CABLES AND SYSTEMS
MARKET TRENDS 1998-1999

CABLES

- End of monopolies
- Markets opening

ENERGY

- Stable volume
- Europe and S. America: continuous price erosion

COMMUNICATIONS

- N. America: growing volume and price erosion
- Europe: volume increase, price shock

INDUSTRY RESTRUCTURING

NORTH AMERICA

SOUTH AMERICA

EUROPE

AUSTRALIA
### GEOGRAPHICAL BREAKDOWN

- **Italy**: 11%
- **Rest of Europe**: 43%
- **North America**: 21%
- **Central and South America**: 15%
- **Australia, Asia, Africa**: 10%

### PRODUCTS

- **Energy cables**: 31%
- **Telecom cables & systems**: 29%
- **Enamelled, building wires and special cables**: 26%
- **Installation services, accessories and other Products**: 14%
PIRELLI ENERGY STRATEGY
- Strengthening competitive position through:
  - Technology innovation
  - Cost leadership
- Global leadership in the industry restructuring

POWER CABLES INNOVATION

AFUMEX  COMPACT  AIR BAG  ZIP
CISCO TRANSACTION OVERVIEW

TRANSACTION STRUCTURE AND RESULTING OWNERSHIP

STRATEGIC ALLIANCE

TERRESTRIAL OPT. SYSTEMS

OPTICAL COMPONENTS

SUBMARINE OPTICAL SYSTEMS

OPTICAL CABLES

FIBER OPTICS

100%  100%  100%  100%

90%  90%
PHOTONIC TECHNOLOGIES OWNED BY PIRELLI
(after Cisco deal)

LiNbO$_3$
Technology

GaAs
Technology

Fiber Gratings

Modulators...

Pump laser...

Filters

Device
packaging

Packaging of all
devices
FIBER GRATING TECHNOLOGY - LABS

- Grating writing set-up
- Grating recoating
- Chromatic Dispersion
- Compensator packaging
Pirelli Cables & Systems

TELECOM CABLES & FIBERS

INTERNET PROTOCOL
“Broadband” services expansion

EXISTING OPTICAL NETWORK
- Narrow bandwidth (“last mile”)
- Low transmission speed

FIBER TO HOME

NEW CABLES

INTERNET technology capability at competitive costs

INNOVATIVE FIBERS

END-USER
- IP (Internet)
- E-Commerce
- Broadband Services (voice + video + data)
Pirelli Cables & Systems

FIBER OPTICS INNOVATION

PAST PRODUCTS

Present - Future Products

Applications

SMR fibres

NewLight™ +

FreeLight™

DeepLight™

NewLight™ -

WideLight™ +

ThinLight™ +

Enhanced FreeLight™

Enhanced DeepLight™

Long length terrestrial systems

Long length, high optical power terrestrial systems

Long length submarine systems

Metropolitan area (no compensation)

Premises (last mile area)
**SUBMARINE TELECOM SYSTEMS**

**MARKET TREND (Euro Mln)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Market Value (Order intake)</th>
<th>Order intake for upgrading on installed systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>3,200</td>
<td>1,900</td>
</tr>
<tr>
<td>2001</td>
<td>5,900</td>
<td>7,800</td>
</tr>
</tbody>
</table>

**MARKET: DRIVING FACTORS**

- Internet as the major source of demand for new capacity
- Technological continuous improvement: clients want to buy tomorrow’s technology to be able to compete in terms of bandwidth costs and availability
- Time to Market
- Integration of terrestrial - submarine system
- Cost competitiveness
- System upgradability
E-BUSINESS PROJECT: LOCAL INTERNET SITES

E-Services for Installers & specifiers:

- Online Product Catalogue
- Distributor Locator
- Technical Training / News / Updates/ Software
- Web-enabled Call Center
- On-line Engineering Service & Support
- On-line Interactive Training
- “Push and pull” promotions
- “Frequent Buyer” Program

Web Marketing Plan to support:

- technical marketing
- customer relationship management (e.g. “Pirelli Club”, etc.)