

# TLC Cables & Systems

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**PIRELLI**

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**TECHNOLOGY DAY**

- Q 1 Results and Outlook
- Cables & Fibers
- TLC Systems



# TLC Cables & Systems, Results: Q1 2004

€ Mln

	Q1 2004	Q1 2003	Variation	FY 2003
<b>Net Revenues</b>	96	89	+7.9%	427
<b>EBITDA</b>	2	(4)		(1)
<b>EBIT</b>	(7)*	(13)		(39)

\* Of which -4 submarine activities

# TLC Cables & Systems, Results: ADVANCED TELECOM SOLUTIONS

## Fibre



- SM Light
- Finelight™
- Magnilight™
- Freelight™
- Widelight™

## Long haul

### Optical & Copper cables



- MLTMinicables
- ADSS
- Dry Ribbon
- OPGW

## Metro & Access

### New Photonics



- Tunable Laser
- OADM
- Triplexer
- CWDM

### Broadband Access (BBA)



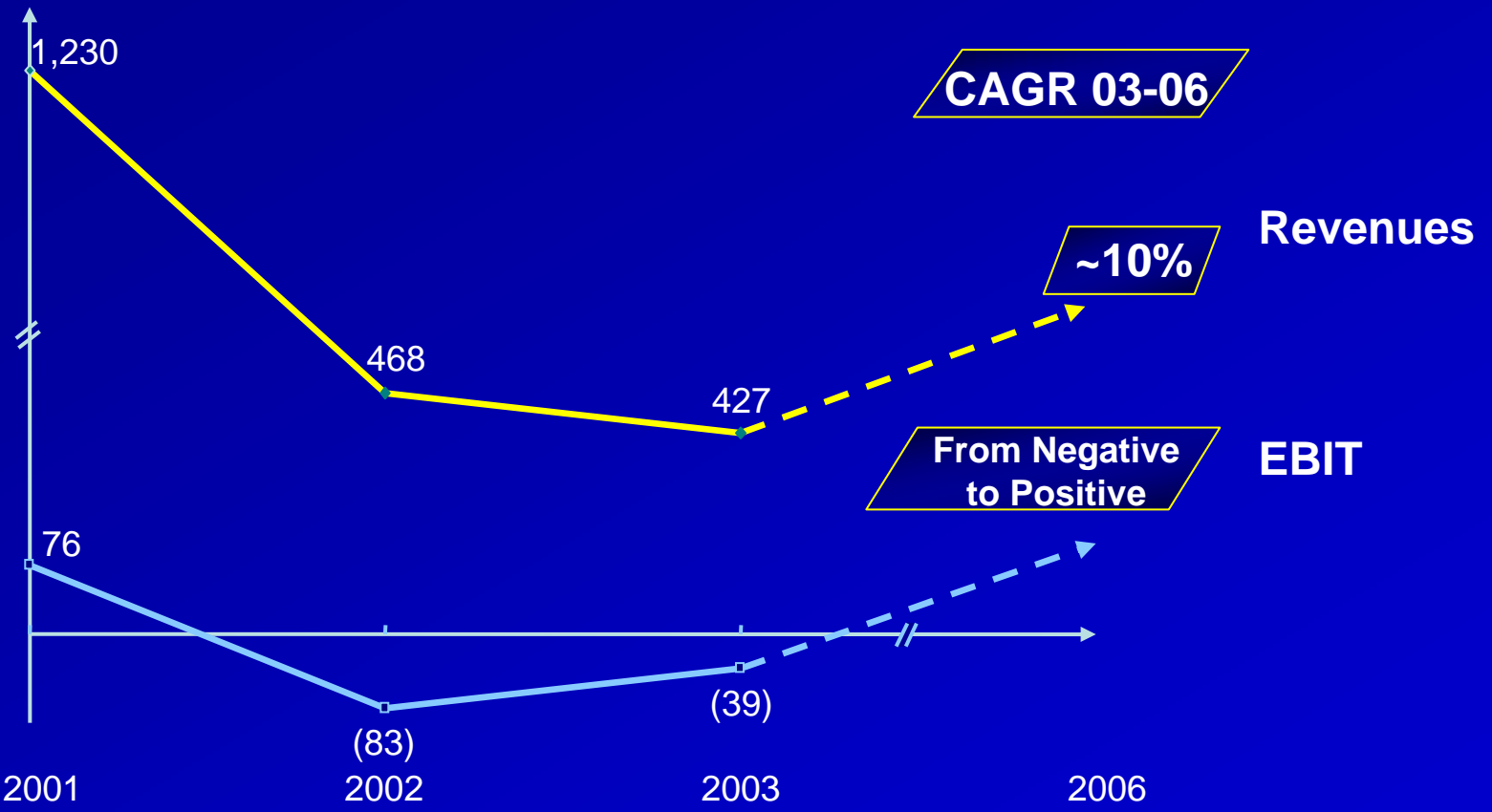
### Connectivity Solutions



### Metro access Systems (MAS)



# TLC Cables & Systems, Results: 04-06 TARGETS



	2001	2002	2003	2006
<b>ROS</b>	6%	-18%	-9%	5%
<b>ROI</b>	11.1%	n.s.	n.s.	~11%

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- TLC Systems



# Cables & Fibres Guidelines: MARKET SCENARIO

	Fibres & Optical Cables	Copper Cables
Market volumes	<p>➔ Slight volume recovery beginning in '04</p> <ul style="list-style-type: none"> <li>- Demand shifting to metro</li> <li>- Premium fibre down to &lt;5% of total volumes</li> </ul>	<p>➔ Modest volume growth (+2% per year)</p> <ul style="list-style-type: none"> <li>- Growing interest in ADSL Cables</li> </ul>
Competition	<ul style="list-style-type: none"> <li>- Overcapacity remains</li> <li>- Price level close to sustainability threshold</li> </ul> <p>➔ Price decrease slowing down. Slight rebound expected in 2005</p>	<ul style="list-style-type: none"> <li>- Highly fragmented supply</li> <li>- Local competitors</li> </ul> <p>➔ Continuing pressure on prices and margins</p>

# Cables & Fibre Guidelines: FIBRES, OPTICAL AND COPPER CABLES

## Actions

### Fibres and optical cables

- **Entry in new emerging countries**
- **Differentiation** through continuous **product innovation**
- **Strengthen the position in PTT customers and growth in other market segments**
- Increasing weight of **proprietary fibres**
- **Connectivity**
- **OPGW Innovation**

### Copper cables

- Push on **new products for xDSL**
- **Focused volume growth**, avoiding price wars

## New targets

### - Revenue CAGR 03-06:

Fibres and Opt. cables	8-10%
Copper Cables	~2%
Connectivity	>20%

- **Maintain leadership in OPGW**
- **Defend contribution margins**
- **Guarantee cash generation**

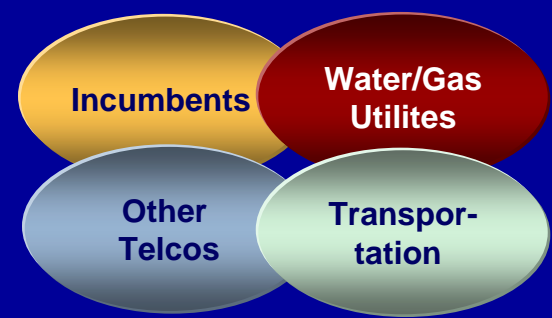
# Cables & Fibre Guidelines: IDENTIFYING PROFITABLE OPPORTUNITIES

**Innovative fibres**



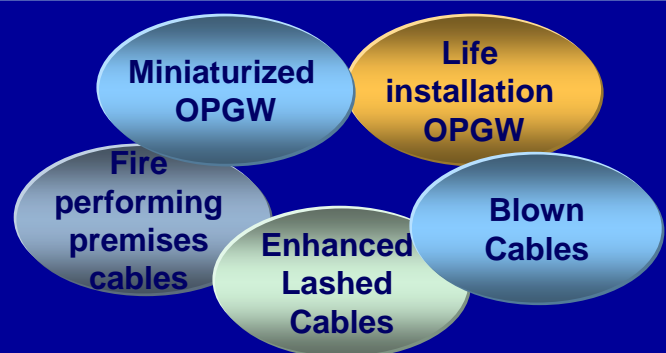
- Low water peak
- Low PMD fibres
- OPGLight
- New NZD generation

**Careful segmentation**



- Service excellence
- Tailored solutions

**Distinctive Cable Solutions**



- Reduction of total life cost

# Cables & Fibres Guidelines: THE BLOWN CABLES' CASE

Creating value for our customers

**Business idea**

**Cable installation system through compressed air blowing**

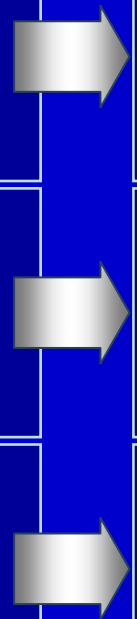


**Emerging needs**

Network design flexibility

Reduction/control of capital expenditures

Speed of customer connection



**Blown cables**

Just in time fibre deployment

Network on demand

- Deferral of capital expenditure
- Fibre deployment related to revenues

Faster subsequent installations

- Concentration of production**
- Optimization of process technology**
- Insisting on delocalization**

**Total savings  
'04-'06  
>30 Mln €**

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# TLC Systems Guidelines: ACCESS MARKET SCENARIO

## Market volumes

➤ **BB Access:** fast growing volumes pushed by the spread of DSL technology

➤ **MAS:** diffusion of optics in metro networks to comply with growing bandwidth requirements

➤ **ROF:** demand driven by the deployment of UMTS/EDGE mobile networks

### DSL penetration in Europe\*

MIn accesses



## Competition

- **Price pressure**, but growing **margins** thanks to **scale economies**

- **BBA:** most **competitors** (esp. in USA and Far East) **focusing on the retail market**

\* Source: EITO

# TLC Systems Guidelines: ACCESS

## Actions

### BBA:

- **Product strategy**
  - . Integrating **leading edge elements (PLabs)** into “**custom made**” solutions
  - . Modularity
  - . Complete offering (**Products + services**)
- **Market focus**
  - . **TLC operators** (customization and full services), not retail market
  - . **Consolidating presence in Europe**
  - . Entering **N.A. and LATAM in 2005/2006**
- Development of **innovative features** (VOiP, Wi-Fi, ...)
- **Business model**
  - . Outsourced manufacturing
  - . Minimized CAPEX

### ROF, MAS:

- **Increase penetration** of existing customer base
- Aggressive pursuit of **new accounts**

## New targets

- **Revenues CAGR '03-'06: ~50%**
- **EBIT positive by 2006**
- **Low invested capital**

# TLC Systems, Guidelines: THE "SMARTGATE" CASE


- ▶ **Product idea:** modular gateway for broadband access
  - Pirelli: definition of marketing requirements
  - TI LAB: Technology scouting
  - Pirelli: design, industrialization, organization of low cost production
  
- ▶ **Commercial targets for Y2004**
  - TI: > 400,000 units installed
  - Fastweb: main equipment supplier
  - BT: main suppliers HUB 3
  
- ▶ **Planned evolution:** from BB access equipment to multiplatform communication hub (BB services, STB, digital TV)

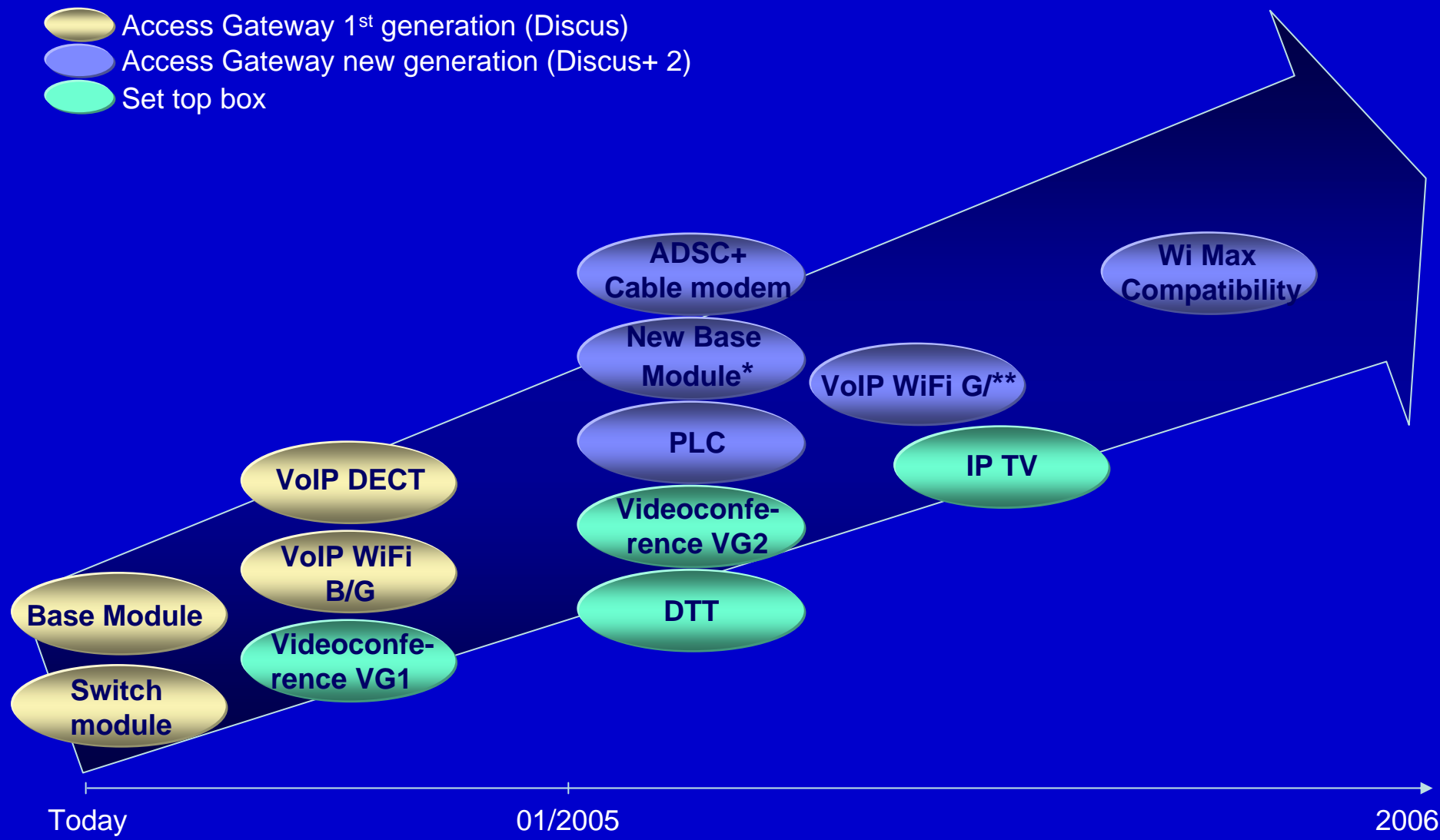
## Pirelli Home Networking model

### Remote management



# TLC Systems, Guidelines: NEW PRODUCTS ROADMAP

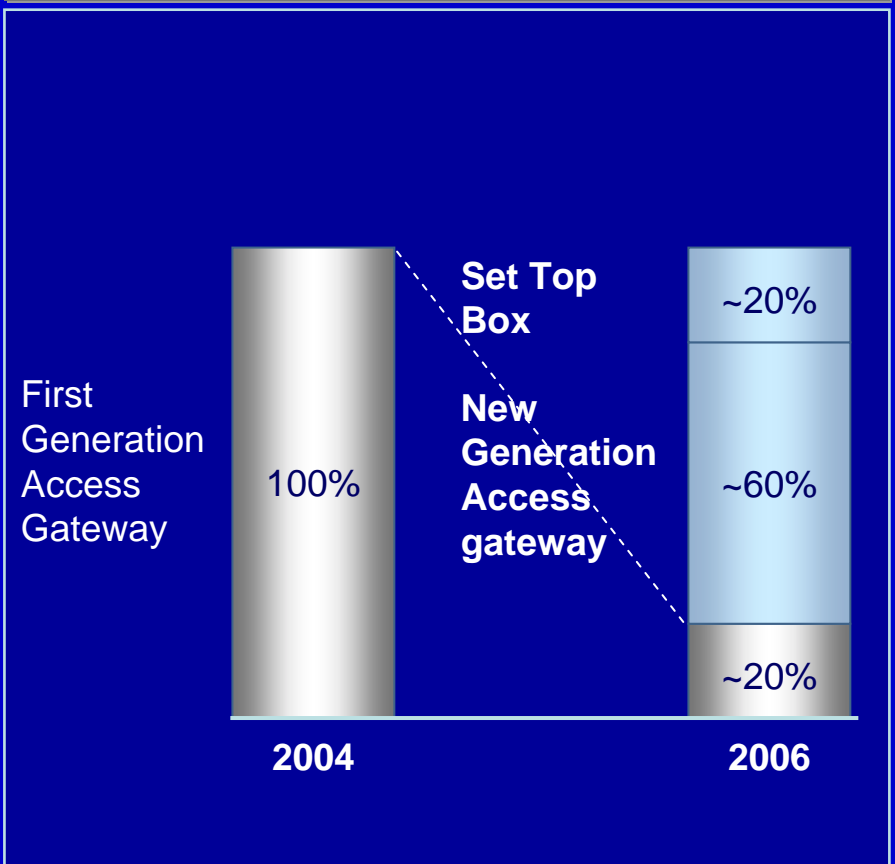
-  Access Gateway 1<sup>st</sup> generation (Discus)
-  Access Gateway new generation (Discus+ 2)
-  Set top box



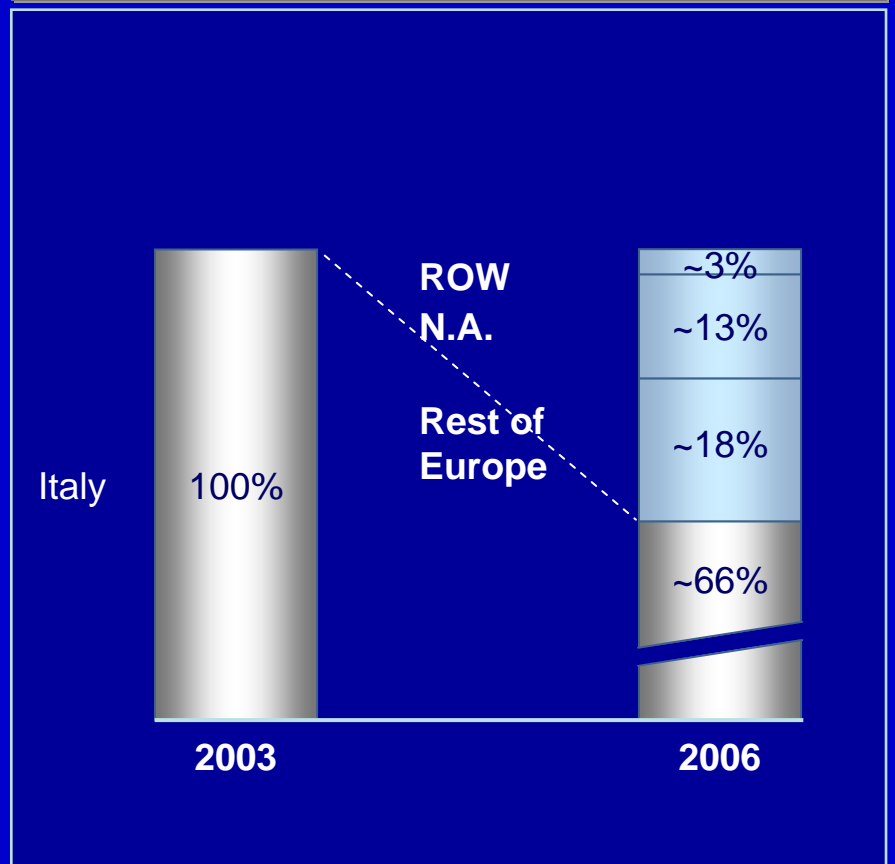
\* With new chipset and platform  
 \*\* Streaming compatible

# TLC Systems, Guidelines: BBA SALES BREAKDOWN

## By product



## By geography



# TLC Systems Guidelines: PHOTONICS MARKET SCENARIO

## Emerging trends

- **Stabilisation of the market**
- **Slow recovery of carriers' investments**
- **Increasing bandwidth consumption (BB diffusion)**
- **Request for "bandwidth on demand"**
- **From legacy networks to new architectures**

## Implications

- **Search for reductions in total life cost of TLC networks**
- **Maximize productivity and flexibility of existing installation**
- **Opportunity for new generation optical systems**
  - . New materials
  - . Tunable products

## TLC Systems Guidelines: NEW PHOTONICS PRODUCT PORTFOLIO

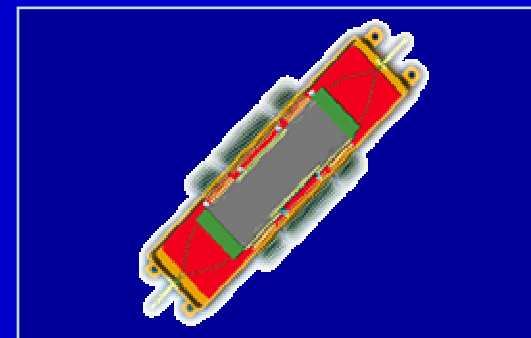
### Tunable laser

High output power laser source emitting on a broad range of selectable wavelengths (tunability)



### Tunable OADM

Breakthrough passive device performing an all-optical add&drop of light beams on a wide spectrum of tunable frequencies



### Triplexer

Optoelectronic interface enabling the offer of video, voice and data for networks based on the innovative PON architecture



# Telecom Systems, Guidelines: NEW PHOTONICS

## Actions

- Product strategy: **integration of electronics and Pirelli distinctive know how in nano-optics**
- Value proposition
  - . **Lower Capex and Opex for Telco's**, tunable products and replacement of rare metals with silica
  - . Target of **>50% cost reduction** vs. existing components
- Commercial objectives
  - . Target **both new installations and replacements in existing networks**
  - . **Tunable laser sales beginning end 2004**
  - . **Triplexer and OADM in the market by 2005**

## New targets

- Become a **technological leader**
- **Significant revenue generation by 2006**
- **Positive EBIT in 2006**