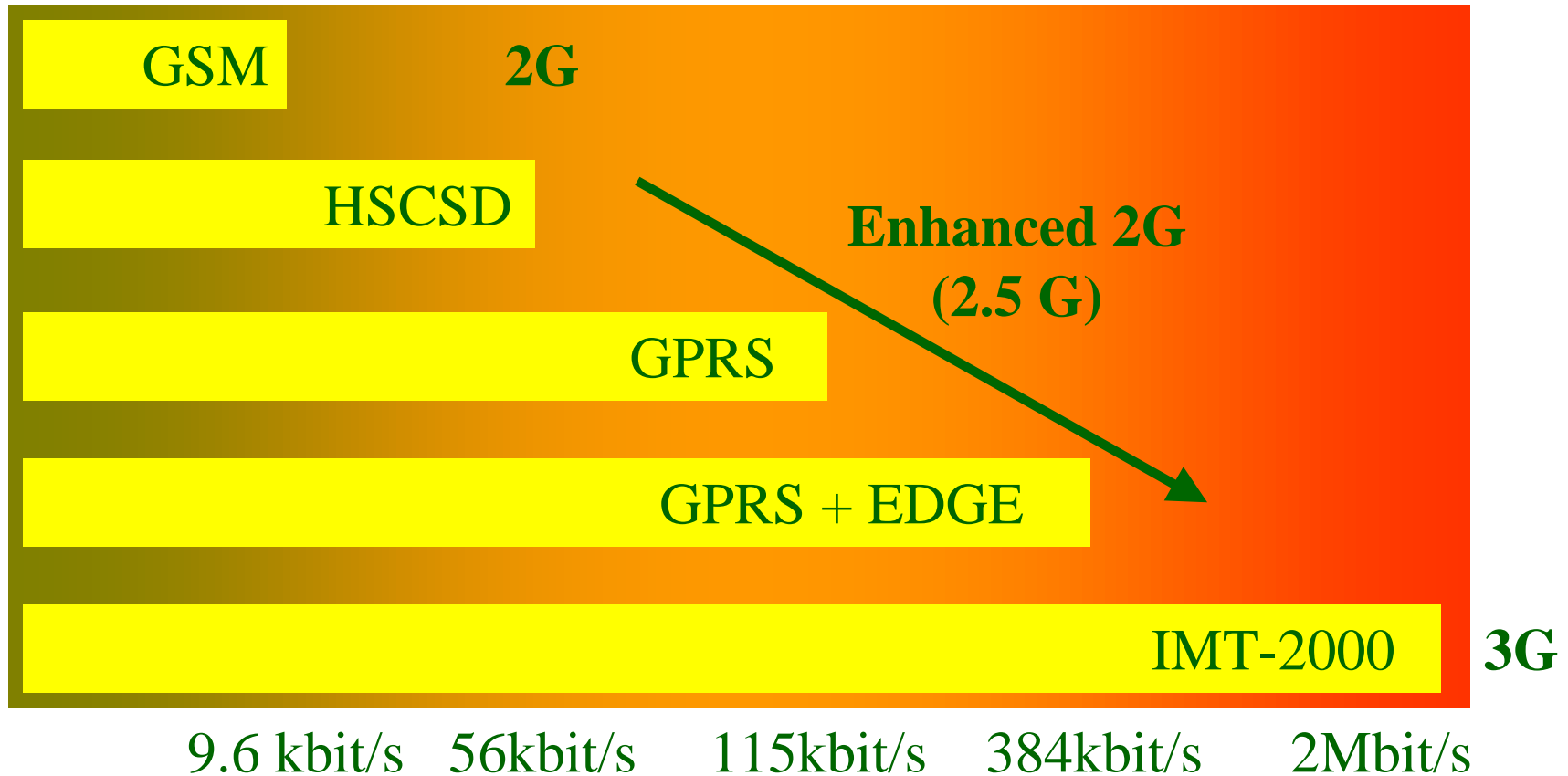
The ITU vision of global wireless access  
in the 21st century





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# Evolution towards 3G





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# 3G Standards

- global co-operation via 3G partnership project
  - choice of five open, non-proprietary standards
  - includes European UMTS and DECT standards
  - builds on enhanced 2G standards
  - evolutionary, not revolutionary



A GLOBAL INITIATIVE





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# 3G Capabilities

- All standards must deliver high speed data
  - up to 2 Megabits / second (indoors)
  - up to 384 kilobits / second (outdoors)
- Networks likely to be IP based
- Global roaming via terrestrial and satellite
- Customised services wherever you are
  - “Virtual Home Environment”





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# The 3G Performance Advantage

## Time to download a 1 MByte file:

- Fixed line modem: 3 minutes
- GSM cell phone: 15 minutes
- Enhanced GSM phone: 1 - 5 minutes
- 3G phone (outdoor): 21 seconds
- 3G phone (indoor): 4 seconds



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# 3G Applications

- Wireless Internet
- Audio on demand
- Electronic postcards (incl video clips)
- Video conferencing
- Secure mobile commerce transactions
- Traffic and travelling information -  
location specific



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# IMT-2000 Concept Phones



NTT Docomo



Sharp



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# The European Mobile Market

- 150M subscribers (33% of world total)
- Mobiles outnumber internet subscribers 2:1
- Over 2 Billion SMS messages per month
- Current Irish mobile market:
  - near 50% penetration
  - annual growth rate 65%
  - estimated value >IR£400 million

(Estimates based on operators' published data)



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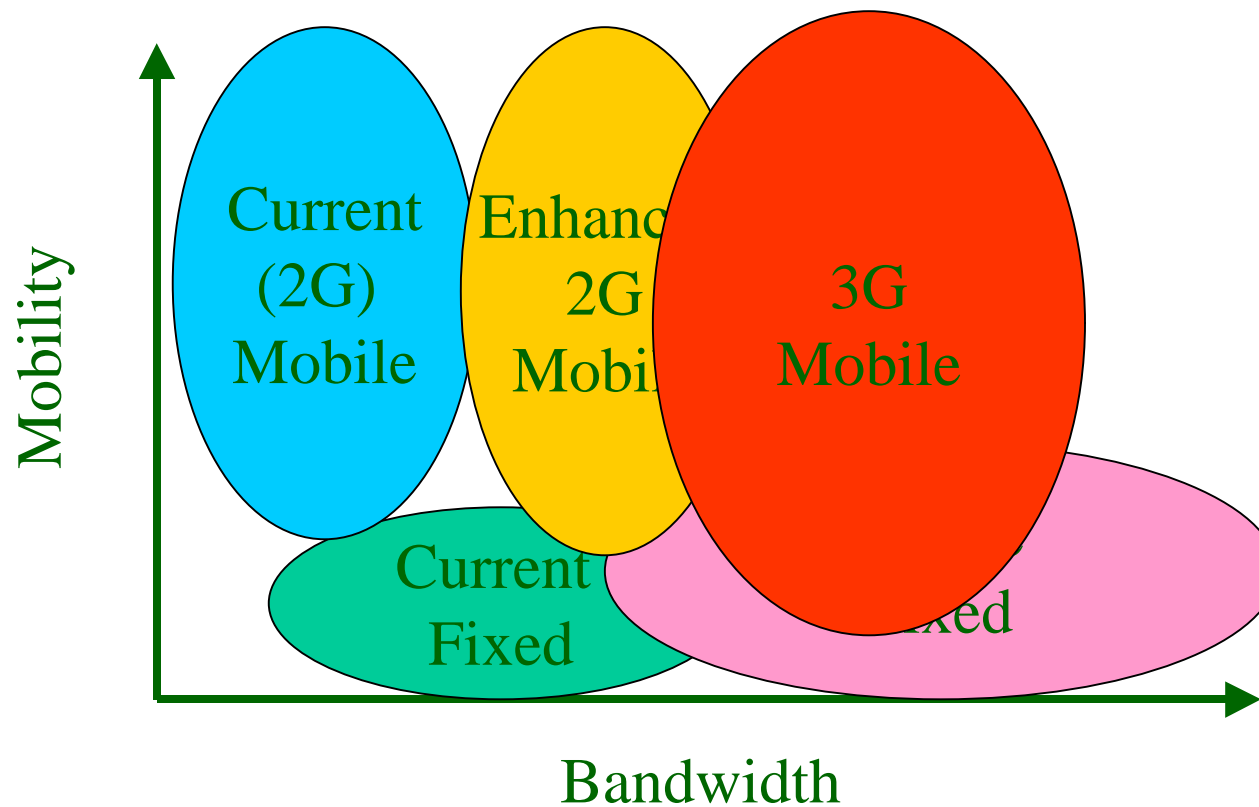
# Market Drivers Towards 3G

- Rapid growth in text, WAP and other data traffic- up to 50% of total mobile traffic within 5 years
- Mobile & Internet penetration both growing rapidly
- Mobile penetration likely to exceed PCs & fixed
- Alliances forming between major mobile, IT and e-commerce players
- Mobile commerce and multimedia identified as key growth areas - **but need bandwidth to deliver**



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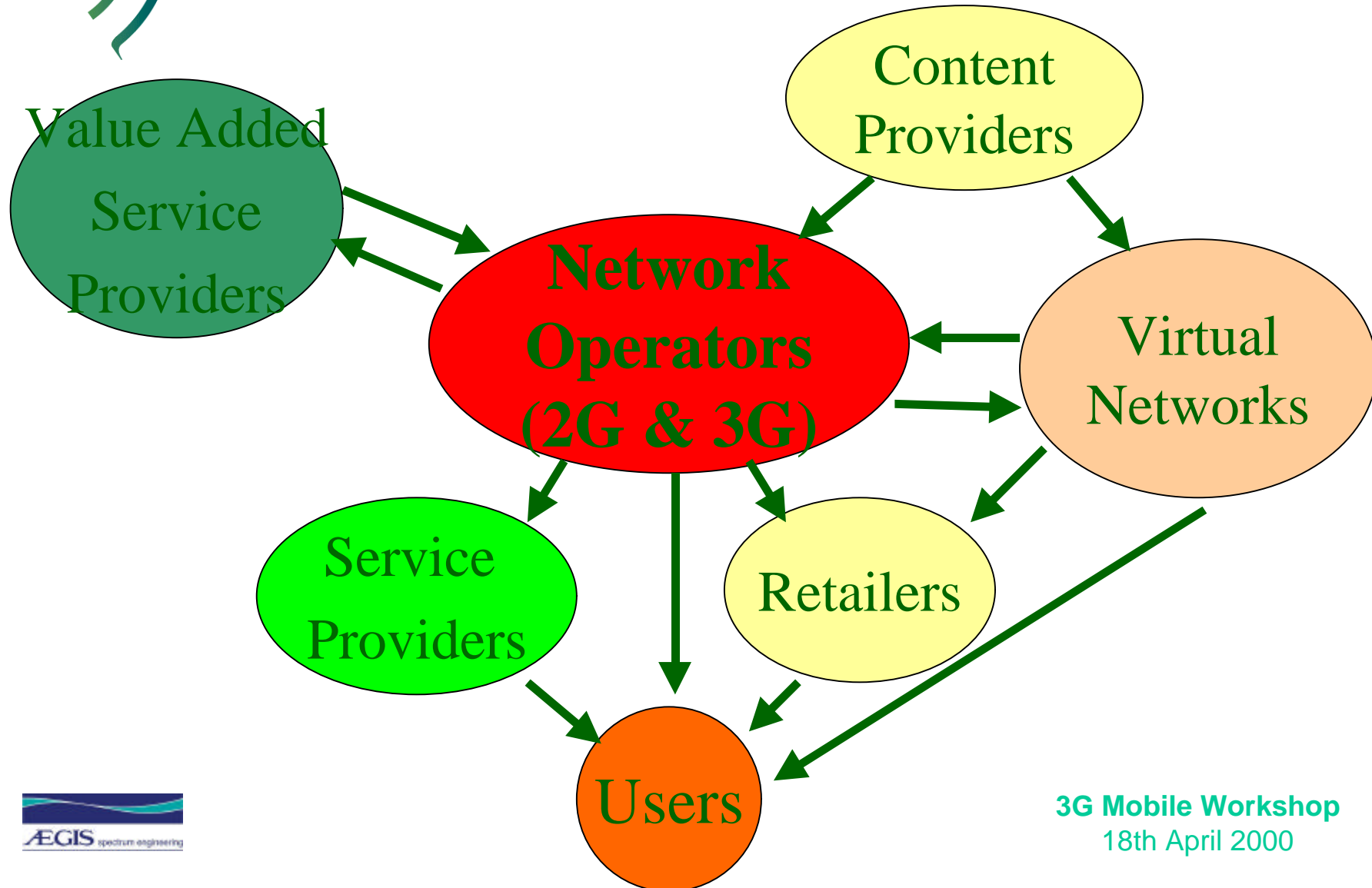
# 3G's place in the Market





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# Potential 3G Market Players





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# 3G Summary

- 3G mobile is a major opportunity for Irish business, commerce and consumers
- Brings together the two fastest growing market sectors - Mobile and Internet
- Market, services and standards evolving from 2G to 3G
- Significant opportunities for value added content and service providers





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## Further Information...

- **ITU IMT-2000 Home Page**
  - <http://www.itu.int/imt/>
- **3rd Generation Partnership Project**
  - <http://www.3gpp.org>
- **ETSI UMTS Project**
  - <http://www.etsi.org/umts/umtsSummary.htm>
- **UMTS Forum**
  - <http://www.umts-forum.org>