Shifting from Future Performance to Short-term Profitability

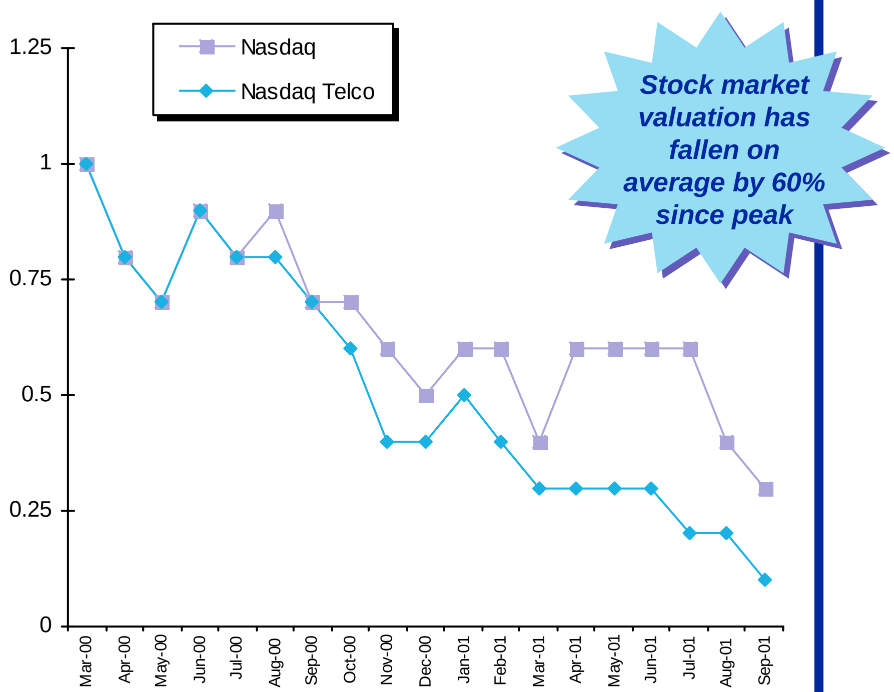
Telecom and Media Trends in a Turbulent Market

Focus has shifted from future performance to short-term profitability

We will look at these developments in turn.

The capital market collapse has influenced all aspects of the TMN industry

Telcos/Media Market Performance



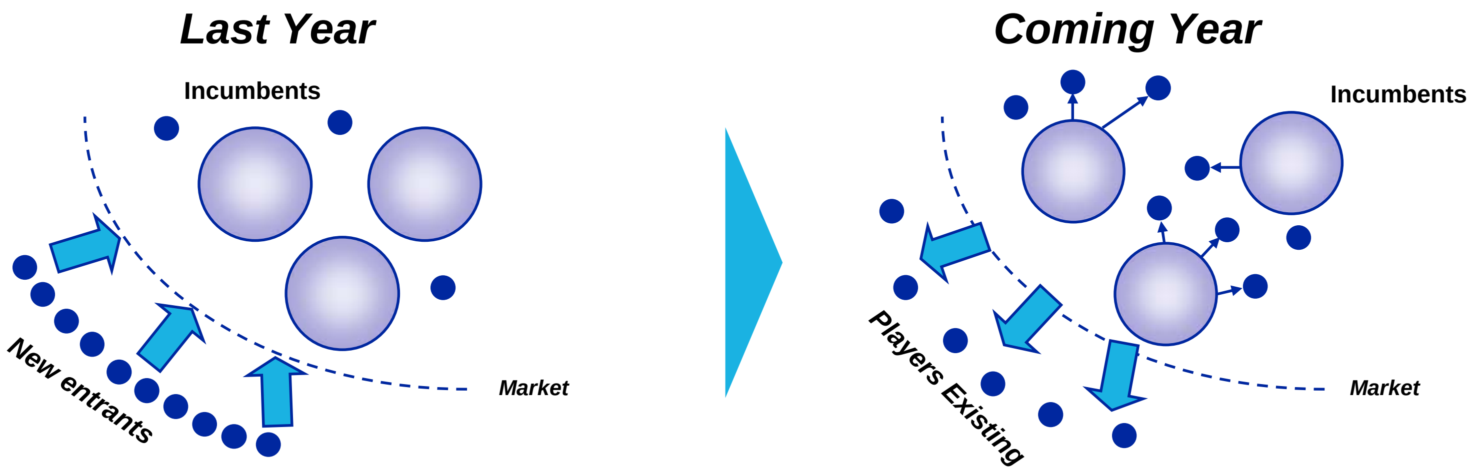
Drivers of Market De-rating

- **Telcos:**
  - Concerns over capital expenditure:
    - Rollout of broadband networks
    - Licence fees for 3G networks—in excess of €125bn globally
  - Technical delays:
    - GPRS/ASDL rollout
  - Debt burden:
    - European telcos need to finance up to €150bn of debt in 2001
- **Internet/Tech:**
  - Fragile business models, e.g.:
    - Portals unable to use access charging
  - Lack of finance/concerns over returns:
    - Capital was not being committed to sector, e.g. 3G auctions
    - Capital committed would not yield returns, e.g. 3G payback
- **Media:**
  - Bleak advertising outlook:
    - Reduction in global advertising growth from 6.8% to 1.3% for 2001

The market is placing a premium on results with rigid performance expectations.

a. “Media Space 2001”, Mike Hilton, ABN AMRO.

The attacker/defender relationship has reversed



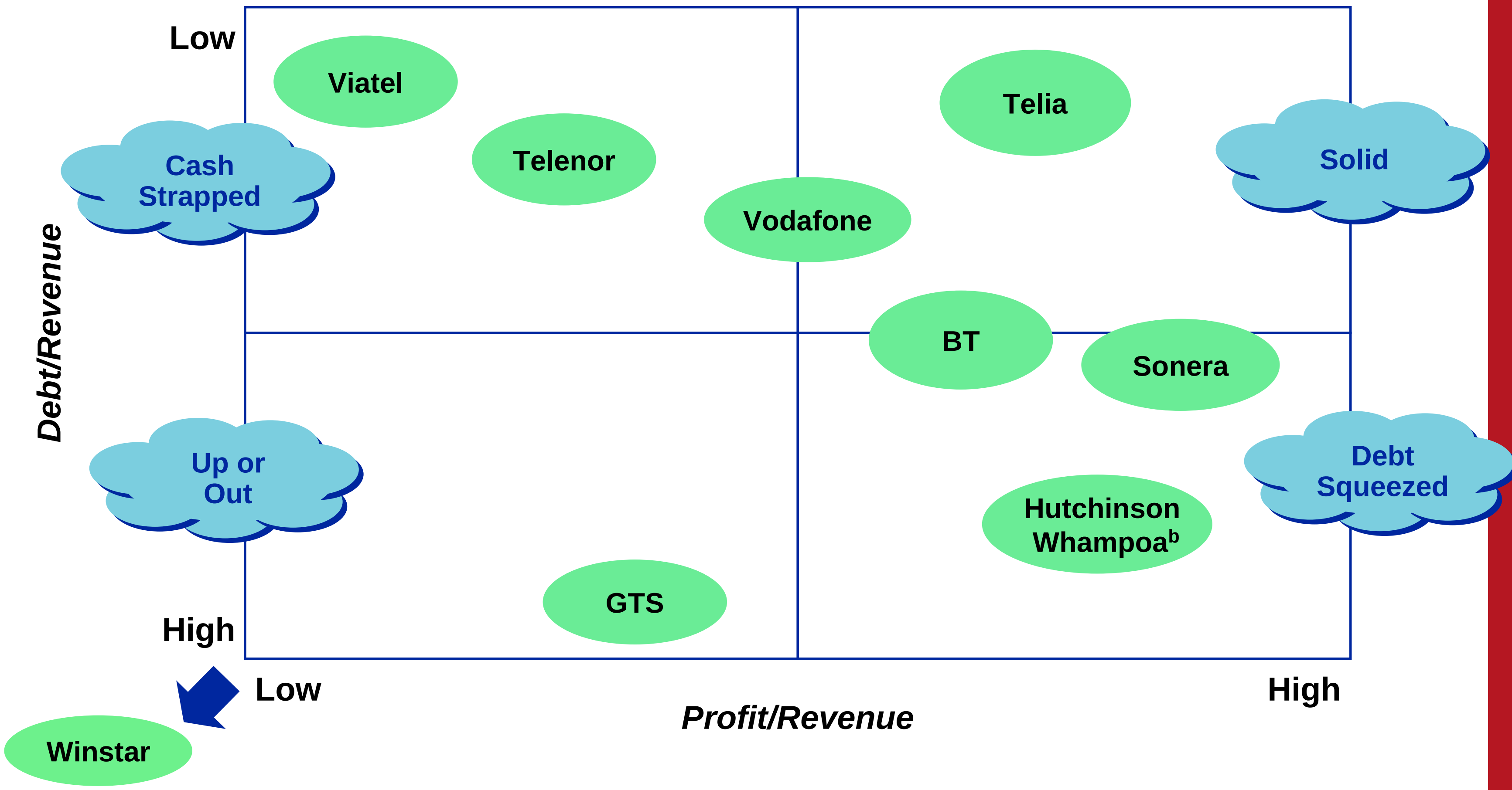
Market Dynamics

- **New entrants took on the role of attackers**
- **New entrants followed cherry-picking strategies to gain customers**
- **New entrants market capitalisation increased based on future growth potential**
- **Established players were considered to be large and unresponsive**

Market Dynamics

- **Incumbents have absorbed some of new entrants, e.g.:**
  - Energis buying Ision
  - FT buying Equant
  - Wind buying Infostrada
- **Other new entrants will be forced to leave the market, e.g.:**
  - Winstar
  - Teligent
  - 360 Networks
- **Pressure on new entrants to deliver will cause strain and render them vulnerable, e.g.:**
  - GTS
  - Viatel
- **Incumbents will face similar pressures, yet their critical mass will be a relative strength**

Four distinct market positions are emerging



a. Adjusted March 2001 data; b. Conglomerate data.

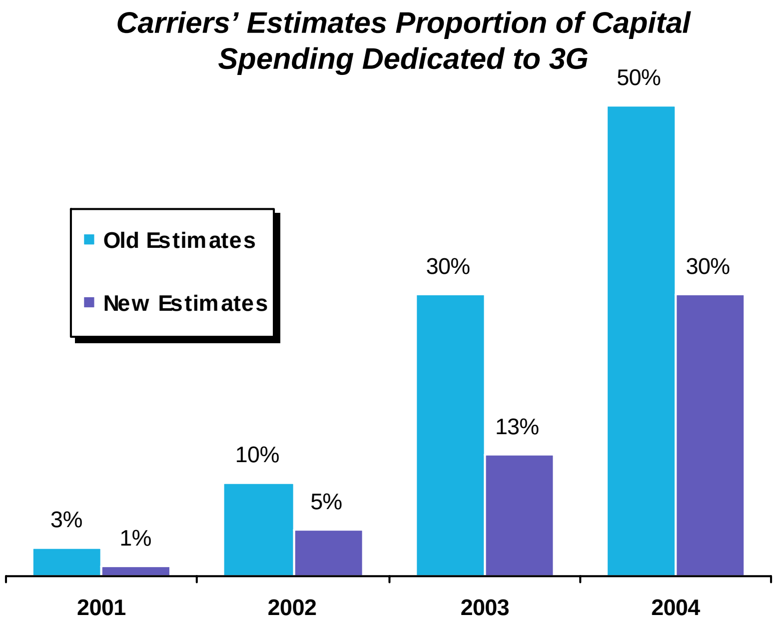
Players' cash position is impacting their strategy

	Cost Position	Revenue Position
Wireless	• **Excessive 3G expenditure:** – Licenses – Rollout	• **Voice revenues generate 80–90% of overall revenues** • **Data revenues hampered by customer acceptance and technical delays** • **Advertising/commerce revenues suffering from economic downturn**
Fixed Line (backbone)	• **Long-haul networks: significant debt from backbone rollout** • **National: reduce expenditure on overlay networks**	• **Long-haul networks: typically negative cashflows due to capital expenditure** • **National: solid cashflow from large customer base**
Broadband (access)	• **Alternative DSL model is today costs prohibitive (regulations, business model)** • **Incumbents: managing cost of roll our carefully**	• **Business models struggling to emerge with solid customer base:** – Slow consumer take-up – Decline of dotcom market • **Expecting new media services to drive up revenues**
Media	• **Content owners: spend on production increasing despite high risks** • **Content aggregators: spend on content increasing as channels multiply; distribution costs increasing due to need for analogue and digital** • **Portals: oversized investment based on ambitious revenue plans**	• **Content owners: buoyant market for good content** • **Content aggregators: suffering from declining advertising spend and multiplication of channels** • **Portals: business models never materialised as planned**

Equipment vendors supporting Telecom and Media companies with financing are now feeling the impact of the downturn.

3G deployment is continuing but at a slower pace with players searching for cost-efficient solutions

Estimated 3G Capital Spending



Strategy

- **Partnerships:**
  - Between licence holders, e.g.:
    - Netcom AB (now Tele 2) and Telia in a 100% joint venture to share infrastructure build cost
  - Between operators and hardware manufacturers, e.g.:
    - Motorola to supply BT Cellnet with GPRS handsets
  - Between operators and MVNOs
- **Prioritised infrastructure deployment, e.g.:**
  - Netcom and Telia have been targeting cities as a priority in the roll-out in Scandinavia
- **Withdrawal from costly projects, e.g.:**
  - Sonera gave one 3G licence back for free rather than add to €4bn spent to date

A reduced level of 3G capital spending and increased partnerships throughout the value chain will continue.

Source: ING Baring, 2001.

Telco's core transport business is pressurised by excess bandwidth capacity and falling prices

Glut of Bandwidth Capacity

- **Unlit fibre:**
  - Only 10% of fibres in the ground in the European triangle—Paris, Frankfurt, London, Amsterdam—are lit
- **Building plans will exacerbate situation:**
  - If current builds were to be completed capacity would be 75x greater than today
- **Advances in laser technology:**
  - Much more traffic can be squeezed onto each fibre
  - Capacity doubles every 6–9 months

Falling Bandwidth Prices

- **International transit prices have fallen by 50% in the past year**
- **Commoditisation of bandwidth:**
  - Rise in bandwidth exchanges results in greater market liquidity and will hasten price declines

Strategy

- **Reduce debt burden**
- **Reduce capital expenditure on backbone e.g. hand back leased lines**
- **Shift targeted investment to metropolitan area network**

Source: America's Network, ING Baring, 2001, Company Reports, Financial Times, Yankee Group.

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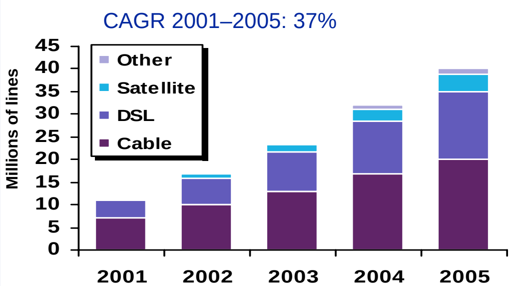
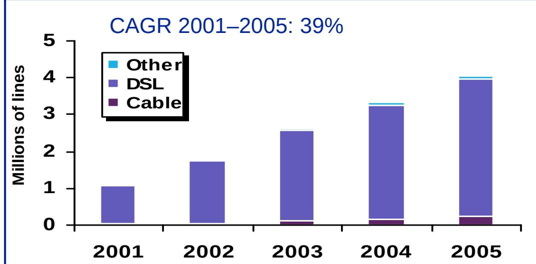
Incumbents controlling local loop access will benefit from the positive broadband demand outlook

Demand

Residential Broadband Lines, 1999–2005



SME Broadband Lines, 1999–2005



Strategy

- Incumbents will launch services ahead of competition whilst retaining control of local loop
- New entrants will fight for local loop access in courts and with regulators

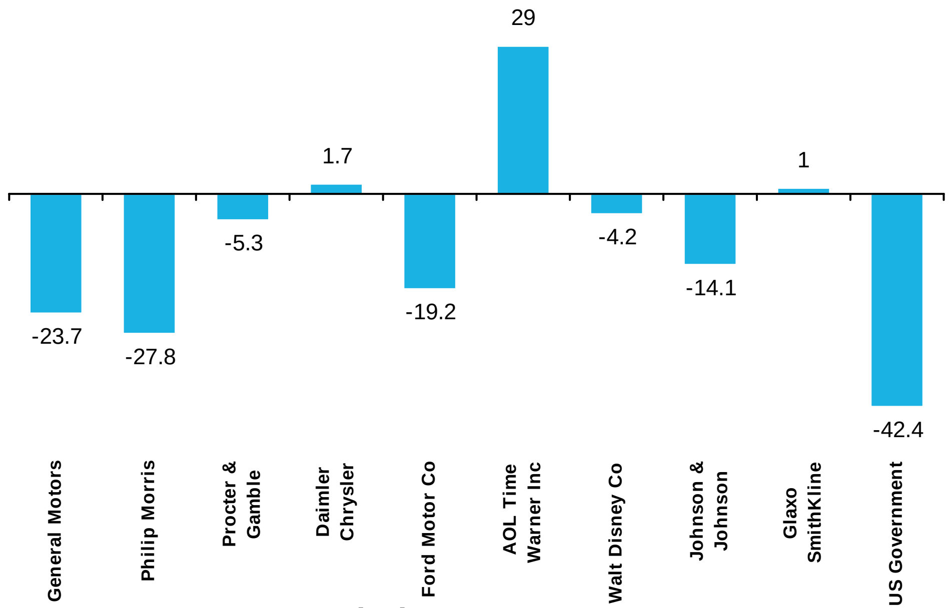
Supply

- **Wholesale and reseller start up models have proven largely unsustainable:**
  - In the UK, only the wholesale operator Bulldog has funding to survive
- **Numerous service providers in weak position have folded or been acquired**
- **Strong revenue generating content models remain unproven:**
  - Local loop is most expensive part of the network, the only way to operate meaningful revenues is through bundled offerings

Source: JP Morgan, “Broadband 2001: Industry Analysis”, 2001.

Ad spend has collapsed, forcing media players to capitalise on consumers willingness to pay for "high-value" content

Year-on-Year Change in Q1 2001 Ad Spend for Top 10 US Advertisers



Total Change = –11.8%

Strategy

- **Overall: Leverage investment in "high-value" content:**
  - Branded/niche
  - Interactive
  - Personalised
- **Content owners and aggregators: Charge premiums for "high-value" content, e.g.:**
  - Productions with Hollywood actors/actresses
  - Premium channel TV
- **Portals: Move to subscription based model:**
  - Free content models proved unsustainable

Additionally, players must continue to invest in content digitisation and preparation of content for new delivery platforms.

Source: "Media Space 2001", Mike Hilton, ABN Amro.
a. AOL Time Warner merger explains increased Q1 adspend in 2001.

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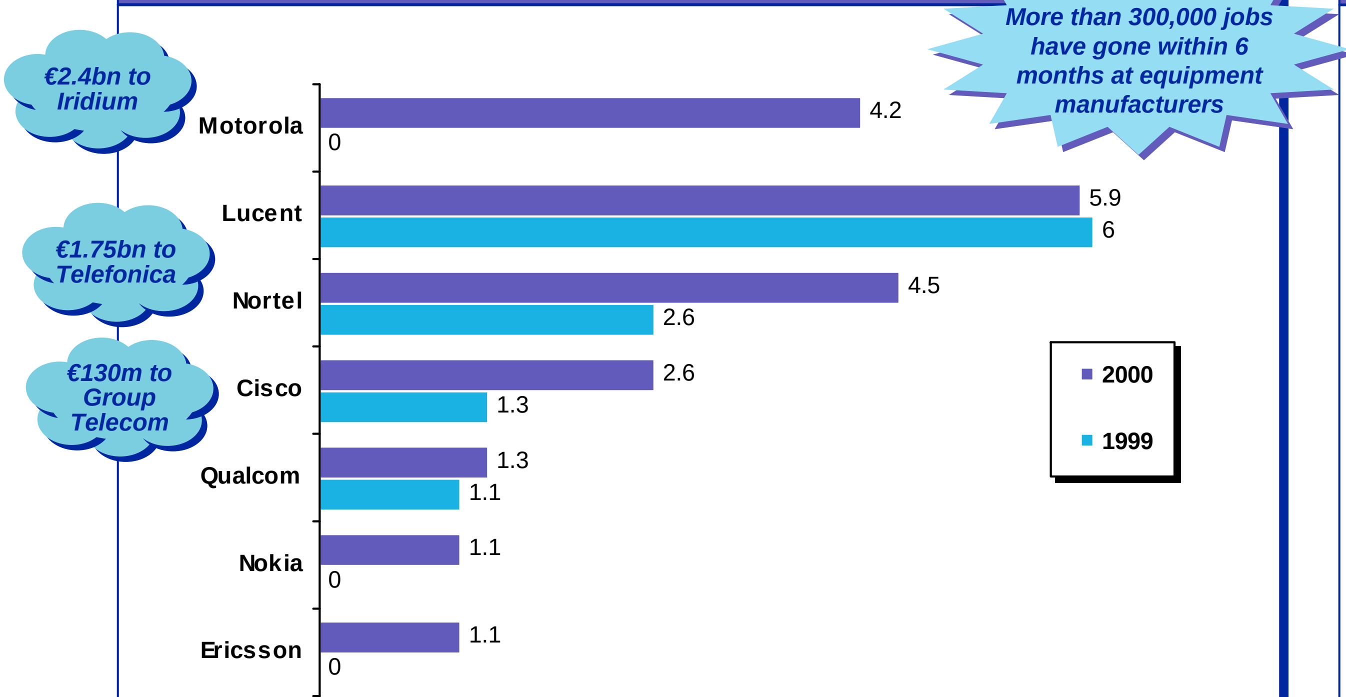
The new media industry is shaping up but will develop at a slower rate than anticipated

Key Media Trends

Trend	*Description*
Digitisation of content	• **Content owners will digitise their libraries to realise the benefits of digital distribution:** •Reduction of distribution costs •Increased ease of global distribution • **This requires new skills in the area of digital asset management**
Content moving to subscription-based / on-demand models	• **Free content models have proven unsustainable** • **Subscription / on-demand models compensate uncertain future advertising revenue streams** • **Content providers seeking new revenue streams**
Evolution of new content delivery platforms	• **Identify the best place to store content and sell to the customer** • **Video-on-Demand, Personal Video Recorder (PVR), DVD** • **Video streaming over the Internet (e.g. Big Brother)** • **Increase interactivity and personalisation of content and advertising**
Differentiation in content creation	• **Brand** • Increasing importance of talent brands and quality to differentiate • Branded artists, production and rights becoming increasingly expensive • **Niche / experimental content** • Regionalisation, new content models • e.g. Big Brother / Survivor shows

Equipment vendors entered into financing to protect volumes but are facing massive industry restructuring

Vendor Financing Commitments, 1999–2000 (€ billions)



Recent Activity

- **Winstar is in bankruptcy, putting Lucent's loan at risk**
- **Vectris, upon entering bankruptcy, has defaulted on a €65 million loan from Cisco**
- **Default rate on telco loans could increase from 1% last year to 5–10% this year affecting both growth and the bottom line**
- **100 rated companies defaulted on €63bn worth of debt in first half of 2001—€20bn was attributable to telcos**

Equipment vendors are getting squeezed from all corners.

Source: TotalTelecom; The Street.com;The Standard Europe; Company Filings; *Financial Times*; CGE&Y.
Note: 1999 figures for Nokia, Motorola and Ericsson unavailable.

Indebtedness and a continuing economic downturn are prompting companies to exit, sell, rationalise or merge

Result	Reasons	Examples
Exit	• Unable to service debt: – Default on loan payments.	• Winstar, Teligent, 360 Networks have filed for bankruptcy
Sell	• Unable to gain further funding	• Atlantic Telecom selling Dutch, German, UK operations • One.Tel sold UK business to Centrica
Rationalise	• Unable to continue heavy capital expenditure alone	• Sonera gave back one of its 3G licenses for free • DT and BT sharing expenditure costs for expansion of 3G networks
Merge / Demerge	• Desire to gain scale through consolidation • Desire to restructure business and balance sheet	• Webraska and Airflash, the location-based mobile service specialists, will merge in a bid to be market leader • BT Spinning off moble business mmO_2, selling assets such as international directories and e-commerce business Yell

Access to capital at the appropriate time is the immediate issue Telecom and Media companies face.

Source: Richard Wilson, Nomura; S. Carrington, CSFB, 29/5/01; Total Telecom.
a. Webraska focuses on mobile navigation technologies, Airflash focuses on mobile end-user applications.

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