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SERVICES



# CONSTRUCTION





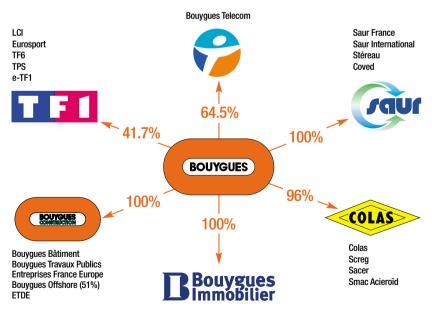
# **Key figures**

**125,000** employees



Sales in 2001 €20,473 million (including international sales of €7,607 million + 8%)	+ 7%
Shareholders' equity as of 31 Dec. 2001 €5,503 million	+ <b>6</b> %
Net debt as of 31 Dec. 2001 €1,124 million 20% of shareholders' equity	
EBITDA in 2001 € <b>1,680</b> million	+ 14%
Operating profit in 2001 €876 million	+ 8%
Net profit (Group) in 2001 €344 million *excl. €206m from Colas share exchange in 2000	<b>+ 60%</b> *

# The Bouygues Group



# Strategies and prospects

# **Editorial**

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# The Bouygues Group

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# Bouygues Immobilier**76**Property promotion<br/>in France and Portugal

Martin Bouygues, Chairman and Chief Executive Officer

he Bouygues Group was created 50 years ago by Francis Bouygues, a young engineer with strong convictions. In particular, he believed that to be a leader – to become one and to remain one – demanded that one seek out challenges and strive to be modern.

Francis Bouygues was convinced that challenges were the only source of progress and that the human spirit was the most powerful force in the world. He knew that nothing could be taken for granted and that ultimately a company's success depended solely on its customers' confidence in it. Drawing on these beliefs, he established a credo with three points – Quality, Deadline, Price – which were to be observed in that order. He also laid down fundamental principles con-



FRANCIS BOUYGUES

values make Bouygues different from other companies. They originated in the actions of a modern entrepreneur who had the ability to swiftly mobilize teams for large projects – teams instilled with a certain spirit. A common cultural identity runs through our entire organization,

> making us more efficient and responsive as well as enabling us to better control risks. We have always been accustomed to competition. It motivates us and drives us to do better. I believe that one of our greatest strengths is knowing how to ally rigor with audacity, imagination with common sense. This last quality has kept us from making many mistakes. The Bouygues Group's concern today is the same as in the past: the confidence and satisfaction of our customers. Because we know

cerning recruitment, training, compensation and recognition of people, whom he regarded as the company's most valuable capital, its very lifeblood, at every level of the organization.

Since 1952, the Bouygues Group has never stopped growing and always stayed true to this strong and original culture, which all our personnel in all our activities share. These that without them, we would not exist. Our company's future success depends on their satisfaction. The only way to provide it is with skilled and motivated people, more and more of whom are employee shareholders, who are proud of what they do and who do it in an excellent work environment. This situation naturally leads to confidence and satisfaction among our shareholders. **M.B.** 

# A CERTAIN Spiriture of uninterrupted growth

n 2001, sales of the Bouygues Group were  $\in$ 20.5 billion, with all of its activities reporting growth. EBITDA went up 14%, to  $\in$ 1.68 billion. Net profit was  $\in$ 344 million, a 60% increase from 2000 on a comparable basis. Shareholders' equity rose to  $\in$ 5.5 billion, and net debt stood at  $\in$ 1.1 billion. The debt-to-equity ratio of 20% reflects an excellent financial structure. With its small amount of debt, the Bouygues Group has the financial resources needed to grow and progress.

# Construction

On the whole, troubles in the world economy did not adversely effect our construction activities. In fact, the remarkable growth of our roadwork activities in the United States easily made up for the contraction of the BCW market in Asia. We have always been adept at going where markets are active and adjusting our operations to contend with economic cycles.

• **Bouygues Construction** has a very substantial order book worth €6.1 billion. Sales exceeded €6.0 billion in 2001. It continued to demonstrate its capacity to work at every stage of a project: preparation, financial engineering, design and construction, turnkey contracts, project management, facility management and maintenance.

Among its major undertakings during the year was the Groene Hart tunnel in the Netherlands. The world's largest tunnel-boring machine, with a diameter of 14.85 meters, is being used there. Meanwhile, Bouygues Offshore has become a major player in the ultra-deepwater market by performing several all-time firsts at the 1,350-meter-deep Girassol oil field off the coast of Angola.

In France, we delivered Cœur Défense in 2001. This was a great success in terms of the excellent technical execution, though the exceptional losses that were recorded had an impact on Bouygues Construction's bottom line. Difficulties and the capacity to overcome them are all part of the entrepreneur's business. Bouygues' reputation is based on executing complex projects that call for the know-how of an exceptional builder.

• **Colas** confirmed its position as the No. 1 road building and maintenance firm in the world. Sales were €7.33 billion, with 42% earned outside France. Colas carries out nearly 100,000 projects a year and continues to expand through external growth, particularly in the United States. In 2001, it reported strong advances in all countries where it operates, including the United States, where the infrastructure market remained robust despite declines in many other sectors.

Active as well in the industrial facets of roadwork, Colas is the world's leading producer of emulsions and binders as well as the owner of large deposits of aggregates, which constitute very important strategic assets. Its financial performance was excellent once again in 2001, with consolidated net profit doubling over a period of two years. The hiring of 3,500 new employees was another sign of growth.

• **Bouygues Immobilier** performs its property promotion activities with skill and sound judgment. Business was excellent in 2001. Net profit rose by 48% and cash flow was positive.

# **Services**

• Saur, a specialist in utilities management, works in three sectors: water and wastewater, which account for 60% of sales; energy (power generation and distribution); and waste management. In 2001, sales were €2.49 bn, with 36% coming from 18 foreign countries, mostly in Europe and Africa.

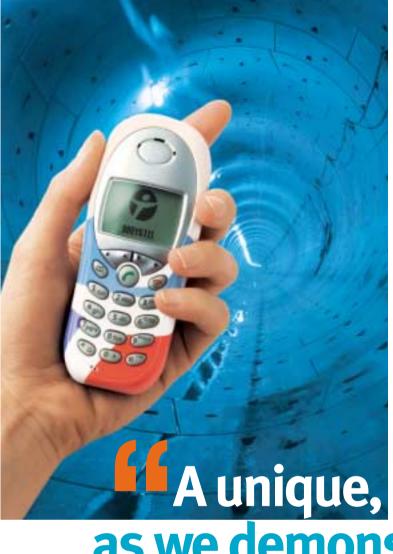
# **Telecom and media**

• **TF1** remains the No. 1 television channel in France, with an average audience share of 32.7%. It reported sales of €2.28 billion last year in a difficult economic context. Net advertising revenues slipped 4.7%, but were still up 10.8% from two years earlier. Its diversification activities contributed 34% of total sales and continue to grow.

In 2001, TF1 bought the shareholding of Canal+ in Eurosport, the only pan-European channel, and now owns 100% of the sports channel. It also increased its interest in TPS from 25% to 50%. Last, TF1 acquired the exclusive television rights for the 2002 World Cup of football and for the 24 best matches in the 2006 tournament, paying  $\leq$ 160 million.

The major deals concluded in the European audiovisual industry in recent years, whether with the aim of acquiring rights or market shares, often have led to serious difficulties. We take satisfaction in having made wise decisions, and we are considering how best to prepare TF1 for future technological changes and the structural transformation of the European audiovisual landscape. In March 2002, TF1 filed several applications for digital terrestrial television licenses, inclunding ones for LCI, Eurosport, Odyssée and TF1, while remaining concerned about Europe's making the right decisions in this domain.

• Bouygues Telecom enjoyed continued growth in 2001, with sales rising 32% to €2.68 billion. Its subscriber base increased by more than 1.4 million customers, reaching 6.6 million at year-end. Network coverage also increased to 98.5% of the population. Its financial situation is healthy, with a low level of debt.



Much can be learned from the social phenomenon of mobile multimedia in Japan. Whereas Europe's experience with WAP technology has been very disappointing, the i-mode services of NTT-DoCoMo have enjoyed immediate and overwhelming success in Japan. We feel they are the best method for rapidly rolling out mobile multimedia on the Bouygues Telecom network. Simple, accessible, useful, competitively priced and broadly appealing - these are the criteria that we see as the keys to success, and we will apply them in a system allowing us to guarantee our customers end-to-end quality. The i-mode solution leaves the choice of network standard open: it will operate on GSM/GPRS as well as UMTS. The new GPRS technology is already delivering faster access to mobile multimedia services, with transmission speeds two to three times higher than with GSM. Bouygues Telecom's GPRS consumer offer will be launched in the second half of 2002. It will of course support i-mode technology.

# A unique, creative group, as we demonstrate each day

EBITDA, which has been positive since 2000, rose sharply to  $\notin$ 473 million in 2001. The company expects to report a net profit in 2002, six years after the commercial launch. In what other business could we have created as much value so quickly without external growth? Recognizing Bouygues Telecom's assets and excellent prospects, we acquired Telecom Italia's stake in the company for  $\notin$ 750 million in March 2002. As a result, Bouygues' holding in Bouygues Telecom increased from 53.7% to 64.5%.

In January 2001, we decided not to bid for a UMTS license in France, believing the terms to be unreasonable. Given the general – and irrational – trend among European telecom operators at the time, we were initially viewed as iconoclasts. Since then, the French government has eased the terms, and there will be another opportunity to apply on 16 May 2002. We have studied this matter very closely in order to act in the best interest of our customers and shareholders. Since we are not the sort to have ready-made opinions, we have tried to gain a little better understanding each day. We have made up our minds cautiously, on the basis of the projected profitability. This subject remains extremely complex.

For 2002, sales of  $\notin$  22.8 billion are projected for the Bouygues Group, with  $\notin$  7.7 billion coming from international activities. Bouygues will devote its resources mainly to building its telecommunications business and to projects at TF1, knowing that its other activities all have the capacity to finance their own growth.

We look to the future with confidence. Bouygues has many assets. For one, our financial structure is solid. Unlike our European competitors in the telecom industry, we have very little debt. Also, we are unique in that we have businesses in both the telecom and television sectors. Last, we have outstanding expertise in each of our activities, and each has strong potential for growth in the future.

For 50 years, Bouygues has brought an entrepreneur's spirit – dynamic, modern, responsible, ambitious and prudent – to all its activities. It is with this spirit, the source of the company's success, that the Bouygues Group will continue to demonstrate its creativity and unique character each day.

18 April 2002 Martin Bouygues

Alain Pouyat Executive Vice President, Information Systems and New Technologies

Pierre Daurès Executive Vice President

# **Corporate management** a team of entrepreneurs

**Board of directors** 

Chairman of the Board Martin Bouygues

# Executive

directors Michel Derbesse Chief Operating Officer Bouygues

Olivier Bouygues Chairman and CEO, Utilities Management

Philippe Montagner Chairman and CEO, Bouygues Telecom

# Directors

Pierre Barberis Patricia Barbizet Mrs. Francis Bouygues

# **Board committees**

Accounts Committee Chaired by Michel Rouger

Selection Committee Chaired by Jean Peyrelevade Georges Chodron de Courcel Jean-Pierre Combot Daniel Devillebichot\* Alain Dupont Lucien Douroux Carmelina Formond\* Patrick Le Lay Jean Peyrelevade François-Henri Pinault Olivier Poupart-Lafarge Alain Pouyat Michel Rouger Serge Weinberg

\*Representing Bouygues employee shareholders

# Supervisor

(non-voting member) Jacques-Henri Gougenheim Honorary CEO, UAP

Remuneration Committee Chaired by Pierre Barberis

Ethics and Sponsorship Committee Chaired by Lucien Douroux

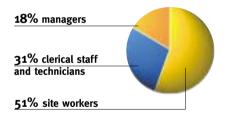


Michel Maître Executive Vice President, Human Resources



### 125,000 employees

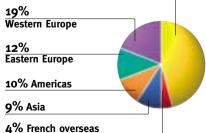
By occupation, as of 31 Dec. 2001



# 56,800 international employees

By geographic region

46% Africa



departments and territories



## Telecom



Philippe Montagner Chairman and CEO, Bouygues Telecom

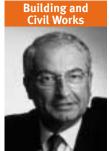
# Media



Patrick Le Lay Chairman and CEO, TF1

Utilities

Olivier Bouygues Chairman and CEO,



Jean-Pierre Combot Chairman and CEO, Bouygues Construction

# Roadworks



Alain Dupont Chairman and CEO, Colas

Property

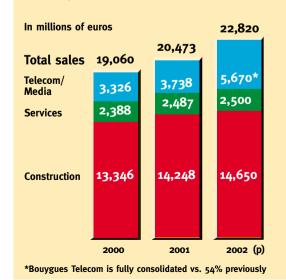






# Sales growth

Saur

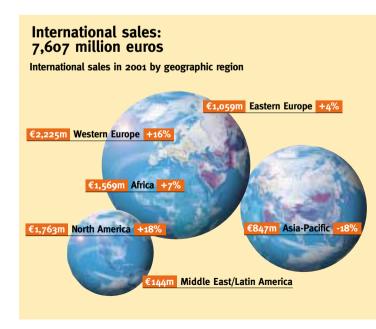




Olivier Poupart-Lafarge Chief Financial Officer



Michel Derbesse Chief Operating Officer

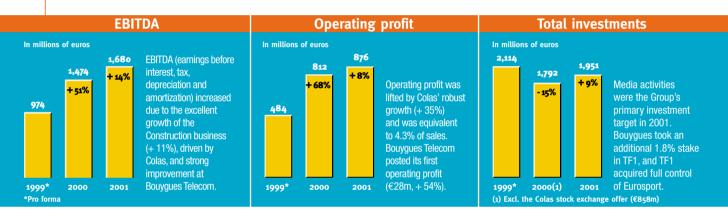


# BOUYGUES 2002 7

# BOUYGUES

# Sound **financial** structure, strong improvement in results

et profit increased by 60% in 2001, compared with the preceding year (not counting the one-time gain from the exchange offer on Colas stock in 2000). This growth reflects the improvement in Bouygues Telecom's results and Colas' strong performance. In 2001, Standard and Poor's rated the Group for the first time. Its credit ratings of A- (long term), A-2 (short term) and a stable trend are proof of the Group's financial health and sound strategies. These ratings are indeed some of the best received by the industrial firms in the CAC 40 index. They were given confirmation by the decision announced on 14 Feb. 2002 to buy Telecom Italia's 10.8% holding in Bouygues Telecom for  $\epsilon_{75}$ om. The Group's net debt at year-end 2001 was 20% of its shareholders' equity of  $\epsilon_{5.5}$ bn, and net cash on hand was  $\epsilon_{2.0}$ bn. The Group thus has the capacity to finance its future development.



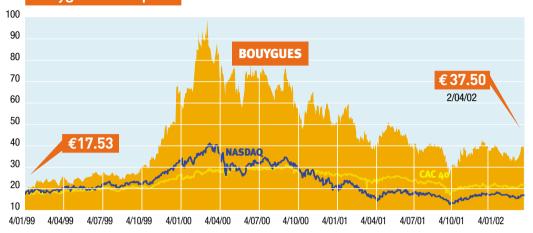
## Consolidated balance sheet as of 31 December

ASSETS (in millions of euros)	2001	2000
Intangible fixed assets	3,408	2,937
Goodwill	366	337
Tangible fixed assets	4,669	4,203
Long-term investments	832	904
Fixed assets	9,275	8,381
Inventories and work		
in progress	1,681	1,493
Trade and other receivables	9,357	9,078
Current assets	11,038	10,571
Net cash	2,198	2,231
Total assets	22,511	21,183

SHAREHOLDERS' EQUITY AND LIABILITIES		
(in millions of euros)	2001	2000
Share capital and reserves	4,418	4,079
Net profit attributable		
to the Group	344	421
Minority interests	741	668
Total shareholders' equity	5,503	5,168
Provisions for liabilities		
and charges	1,909	2,002
Financial liabilities	3,081	3,028
Long-term capital	10,493	10,198
Customers' advances		
and deposits	531	438
Non-financial liabilities	11,246	10,377
Current liabilities	11,777	10,815
Short-term bank borrowings	241	170
Total liabilities	22,511	21,183

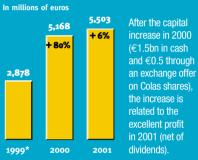
Consolidated profit and los	s accour	π
(in millions of euros)	2001	2000
Sales	20,473	19,060
Other operating revenue	1,138	1,544
Operating expenses	(20,795)	(19,850)
Share in earnings of joint ventures	60	58
Operating profit	876	812
Net financial items	(149)	(15)
Profit before tax and exceptionals of consolidated companies	727	797
Net exceptional items	73	15
Income tax	(268)	(152)
Net profit of consolidated companies	532	660
Share in net profit of companies accounted for by the equity method	22	7
Amortization of goodwill	(44)	(40)
Total net profit	510	627
Net profit attributable to the Group	344	421
Minority interests	166	206

A reference document registered by the COB is available to anyone who requests it at corporate headquarters. It contains accounting, financial, legal and stock market information on the Bouygues Group. Bouygues share price

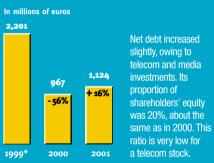


Over the past three years, Bouygues' stock has consistently outperformed the Paris stock exchange's CAC 40 index as well as telecommunications and new-technology stocks listed on the NASDAQ.

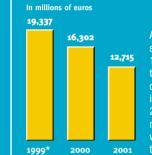




# Net debt



# Market capitalization



After the wave of speculation in late 1999-early 2000, telecom stocks continued to decline in 2001. At year-end 2001, Bouygues' market capitalization was 2.8 times higher than on 4 Jan. 1999.

Consolidated cash flow stat	ement	
(in millions of euros)	2001	2000
A - Operating activities		
Cash flow from operations	1,135	1,213
Change in working capital		
requirements	326	169
Net cash from operating activities	1,461	1,382
B - Investing activities		
Investment in fixed assets	(1,951)	(2,650)
Disposals of fixed assets	429	577
Other, net	(61)	143
Net cash used in investing activities	(1,583)	(1,930)
C - Financing activities		
Increase in shareholders' equity	245	2 076
Dividends paid during the year	(229)	(256)
Increase (decrease) in financial liabilities	2	(143)
Net cash provided by financing		(1.10)
activities	18	1,677
D - Net impact of exchange rate movements and non-cash activ	vities 1	(4)
Increase (decrease) in cash and cash equivalents (A + B + C +D)	(103)	1,125
Cash and cash equivalents at 31 December	1,957	2,060

# Balance sheet of Bouygues SA as of 31 December

ASSETS (in millions of euros)	2001	2000
Intangible and tangible fixed assets	9	9
Long-term investments	4,906	4,858
Fixed assets	4,915	4,867
Current assets	765	654
Cash	1,002	733
Total assets	6,682	6,254

SHAREHOLDERS' EQUITY AND LIABILITIES		
(in millions of euros)	2001	2000
0 11	4.000	4 005

Share capital and reserves	4,860	4,265
Net profit	237	478
Shareholders' equity	5,097	4,743
Provisions for liabilities		
and charges	273	262
Financial liabilities	1,197	1,200
Long-term capital	6,567	6,205
Current liabilities	115	49
Total liabilities	6,682	6,254

# Profit and loss account of Bouygues SA

(in millions of euros)	2001	2000
Sales	74	64
Other operating revenue	1	16
Operating expenses	(99)	(98)
Operating results	(24)	(18)
Net financial items	190	442
Profit before tax and exceptional items of consolidated companies	166	424
Net exceptional items	49	50
Income tax	22	4
Net profit	237	478

The Bouygues Telecom network is managed from the "cockpit" in the Paris suburb of Le Plessis-Robinson. Fifty controllers detect and repair malfunctions in real time, 24 hours a day.

alla a



# Telecom Mobile Media

Coverage will be improved

by putting

1,000 more sites into

commercial

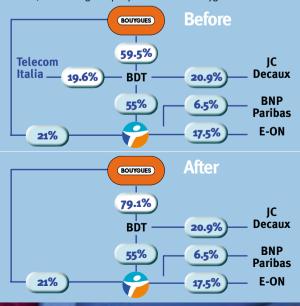
operation in 2002.

2,650 customer assistants answered 12 million calls in 2001.



# Bouygues owns 64.5% of Bouygues Telecom

In March 2002, Bouygues acquired Telecom Italia's 19.6% interest in BDT, the holding company that controls Bouygues Telecom.



ince 2001, there have been more mobile-phone than fixed-phone subscribers, and the mobile phone market continues to grow at a fast pace (+ 25% in 2001). Bouygues Telecom's market share is 17.9%, with a gain of 1.4 million customers last year. Sales rose by 32% to €2.7bn, reflecting strong growth for bundle-tariff products and rising revenues from services. The goal of positive EBIT was achieved. Bouygues Telecom has expanded very rapidly and developed into a mature business. Henceforth, the focus will be on boosting profitability and controlling operating costs. For 2002, Bouygues Telecom forecasts a 15% increase in sales to €3.1bn, and it also expects to post a profit. Bolstering its position in the mobile multimedia market, the operator launched its first corporate multimedia services in February 2002. These will be offered over a GPRScompatible network. The rollout of mobile multimedia products in the consumer market is scheduled for the autumn of 2002. The decision not to bid for a UMTS ("3G") license in January 2001 was applauded for its realism. The terms for awarding these licenses were eased in October 2001. Bouygues Telecom will decide in May 2002 whether to apply for one, basing its decision on the projected profitability of a 3G network.



# SUCCESSFUL STARTUP OF BOUYGUES TELECOM CARAÏBE

Created in December 2000, Bouygues Telecom Caraîbe (BTC) covers 95% of the French territories of Guadeloupe and Martinique. A new network was opened in French Guiana in October 2001. The subsidiary is developing a commercial offer geared to the local market. Prepaid services account for over 60% of sales. At year-end 2001, BTC had 152,000 customers, for a 23.2% market share.

# **A SINGLE BRAND**

Bouygues Telecom has brought the advertising for all its products (bundles, prepaid, corporate, services) under a single banner. There is one brand, with strong visibility, supported by a new slogan highlighting Bouygues Telecom's aim of supplying concrete solutions to its customers' needs: "When you choose Bouygues Telecom, you know why."

The entire

network is

GPRS

standard.

being adapted

to support the

# MMM FOR CORPORATE CLIENTS AND CONSUMERS

Intranet Mobile is the first offer of mobile multimedia (MMM) services transmitted on the GPRS standard on the market. Targeted to corporate clients, it was rolled out in early 2002. Bouygues Telecom is going to test its MMM consumer services on technology enthusiasts, who will be able to receive them on GPRS cell phones and PDAs.

# **SEVEN YEARS OF INNOVATION**

- 1996 Bundle tariffs and free voice mail
  - Kiosque services
- 1997 Caller ID
  - Bundle tariff package, which includes
     a free handset
  - Enhanced Full-Rate Digital Sound
- 1998 Scoop, telemessaging information service
  - · Express set-up of new lines



Mobile multimedia services for consumers will be rolled out in the autumn of 2002.

- Liberté, a bundle tariff with the same per-minute rate for included and additional airtime
- Express-M@il, mobile e-mail service
- Mobile Direct, the first distance-selling company for mobile phones
- 1999 On-site replacement of malfunctioning handsets within 24 hours for corporate clients
  - Nomad, a bundle tariff that can be canceled at any time
  - Ultymo, a bundle tariff that includes regular, free-of-charge handset replacement
  - Ultymo Millenium, a bundle tariff with unlimited free calls on weekends
- 2000 Spot, part of the fixed airtime is paid by advertising displayed on the phone and the rest by the subscriber
  - Ado, the first bundle tariff for teenagers • Contrat Satisfaction, an exclusive quality
- guarantee 2001 • Mini-Forfait, the first bundle tariff with a contract for less than one year
- 2002 Intranet Mobile, the first GPRS mobile multimedia services on the market; designed for corporate clients





# HIGHLIGHTS

- Positive EBIT in 2001: €53 million.
- Rollout of the **GPRS network.**
- Development of services (call waiting, SMS, roaming, kiosque, Intranet Mobile, etc.), which generate 7.7% of sales.



Success of the Mini-Forfait (6-month contract, 45 minutes of airtime for €12.95)

800 million messages sent in 2001, up 150% from the preceding year.

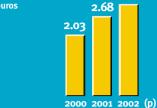
• At year-end 2001, over 400 shops and clubs were distributors primarily of Bouygues Telecom products and services.

• Roaming: Bouygues Telecom had agreements for 144 countries, ranking it among the top five operators worldwide in terms of global coverage.

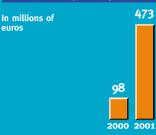
Launch of "esp@ce client" on bouyguestelecom.fr, enhancing the customer relations system (call centers and audio response unit).

 French League Cup sponsor for four years.

### Sales: + 32% in 2001 3.08 In billions of euros 2.68



# EBITDA multiplied by 4.8



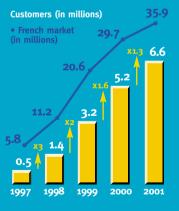
(in millions of euros)	2001	2000
Sales	2,681	2,037
Other operating revenue	942	1,637
Operating expenses	(3,570)	(3,869)
Share in profits of joint ventures	-	-
Operating profit	53	(195)
Net financial items	(155)	(152)
Profit before tax and exceptional items of consolidated companies	(102)	(347)
Net exceptional items	3	(-11)
Income tax	39	81
Net profit of consolidated companies	(60)	(277)
Share in net profit of companies accounted for by the equity method	(1)	-
Consolidated net profit	(61)	(277)
Net profit attributable to the Group	(61)	(277)

Consolidated profit and loss account

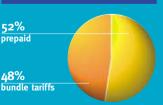
Bouygues Telecom's coverage reached 98.5% in 2001.



# 6.6 million customers



## Customer breakdown



# Consolidated balance sheet as of 31 December

ASSETS (in millions of euros)	2001	2000
Intangible fixed assets	411	290
Goodwill	2	2
Tangible fixed assets	2,390	2,247
Long-term investments	5	3
Fixed assets	2,808	2,542
Inventories and work in progress	121	116
Trade and other receivables	1,521	2,028
Current assets	1,642	2,144
Net cash	250	698
Total assets	4,700	5,384
SHAREHOLDERS' EQUITY AND LIABILIT (in millions of euros)		2000
(in millions of euros)	<b>IES</b> 2001 561	<b>2000</b> 561
	2001	
(in millions of euros) Share capital	<b>2001</b> 561	561
(in millions of euros) Share capital Reserves and net profit	<b>2001</b> 561 24	561 525
(in millions of euros) Share capital Reserves and net profit Participating loans	2001 561 24 755	561 525 713
(in millions of euros) Share capital Reserves and net profit Participating loans Shareholders' equity	2001 561 24 755 1,340	561 525 713 <b>1,799</b>
(in millions of euros) Share capital Reserves and net profit Participating loans Shareholders' equity Provisions for liabilities and charges	2001 561 24 755 1,340 97	561 525 713 <b>1,799</b> 151
(in millions of euros) Share capital Reserves and net profit Participating loans Shareholders' equity Provisions for liabilities and charges Financial liabilities	2001 561 24 755 <b>1,340</b> 97 2,153	561 525 713 <b>1,799</b> 151 2,152
(in millions of euros) Share capital Reserves and net profit Participating loans Shareholders' equity Provisions for liabilities and charges Financial liabilities Long-term capital	2001 561 24 755 <b>1,340</b> 97 2,153 <b>3,590</b>	561 525 713 <b>1,799</b> 151 2,152
(in millions of euros) Share capital Reserves and net profit Participating loans Shareholders' equity Provisions for liabilities and charges Financial liabilities Long-term capital Customers' advances and deposits	2001 561 24 755 1,340 97 2,153 3,590 4	561 525 713 <b>1,799</b> 151 2,152 <b>4,102</b> 1
(in millions of euros) Share capital Reserves and net profit Participating loans Shareholders' equity Provisions for liabilities and charges Financial liabilities Long-term capital Customers' advances and deposits Non-financial liabilities	2001 561 24 755 1,340 97 2,153 3,590 4 1,105	561 525 713 <b>1,799</b> 151 2,152 <b>4,102</b> 1 1,280



# **Television** the No. 1 media group in France

F1 is an integrated media group that is active in every sector of the audiovisual industry. With a 32.7% audience share (four years of age and older; source: Médiamétrie) and 35.5% of all women viewers under 50 (the prime target for advertisers), TF1 is the leading general-programming channel in France. In 2001, its selection of entertainment and reality TV programs grew even richer. TF1 acquired the exclusive rights for the 2002 World Cup and for the 24 best matches in the 2006 tournament. Following an exceptionally good year in 2000, advertising revenues were down 4.7% in 2001, reflecting a general decline in the market. They nevertheless rose by 10.8% over that two-year period. Revenues from diversification ventures increased once again, rising 18.4%. Key reasons for the gain were the full buyout of Eurosport and growth at two subsidiaries, TF1 Licences and Glem. TF1, which has either a 100% or smaller equity interest in 15 theme channels, increased its stake in the satellite broadcaster TPS from 25% to 50%. Ten percent of TF1's revenues come from international diversification (Eurosport International, film rights, adaptation of shows produced by Glem). Its strategy for consolidating leadership is to expand content production activities and gain control of distribution channels.

"Star Academy," a very popular reality TV program. The final was watched by 1.1 million viewers.

"L'aîné des Ferchaux," high quality drama with renowned actors.



# **KEY FACTS**

• 40 operational subsidiaries

• TF1 has averaged **92 of the top 100 audience ratings** each year for the past nine years

• Le Diner de Cons drew the largest audience in 2001 (11.7 million viewers)

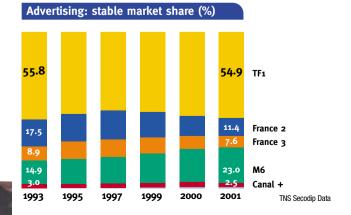
• A line-up of **15 other channels** 

• Eurosport: the No. 1 pan-European channel in terms of viewership

• **TF6:** leader in the 15-34 age bracket after one year on the air

• TPS: 1.09 million subscribers on 31 December 2001

• tf1.fr: the No.1 media site in France, with over 1 billion page views in 2001





# Employees **2,900**

# HIGHLIGHTS

• Standard & Poor's gives TF1 credit ratings of "A" (long term) and "A-1" (short-term).

• TF1's stock is included in the FTSE 300, the DJSI index and the ASPI Eurozone index (sustainable development).



• CSA renews the **broadcasting** license on 5 October 2001.

• TF1 Films Production co-produces 11 of the 17 French films with over 1 million box-office entries in 2001.

• Acquisition of France Telecom and France Television's 25% interest in **TPS.** In the spring of 2002, TF1 will own **50% of the satellite broadcaster.** 

• Glem, a producer of entertainment shows and programs, posted 98%-higher net profit.

• **TF1 Games:** profitable from year one. The biggest seller of board games in France.

• Purchase of exclusive TV rights for the **2002 World Cup** for TF1, Eurosport and LCI, and acquisition of some rights for 2006.



**Diversification sales rise** 

# **Consolidated profit and loss account**

(in millions of euros)	2001	2000
Sales	2,282	2,220
Other operating revenue	43	50
Operating expenses	(1,949)	(1,847)
Share in profits of joint ventures	-	
Operating profit	376	423
Net financial items	(18)	18
Profit before tax and exceptional items of consolidated companies	358	441
Net exceptional items	5	-
Income tax	(123)	(155)
Net profit of consolidated companies	240	286
Share in net profit of companies accounted for by the equity method	(25)	(33)
Amortization of goodwill	(4)	(2)
Consolidated net profit	211	251
Net profit attributable to the Group	210	250
Minority interests	1	1



Diversification,

97% Advertising

3% Diversification

60% TF1 Broadcasting

5% Theme channels

9% TPS (50%)

16% Other

diversification

10% Television tax

Diversification

Advertising

% of sales

1987

2001

a relay of growth

"Une Femme d'honneur," like "Julie Lescaut" and "Navarro," proves the appeal of "serial" heros.



### Consolidated balance sheet as of 31 December ASSETS (in millions of euros) 2001 2000 Intangible fixed assets 436 Goodwill Tangible fixed assets Long-term investments Fixed assets 753 371 Inventories and work in progress 1.102 Trade and other receivables **Current assets** 1,707 1,426 Net cash 345 **Total assets** 2,492 2,142 SHAREHOLDERS' EQUITY AND LIABILITIES 2001 2000 (in millions of euros) Net profit attributable to the Group Minority interests Shareholders' equity 684 770 Provisions for liabilities and charges **Financial liabilities** 1,159 901 Long-term capital Customers' advances and deposits Non-financial liabilities Current liabilities 1,313 1,241 Short-term bank borrowings **Total liabilities** 2,492 2,142

# BOUYGUES 2002 15



# A line-up of 15 theme channels

The provide the provided and the provide

Eurosport, the No. 1 sports channel in Europe, reaches 93 million homes. It had sales in 2001 of  $\in$  297.4m (+8.1%). Its revenues come from advertising, which increased 23% thanks to the development of satellite platforms in Europe, and subscriptions. Eurosport increased its impact in 2000 by creating Eurosportnews. Its Web site, eurosport.com, which exists in six languages (French, English, German, Italian, Spanish and Swedish), tallies more than 30 million page views per month.

# L

Received in 4.2 million homes
3rd-ranking channel for upper-level managers and professionals

# HIGHLIGHTS

New features: 11 septembre, Un Jour en guerre, La Gazette de l'Hôtel Drouot...

• Agreement with the cable operator UPC (150,000 new subscribers)

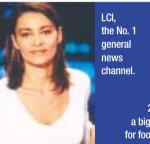
### **15 CHANNELS**

• Five 100%-owned channels: LCI,

Odyssée, Eurosport, Eurosportnews, Shopping Avenue • Two 50%-owned: TF6, Série-Club • Seven 50%-owned via TPS: TPS Star, Ciné Star 1, Ciné Star 2, Cinétoile, Cinéfaz, Télétoon, Infosport • One 22%owned: TV Breizh



During the Olympics in Salt Lake City, eurosport.com tallied 27 million page views.



2002, a big year <u>for footb</u>all.



In the seven years since it was launched by TF1, LCI has established itself as a benchmark for all-news channels. It is broadcast by cable and two satellite networks and received in nearly 4.2 million homes. On the air 24 hours a day, LCI brings viewers ongoing live coverage of important news stories. The channel's impact grew in 2001 with the events on 11 September and should continue to do so in 2002, when the French presidential elections and the World Cup will take place.

> Eurosport is the audience leader in 7 of the 8 major European markets.

EURO SPORT

# HIGHLIGHTS

TF1 acquires 100% of Eurosport
 A record 132 million viewers for the Olympics in Salt Lake City
 Rights for the US Open (tennis) and the Masters (golf) in 2001

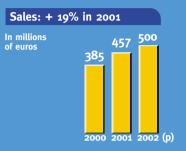
### **Growing penetration**

Subscriptions millions of households









# Satellite operator sees profit ahead

n December 2001, TF1 announced that it was buying the equity interest of France Télévision Entreprise in TPS. This transaction gave TF1 a 50% stake in the satellite operator as of the first quarter of 2002. TPS broadcasts programs produced by other television companies as well as those of its own channels, which may be transmitted by cable as well as satellite. It also develops interactive services. At year-end 2001, TPS had 1.09 million customers and a roughly 40% share of new subscribers.

Besides its satellite subscribers, the broadcaster has 250,000 cable clients for its movie channels. In September 2001, TPS added a new name to its roster: TPS Star, a premium channel featuring movies and football, two themes that have made it a big success. TPS reduced its loss by 19% to €99m in 2001. The broadcaster expects to have 1.4 million subscribers and to earn a profit in 2004.

**TPS Star** 

shows the

biggest hit

movies. Série-Club is 50%-owned by TF1.



## TPS shareholders in 2002



# HIGHLIGHTS

• TF1 becomes the largest shareholder

- Fifth anniversary
- Launch of TPS Star, a premium, TPS-produced channel devoted to movies and football
- Fight against decoder pirating
- 20 million connections each month to its interactive services

# **KEY FACTS**

- 1.09 million subscribers (+ 14%) at 31 December 2001
- TPS carries 138 channels, 50 interactive services and 47 radio stations, compared with 29 channels, 2 interactive services and 2 radio stations at its launch five years ago

• Seven channels are 100%-owned: Ciné Star 1 and 2, Cinétoile, Cinéfaz, TPS Star, Télétoon and Infosport

- No. 1 cable and satellite program producer in terms of investment
- The only French digital broadcaster that shows First Division football matches
- The only satellite operator that offers e-mail service to all its subscribers
- A national network of over 8,400 authorized distributors
- 300 interactive services launched in five years

Children's programs are a priority for 2002



# Utilities management water, energy, waste

Saur is one of the world's leading public utility management companies, with operations in 18 countries. A specialist in the water cycle (60% of revenues), it also offers services in the sectors of energy (power generation and distribution) and waste management (sorting and recycling).

Saur is now capitalizing on its experience to move into a new and expanding market, the management of industrial wastewater treatment plants.

In France, new opportunities are arising with the expiration of one-half of utility licence agreements by 2006 and the devel-

opment of inter-municipal services. Saur has increased its productivity by industrializing its operating methods in its water businesses. In the international sphere, Saur is focusing efforts on regions where it is already strongly positioned and on growth markets, particularly in Europe.

Believing it has an important role in improving the quality of life through its operations and services, Saur has taken the path of sustainable development, a key strategy to ensure long-term growth and the satisfaction of its shareholders, partners and employees.



## CUSTOMERS - THE FOCUS OF THE INFORMATION SYSTEMS

Saur is relying on information technologies to make client relations open and efficient. In France, new, interactive client management software called Saphir will go into use in 2002. It will handle the 5,000 municipal client contracts and all relations with the 3.2 million retail customers. This tool for managing and following up services will be introduced in markets abroad in early 2003.

# HIGHLIGHTS

• Contract to upgrade the Lyon Pierre-Bénite sewage treatment plant, the largest such project in France.

• 50-year renewal of the water management contract with Valencia, Spain, the largest water distribution contract signed in Europe in 2001.

• Acquisition of Idagua, a Spanish company specialized in industrial wastewater management.

• A patent was obtained for a thermolysis process to treat wastes at moderate temperatures. It eliminates the risk of pollution, produces recyclable residues and adapts to municipalities' changing needs.





## Consolidated profit and loss account

(in millions of euros)	2001	2000
Sales	2,494	2,399
Other operating revenue	167	132
Operating expenses	(2,576)	(2,415)
Share in profits of joint ventures	-	-
Operating profit	85	116
Net financial items	(54)	(41)
Profit before tax and exceptional items of consolidated companies	31	75
Net exceptional items	30	(11)
Income tax	(18)	(25)
Net profit of consolidated companies	43	39
Share in net profit of companies accounted for by the equity method Amortization of goodwill		5
Consolidated net profit	(12) <b>36</b>	(12) <b>32</b>
Net profit attributable to the Group	33	32
Minority interests	3	-



Saur's central laboratory in the Paris region rounds out its decentralized network.

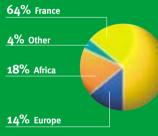
CIE, a Saur subsidiary, manages electricity services in Ivory Coast.



# A COMMITMENT TO SUSTAINABLE DEVELOPMENT

Saur's approach has six components: employee awareness, a commercial offer consistent with sustainable development, supplier involvement, reduced environmental impact, sustainable development integrated in human resources management principles and a stronger local role for the company. Saur is implementing a five-year strategy with three basic targets: employee performance, financial profitability and environmental protection.

# 36% of sales from foreign operations



47.8 million people served

72% Water and wastewater 34.7 million

18% Electricity 8.5 million

**10% Waste management** 4.6 million

ASSETS (in millions of euros)	2001	2000
Intangible fixed assets	491	501
Goodwill	141	151
Tangible fixed assets	1,263	1,071
Long-term investments	170	244
Fixed assets	2,065	1,967
Inventories and work in progress	64	58
Trade and other receivables	1,648	1,478
Current assets	1,712	1,536
Net cash	123	105
Total assets	3,900	3,608
SHAREHOLDERS' EQUITY AND LIABILITIES		
(in millions of euros)	2001	2000
Share capital and reserves	583	556
Net profit attributable to the Group	33	32
Minority interests	54	35
Others	22	
Shareholders' equity	692	623
Provisions for liabilities and charges	489	413
Financial liabilities	310	284
	1,491	1,320
Long-term capital		
Long-term capital Customers' advances and deposits	43	33
Customers' advances and deposits	43	33
Customers' advances and deposits Non-financial liabilities	43 2,290	33 2,190

**Consolidated balance sheet as of 31 December** 

# Construction a full-service contractor

Reader and benchmark firm in the field of general contracting, Bouygues Construction offers a broad range of services in the related sectors of building and civil works, gas and oil contracting, and electrical/network installation. By proposing complete, added-value solutions – from project design to facility management – Bouygues Construction has gained a reputation as a full-service, customer-focused contractor. With local subsidiaries or temporary operations in 70 countries, it earned 53% of its revenues out-

BOUYGUES

side France in 2001. Strong growth in Western Europe is being coupled with expansion in a new region, the Caribbean. Bouygues Construction's consistently well-filled order book contains longrunning contracts, guaranteeing a secure future for this business through the middle term. The average amount of the ten largest contracts has more than doubled over the past ten years.

Bouygues Construction will pursue and step up its strategy of profitable expansion. The sales target for 2005 is more than  $\notin$ 8.0 billion, not counting revenue from future acquisitions.

Port of Monaco: a doubling of capacity and protection from the sea.



# COMPLEMENTARY ENTITIES

• Bouygues Bâtiment : building in the Paris region and abroad

Bouygues Entreprises France
 Europe: a network of subsidiaries
 in France, the EU and Switzerland

# Bouygues Travaux Publics (civil works):

Large bridge and tunnel projects
 Specialized subsidiaries: DTP
Terrassement; VSL-Intrafor (post-

Bouygues Offshore: oil and gas contracting

ETDE: electrical/network installation

Almost 2,500 new employees were hired in 2001.

# HIGH-ADDED-VALUE SERVICES

Bouygues Construction can supply services at every stage of a project.

### • Initial preparation: helping investors find land, perform administrative formalities, etc.

• Financial engineering: setting up the financing for complex projects.

### Design-construction:

designing the project, developing technical solutions, reducing costs and building within the client's predetermined budget.

### Turnkey projects:

A-to-Z execution, including industrial equipment, office systems, interior decoration, etc.

## Project management:

directing and coordinating services and suppliers on the client's behalf.

### • Operation and maintenance:

services provided at the facility for a fixed period.

# **HIGHLIGHTS**

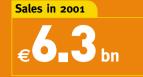
 Amount of order book remains high (€4.7bn), despite building slump in Asia

Civil works activity rises 28%

● 11 contracts worth over €15m each under way in Switzerland

 Acquisitions: Ecovert FM, a facility management company in Britain, by Bouygues Bâtiment and Quille; Gallet Delage (public lighting), Satel (electrical equipment) and E3 Lapeyre (climate systems) in France, by ETDE

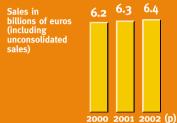
 Creation of Parcolog, a logistics facility management company



# **Employees**

# 38,000

# Stable business volume



# **Consolidated profit and loss account**

(in millions of euros)	2001	2000
Sales	6,324	6,222
Other operating revenue	154	189
Operating expenses	(6,422)	(6,315)
Share in profits of joint ventures	13	21
Operating profit	69	117
Net financial items	33	13
Profit before tax and exceptional items of consolidated companies	102	130
Net exceptional items	(9)	(17)
Income tax	(56)	(54)
Net profit of consolidated companies	37	59
Share in net profit of companies accounted for by the equity method	6	5
Amortization of goodwill	(1)	(4)
Consolidated net profit	42	60
Net profit attributable to the Group	21	42
Minority interests	21	18



# The largest tunnel-boring in the world (14.87 m in diameter) for the Groene Hart project in Holland.

Cœur

two 39-floor

towers at the

edge of

Paris.

# **MAJOR CONTRACTS**

 A28 highway concession, Normandy (€800m)

British Home Office headquarters (€700m, of which €325m for construction)

 Lötschberg Tunnel, Switzerland (Bouygues' share: €250m)

 Highway concession, Jamaica (€200m)

- Hospital center, Tahiti (€145m)
- Mosque, Turkmenistan (€100m)
- Sports center, Budapest (€85m)
- Headquarters of Compag France (€85m)
- West Middlesex Hospital, London (€85m)
- Renovation of the Grand Hôtel Intercontinental, Paris (€70m)
- Auchan supermarket, Poland (€70m)

Office buildings, Boulevard Haussmann, Paris (€58m)



# **Business synergies**

78% Building and Civil Works 16% Gas/Oil 6% Electrical/ Network Installation **Geographic balance** 2001 sales by region 47% France 15% Western Europe 13% Asia 12% Africa 11% Central and Eastern Europe 2% Americas/ Middle East

Two hotel in Cuba A partnership with Auchan in Poland.



## Consolidated balance sheet as of 31 December

ASSETS (in millions of euros)	2001	2000
Intangible fixed assets	380	363
Goodwill	30	33
Tangible fixed assets	568	485
Long-term investments	167	139
Fixed assets	1,145	1,020
Inventories and work in progress	91	77
Trade and other receivables	2,799	2,767
Current assets	2,890	2,844
Net cash	1,052	937
Total assets	5,087	4,801
SHAREHOLDERS' EQUITY AND LIABILIT	150	
(in millions of euros)	2001	2000
		<b>2000</b> 60
(in millions of euros)	2001	
(in millions of euros) Share capital and reserves	2001 67	60
(in millions of euros) Share capital and reserves Net profit attributable to the Group	2001 67 21	60 42
(in millions of euros) Share capital and reserves Net profit attributable to the Group Minority interests	2001 67 21 99	60 42 97
(in millions of euros) Share capital and reserves Net profit attributable to the Group Minority interests Shareholders' equity	2001 67 21 99 187	60 42 97 <b>199</b>
(in millions of euros) Share capital and reserves Net profit attributable to the Group Minority interests Shareholders' equity Provisions for liabilities and charges	2001 67 21 99 187 540	60 42 97 <b>199</b> 690
(in millions of euros) Share capital and reserves Net profit attributable to the Group Minority interests Shareholders' equity Provisions for liabilities and charges Financial liabilities	2001 67 21 99 187 540 208	60 42 97 <b>199</b> 690 209
(in millions of euros) Share capital and reserves Net profit attributable to the Group Minority interests Shareholders' equity Provisions for liabilities and charges Financial liabilities Long-term capital	2001 67 21 99 187 540 208 935	60 42 97 199 690 209 1,098
(in millions of euros) Share capital and reserves Net profit attributable to the Group Minority interests Shareholders' equity Provisions for liabilities and charges Financial liabilities Long-term capital Customers' advances and deposits	2001 67 21 99 187 540 208 935 379	60 42 97 199 690 209 1,098 322
(in millions of euros) Share capital and reserves Net profit attributable to the Group Minority interests Shareholders' equity Provisions for liabilities and charges Financial liabilities Long-term capital Customers' advances and deposits Non-financial liabilities	2001 67 21 99 187 540 208 935 379 3,604	60 42 97 199 690 209 1,098 322 3,280



# Oil and gas contracting a complete offer

B ouygues Offshore, a 51%-owned subsidiary of Bouygues Construction, is one of the main international contracting companies in the oil and gas industry. It has expertise in offshore and onshore projects, maritime construction, liquefied natural gas, chemicals, refining and maintenance. Offering a full range of services, it brings clients a unique combination of recognized project-management know-how, broad experience in engineering and construction, innovative solutions and a positive image with major clients. In 2002, Bouygues Offshore has its sights set on 19 offshore, 7 onshore and 7 liquefied gas contracts.

Delivery of the world's largest Floating Production, Storage and Offloading unit (Girassol, in Angola).



# **HIGHLIGHTS**

- Net profit in 2001: + 19.6%
- Order book at year-end 2001 at an all-time high (+ 13% to €1.1bn).

• Main projects under way or delivered in 2001: bottomsurface links in the Kizomba project (Angola); terminal and pipeline for the Caspian Pipeline Consortium in Russia (1.8 million hours of work without an accident); Pointe des Grives container terminal at Fort de France; Canyon Express, first contract for the Saibos FDS, Gulf of Mexico; scheduled shutdowns of TotalFinaElf refineries in Europe; offshore structures for the AlOC consortium in Azerbaijan.

• **Contracts won** at Bilbao and Huelva (Spain) and Damiette (Egypt), signaling restart of LNG activity.

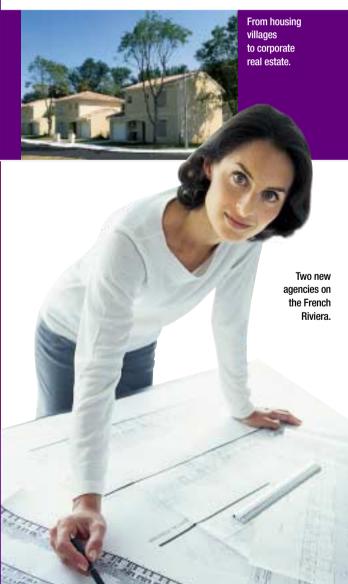
Acquisition of Offshore
 Design Engineering Ltd (ODE).

# Over 80% of business is international 39% Africa excl. North Africa 2% North Africa 4% The Americas 3% Asia-Pacific 17% France 35% Europe excl. France All oil and gas contracting activities

	40% Offshore
16% Maintenance	
4% Chemicals, refinence of the second	ning/
3% Maritime works	
3% Liquefied gas	
34% Onshore	

# Bouygues Immobilier Promotion No. 1 in Europe

B ouygues Immobilier is active in all segments of the property market: apartments, multiple-home projects, offices, commercial space, hotels, and property development. In 2001, reservations increased by 9%, a sign of sustained activity, notably in corporate real estate. Bouygues Immobiler also acquired a 66% interest in H4 Valorisation from the electric utility EDF. Now called ValPar Immo, this unit earns most of its revenues in the housing market. Despite the predicted contraction in the office market in 2002, the total volume of reservations is expected to remain stable, while booked sales should go up by 22%, reflecting a good level of production. The proportion of international sales is forecast to double, rising to 13% of total sales, thanks to projects in Spain, Portugal and Germany.



# AN EXPANDING NETWORK

Twenty agencies in France and seven elsewhere in Europe: Madrid, Barcelona, Valencia, Lisbon, Berlin, Frankfurt and Warsaw.

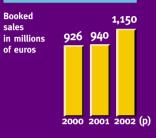
# HIGHLIGHTS

 Prestigious office projects
 Paris and suburbs: Nortel campus, Headquarters of Steria, Innovatis, Headquarters of Compaq France, Taylor Nelson Sofres,
 Other European cities: Trianon (Madrid), Magellan Tower (Lisbon), developments at Seville and Santander (Spain).





# Sales: +2% in 2001



(in millions of euros)	2001	2000
Sales	940	926
Other operating revenue	39	24
Operating expenses	(935)	(891)
Share in profits of joint ventures	1	
Operating profit	45	59
Net financial items	(8)	(27)
Profit before tax and exceptional items of consolidated companies	37	32
Net exceptional items		(7)
Income tax	(6)	(3)
Net profit of consolidated companies	32	22
Share in net profit of companies accounted for by the equity method		
Amortization of goodwill	-	(1)
Consolidated net profit	32	21
Net profit attributable to the Group	31	21
Minority interests		

Consolidated profit and loss account



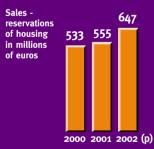
### Modernization of marketing

methods. The past three years have seen the creation and development of marketing tools such as the Internet (vivolio.fr, revamping of bouyguesimmobilier.com) and the telephone call centers. These are used to direct more and better-informed customers to the sales offices. Objective: improve the customer/prospect conversion rate.

• Launch of Valorissimo® with the Caisse Nationale des Caisses d'Epargne - an insurance contract that provides private investors with rental-revenue and resale guarantees.

Intégralimo<sup>®</sup>, a loan marketed with the Caisse d'Epargne - initially offered in the Paris region, it was made available throughout France. It enables buyers to purchase a home with no personal down payment.

# France: housing to rise in 2002







# Consolidated balance sheet as of 31 December

ASSETS (in millions of euros)	2001	2000
Intangible fixed assets	3	6
Goodwill	-	-
Tangible fixed assets	107	116
Long-term investments	12	14
Fixed assets	122	136
Inventories and work in progress	678	616
Trade and other receivables	896	704
Current assets	1,574	1,320
Net cash	134	25
Total assets	1,830	1,481
	-	
SHAREHOLDERS' EQUITY AND LIABILITI		
(in millions of euros)	2001	2000
(in millions of euros) Share capital and reserves		<b>2000</b> 94
(in millions of euros)	2001	
(in millions of euros) Share capital and reserves	<b>2001</b> 115	94
(in millions of euros) Share capital and reserves Net profit attributable to the Group	2001 115 31	94
(in millions of euros) Share capital and reserves Net profit attributable to the Group Minority interests	2001 115 31 11	94 21 7
(in millions of euros) Share capital and reserves Net profit attributable to the Group Minority interests Shareholders' equity	2001 115 31 11 <b>15 17 17</b>	94 21 7 <b>122</b>
(in millions of euros) Share capital and reserves Net profit attributable to the Group Minority interests Shareholders' equity Provisions for liabilities and charges	2001 115 31 11 <b>15 76</b>	94 21 7 <b>122</b> 71
(in millions of euros) Share capital and reserves Net profit attributable to the Group Minority interests <b>Shareholders' equity</b> Provisions for liabilities and charges Financial liabilities <b>Long-term capital</b> Customers' advances and deposits	2001 115 31 11 <b>15 57</b> 58	94 21 7 <b>122</b> 71 43
(in millions of euros) Share capital and reserves Net profit attributable to the Group Minority interests Shareholders' equity Provisions for liabilities and charges Financial liabilities Long-term capital	2001 115 31 11 <b>15 57</b> 58	94 21 7 <b>122</b> 71 43
(in millions of euros) Share capital and reserves Net profit attributable to the Group Minority interests <b>Shareholders' equity</b> Provisions for liabilities and charges Financial liabilities <b>Long-term capital</b> Customers' advances and deposits	2001 115 31 11 15 57 76 58 291 1	94 21 7 <b>122</b> 71 43 <b>236</b> 1
(in millions of euros) Share capital and reserves Net profit attributable to the Group Minority interests <b>Shareholders' equity</b> Provisions for liabilities and charges Financial liabilities <b>Long-term capital</b> Customers' advances and deposits Non-financial liabilities	2001 115 31 11 15 57 76 58 291 1 1,526	94 21 7 <b>122</b> 71 43 <b>236</b> 1 1,243



he world's No. 1 road construction and maintenance firm, Colas also has extensive resources in upstream activities. In 2001, its quarries produced 90 million tons of aggregates, and its asphalt and emulsion plants 52 million tons of asphalt and 1.5 million tons of emulsions and binders. Alongside its core roadworks business, Colas is also expanding in the sector of transport infrastructures: signs, signals and traffic management, civil engineering and piping, waterproofing, railway upgrading, environmental systems, recycling and concessions. Its strategy, based on strong and profitable growth, consists in

increasing market shares in Europe and North America, its strongest regions, while building business in new territories.

THE R. P. CONTRACTOR P. LEWIS CO., N. LEWIS

Colas has operations in 40 countries. Its 1,200 local units located near decision-making centers are a key asset in winning contracts. Despite the sluggish economy in 2001, Colas substantially increased its already robust sales.



COLAS

An international network of 500 quarries and gravel pits.

### PROTECTING THE ENVIRONMENT

Besides developing products that beautify the environment or reduce vehicle rolling noise, Colas is a leader in the recycling of materials. Advances include the Novacol and Thermocol processes (hot or cold recycling of pavement at the site) and the recycling centers for waste and construction materials it began setting up in the 1990s. Slag from metallurgical processes, crumb rubber from old tires and residue from household waste incineration go into the composition of products, and old asphalt is often reused in the construction of new pavement.

# **WORKER SAFETY**

Constant vigilance brought down the work-accident rate at Colas units in France from 47 in 1990 to 19.8 in 2001. The goal is to lower it further to 10. A special intranet has been set up to allow safetyrelated know-how and experience to be shared. The many competitive activities among units also encourage workers to copy safety practices.

Colas hired 3,500 new employees in 2001, making it a big contributor to the job market.

# HIGHLIGHTS

Net profit rises by 33% No. 1 binder producer

worldwide

• 90,000 worksites in 2001, averaging €75,000 per site

Acquisition of Branscome Inc., in Virginia (gravel pits, asphalt and concrete plants)

### Diverse projects:

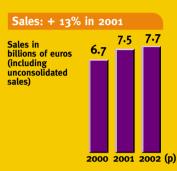
### • In France:

Paul Ricard race track, 20 km of the A1 highway in northern France (application of Coldraine porous asphalt), taxiway at Strasbourg-Entzheim Aiport in eastern France, flooring at the second Disneyland Paris theme park, tramway tracks at Bordeaux in southwestern France, repair of 42 km of the



Employees

53,300



# Consolidated profit and loss account

		2000
Sales	7,328	6,517
Other operating revenue	280	289
Operating expenses	(7,354)	(6,628)
Share in profits of joint ventures	45	42
Operating profit	299	220
Net financial items	(27)	(18)
Profit before tax and exceptional items of consolidated companies	272	202
Net exceptional items	(10)	14
Income tax	(77)	(76)
Net profit of consolidated companies	185	140
Share in net profit of companies accounted for by the equity method	36	30
Amortization of goodwill	(16)	(14)
Consolidated net profit	205	156
Net profit attributable to the Group	203	153
Minority interests	2	3

112 14

Atlanta

WEST 20

20 EAST

Columbia 2



A83 highway, with planing and recycled asphalt, etc.

# • International:

A12 (Brussels-Antwerp), Rockingham race track (Britain), M0, M1, and M5 highways (Hungary), Highway I35 (Czech Republic), first use of Coletanche in the USA, container storage facility for the Port of Los Angeles (USA), Highway 49 in Alberta (Canada), Savalou-Djougou highway (Benin), etc.



Europe + North Ame 93% of sales	erica:
56% France	
23% North America	
14% Europe	
4% Asia/Africa/	3% French
Indian Ocean	overseas
All roadwork activit	ies
Sales by activity in 2001	
68% Roadworks	
14% Materials	
and products	

7% Civil engineering/Piping 5% Waterproofing **3%** Safety/Signaling 1% Rail

2% Building

# Consolidated balance sheet as of 31 December

ASSETS (in millions of euros)	2001	2000
Intangible fixed assets	141	116
Goodwill	88	113
Tangible fixed assets	1,112	1,019
Long-term investments	285	288
Fixed assets	1,626	1,536
Inventories and work in progress	177	183
Trade and other receivables	2,080	2,052
Current assets	2,257	2,235
Net cash	253	124
Total assets	4,136	3,895
SHAREHOLDERS' EQUITY AND LIABILIT (in millions of euros)	ES 2001	2000
Share capital and reserves	664	558
Net profit attributable to the Group	203	153
Minority interests	203	31
Shareholders' equity	894	742
Provisions for liabilities and charges	452	463
Financial liabilities	197	234
Long-term capital	1,543	1,439
Customers' advances and deposits	96	70
Non-financial liabilities	2,443	2,282
	,	2,202
Current lighilities	2 5 3 0	
Current liabilities Short-term bank borrowings	2,539 54	2,352 104

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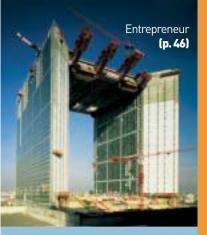
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# Strategy

# **Nobile MultiMedia**

# A versatile mobile phone

I can send messages and images, find a restaurant, play games, get the news, know my location...

# ...at an affordable

price. With packet switching, I pay for the volume of data, not the time spent sending it.

A new business Supplying services: Bouygues Telecom will build its offer.

# New tools

 Packet-switching technology for transferring data. Bouygues Telecom's network already supports GPRS.

• Applications to structure, secure and send data. The choice: Europe's WAP 2.0 or Japan's i-mode. • Equipment makers are designing special handsets now.

# A real market

SMS's success is promising. MMM in Japan proves that a real market exists for a well-designed product...

• An easy-to-use product. Many services, with free entry for all content suppliers. Interoperability: subscribers to different operators can exchange messages.

Images, color and music are coming to our mobile phones. This revolution is made possible by the arrival of GPRS, a technology designed for sending data. Bouygues Telecom is developing a rich, practical and easy-to-use selection of mobile services for consumers.

# A new service road

PRS. What do these four letters that have been so much in the news in recent months stand for? "General Packet Radio Service," say the technicians. "A pipe" is the simpler answer offered by Alain Pouyat, executive vice president, Information Systems and New Technologies of the Bouygues Group. The mobile phone industry has grown up in Europe using networks based on GSM<sup>1</sup>, a system for voice transmission. GPRS, which is designed for transferring data, is now going to be coupled with GSM, allowing operators to offer a rich selection of practical multimedia services at attractive rates.

# **Visual device**

GPRS is a packet-switched system, meaning that regardless of the quantity of data being sent they no longer travel over a single chan-1/ Global System for Mobile communications nel continuously, as they do with GSM. Instead, they are sent in small packets whenever there is space available on the network. Users have the convenience of an always-on connection, but pay only for the amount of data they send. The time constraint disappears, whether users are reading a magazine, writing an e-mail or game-playing with a friend. Always-on connectivity also means they can be automatically alerted when, for example, their child sends a message or a plane is late. And the transmission speed? Two to three times faster than GSM under normal conditions. New technologies like digital compression and EDGE could be progressively added, permitting larger quantities of data and thus more services to be transmitted. The initial applications – e-mail, color images and text - will be enhanced with new features like brief animated graphics, photos and music. These new services >



WAP

MODE

**G**PRS is a route for data traffic, like GSM and UMTS. WAP, like i-mode, is a programming language, a set of tools and standards used to present, secure and address data. It's the difference between a highway and a truck. I.MODE

00 000

Kb/s

400 Kb/s

UMTG

40 <sup>Kb/s</sup>

GPR

MOD

# **CIRCUITS VERSUS PACKETS**

**On a GSM** network, a radio channel is totally dedicated to a transmission, from start to finish, even during the intervals when the two parties are not talking or no data are flowing.

**GPRS** was designed for moving data. The data is broken up into separate packets, each with its departure and arrival address. The packets of a single transmission can travel over several different channels, and several transmissions can travel almost simultaneously over the same channel.





Transmission mode: circuit Speed: fixed, 9.6 kbps Billing: by time Main use: voice When marketed by Bouygues Telecom: 1996

Transmission mode: packet Speed: variable, 10 to 30 kbps Billing: by quantity of data Main use: data When marketed by Bouygues Telecom: 2002

# The sun rises on mobile multimedia



In Japan, mobile multimedia is more than a technology. It's a social phenomenon – one that Bouygues Telecom is looking at very closely.

Seventy-four million Japanese have a mobile already mobile multimedia users, a figure that has more than doubled in one year. Fun, information, shopping-many more services are offered than with WAP, and they are easier to use. With packet technology, subscribers are always connected to the network, and by simply pushing a button, they are linked to the world of multimedia. Pages of text, e-mails and simple images display smoothly on the large color screen, even though transmission speeds are about the same as with GSM. The reason? Packet switching and excellent interconnection of network components.

# The MMM boom in Japan



\*Source: Telecommunications Carriers Association

NTT-DoCoMo was the first of the three Japanese telecom operators\* currently in the market to launch a mobile multimedia product. That was in February 1999, and the service was called i-mode. Both a technology and a business model, i-mode was inspired by France's Minitel teletext system, offering many simply designed services for consumers in an entertaining format. NTT-DoCoMo lays down precise specifications for the suppliers of handsets, network equipment and servers to ensure maximum simplicity and system uniformity. The operator earns its revenues from the basic subscription ( $\in_3$  per month), plus transmission and messaging charges. It does not, however, supply content. As on the Web, there are no restrictions on creating sites. There are more than 50,000 now on i-mode, and many charge for their services. Five percent are "official" sites, meaning NTT-DoCoMo takes care of the billing and lists them at its portal.

# Speechless

The average bill? Over €15 per month. Many Japanese have no home computer and spend nearly three hours a day on public transport, where talking on the phone is prohibited. Consequently, they use their mobile for entertainment (40% of connections), getting information (20%), and messaging (an average of eight a day). Impressed by its popularity, the German operator E-plus successfully launched i-mode in March 2002.

<sup>\*</sup> The two others are J-Phone, with its J-Sky product, and KDDI, with EZ-Web

will call for special handsets with larger, color screens. Some will even be able to take digital photos, "We're moving from an audio device to a visual device," explains Georges Passet, research and technology planning manager at Bouygues Telecom. Some phones will even perform the functions of a personal digital assistant, turning them into "smartphones" or "talking PDAs." For people who would rather browse with their laptop, the mobile phone will serve as a modem without even leaving their pocket<sup>2</sup>. "The real mobile multimedia revolution is happening today," says Pouyat. "EDGE or UMTS, when they come along in the future, will just be quantitative jumps." Mobile multimedia is a revolution not only for subscribers, but also for Bouygues Telecom, even if the transition is relatively simple on the network, where some adaptations and a GPRS network core were introduced in 2001.

# Simplicity and support

A companywide team led by Benoît Louvet has been developing a new consumer-market offer since September 2001. It has an eye on Japan, where mobile multimedia has been a booming success over the past three years. NTT-DoCoMo has pioneered the market with its i-mode, applying a simple business model based on user-friendliness. The operator chooses the technologies and specifications and then imposes them on the handset manufacturers and content providers. Bouygues is taking inspiration from this model for its consumer GPRS offer. "We'll take the time to develop a quality product that will be accessible to the maximum number of people," says Gilles Pélisson, CEO of Bouygues Telecom. "The technology is meaningless without well-designed services that satisfy customers," adds Louvet. The company will draw on the hard lessons learned with WAP on GSM and rely on the formula that drove its original success: simplicity, practicality and customer support.

There is no question of talking about mobile Internet. Regular Web users will not find the Web as they know it, and people who do not already browse with a PC are not going to start with their mobile phone. Bouygues Telecom will propose an array of services accessible by voice or messaging through a multimedia portal. Mobile multimedia will be rolled out in several phases. The first target will be the "techies," who are always eager to get their hands on novel products, followed by people who are not pioneers, but not averse either to trying out new things. This will prepare the terrain for a full, marketwide campaign. Corporate clients have been able to take advantage of mobile multimedia since February 2002 as part of an offer that gives employees mobile access to their company's intranet.

# Better and better

Mobile multimedia will continue to evolve during the first year. There will be progress in digital compression, which Bouygues Telecom is working on with TF1, improvement in Web-mobile phone interfaces and the arrival of more powerful handsets. And UMTS? "My decision may have run counter to the popular wisdom on 31 January 2001, but our choice has been unanimously applauded since then," comments Martin Bouygues, UMTS won't appear in the market until the technologies are ready, which will be in 2004 at the earliest. "In the meantime," says Philippe Montagner, Bouygues Telecom chairman and CEO, "GPRS will allow us to deliver all the services we want to our customers."

2/ Thanks to Bluetooth, a technology that uses short-range radio waves.

# **POSSIBLE DEVELOPMENTS**

GPRS transmission speeds are still too slow for some applications like photos and music. There are several solutions:

• DIGITAL COMPRESSION is a method of keeping only essential data to reduce the quantity that must be transferred. Powerful terminals are needed to rapidly reconstitute the data on reception. For example, with digital compression, music can be downloaded and played on a mobile phone, just like on a Walkman.

• EDGE, also called e-GPRS, is an adaptation of the GSM standard. By increasing the radio signal's efficiency, it can multiply the effective GPRS transmission speed by 2.5. EDGE, which requires a special terminal, could be available by 2003.

• UMTS (Universal Mobile Telecommunications System) is a packet-switched system that uses different frequencies from GSM and requires the installation of a new network. Rollout: 2004.

• 4G, the fourth generation network, is directly Internet-driven, while GPRS and UMTS are still hybrids of telecom and information technologies. Actual transmission speeds could be as high as 100 mbps. 4G might be here around 2010.

# MOBILE MULTIMEDIA LETS YOU...

• communicate by messaging systems (e-mail or MMS, the future successor to SMS);

• **browse** sites designed for display on mobile phones;

 download images, games, music, simple videos and more using a specially equipped mobile phone and a portal offering convenient access to a variety of applications.



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THE FABULOUS OF THE LITTLE MESSAGE

# DESTINY

Once upon a time, there was a little message. So little it nearly went unnoticed. But its charm and many endearing qualities could not be ignored. It won the hearts of mobile phone users, served them quickly and faithfully, and earned a place as a modern-day messenger. Once upon a time, there was SMS instant messaging (Short Message Service).

t is less than 160 characters long, but it has won over 40% of mobile phone users in France. Short Message Service caught on first among young people: 73% in the 20-24 age bracket regularly communicate with SMS, with the proportion jumping to 84% for 15- to 19-year-olds. Women were the next to fall under its spell, followed by the public at large. The tidal wave has swept across France. In 2001, 3.3 billion SMS messages were sent there, and double that number is forecast for 2002. The Bouygues Telecom network carried 800 million of these messages.

SMS may be piling up records today, but its early years were spent in the shadows. It will celebrate its tenth anniversary in December 2002. When the first SMS message was sent from a PC to a Vodaphone mobile, in 1992, there was no fairy watching over its birth and promising it a splendid future. There is, indeed, nothing extraordinary about the technology. The message simply travels in the free space on a signal channel that operators use to verify connections between a network and the phones affiliated with it. But SMS plucked up its courage and took a turn in a public capacity as a miniature envelope on the screen indicating the arrival of a voice communication. Compared to the promises of WAP (Wireless Application Protocol) and mobile Internet, SMS's potential seemed modest. Its weaknesses, however, turned out to be its strength.

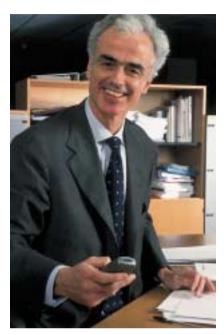
# Тһимbnai

Its technology is not very advanced, which makes it even more accessible. SMS got a boost from some doting godfathers in November 1999 when France's three mobile operators signed an agreement to allow messages to be sent between their networks. This was a key to its growth. There is no need to have the latest model handset, since all phones are compatible (compared with just 20% for WAP). SMS messaging is not intimidating to users. Its appeal lies precisely in its simplicity, and simplicity is a watchword at Bouygues Telecom. "We have done everything possible to simplify instant messaging, in particular by working with handset manufacturers," explains Emmanuel Capron, director of Operator Services and Strategic Partnerships. The SMS menu can now be accessed on most models by pressing just two keys.

Being small makes it even cooler to young people. It fits right in with the "thumbnail culture", with its abbreviations,

# **BOUYGUES TELECOM / Services**

# Thanks to SMS instant messaging, users grasp how mobile services make sense.



Emmanuel Capron, director of Operator Services and Strategic Partnerships.

onomatopoeias and acronyms like CUL8R, OIC and ASAP (See you later, Oh I see and As soon as possible) and its emoticons as punctuation: :-( I'm frowning and ;-) I'm winking. Bouygues Telecom has even published a lexicon for people who are unfamiliar with this special language.

Another advantage: SMS is discreet. In meetings, on trains... the messages are neither seen nor heard by others, making them perfect for situations where loud phone conversations are not possible. Everyone can use SMS to converse in complete privacy, without disturbing people nearby. After all the excitement when cellphones first came out, users are now interested in gaining more control over these sometimes intrusive devices.

# Everybody loves it

SMS, though so very discreet, has become a badge of recognition. In the way pagers were in the past, it is the link among members of what used to be termed "clans" and that are now called "communities." The lines of communication are never down between people with common interests, such as a passion for 18th-century painting or movies, or a desire to stay in touch with childhood friends or family members.

An SMS message can be sent to several people simultaneously. It pops up on one screen after another, provoking responses and sending new messages in ever-wider circles. SMS is a trustworthy messenger, too. The voice network may be overloaded or inaccessible, but messages work their way through and arrive in less than a minute 70% of the time. Success has not gone to its head. It remains modest. Less expensive than a postage stamp, an audiotel number or one minute of cellphone airtime, the flat rates for SMS or combined voice-SMS make it irresistible (0.1 euro instead of the base rate of 0.15 euro). It has ended up as a communication model. In 2001, 80% of messages were of a private nature. Today, however, SMS's sights are set on bigger things.

It wants to be useful and not just a device for contacting friends or conducting a romance. So here come the services. News and sports, entertainment (forums, games, gambling...), alerts (email, fax, stock market...), they all swear by it. Its only requirement? That the user type in the number of the desired service (831, for example, to get uninterrupted news from TF1 with the "Scoop" service). Its sense of fairness has led it to compensate its content suppliers... and to raise some of its rates. But who can be angry at it? Especially when SMS is making such a big effort to simplify life for its devotees. For example, short, five-digit numbers common to all three operators are to be introduced soon to make accessing a multitude of services easier.

# It changes life

Now more confident, it is not afraid of courting corporate users. SMS gives intelligence and life to machines. Bouygues Telecom is a pioneer in the machine-tomachine sector. The outdoor advertising firm JC Decaux remotely operates nearly 8,000 revolving billboards with SMS. At Niort and Vannes, parking meters equipped with a SIM card flash an SMS alert to the management company in the event of a breakdown or theft. The French railway, SNCF, tracks 3,700 freight locomotives with 133,000 SMS messages a day. Though still marginal, the M2M business already accounts for 8% of the billed connections of Bouygues Telecom Entreprises, and growth prospects for 2002 are excellent.

It rewards those who look after it. Bouygues Telecom has a 25% share of the strategic non-voice market, compared with 18% for the voice segment. This success is a product of Bouygues Telecom's proactive learning policy (phone support, publication of an SMS guide, etc.). SMS is loyal, too, sparing no effort in promoting itself and in the process, proving to be an excellent teacher. "Thanks to SMS, users grasp the relevance of mobile services," notes Emmanuel Capron. "We had underestimated its educational role. Its adoption today by our customers is the first step toward mobile multimedia." Sweet revenge for a little message that looks set for a great future.

SMS :	ITS EZ 2 CHAT
HAK :	Hugs and kisses
BLTN :	Better late than never
CULBR :	See you later
GR8 :	Great
LOL :	Laughing out loud
TIA :	Thanks in advance
WRU :	Where are you?
TTYL :	Talk to you later
88 :	Best regards
NDYA :	Why do you ask?

# Smiling :--1 Laughing :--1 Kissing :--1 Indifferent :--1 Shock :--5 Blabbing :--6 Frowning :--7 Crying with joy :#1 Drunk

Over 80% of the 15-19 age group use instant messaging.

18

From businessmen to teens: SMS appeals to a broad public.

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The Eiffel Tower emits an electromagnetic field ten times as strong as those of the three wireless operators' networks combined

that is, a field equivalent to the one generated by 300,000 relay antennas!
And it does so with no known impact on health.
This field comes from the terrestrial TV transmitters installed at the top of the tower, which cover
Paris and its adjacent suburbs.

**######** 

\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*\*

THIS CONTRACTOR OF STREET

So, do we have to dismantle the networks and throw our mobile phones in the trash? Are the radio waves they emit really a health hazard? There's plenty of speculation, but no scientific study has proven it. Still, people worry. Here's what Bouygues Telecom has to say.

## and harmless

he radio waves emitted by relay antennas that are causing such concern are like light waves, but invisible. We have long been exposed to radiation from high-voltage lines and radio and TV transmitters, which is often more powerful than the radiation from these antennas. In France, 100,000 sites produce electromagnetic radiation and less than onethird are mobile phone relay antennas. "Several hundred studies have been done around the world. Not one has demonstrated the existence of a health risk<sup>1</sup>," says Jean-Claude Bouillet, head of Frequencies and Protection at Bouygues Telecom. The concern persists, however. "We are in the realm of emotions here, he cautions, so a purely rational response is not enough."

## Act immediately

Will the situation calm down by itself? A century ago, the construction of a train station frightened people into moving. Ten years ago, people were still afraid of microwave ovens. Is waiting passively the right solution? Bouygues Telecom cannot let the fears aroused by the antennas jeopardize the extension of its network. It now takes twice as long to negotiate the installation of an antenna as it did four years ago. Some maintenance technicians are attacked verbally. Some communities are even demanding that antennas be removed. "It's not only that network expansion is critical to Bouygues Telecom's business," notes Frédéric Zimer, assistant general

1/ Given the exposure levels, no group of internationally recognized experts currently accepts the hypothesis of a health risk. manager and head of Networks. "There are obligations in our license concerning coverage. And when we have covered a district, the emergency telephone numbers must remain accessible, which is second type of obligation." Bouygues Telecom disconnects its equipment during maintenance operations.





## Radio frequencies: the impact of distance

The radiation three meters from an antenna is below the European exposure standard, which itself is 50 times lower than the level at which harmful effects have been observed. An electromagnetic field's strength, expressed here as a percentage of that standard, decreases in proportion to the square of the distance.

## Antenna tales

Sleep. In 1997, an elderly couple living in northern France wrote to Bouygues Telecom complaining that since the day an antenna was erected 100 m from their home, they had had trouble sleeping. However, the antenna had not gone into service until a month and a half after its installation. Apparently just the sight of it was keeping them awake.

Sensible. In 1999, the mayor of a small village in Alsace demanded that the antenna installed on the school be removed. A mayor down the road immediately asked that it be put up in his community to cover a business zone he was developing. Real progress as opposed to imaginary risk



## Out of sight.

Antennas concealed by a chimney or church tower do not prompt complaints, even though people living nearby generally know they are there. ▶ Bouygues Telecom has opted for transparency. The Frequencies and Protection Department and the Networks Department collect information, finance research and take part in colloquiums all over France, from the National Assembly to the regional public housing congresses. Since June 2000, a page on the company's Web site has dealt with this subject. On the recommendation of the Frequencies and Protection Department, Bouygues Telecom can decide to take down or turn off an antenna once a replacement site has been negotiated.

## Measure accurately

Health is one of the first matters submitted to Bouygues Telecom's Scientific Council, a group created on 18 June 2001 whose six members come from outside the company.

France's top electrical engineering school recently developed for Bouygues Telecom a handy and highly accurate device for measuring electromagnetic fields that can be easily taken into homes. Its readings are displayed as a percentage of the European exposure standard, making them meaningful to the layman. APAVE or Veritas makes the measurements for Bouygues Telecom in the home of anyone who requests it in writing. Occasionally a defective microwave oven is founded, but the electromagnetic fields produced by Bouygues Telecom's antennas are far below the exposure standard. Objective information and scientific measurements are a potent mix: more than 50 percent of complaints are ultimately withdrawn.

## **Inform precisely**

As for mobile phones, Bouygues Telecom has published a booklet that it gives free of charge to anyone who asks for it. It suggests a few reassuring precautions that people who are very worried about electromagnetic radiation can take. These include using a recent-model handset, getting an earphone and not talking on the phone five consecutive hours. "The magnetic field emitted by a phone pressed to the ear is far below the exposure standard, and the skin absorbs most of it," explains Bouillet. "But it's still stronger than one from an antenna a few meters away." The phones themselves do not frighten people, however. Their owners control their use and enjoy their convenience, to the extent that they take a risk all experts recognize: using their phone while driving, thereby multiplying by four their chances of an accident.



## TAKING THE CUSSION OF A CONTROL OF A CONTRO

Telecom does it with personalized rela-

tions and top-quality services.

heir number has now risen to over 6.6 million, aged 10 to 80. They are students and parents, self-employed professionals and corporate employees, Web fanatics and new-tech nay-sayers. They are the customers of Bouygues Telecom. More and more demanding and increasingly well informed, they will change operators in a minute if they think they will get a better deal elsewhere. This behavior has become so common that an evocative word - "churn" has even been found for it. For Bouygues Telecom and its rivals, winning customer loyalty is now a top priority.



"We have shifted our focus from looking everywhere for new customers to building long-term relationships with the ones who put their confidence in us," says Bouygues Telecom CEO Gilles Pélisson. At the company's headquarters in the Paris suburb of Boulogne, two words are on everyone's lips: transparency and autonomy. Transparency means easyto-understand contracts, with no restrictive conditions buried in the fine print, and services designed for newcomers and Bouygues Telecom's longstanding customers alike. The second word, autonomy, means giving everyone the chance to choose the type of service he or she prefers. For Internet night owls, there is the "esp@ce client" page at bouyguestelecom.fr or WAP service. For seniors who like personal contact, there are street-corner shops and clubs<sup>1</sup>. And for everyone, at home or anywhere else, there is pre-recorded customer service and customer assistants if callers want to speak to a real person - to get answers to questions or subscribe to new services by phone.

## Assistants for VIPs

Available to every Bouygues Telecom subscriber 13 hours a day, six days a week, the customer assistants are the pillars of the system. Bouygues Telecom opened its first call center in 1996, when it began offering phone service. Four others, where more than 2,650 assistants work, have been created since then. To tailor their answers to each situation, assistants have access to a database showing the terms of each contract as well as a history of what has happened in the account (a change in the bundle tariff, subscription to a new service, etc.). Assistants receive regular training in how to adapt their tone and vocabulary to the caller (everyone, however, is treated with respect!). The most active customers receive VIP treatment from veteran advisors, who spend extra time answering their questions. Specialized teams for families, young people and tradesmen are now being set up, too.

The less expensive and easier-to-personalize Internet has everything going for it. Esp@ce Client already handles 40% of the matters that prompt people to ring up the call center. The number of connections has soared from an average of 23,000 a week in 2001 to 120,000 in February 2002. Is the Web going to replace the call centers? "Absolutely not," says Jean-Luc Gonzalez, head of multimedia at Bouygues Telecom. "The site complements the call centers for a group of subscribers who are younger, who use their phone more and are more loyal." And eager to always have the newest >

1/ The shops are managed directly by Bouygues Telecom. The clubs are independent stores that agree to earn 60% of their revenues from Bouygues Telecom products.

Almost

half the

## THE VOICE OF THE COMPANY

310101111

At the heart of the system is the phone support service. Some 24 million calls come in each year, with half of them taken by the 2,650 customer assistants.

- Good morning, Bouygues Telecom. My name's Caroline. How can I help you? The assistants give their name to personalize the call.

## – Good morning. I'm calling because I'm having a little trouble using the Web site.

Well, not all Bouygues Telecom customers are computer experts! Technology fans were the first to subscribe, but with more and more mobile phone users, our recent users are less familiar with the new media. 300,000 customers used bouyguestelecom.fr one or more times in 2001.

## - Could you give me your mobile phone number, please?

In fact, a number appears on the assistant's monitor when the call comes in, but some subscribers use a friend's phone.

## - It's o6 60...

## – Mrs. Paul. Is that right? I see that you're a very regular customer.

Customers like recognition. The assistant's secret tool? A computer file giving the history of the contract with the person calling. This file will soon be available to salespeople in the Bouygues Telecom shops and clubs.

## - I've been with you for two years, and I've just given my daughter a minibundle tariff as a present. That way, she can call me when she gets out of school. I've heard about something called a "Between Us" service that gives lower rates on certain numbers. Is she eligible for that?

There are three basic types of call center calls: billing/payment questions, how to use the phone and contract modifications (changing bundle tariffs, subscribing to new services, etc.). The tone can range from a request for information to a complaint. Assistants know how to manage these situations. The golden rule is to let customers talk, listen, and then reformulate what they have said to be sure to have understood.

## - So you'd like your daughter to have a special rate for the calls she makes to you? In that case, I recommend our "Passion" service. Five hours of airtime to one number for 6.1 euros per month. That works with the minibundle tariff. Does that sound like what you're looking for?

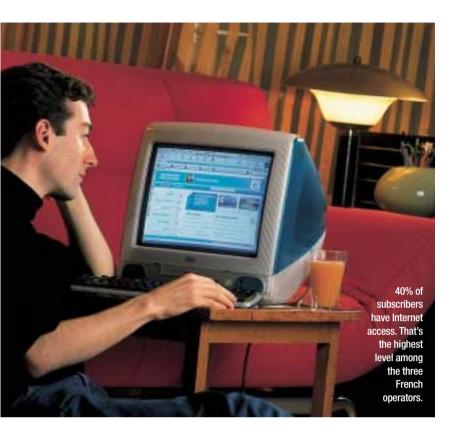
The assistants have to be familiar with the tariffs and phone sets as well as the services so that they can handle 90% of the calls they

take. Passing a customer from one assistant to another is to be avoided. Keeping up on all this information requires regular training, given in two half-day sessions per month. A special intranet for the assistants informs them about the latest tariffs on offer. And if there is a problem during a call, several technical services are on hand to deal with complicated or special questions (WAP, aftersales and order follow-up). It's only as a last resort that a caller is transferred to a specialized assistant, however.

## – Yes, that's a good idea. What do l have to do?

I'll take care of everything for you.
You will have the service within
48 hours. Your daughter will get a
message confirming the subscription.
Thanks very much. Goodbye.
Goodbye.

After hanging up, the customer assistant enters the reason for the call and the solution that was provided in the customer's computer file, while waiting for the next call. Assistants take an average of 80 calls a day, unless they are busy answering letters or emails received at the web site.



## Did you say... available?

In 2001, Bouygues Telecom received:

350

million calls on its voice servers (over 90% to check time used)

## 12.5

million calls to its customer assistants

## <u>3.5</u>

million visits to its shops and clubs 12 million connections to

bouyguestelecom.fr (3 million forecast in 2002)

million WAP

connections

letters

Minitel connections

phone on the market. Since the end of 2001, subscribers who want to change their handset can choose a new one, according to the number of points they have earned, and order it online at the site. This has become an indispensable service.

## At the street corner

Customers who want to try out the phones before picking one head for a shop. Created in 1998 as simple sales points, the shops and clubs have transformed into spaces for offering multiple services. Nowadays, one person out of two who comes in is already a customer. Frequent-caller points are accepted currency, and computers connected to bouyguestelecom.fr are available to the public. "In a few months, salespeople will be able to access customer files from their computer and give advice corresponding to the customer's profile," says Frédéric Ruciak, director of the Bouygues Telecom shop and club network. This network is going to grow from the current 440 sales points (160 shops and 280 clubs) to 600 in 2003 (200 shops and 400 clubs), all with the same sign and brand-new shop fittings. After-sales service, which is currently outsourced, will be tied into this network by the end of this year, too.

Great Web servers, headphone-equipped advisors and conveniently located shops – everything has been done to give customers top-notch service. "It's up to us to reach out to customers," says Richard Viel, director of Consumer Marketing. "Rather than sitting back and waiting for them to ask for something, we're stepping up and helping them make decisions." How? By contacting them to find out if they are satisfied (2 million calls in 2001). By regularly proposing bundles, services and handsets that match their lifestyle and call volume. Requests for advice increase as the number of options multiplies. Bouygues Telecom proposes 14 bundle tariffs today, compared with six at the outset.

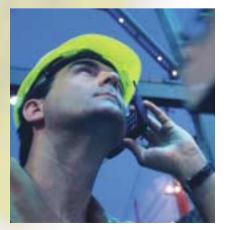
## The desire to stay

Mail promotions are targeted. There is no point in proposing the Pro 10-hour product to a newcomer who is trying out the mini-bundle. Small and large consumers do not receive the same magazine. In a few months, Web users will be contacted by email and "nomads" by SMS or telephone. Mrs. Paul, who goes into her neighborhood shop frequently, will receive letters signed by her advisor, asking her to come in for a demonstration. "What's essential is to make customers want to stay with Bouygues Telecom," says Viel. If they are happy, if they feel understood and appreciated, they will become the best ambassadors to their friends and neighbors that the company could have.



ros

Bouygues Telecom targets the consumer market exclusively, right? Wrong. The Bouygues Telecom Entreprises line of corporate services is growing. Sensibly and surely. A discreet player worth knowing more about.



Access to the entire company's information system with the Mobile Intranet.

## **BOUYGUES TELECOM / Corporate services**

10 bundles and over 30 services to tailor the solution to each company's size. Data transmission, even more than voice transmission, is what interests professionals today.

ouygues Telecom's diva performed flamboyantly on TV screens, while the soberly dressed figures symbolizing Bouygues Telecom Entreprises seemed reserved. That was in 1998. The new telecom operator was mainly wooing the consumer market. Today, over 60% of French people have a personal mobile phone, but the proportion of employees equipped with one for their work is a much lower 22%. Bouygues Telecom Entreprises is already capitalizing on these tantalizing growth opportunities. Each year since its launch, it has expanded by 25%. In 2001, sales rose to €156m. What resources does it have to keep on growing? A complete offer that can be tailored to each customer's needs; a capacity for innovation: and a well-known name in the business world.

## **Tailored services**

France has over 3 million businesses, from tradesmen and small/medium-sized companies to major corporations, employing a total of some 24 million people. Plus there are all the government civil servants. Each is a distinct group of potential customers who want personalized service. To reach them, Bouygues Telecom Entreprises is relying on its local presence, provided by a network of 15 regional agencies and 200 customer advisors. Recognizing that each customer is different also means segmenting the offer and customizing services. The aim? "To be present for small businesses and major corporations alike," says Serge Goldstein-Desroches, managing director of the Entreprises market line. With ten bundle tariffs and over 30 services, it's possible to find the right combination to precisely satisfy every requirement. To small companies (fewer than 50 employees), Bouygues Telecom Entreprises usually proposes individual bundle tariffs, similar to those offered in the consumer market, because these firms' needs are simple. For SMEs (50 to 500 employees), it has designed special solutions like the Internal Unlimited bundle tariff. For a monthly charge of €35 per mobile phone, the company gets an internal network with short numbers. The staff's fixed phones are also included in this network. The advantage is that all calls between the mobile phones and, up to a predetermined volume, between the fixed and mobile phones in this network are free of charge. For large companies and government administrations, Bouygues Telecom proposes a service where the customer pays only for the time phones are actually used. This flexible solution avoids the complications of managing excess charges. While companies' requirements may vary depending on their size and business activity, they all want efficient management of their phone system. Controlling costs, a company's primary concern, can be done using a billing analysis tool available online.

## 140 countries in the network

**F**rankfurt, Rome, Madrid... in the era of the euro, how can mobile phone operators simplify life for customers who have to travel for their work? By forming ties between European and American operators. Doing this will strengthen the position of Bouygues Telecom Entreprises, which is already No. 1 in France in terms of the number of countries (140) covered by roaming agreements. As of 31 Jan. 2002, it had such agreements with over 270 foreign operators. Their aim is to allow customers to phone from foreign countries as if they were at home and, above all, to enjoy the same services everywhere in Europe. "These new possibilities should help to increase roaming revenues by nearly 50% in 2002," says Jean-Philippe Aumercier, head of Roaming and International at Bouygues Telecom.

Bouygues Telecom has carved out a place for itself in the competitive market for corporate mobile phone systems. It now has over 30,000 clients, and some prestigious ones at that, including the Ministry of the Interior, the national statistics institute (INSEE), the French postal service, BNP-Paribas, Microsoft and Siemens, to name but a few.

## **Mobile toolbox**

I-nno-vate. Neither for its own sake nor for the pleasure of it, but to deliver better solutions to customers. Innovation at Bouygues Telecom today can be summed with three letters: MMM. Bouygues Telecom Entreprises was the first to roll out a mobile multimedia service offering. That was in February 2002. "Data transmission, even more than voice transmission, is what interests professionals today", observes Goldstein-Desroches. "To react quickly, employees have to maintain contact with their company's information system."

These services, called Intranet Mobile, mark a break with the past in the way companies work. They give access from a mobile phone, a PDA or a PC to a full array of tools (agenda, messaging, directory, etc.), which can be adapted to the level of the company's equipment. The Universal Offer is designed for companies without an intranet. It includes messaging, personal or company agenda, company directory and other features. Larger companies that lack a messaging system can opt for IBM's Lotus i-Notes, a powerful, user-friendly application with personalizable features (contacts and company-specific information in addition to the basic features of messaging, agenda and directory). And last, for the largest companies, Mobile Intranet offers the means to make the company's applications and software mobile and to access the company's existing information system. The icing on the cake is that these services function on GPRS. This standard is four to five times faster than GSM, and with GPRS, users are charged for the volume of data transferred, not the connection time.

## **Cyber communication**

Bouygues Telecom Entreprises offers other cyber-solutions besides mobile multimedia. One is "Machine-to-Machine." These SMS-based solutions allow equipment to be operated remotely using a SIMcard device to send messages to a central computer. The outdoor advertising giant JCDecaux has already equipped 7,000 of its time-sharing billboards with it. The slightest malfunction is detected by an automatic system, which sends an SMS GPRS-based Mobile Intranet services were launched in early 2002.

message to the sector manager via a central server. Another possibility offered by this solution is to program the display cycles in relation to advertisers' requirements. "The market could represent 4% of Bouygues Telecom's sales within five years," predicts Goldstein-Desroches. Bouygues Telecom Entreprises also has another advantage besides its products and capabilities in marketing and technology: the Bouygues name, which is trusted in the world of business.

Bouygues Telecom



Its name calls to mind prestigious structures that have marked their times and their landscape. Bouygues Construction has forged its reputation by taking up daunting challenges. It has repeatedly shown in major projects that it can set deadlines and meet them, while delivering superior quality and controlling costs. A key to these achievements is the ability to mobilize skilled teams of workers, motivate them, and unite

their efforts behind a clearly identified leader. Central to this powerful culture, which has taken root throughout the Bouygues Group, is

a constant concern – to bring added value to customers by proposing innovative, common-sense, directly useful solutions and methods. Each project is seen as a fresh opportunity to achieve progress in both the technical and human spheres and thus to remain the benchmark firm in general contracting.

# REAL ERANCE

## STADE DE FRANCE

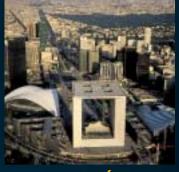
A symbol of versatility: design, project financing, construction and operation for 27 years under the world's largest sports-facility concession (33%). 1997

## THE BUILDERS' VIEW

BOUYGUES 2002 47

## **BOUYGUES CONSTRUCTION /** Technique and prestige

1



**ARCHE DE LA DÉFENSE** A presidential project and media mag-net. This enormous cube, whose sides were temporarily unstable in one phase of the construction, rests on 12 piles that support 300,000 tons. 1989

## HONG KONG CONVENTION CENTER

Construction was already under way when it was learned that the center had to be delivered in time for the ceremony marking the return of Hong Kong to China. It was. This multicultural project was the first carried out in partnership with a Chinese company. 1997







## MUSÉE D'ORSAY

The first major renovation in France of a listed 19th-century building required doing complex studies rapidly. Bouygues Construction won the contract by proposing to do the project in 30 months. It met the deadline. 1986



## **BOUYGUES CONSTRUCTION /** Technique and prestige

## BRAS DE LA PLAINE Road viaduct

V-V-VI

It stretches across a 110-meter-deep ravine on the island of Réunion. The viaduct's 280-m span makes it the world's longest with a composite highperformance-concrete/steel deck. 2002

## GIRASSOL

 By equipping a 1, 350-m-deep oil field of the Angolan coast, Bouygues offshore became a major player in the ultra-deep water sector. 2000

## **FIAT TOWER**

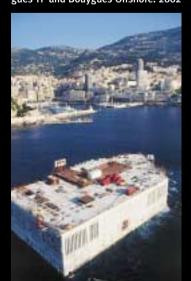
La Défense's tallest tower at the time. The engineering offices were involved from the start of the design phase in this project, which introduced industrialized production to building construction. 1974





**MONACO SEA WALL** Ten concrete caissons, each ten stories high, are being set on a soft, sloping bottom to expand the port and shield it from the sea. A team effort by Bouy-gues TP and Bouygues Offshore. 2002

the original project would have. 2000



**SYDNEY METRO** A project illustrating the expertise acquired in designing and using slurry tunnel-boring machines. Passing beneath the runways at the Sydney airport caused only 3 mm of settling! 2000

**BOUYGUES CONSTRUCTION /** Technique and prestige

A AVALANTA A LA A

**CIEUR DÉFENSE** The largest office project in Europe, wedged among other buildings, in the business district of La Défense, near Paris. Delivered in just 32 months. 2001

1000



## HASSAN II MOSQUE

In Casablanca. Notre Dame Cathedral in Paris would fit in the width of its central nave. The most up-to-date construction techniques are combined with refined Moorish decoration. The building rests partly on stilts pounded by the waves. "The reign of God will be founded on the ocean," says the Koran. 1992







## ROISSY 2 AIRPORT Aéroports de Paris set extremely strin-

Aéroports de Paris set extremely stringent quality requirements for the concrete. A long-term partnership was born with this initial, demanding project. 1980





PARC DES PRINCES In Paris. A major new challenge for a firm hitherto specialized in building construction. Large-scale prefabrication and worksite computerization were used for the first time in this three-year project involving the whole company. Despite its complexity, the stadium was delivered on schedule. An impressive entry into the civil works market. 1972



**RIVADH UNIVERSITY** A colossal project. The challenge was to build 1 million m<sup>2</sup> in 40 months in the Arabian desert. Scheduling software designed in house coordinated the efforts of as many as 14,000 workers. 1984







## ILE DE RÉ BRIDGE

It was delivered eight months ahead of schedule, gaining a summer season for the customer, the Charente-Maritime General Council (western France). Offshore techniques were used for the foundations in waters where waves can reach 3 m. 1988

Parc des Princes (1972); Palais des Congrès, Paris (1973); olympic stadium, Tehran, Iran (1974); Fiat tower, La Défense (1974); Bugey nuclear power plant, France (1979); Roissy 2 airport (1980); INSET, Yamoussoukro, Ivory Coast (1982); Bubiyan bridge, Kuwait (1983); Riyadh university, Saudi Arabia (1984); Saint-Alban nuclear power plant, France (1985); Les Halles quarter, Paris (1986); musée d'Orsay, Paris (1986); Pyeong Taek methane terminal, South Korea (1987); Challenger, Bouygues headquarters (1988); Ile de Ré bridge, France (1988); arche de la Défense, Paris (1989); Sylans viaduct, France (1989); ENSA, Yamoussoukro, lvory Coast (1989); Jijel-Ramdane Djamel railway line, Algeria (1990); Pacific Place towers, Hong Kong (1991); James Bay dam, Canada (1992); Richelieu wing, the Louvre, Paris (1992); Hassan II mosque, Casablanca (1992); the new city of Muang Thong Thani, Thailand (1992); Channel tunnel (1994); Hong Kong national stadium (1994), Charléty stadium, Paris (1994); the barge Nkossa, Congo (1994); Pontiac Marina, Singapore (1995); Gueok Tepe mosque, Turkmenistan (1995); Bibliothèque Nationale de France, Paris (1995); Normandy bridge (1995); presidential palace, Kazakhstan (1995); Stade de France (1997); Hong Kong Convention center (1997); presidential palace, Turkmenistan (1997); TGV viaducts at Avignon (1999); transformation of the Palais des Congrès, Paris (1999); Beirut sea front, Lebanon (2000); Sydney metro (2000); Cœur Défense towers (2001); Bras de la Plaine viaduct, Réunion (2001); Girassol deepwater oil field, Angola (2002); port of Monaco sea wall (2002); Groene Hart tunnel, the Netherlands (2004) RUJECIS: PARC DES PRINCES TO EGROENE HART TUNNEL

Port of Los Angeles

COLAS

Colas is winding up work in one of the largest port expansion projects in the United States – Pier 400, the remarkable 196-

hectare container terminal in the Port of Los Angeles.



E

## 

An artificial island connected to the city by a narrow rail and road corridor.





All documents are transferred across an Internet platform.



he sprawling city of Los Angeles, with 15 million residents, is the largest agglomeration in the United States. Its equally huge port, already the country's biggest, is going to be even bigger. Sully-Miller Contracting Co., the California-based subsidiary of Colas, was awarded a €89m contract in the first phase of the Pier 400 project. The vast terminal being constructed on a 196hectare expanse of reclaimed land will be the largest container loading, unloading and storage facility in the world. It will be operated for 25 years by Maersk Sealand, the world's largest shipping line. "Its our biggest project in North America," boasts Louis Gabanna, vice president, Western Operations, at Colas Inc.

## **Developing an island**

"Almost 500,000 tons of asphalt. That's enough to build 500 km of highway, 10 m wide and 10 cm thick," says project manager Alex Saplala enthusiastically, citing the quantity of asphalt poured at the terminal. As for the aggregates, 230,000 m<sup>3</sup> were brought 2,000 km by sea from Vancouver, Canada, in about ten shipments. Why so far? A ship holds the equivalent of 300 truckloads. In a city famous for its nightmarish traffic, where trips are measured in terms of time, not distance, avoiding the one-hour-plus drives between Sully-Miller's nearest quarry and the site was an obvious advantage. "This solution was the most economical as well as the most practical and ecological," explains Saplala. The remainder was hauled in by road, along the narrow corridor connecting the pier to the coast, at a rate of 200 loads a day. The 455,000 tons of asphalt were produced at the site with a plant bought specifically for the project. The

## Made in California

ounded in Los Angeles in 1923, the roadworks company Sully-Miller became a unit of Colas in 1998. Based at Anaheim, in southern Los Angeles County, it has 400 employees. Blue Diamond Materials (asphalt) and United Rocks Products (gravel) were acquired in April 1998 and September 1999. With sales of €250m in 2001, Sully-Miller produces 2.5 million tons of asphalt mixes and 3 million tons of aggregates each year. Colas is present in 23 states of the United States and earned 23% of its revenues in North America in 2001. Two other major projects highlighted the year: completion of the four-lane SR 26 in Pennsylvania and the construction of a 23-mile section of Interstate 75 in Georgia. The road-building market remains strong in the United States thanks to federally funded projects in the multi-year program under the Transportation Equity Act of the 21st Century.



## The Sully-Miller project team

7 managers to lead a staff of 300 and coordinate 19 subcontractors.



ALEX SAPLALA Project manager



GINA PICCIRILLO Coordinator



FAYE ROBERTS Accountant



FRANK GRAY Superintendant

quantities of other materials and equipment – 1.3 million tons of aggregates, 20,000 m<sup>3</sup> of concrete, 600 km of electrical conduit, 11 km of water pipe and so on – give an indication of the project's dimensions.

## "We will do it"

In the Internet bidding for the project, Sully-Miller's price was lower than those of the four other companies in the running. "When I got the phone call saying we had won, it was five minutes of pure happiness. A team in seventh heaven and anxious to get started," recalls CEO Bruce Reiser. "Then all the doubts suddenly resurfaced." Wasn't the 14-month deadline too short? Could we do it for the price? Hadn't we forgotten something in the proposal? "And then, you look at your team and you tell yourself: Yes, we've thought of everything. We will do it." Sully-Miller opted to use a small management team for the project: seven managers are in charge of a staff of 75 as well as the 225 people from the 19 subcontracting firms. "This project's complexity lies in the time management, the variety of tasks that have to be coordinated, and the intense pace of the work," explains scheduling manager Kyle Park. Another factor of success as far as the client was concerned was real-time access to all the project >



KYLE PARK Project engineer





BERT LOZANO KAZEM ELSHAFIE ect engineer Project engineer



## Terns take a turn on the pier

short distance from

the rumbling of the heavy equipment is a nesting place for California Least Terns between April and August. A 10-hectare reserve has been created at the tip of Pier 400 for this migrating bird, which has been protected since the spreading metropolis drove it from the beaches. All that separates this haven – an island on an island, under the authority of the environmental department - from the construction area is a double chain-link fence. The machinery and the birds have to coexist, and this obligation is taken very seriously. In the United States, laws are extremely strict: killing a tern or destroying a nest is liable to a steep fine of €100,000 or even one year in jail. "During the mating season, we have to keep the terns from building their nest in the construction area," says superintendent Frank Gray. "Imagine what that means for a project of this size." Ultimately, American pragmatism found the solution. The ground is wet down every day so that the terns, which want a warm place to nest, will stay on their bit of land. Another measure was to pick up garbage regularly. The season ended with "zero incidents for the terns," which resumed their flight to Mexico.

data. Accordingly, a shared Web platform was set up for everyone working in the project (contracting authority, prime contractor, general contractor and subcontractors).

## A paperless project

Data on scheduling, work status, deadlines, quantities and administrative items like invoicing and payroll are entered in the system where they are generated and are immediately accessible for consultation. That means zero printing costs, automatic archiving and total transparency. "This original type of organization enables everyone to react fast," says Saplala. "It's also a safeguard against all kinds of complaints." For example, the balance due for November (over 10 million euros) was approved by the contracting authority barely 40 minutes after it was submitted and it was paid six days later. Administrative clarity, swift execution, fewer disagreements, improved cash flow... and a trial run for Colas, with very satisfactory results. In March 2002, just a few weeks from delivery, work was one month ahead of schedule. This should put Sully-Miller in a strong position when the time comes to bid for the project's second phase in the summer of 2002.



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When the Iron Curtain fell, Colas picked Romania for its first move into Eastern Europe. Its strategy in this promising but risky region? Small steps and solid roots. Ten years later, Colas is the country's No. 2 roadworks company.

Pitești 84 Km. Podu Dámboviței 3 Km.



horse-drawn wagon on a small country road – this postcard image of Romania is increasingly out of date. In a country with annual economic growth of 5%, the wagons are being overtaken by more and more Dacias, the Romanian car made by a Renault subsidiary. In ten years, traffic has doubled on the country's narrow, run-down roads. In the capital, the parking problem has become a nightmare for city officials. When Ceaucescu transformed downtown Bucharest in the '80s, he was expecting 100,000 vehicles to use the city's streets, not 800,000, as was the case in 2000.

Besides the essential modernization of the road network (5,600 km of national roads are to be upgraded in 10 years), there is a vast project to construct 1,300 km of multiple-lane highways in the same period. The task exceeds the capacities of Romanian firms, which are struggling for lack of capital to replace worn out equipment. To get the job done, the State plans to rely on foreign companies, to whom Central Europe's second largest market after Poland, with 22 million people in a country half the size of France, looks very attractive. Since many of the country's elite were trained in France, French companies have an edge here.

## A business base

Arriving as a pioneer in 1991, Colas is still the only French roadworks company trying to maintain permanent operations in Romania. Government red tape, galloping inflation and the unreliability of subcontractors have discouraged more than one. To succeed, it is better to start small and put the emphasis on building a business base. In a new market, Colas is positioned as a producer of materials: emulsions, asphalt mixes and aggregates. (The first, incidentally, gave Colas its name: COLd ASphalt.) Bruno Laffaire, who manages Colas' activities in Romania and countries bordering it to the south, explains: "One expat and a few locals can start up an emulsion plant, while it takes several expats and 150 locally recruited workers to carry out a highway upgrade project." Its position as a supplier allows it to keep an eye on the market and make the first contacts. And nothing prevents it from doing a few local projects at the same time. Sorocam, a joint venture set up with the State, is its arm for doing this. The 1996 buyout of Screg created a new situation and changed Colas' position in Romania. When Screg arrived in 1995, it opted for a different strategy and bid for major road upgrading projects with international financing. It was an ambitious

choice, given the difficulty of meeting delivery deadlines, and thus costs, in this uncertain environment. Colas saw an opportunity to diversify its

operations in the country and decided to take the gamble, realizing it could rely on its knowledge of the market. It won its bet.

## Taking a gamble

Six years later, Colas Roumanie, the former Screg Roumanie, upgraded and widened 212 km of national roads (48 km more are in progress) and forged a reputation for reliability. Projects were delivered on time and with no follow-up corrections required. Early completion bonuses were even received on some highway segments completed ahead

> 5,600 km of national roads to upgrade in 10 years.

of schedule – a real feat in this country, where contract deadlines are rarely met. The logical follow-up was the first multiple-lane highway contract, signed in late 2001, for a project involving 42 km of roadwork and twelve bridges on the highway between Bucharest and Constanta, the country's largest port, located on the Black Sea.

The key to success? Romanian site managers trained in the company's methods by Emmanuel Quesson, director of Colas Roumanie, who has been there from the start. Most of these managers have also gone to France for training. It is a smoothrunning team and the personnel are stable.

## From road to rail

In 1995, Screg began to build up solid relations with the No. 3 Romanian company in the sector, SCCF lasi. This privatized firm based in the north of the country is active not only in road building, but also in civil engineering, bridge construction (including those in the highway project mentioned earlier) and railway maintenance – diversity that Sorocam and Colas Roumanie lack. SCCF lasi has an industrial base, too, with four gravel pits<sup>1</sup>, three asphalt plants and six concrete plants. "Its close-knit, dynamic management team pulled off a difficult privatization and kept the staff motivated," notes Laffaire.

1/ Gravel of medium hardness taken from river bottoms is used as the ballast for the foundation layers of a road. The surface layer requires a better-quality material, which comes from quarries. At the end of December 2001, Colas crowned six years of cooperation by taking a 51% stake in SCCF lasi. The investment gave the company additional cash, which it immediately began using to upgrade its equipment. With this acquisition, which doubles its business activities in Romania, Colas became the No. 2 roadworks company in the country. Henceforth, its position, size and capabilities will allow it to bid on its own for all projects.

## **Region by region**

A fourth unit, Ancorad, rounds out the team. Colas bought 66% of this formerly stateowned company in September 2000. A regional firm, it does road maintenance in the western part of Craiova. Its size and activities make it comparable to a Colas agency in France. Sorocam in Bucharest. Ancorad in Valachie, and SCCF lasi in Moldavia represent big strides in the development of a nationwide network and local presence to reach public clients, as in France. The next acquisition could be in Transylvania, where Sorocam already has two emulsion plants. With their full range of capabilities, Colas Roumanie and SCCF lasi handle major projects across the entire country. Already dreaming of repeating the success in Romania in other Balkan countries, Laffaire is developing contacts in Slovenia, Serbia, Bulgaria and Greece. In the future, the yellow Colas emblem may well be seen along roads from the Black Sea to the "Big Blue".



## From local to national

Colas in Romania: 1,740 employees, including 4 expatriates

## 1995

1991

Sorocam,

created by Colas.

mixes, emulsions,

aggregates. Road

maintenance in the

region of Bucharest.

190 employees.

a semi-public company

Production of asphalt

 Colas Roumanie (ex Screg Roumanie)
 Major projects with international financing, awarded through bidding.
 100 employees.

## 2000

Ancorad A formerly stateowned company. Road maintenance in the region of Craiova. 250 employees.



## 2001

SCCF lasi Formerly state-owned company bought out by its employees in 1995. Production of asphalt mixes, emulsions and aggregates. Roadworks, civil engineering, bridge construction and railway maintenance in Moldavia. 1,200 employees.

Upgraded national highways Under construction Planned multiple-lane highway



Bouygues TP introduced the slurry TBM to Australia with the Sydney metro project.

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## depth

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The breakthrough on the North Lyon Bypass.

The

Digging tunnels is a bigger business than ever in Europe. Bouygues TP has centered its strategy on this activity, relying on know-how built up over 30 years.

BOUYG

BOUYGUES CONSTRUCTION / Tunnel market

POACE I CADD KIN/ SOM IN

Able to dig through all kinds of ground, the earth-pressurebalanced TBM is a Bouygues TP specialty.

North Lyon Bypass: cutting tools had to be replaced often due to the abrasive soil. ridge building is becoming rare in Europe. There are not many rivers and valleys left to span, and the number of big projects is dwindling. "Innovation in concrete bridge construction has about reached its limits," adds Pierre Boiraud, deputy CEO at Bouygues TP<sup>1</sup>. "With no more progress possible, our rivals will eventually know how to do it as well as we do."

So where does the future lie? Underground. The desire to protect our environment has been driving the tunnel-building market in Europe for several years. To get car traffic across the Warnow River, the German port of Rostock opted for a tunnel, which Bouygues TP is building under a concession contract, rather than a bridge, with its imposing access roads. In Switzerland, Bouygues TP and local subsidiaries Prader and Losinger Sion are helping to construct the giant, 37-km Lötschberg tunnel as part of a trans-Alpine piggyback<sup>2</sup> transport program. France and

Italy are preparing a similar project between Lyon and Turin. At Groene Hart, in the Netherlands, Bouygues TP is putting 7 km of high-speed rail line underground to protect polders and, yes, a bird sanctuary.

## In the vanguard since the '70s

The Group began digging tunnels back in the early 1970s, at a time when a booming market in citysewage-system construction was stimulating the development of new tunneling methods. Today, Bouygues TP is a world leader in tunnel building, with some 20 projects (a record number) currently under way from Paris to Hong Kong.

One key to success is having a command of all techniques to be able to deal with whatever geological conditions are encountered. Paradoxically, the work is simpler in hard ground, where classic >

1/ Deputy CEO Europe, North America, Middle East.
 2/ Trucks transported by rail.

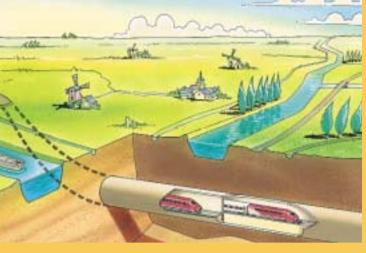
## GROENE HART, ON THE AMSTERDAM-ROTTERDAM HST LINE King of the TBMs

The largest tunnel-boring machine in the world is named Aurora. With a diameter of 14.87 m, it incorporates all the innovations that Bouygues TP has developed in this field over 25 years.

wo high-speed trains can zoom past each other at 300 km/h in the 7-km-long tunnel built through fine, wet sand under the bird sanctuary of Groene Hart, in the Netherlands. The Dutch government envisioned two parallel tunnels, but ultimately opted for Bouygues TP's single-bore solution. Less expensive but more difficult, this approach calls for such things as a precision laser guidance system, simultaneous monitoring of 2,000 operational parameters and automatic removal of excavated soil. Catsby, a system developed by **Bouygues Construction, is being used** to detect variations in the soil that could cause accidents.

## An underground Babylon

This €380-million contract represents four years of work. Behind the technical feat is a human challenge. There are 22 nationalities among the 250 people who are taking care of maintenance and supplying the giant machine with tunnel segments (precast concrete elements that form the lining), bentonite (impermeable mud injected at the front of the machine to support the cutterhead), grout (mortar injected in the space between the segments and the soil) and spare parts. The smallest breakdown would halt the machine, which is supposed to operate 10 hours a day, 7 days a week, for two years. In a soundproof plant at the site, the bentonite is separated from the excavated sand and then recycled. Groene Hart ("Green Heart") is indeed a "green" worksite. Ducks paddle in the ponds around the access shafts and rabbits hop across the parking lots. Residents of the area are not the only ones who are happy.



Instead of two tunnels, a single one divided by a vertical partition: a Bouygues TP solution that eliminates connection shafts.





## A TUNNEL UNDER THE RIVER AT ROSTOCK, GERMANY Going with the flow

Bouygues TP built its first submerged tunnel 17 years ago, under the Marne, in France. Now a buoyant market is offering opportunities to update its skills and expand its tunneling services.

A t Rostock, a major port in northeastern Germany, Bouygues TP is the designer, builder and concessionaire of an 800-m road tunnel under the Warnow River. In the summer of 2002, workers will begin submerging six concrete caissons, which have been under construction since April 2000 in a nearby basin. These 22,000-ton, 120-m-long, two-story-high monsters will be set in a dredged channel, with a maximum gap of three centimeters between them. These caissons will enclose a single-tube tunnel, which will be accessed by a covered road on each bank. The overall length is 4 km. The city of Rostock chose a submerged tunnel over the other options: either digging one, which would have been more costly, or building a bridge, whose accesses would have been too imposing given the 52-meter clearance for navigation at this point. The tunnel will open to traffic in September 2003. support systems are adequate to hold up the roof. The methods in this case vary: blasting, drilling with a bit on a flexible arm, or a tunnel-boring machines (TBM), which can dig and remove the excavated material, or "spoil," simultaneously. Experienced working in Alpine hard rock, Prader and Losinger Sion of Switzerland, Bouygues TP subsidiaries, have expertise recognized worldwide in these techniques, even for steep slopes.

The prize for difficulty, however, goes to light soil, especially when it is water-soaked. "Digging in soft ground is a battle at every instant against an awesome natural element. It's a constant challenge," says Pierre Longchamp, a specialist in tunnelboring machines in the Technical Department at Bouygues TP. The solution? Shield TBMs, which have a steel shell to support the walls until the concrete tunnel lining is built. Each of these machines is designed specifically for the geological conditions at a given site and is used just once.

In water-bearing or very unstable soil, the TBM's cutterhead is stabilized by injecting tunnel spoil, slurry or air under pressure into a chamber behind the disk. There are ten or so companies in the world that have expertise in the use of these earth-pressure-balanced tunnel-boring machines. Developed in Japan in the 1970s, they have become Bouygues TP's war-horse and now represent half of its tunnel-building business.

## A series of challenges

"We have initiated and supported the development of the earth-pressure-balanced tunnel-boring machine," points out Michel Cote, CEO of Bouygues TP. Each project is an occasion to take up a small number of important challenges.

The baptism of fire was at Lille in 1986, where an 800-m tunnel was dug through chalk with a slurry TBM, the second time such a machine was used in France. "It would be a textbook exercise today, but at the time, it seemed formidable," recalls Cote. Two years later, contending with high water pressure and complicated logistics owing to the long

## Learning with each project

## 1986

## LILLE METRO

The first slurry TBM used by Bouygues TP in France bored through 800 m of chalk.



## 1988

## THE CHANNEL

Three 20-km tunnels bored with tunnel-boring machines capable of working open-face or under 10 bars of pressure, a record at the time.



## 1990

## LA GALAURE HST TUNNEL (FRANCE)

Bouygues TP's first experience with presupport. A semicircular concrete vault is injected into the ground before excavation. The operation is performed a few meters at a time over a distance of 2,700 meters.



## 1993

## STRASBOURG TRAMWAY

Bouygues TP passes under buildings for the first time with a slurry TBM. Also the first use of Pyxis, a laser guidance system developed by Bouygues TP.

Expertise in blasting or drilling through rock has long been an arm in Bouygues TP's tunneling arsenal.

At Hong Kong, blasting was used to open 1,500 m of the Cheung Ching twin-bore road tunnel. Delivered in 1997.

## 1994

## NORTH LYON BYPASS

The largest earth-pressurebalanced TBM to date (diameter: 11 m) bores two 3.25-km tunnels in mixed ground. Top speed: 8 meters a day.



## **1997**

SYDNEY METRO Using a slurry TBM, Bouygues TP passes under airport runways for the first time, with just 3 mm of settling.



## 2000

RAIL TUNNEL AT HONG KONG Bouygues TP and Dragages Hong Kong use an earth-pressure-

Hong Kong use an earth-pressurebalanced TBM (a first in this region) capable of digging through rock and soft ground.



## 2000

**ROSTOCK** See inset on p. 68.

## 2001

**GROENE HART** See inset on p. 67.







Sydney metro: a 6-km tunnel delivered for the 2000 Olympics.

Switzerland: two rail tunnels to be completed in 2005.



distances, Bouygues TP bored three 20-km tunnels under the Channel<sup>3</sup>. Then, in 1994, a TBM with a record diameter of 11 m drove two 3-km tunnels through very mixed soil at Lyon. A generation of site managers got their training in this difficulty-packed project. The most recent exploits have been tunneling beneath airport runways in the Sydney metro project and the Groene Hart project, with its giant TBM, which started in early 2001.

## 130 researchers

Each project adds new people to a team of passionate tunnel builders ready to capitalize on their experience. The workers in one project never find themselves all together again, but instead go off in different directions to train new people.

Bouygues TP's Technical Department, a veritable inhouse engineering office, supports the teams in the field, analyzes the data, and works with suppliers in designing each new TBM. By developing tools like Catsby, a computerized collapse detection system, and the laser guidance system Pyxis, it supplies innovation that is synonymous with competitive edge. At Sydney, in-house methods for calculating settling were a decisive factor during negotiations on the metro contract.

3/ The 50-km French portion of the tunnel.

"The purpose of our technical department, which is one of the biggest among the major builders, is to propose variants," says Boiraud. "That's where our competitive advantage lies." Bouygues TP is willing to be daring. At Hong Kong, for example, it rejected blasting in favor of a TBM, a method little used there after some bad experiences earlier.

## Masters of the earth

Victory in an underground project also depends on what happens around the tunnel. Intrafor, a Bouygues TP subsidiary specialized in soil consolidation and special foundations, prepares the ground and constructs the access shafts and intermediate tunnels – activities crucial to meeting deadlines and thus to controlling costs. At Groene Hart, Intrafor worked 25 m below ground level to put in the supports for the 80-m-long launching shaft, where the TBM began its voyage. It also built the adjacent 120-m cut-and-cover and improved the soil along the first 300 meters of the route.

Intrafor is also constructing the diaphragm walls for three intermediate access shafts that are 30 meters in diameter. These structures will eventually be covered by fields and accessible only by discreet entrances, since a tunnel should disappear into the landscape. A frustrating fate, but one that preserves the environment. Market

BOUYGUES

# 

Cuba's economy is opening very slowly, but its tourism market is booming, bringing opportunities that Bouygues Bâtiment has seized to become the leading foreign builder on the island.





hen Alain Marinetti set foot in Cuba for the first time, in 1997, the island welcomed 1.5 mil-

lion visitors a year. Bouygues Bâtiment's commercial director for North and Central America knew that since the fall of the Berlin Wall and the halt of Soviet trade, tourism, viewed as the driver of the economy, had become a top priority of the Cuban government. Tourism brought in hard currencies and created jobs, while consuming little energy. Every new hotel promptly displayed a "No Vacancy" sign.

Government authorities wanted to step up hotel construction, but the new pace was too fast for local construction companies. Bouygues Bâtiment, a familiar name in Latin America after developing business there for several years, looked like the right company, in the right place, at the right time. Marinetti recalls: "We had identified the special features of the Cuban market: state control, virtually closed, no outside financing, an island under the U.S. embargo, a shortage of skilled labor and an obligation to team up with a local firm in the bidding." Bouygues Bâtiment immediately showed how it was different. At the construction and defense ministries, which manage a large share of the island's real estate assets, it proposed to carry out high-quality building programs faster, but for the same cost.

#### An original approach

The solution, wholly new to this market, has three components: first, perform a turnkey contract that includes the design, construction, decoration and outfitting (a first in Cuba, where builders do only the construction and assembly); second, use imported, industrially prefabricated elements to reduce consumption of traditional local materials and thereby shorten delivery times; and third, build a lot of rooms under a single contract to benefit from scale economies. The last was an essential condition to meet the challenge. Less than two years after initial contacts, Bouygues Bâtiment and 50-50 partner Uneca, a local builder in the construction ministry, were selected by Almest a defenseministry-affiliated real estate company, for the turnkey construction of two up-market hotels (€95m). The 600- and 400-room facilities will be located at Varadero, the principal tourist spot east of Havana. This project, which gave Bouygues Bâtiment a foothold in Cuba, was of strategic importance.

#### Lead-off project

The project involved erecting small, twofloor buildings – bungalows in a kind of Caribbean, neocolonial style – each having several rooms. To successfully carry off this large-scale pilot project, Bouygues Bâtiment set up its own all-trades construction team rather than relying on subcontractors. As many as 2,000 Cuban workers were employed at the sites. Considering the difficulty of getting supplies locally,

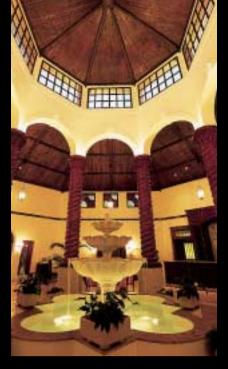




At Varadero, a well-known seaside resort east of Havana, the first hotels were delivered in December 2001.







# Delivered in half the time

building materials (wood frames, tile, air conditioning systems, etc.) were imported from Europe, Canada and Latin America. This lead-off project was a success: hotels of recognized high quality were delivered in July and December 2001, in half the time usually required in Cuba.

#### **New contract**

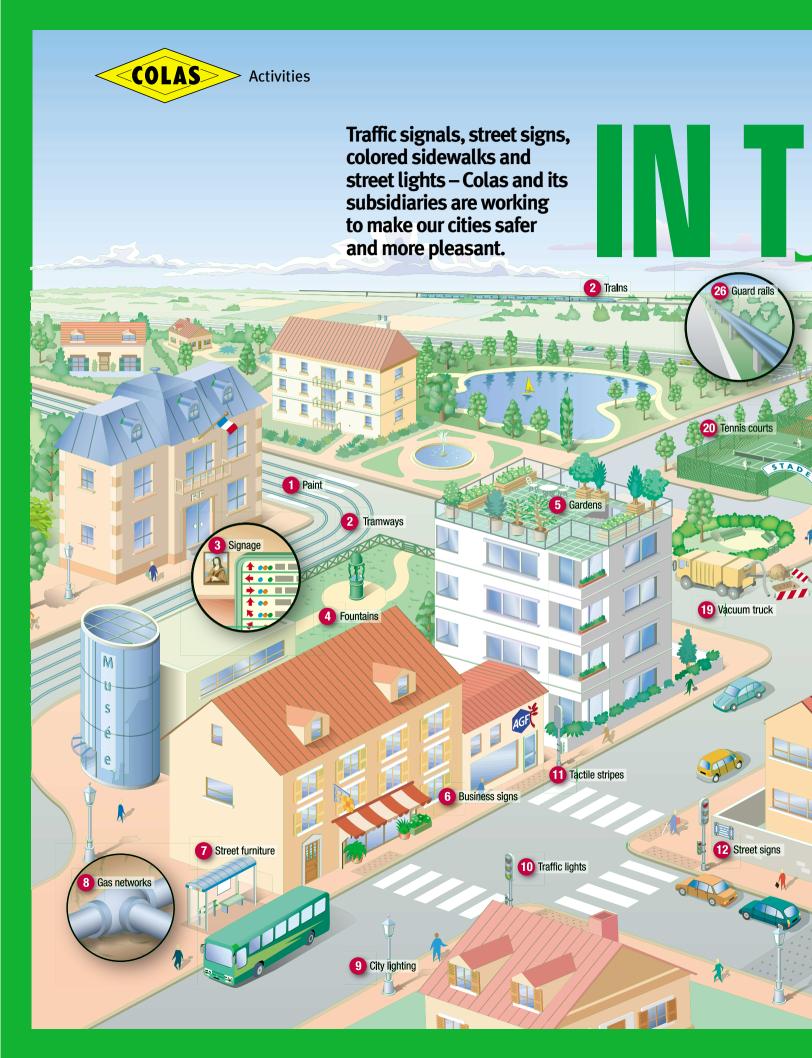
Hurricane Michelle, whose 210 km/h winds made it the most violent to hit Cuba in 44 years, provided a full-scale quality test. The buildings stood up perfectly to the storm. "This event strengthened our reputation with the Cuban government," points out Richard Dupuis, regional director for North and Central America. The project's success has led to another contract, worth €91.5m. In late 2001, Almest asked Bouygues Bâtiment to team up with the Unión de Construcciones Militares to build the island's largest tourist complex. Located at Holguín, 800 km east of Havana, it will have

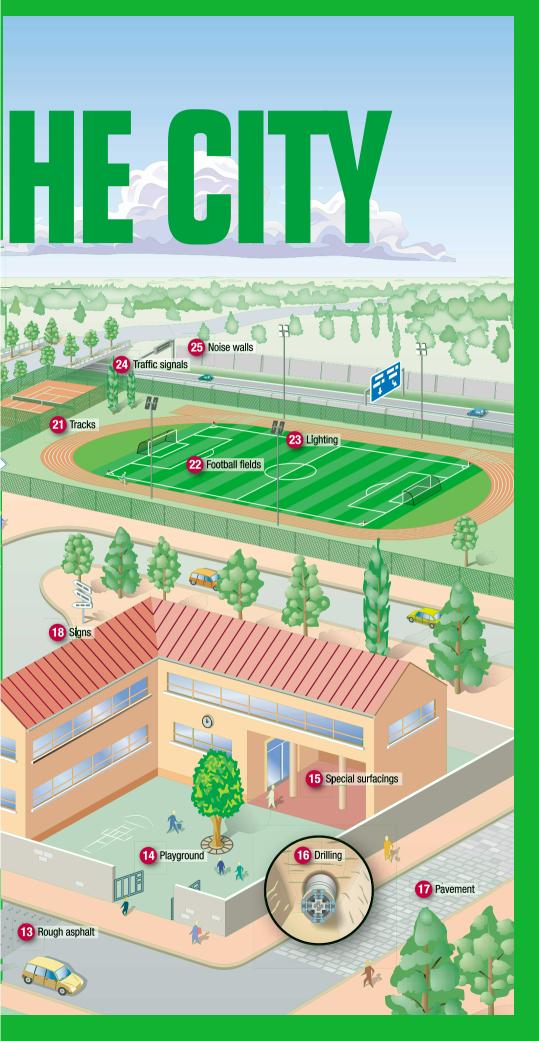
944 rooms and suites. In 2001 the Tourism Ministry, which is forecasting 7 million visitors in 2010, announced the construction of 5,000 rooms a year over the next 10 years, more than the total for the past ten years. The slump in the airline industry after 11 September does not seem to have altered these plans. Despite the delay in launching a number of worksites in late 2001, the market is recovering. Canadians and Europeans, who make up the largest groups of visitors, are coming back. Talks are under way concerning the construction of two more hotels (1,000 rooms) at Varadero as well as a tourist complex with several thousand rooms on Cayo Santa Maria, an island paradise between Varadero and Holguín.

In early 2002, Bouygues Bâtiment opened a commercial branch in Havana, which could also serve as a bridgehead to allow Bouygues Construction to take part in future developments on the island.

#### Two design-build projects

Varadero	Pesquero	
Completed	In progress	
1,000 rooms	944 rooms	
€93m	€92m	
22 months of work	24 months of work	





- 1 Solvent-free paints for street markings to protect the environment.
- 2 Laying and maintenance of tramway and train tracks.
- **3** Signage at the Louvre, Christie's, Galeries Lafayette, etc.
- 4 Laying and maintenance of water systems, including the Wallace fountains in Paris.
- 5 Hanging gardens on asphaltwaterproofed roofs.
- 6 Business signs for Interflora, Roissy airport, the metros in Lyon and Rennes, Renault, the insurance companies MMA and AGF, etc.
- 7 Street furniture designed for modern and historic districts.
- 8 Gas networks: laying and maintenance of pipe from storage sites to building entrances.
- 9 Installation of street lights and city illumination.
- 10 Manufacture of traffic signals with traffic counters and audible traffic signals for the visually impaired.
- **11** Tactile ground surface indicators for the blind.
- 12 Metal or enamel street signs.
- 13 Rough asphalt on curves and near schools for better traction and stopping.
- 14 Shock-absorbent pavements for playgrounds.
- 15 Special surfacings, from parking floors to reconstituted marble.
- **16** Directional drilling and micro tunneling to prevent pavement collapse.
- 17 Classic or decorative pavements: colored asphalt, resin-gravel mixtures like stone, waffled pavement like paving stones.
- 18 1,500 traffic signs manufactured and installed each day in France (25% of the market).
- 19 Vacuum trucks to pick up earth and gravel to keep worksites clean.
- 20 Clay, artificial grass, resin, concrete, rubber, "quick": 30,000 tennis courts built in France each year.
- 21 Synthetic tracks: from Charléty Stadium in Paris to neighborhood facilities.
- 22 Artificial grass for football fields: as flexible as real grass and non-abrasive.
- 23 Stadium lighting.
- 24 Manufacture and installation of fixed and variable-message panels over highways.
- 25 50 km of noise walls in France, made of concrete, wood, glass or metal; some topped with a hedge.
- 26 Safety: 1,000 km of metal guard rails installed each year.



# TC BERN

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With offices in Alsace since 1979, Bouygues Immobilier has 20 agencies in France.

Bouygues Immobilier arrived in Portugal in 1999 and today has branches in Spain, Germany and Poland as well.

The discoverer: Béatrice Galland-Mortier, who went off to explore the uncharted lands of Portugal. The cultivator: Francis Meppiel, who heads one of Bouygues Immobilier's most successful subsidiaries, located just up the road from the vineyards of Alsace. High adventure versus humdrum management? It's not that simple...



Magellan Tower, an office building at the Universal Exhibition site in Lisbon, will serve as a visitor's card in Portugal.

Béatrice Galland-Mortier's dream of heading a small foreignbased team is a reality since September 1999.

éatrice Galland-Mortier, 30 years old and bilingual, arrived in Portugal alone one morning in September 1999 with an address book in her pocket. Francis Meppiel, in his forties, is Alsatian, like his staff at Bouygues Immobilier Est, which he has headed for 10 years. She left Bouygues Immobilier's head office after two years of in-house training. He grew up in Mulhouse, where his school buddies are now notaries, public officials and architects. She set a course for Lisbon to found a long-term and profitable Portuguese subsidiary. Her office? A rented two-room apartment, with a Bouygues Immobilier sticker on the door for a sign. He chalks up 5% annual growth and is getting ready to open an office in Dijon. Housed in an elegant downtown building, the Strasbourg headquarters, like the agency in Nancy, is itself a promotional showcase.

#### Network

On arriving, Béatrice went to see a lawyer, whose counsel would be crucial in navigating the local legal system. Francis understands. "In France, each community has its own city planning laws!" She then made the rounds of real estate agents, architects, politicians and property owners in Lisbon to introduce herself and get the lay of the land. "Promoters build their network with their car and their visitor's card," explains Béatrice.

"Then they maintain it," adds Francis, who had to get reacquainted at the Strasbourg city hall after the

last elections brought in a new team. The leitmotif: the promoter has a social role and contributes to the development of his or her community.

"The Bouygues Immobilier subsidiaries work with a long-term perspective and recruit locally whenever possible. Even at the top level," explains François Bertière, chairman and CEO of Bouygues Immobilier. The four people on Béatrice's staff are Portuguese, and her successor will be, too.

#### Land

In early 2001, Béatrice recruited a property prospector. Mario Moreira, a Porto native now from Lisbon, travels all over the country (he drove 50,000 km last year) looking for the raw material every promoter needs – land for sale. At Bouygues Immobilier Est, these prospectors are mainly involved in developing housing projects (80% of the business). Their highrisk job calls for a sharp eye able to make distinctions as fine as which side of the street is better. A parcel in a bad location won't sell, and half of future buyers live within five kilometers and know the neighborhood like the back of their hand.

For the Magellan Tower, the first reference for Bouygues Imobiliària, maximum commercial security was the priority: a product meeting all European office-building standards; a risk-free location, at the heart of the Universal Exhibition site; and a well-known architect, Jean-Michel Wilmotte, who restored Lisbon's Chiado Museum in 1994. The project was sold from the plans in September 2001, a first in Portugal. Two models are prominently displayed in the agency's offices, a short walk from the site. "We think about it day and night," admits Béatrice. "It's our first project, so we can't afford to fail." A discoverer has to explore the coastlines before plunging into the jungle.

"Audacity is often on the side of the cultivator," Francis believes. "Thanks to our image and our capital of trust, we can pioneer new markets, like student housing, or new territories, like Dijon or the villages in the Alsatian vineyards."

His branch's catalog contains everything a promoter might offer: offices, commercial premises, collective and individual housing and even complex, multiple-component projects. At Illkirch-Graffenstaden, in the suburbs of Strasbourg, Bouygues Immobilier has renovated an industrial site for the city, transforming it into a mini-downtown, with a post office, small supermarket, offices, retirement home, park and housing.

#### **Multiple products**

"Bouygues Imobiliària will diversify its product range starting with its next projects," says Béatrice. A shopping mall and consulting for the contracting authority in an office renovation project in Lisbon are two ventures already being set up.

"Each subsidiary has to be able to offer international investors not only the same variety of opportunities, but also the same quality," stresses Bertière. The four European branches, in Madrid, Frankfurt, Lisbon and Warsaw, deal with the same clients as the French subsidiaries. And sometimes open up markets for them. Crédit Suisse, a Bouygues Immobilier partner in Paris, made its first investment in Portugal with the Magellan Tower, "The Group's reputation is an asset," says Béatrice, whose office is decorated with photos of Challenger and Bouygues Immobilier's most prestigious projects. "And it's up to us to strengthen it." Moreira has decided that some pieces of land are not for him. Bouygues Imobiliària does not make commitments without guarantees. And there's no question of building without a permit, which is common practice in this market.

#### Procedure

In Lisbon, projected as in Strasbourg, three projected evaluations for each project are submitted to Bouygues Immobilier's general management: one when the land is purchased, one during the marketing, and one when construction is launched. This procedure, which is reflected by ISO 9001 certification, has a cost. "We're not competitive for fewer than 20 housing units," says Francis. "We compete more on quality than on price." This is proven by what happens when dwellings are delivered. Michel Hahn, whose job is to track down the least defect in projects nearing completion, says that "the devil is in the details." It's rare that a customer takes delivery of a dwelling without the slightest reservation. "We're proud to say that this happens to us 15% to 20% of the time."

A proposal to put together? A land purchase to negotiate? Béatrice knows she can reach for her phone and call the head office, which will put all its capabilities at her disposal. The link is constant. Philippe Jossé, executive vice president, Europe, and Eric Pouillevet, AGF<sup>1</sup>director, each spend 80 days a year in the subsidiaries they are responsible for. "We're discoverers equipped with the best navigational systems," says Béatrice.

"We have specialists out here, but the contribution from the head office is essential," says Francis. "Because the general management is not wrapped up in our projects, it can look at them objectively." François Bertière sums it up this way: "Local subsidiaries, common methods, central validation of decisions."

1/ AGF: Administration, Control, Finance

Francis Meppiel joined Bouygues at Mulhouse in 1984. His intimate knowledge of Alsace is an asset in setting up ambitious

projects.



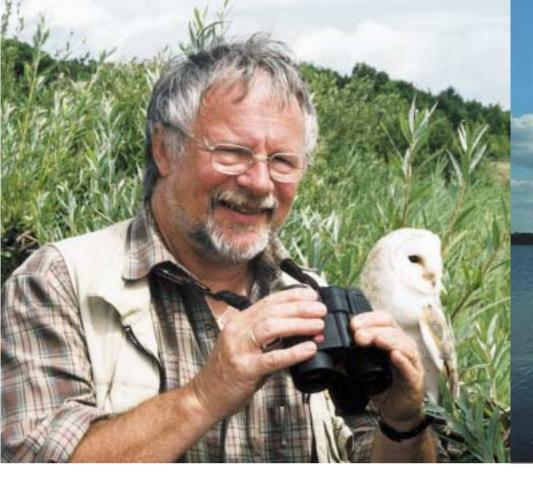
Bouygues Immobilier Est redeveloped the center of Illkirch-Graffenstaden, near Strasbourg.



The Arlington nature reserve is a favorite stopover for some 10,000 herons, mallards, widgeons and other birds on their spring and autumn migrations.

FOR

Frogs and newts feed on the many kinds of water insects. Ecology. The latest vogue in business? Not at Saur. Across the Channel, between London and Brighton, its subsidiary SEW has made environmental protection part of its growth strategy. And come up with a sustainable development model that reconciles productivity and the conservation of nature.



A reservoir of 3.5 million m<sup>3</sup> of water, fed by the Cuckmere River.

The 49 hectares of woods planted around the reservoir have enticed back animals like the tawny owl, nightingale and vole. lue sky, 15°C and a light breeze. "Spring is the ideal time to angle for trout," say Paul and Aif, who have fished for over ten years at Arlington, in southeastern England. There are many people just like them, who enjoy coming out to fish in the freshwater reservoir or stroll with their family in this park and nature reserve operated by South East Water (SEW), a water distribution subsidiary of Saur UK. So what is the connection between supplying water and managing a park? A certain idea of the environment and of sustainable development, a United Nations-back

notion that encourages the rational use of natural resources. "Water, the source of life, is the heart of our business," explains Margaret Devlin, CEO of SEW. "Our role is to promote and integrate in our management practices this natural heritage that we will leave to future generations." It's a belief she has demonstrated with a series of initiatives like the creation of the natural park at Arlington and campaigns to make her customers more sensitive to the issues of the scarcity of natural resources and environmental protection.

#### **Environmental management**

SEW operates in Sussex, the so-called Garden of England. The region's mild climate and proximity to London, just 60 miles away, make it very attractive. To cope with population growth and prevent "hydro-stress,"<sup>1</sup> the Saur UK subsidiary, which owns the water distribution network, has been careful to increase its sources of supply. It was precisely with an eye to meeting future needs that it built the Arlington reservoir in 1971. With a capacity of 3.5 million cubic meters, this river-fed reservoir can provide water for up to 100,000 people. From the beginning, Arlington was intended to be not just a reservoir, but also a site for conserving and admiring wildlife<sup>2</sup>. "It's a way to show our customers that we are very proactive when it comes to ecology," explains Emma Goddard,

1/Water consumption in excess of available resources.

2/ British law requires that water reservoirs be managed as nature reserves.



Kingfishers, Canadian geese and crested grebes are regular visitors to the reservoir.

SEW's environmental coordinator. Around the reservoir, 49 hectares of rolling woodlands were created from scratch.

Some 30,000 oak, poplar, hazel, cherry and other indigenous trees were planted to provide biodiversity and attract animals like voles, shrews, nightingales and butterflies.

To encourage the region's residents to rediscover nature and enable the company to meet or exceed its legal obligations to invest in conservation, SEW works with several public and private organizations like the English Environmental Agency and the Sussex Wildlife Trust<sup>3</sup>. SEW has also recruited an environmental specialist and improved the site by creating trails with way markers, a bird sanctuary, fields of wildflowers and a fishing area. The cost to the company is practically nil, since subsidies and parking charges pay for the maintenance. SEW's efforts have been very successful. Arlington is now one of the region's most popular tourist sites, and in 2000 British environmental authorities awarded it the status of Local Nature Reserve and Site of Specific Scientific Interest.

As would be expected from a company that produces 400 million liters of water each day, South East Water's commitment to environmental protection does not stop with Arlington. "Of course our sources of supply are not running dry, but we are aware that the combined effects of climate change, rising consumption and population growth are making water scarcer," says Devlin. "Because we want to be able to consume water today and in the future, it is important for us to manage our natural resources properly by urging customers to consume water sparingly."

#### **Education as a creed**

For several years now. South East Water has sought to heighten its customers' awareness by distributing pamphlets on subjects like reducing water consumption and the advantages of private water meters. It also supplies information through customer advisors and its Web site as well as holds conferences in schools. An advocate of openness. it organizes visits to its water treatment plants, makes public its results in limiting water losses and reviews all its initiatives in an annual environmental report. And if this were not enough, the company is also a leader in soil pollution treatment and reducing paper consumption by encouraging employees to use e-mail. In 2002, a jury of British companies recognized its policies and activities by presenting it with the Business Commitment to the Environment Award for its work at Arlington.

3/ A regional wildlife protection society.

#### **CYBER GREEN**

Arlington,

in Sussex, the

'Garden of England."

South East Water is the first company in the UK to use GPRS mobile phones. (With GPRS, transmission speeds are four to five times faster than with GSM, and billing is by volume of data rather than connection time.) The aim is to allow staff to react faster and be more productive. Instead of having to come back to the office, employees can work while at the site or from their car This saves time, cuts travel costs and reduces air pollution (the average number of miles driven daily is onetenth of its former amount). In 2002, South East Water has also begun offering its business and municipal clients a new service: secure online bill payment, thereby reducing billing and mailing costs as well as paper consumption.



# TELENAUTS

# TF1 is creating the television of the future. Simple and interactive, it links TPS with the phone network.

heck your bank account during a commercial. Enjoy a movie at home, at the time you choose. Go shopping with your remote control. In the future? No, today, on TPS. The satellite broadcaster, whose largest shareholder is TF1, has bet on interactivity since the day it was created. "For online services, Americans use their computer and Japanese their mobile phone," says Alain Staron, the head of TPS Interactif. "Europeans prefer their television set." An interactive TV pioneer on the continent, TPS has launched 300 event-specific or regular iTV services over the past five years. They include Météo Express in 1997 (its real-time satellite images are still unmatched), home banking in 1998, and TV messaging. With TV Mail, introduced in March 2001, messages can be sent to a mobile phone, computer or the TV set of another subscriber.

#### Simplicity

Almost nine out of ten TPS clients use these services, the best score among digital TV operators in France<sup>1</sup>. Most of them are getting their first taste of interactivity with their remote control. Some 80% of the users of Crédit Agricole TV had never tried distance banking before, either by telephone, Minitel or the Internet. The basic devices are a decoder under the TV set, which is connected to both the satellite dish and the telephone line, and an easy-to-use remote control with five buttons (four arrows and an "OK" key) reserved for interactive services. The information sent by the user (e.g., to make a purchase, vote or perform a banking transaction) travels over the telephone network. Very little text and only a few choices are

1/ 87% compared with 79%, on average, for all satellite and cable subscribers. Source: Ipsos Media.

displayed on the screen. With Météo Express, three clicks will tell you whether it will be 15°C on Sunday morning where you live.

#### **High speeds**

So what's missing? Emmanuel Florent, chairman and CEO of TPS and CEO of e-TF1, says that high-speed Internet, set to arrive in 2003, will allow more information and video to be supplied with services. More generally, all TPS channels will be able to include interactive features. The teams at TF1 and TPS are already at work creating them in a project code-named Dream TV.

ADSL<sup>2</sup> technology, offering transmission speeds 10 times faster than ordinary Internet connections, will make the equipment simpler. There will be no more need for the satellite dish, since everything will flow through the phone line. The connection will be permanent but not tie up the phone line, allowing Internet, telephone and TV all to operate simultaneously through the decoder.

#### Freedom

Multivision, which currently broadcasts movies at scheduled times, will transform into a home video club. Hundreds of films, clips, cartoons and games will be available for downloading at any time of the day or night. The decoder's integrated hard disk will save hours of programs automatically or on command. The telenaut will be able to watch the evening news with a few minutes delay or interrupt a TV program to answer the phone and then go back to the show at exactly the point he left it. Dream TV will make one dream of viewers come true: to be free of time constraints.

2/ Asymeteric Digital Subscriber Line







# Bruno Jonas's World Cup Diary

Bruno Jonas, 35, Parisian, consultant, married, one son (Thomas, aged 10), and a big football fan. Memories of France's victory on that fabulous day in July 1998 still excite him. Now he's totally wrapped up in the 2002 World Cup. Here are excerpts from his diary<sup>1</sup>. Bruno Jonas's World Cup

# Resolutions for the XVIIth World Cup (TWC). First, have confidence. France's "Bleus" are going to win, just like in 1998 and 2000.

**Don't:** Make phony morning appointments in order to watch the matches live. Worry myself sick about the French team.

**Do:** Get organized to follow the Cup as best I can, despite the time difference with Japan and South Korea. Record the live broadcasts on TF1, the delayed broadcasts on Eurosport and regular news on the team on LCI. Get my work done, even on the days after celebrating. Make plans for the evening of 15 June with Benoît, who runs the Eurosport Café<sup>TWC2</sup>. The first matches in the round of 16.

#### Friday, 31 May: Finally it's starting

blood pressure 14/8, cigarettes 11, time on TWC 3 1/4 h.

1:00 p.m. At home alone. I asked Nathalie and Tom not to bother me today. Concentration: the kickoff of France's first match in half an hour. Been waiting months for this. Relax. After all, "we're the champions." Sunk in my armchair, the TV on TF1. 2:00. Great. Zidane scores the first goal. 3:15. It's over. What a relief! I'm wiped out. Not even the strength to dial up 3615 TF1<sup>TWC</sup> or the audiotel to answer today's football question. Hardly the energy to ring up Benoît to see if he thought to order jerseys <sup>TWC</sup> and scarves for 15 June. Best to plan ahead.

#### Saturday, 1 June: All about the Bleus

blood pressure 11/7, cigarettes 5, time on TWC 6 h.

8:30 a.m. Ugh. Waking up to the sound of the French team's song "Tous ensemble"<sup>Twc</sup>(All together). Tom has been playing it over and over for an hour along with "Alors, on remet ça"<sup>Twc</sup> (rap for the fans: Let's do it again) and the collection of the players' favorite songs <sup>Twc</sup>. I turn on LCI to see if the players have recovered all right. Then switch to TF1 to watch some matches live. Tom says he's going to be a coach. Glued to his computer playing the coaching game at tf1.fr.

- "Mind going by the newsstand and picking me up the World Cup magazine<sup>TWC</sup>, the one with TF1's red-white-and-blue logo on it?" he says.

1/Any resemblance to an actual person, living or dead, is entirely coincidental. 2/ "TWC" (The World Cup) indicates TF1's spin-off products and special programs for the World Cup. In 1998, 20.6 million viewers watched the World Cup final on TF1, an all-time record that was topped by the 21.4 million who tuned in for the Euro 2000 final.

Bruno Jonas's World Cup

- "Anything else? I've got other things to do."

- "And could we play the French Team edition of 'Tir et But' TWG later?

- "Maybe..." Have to practice. Last time we played, he beat me three games to zero.

Noon. Debriefing on yesterday's match with friends at the Eurosport Café. While the sports channel's consultants analyze the action, Sébastien launches into a theory about the players' capacity to recuperate physically being related to the amount of stored lipids they consume during a match. Too complicated. I have a cigarette. Tell Benoît I'm worried about how the tables are arranged in relation to the giant screen. I show him my latest finds for the evening's entertainment. Two CDs: the music of the Bleus<sup>TWC</sup> and the fans<sup>TWC</sup>.

#### Monday, 3 June: You can never be sure

blood pressure 11/5, cigarettes 2, time on TWC 2 h.

7:30 a.m. News on LCI. Everything's fine. The team's jogging. 9:00. At the office, I connect to eurosport.fr to keep track of the scores during the day and chat in a football forum. 11:30. Good. Now I can concentrate. 1:00 p.m. Stormy lunch with Marc, Philippe and Isabelle. Argued about France's chances of getting to the final. All alone, I confront their defeatism and sarcasm. 6:00. At the Eurosport Café I watch a clip from Italy's match. One of the favorites in this Cup. I take the opportunity to round up some more people for the party on the 15th. 7:00. Back home. TV Games<sup>TWC</sup>. The family brushes up its football knowledge: best matches, interactive quiz, etc.

#### Thursday, 6 June. Zen attitude

blood pressure 12/6, cigarettes 0, time on TWC 45 min.

7:30 a.m. Report on LCI. Everything's still going well. The Bleus, the world and European champions, are relaxing before their match against Uruguay. Remind Benoît to order sushi and several platters of pulgogui for the 15th. After all, it is the "World" Cup. 9:00. Bad day ahead. Practically no World Cup. On the agenda: the planned merger between Fidis and Bettina, our biggest client. I go from one meeting to the next. 2:45 p.m. Bip, bip. An SMS from tf1.fr<sup>TWC</sup> on my mobile phone. They

For the World Cup, Une Musique has put out four French Team CDs, including three songs, "Alors, on remet ça" (Let's do it again), "Tous ensemble" (All together), sung by J. Halliday, and "Enlève ton maillot" (Take off your jersey) for kids, as well as a collection of the players' favorite songs.

### A 'mobile' perspective on the World Cup

Thanks to a partnership agreement with TF1, Bouygues Telecom will offer subscribers football news and, from 31 May to 30 June, World Cup results. Personalized ring tones, interviews, games, commentary, songs, player imitations and other features will be available by voice mail, SMS instant messaging, mobile multimedia or WAP. Starring the French player Lizarazu.



#### **400 hours of television on three channels** 130 accredited staff at the events (31 May-30 June 2002)



Live broadcasts at 8:30 and 11:30 a.m. and 1:30 p.m. 6:30-8:00 p.m. A World Cup special presented by the well-known TV personalities: Jean-Pierre Pernault and Flavie Flament



**11:30 a.m.** Rebroadcast of the match shown at 8:30 a.m. on TF1

1:30 p.m. Rebroadcast of the match shown at 11:30 a.m. on TF1
Broadcast of 8 of the 16 key matches of round one simultaneously with TF1
8:30-11:00 p.m. Eurosport evening special



6:00 a.m. The World Cup journal

**1.00 a.m.** Matchrecaps

8:30 a.m. Rebroadcast of the previous day's best

Throughout the day: A "goal-by-goal" report using an overlaid window during regular programming

### **Marketing the World Cup**



The Eurosport Café, in the center of Paris, is the first Eurosportlicensed café. It will show matches on a giant screen.

> TF1 has been a partner of the French team for over 10 years. It has televised all of its official and friendly matches.

Bruno Jonas's World Cup

won! 7:00. Return home, going by Eurosport Café on the way. Measure the bar with the bartender with the idea of putting a giant buffet there. At home, Nathalie greets me with, "Barthez was great once again. Don't worry, I taped the whole thing." Obviously, no cassette in the VCR. Hum. I switch on Eurosport. At least I'm sure to see the highlights. They show them every evening.

#### Tuesday, 11 June: They're still going strong

blood pressure 13/7, cigarettes 2, time on TWC 45 min.

7:30 a.m. LCI shows highlights from the match with Denmark, our last opponent before the round of 16. OK, as long as I'm at it, I'll watch the first half. I'll say my car broke down. 9:40. Panic. I'm late. What do you know. My boss is browsing eurosport.fr looking for scores. The French team has qualified for the next round. I invite him for a coffee. Talk about football for an hour. Make a call to the Café to find out how many people are expected on the 15th. Benoît says to stop harassing him.

#### Saturday, 15 June: d-Day

blood pressure 14/8, cigarettes 14, time on TWC 7 h.

Didn't sleep a wink. Had lunch with the family watching LCI to see how the French team is doing a few hours before the clash between France and England. On TF1, between two recaps, interviews with the players' wives<sup>TWC</sup> on their schedule during TWC. Midday: I pop by Eurosport Café. At least 50 people are watching the match. No one has touched the buffet. It's superstition. Still no goals at halftime. They're tough, the English. The second half starts. Tense silence in the room as play goes on. The final minute. "Goal" shouts the announcer Thierry Roland hoarsely. Everybody in the Café starts singing "Alors, on remet ça!" TWC Everybody goes wild. We're on the way to the quarterfinals. We'll take Brazil, then the Cup! Pfffiii. The blast of a whistle makes me jump. I wake up alone, in my living room, in front of the TV. This whole fortnight? I've dreamt it. The World Cup is just starting. Quick. I have to call Benoît at Eurosport Café!

> TF1 sold 1.4 million videos of the last World Cup.



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# What are the terms of the agreement that TF1 has signed with Kirch?

**TF1:** For this World Cup, TF1 has acquired total and exclusive French television rights for all 64 matches, summaries and rebroadcasts. TF1, LCI and **Eurosport France will operate** these rights. As for the 2006 World Cup, in Germany, broadcast rights have already been acquired for the 24 best matches, including the semifinals and the final. In addition, this agreement includes the option to acquire the same exclusive rights as for 2002. These rights would have to be negotiated before 31 December 2003. All this adds up to a contract worth €168m.

#### Was it essential to do this?

TF1 is the events channel and, for over ten years now, the channel for football and the French team. It telecast the finals of the 1998 World Cup and the European Cup in 2000. It couldn't pass up the world's most universal sporting event and the one with the most media coverage.

The decision was weighed over a period of several weeks and made at the end of 10 days or so during which all the TF1 teams worked together.

# The football CHANNEL

TF1 is the only world broadcaster that has the leading general-programming channel, the No. 1 sports channel, the No. 1 all-news channel and the No. 1 media site (tf1.fr) in its home market. All these channels will be used so that everyone can follow the tournament.

## How will TF1 make money on its investment?

Apart from advertising (for example,  $\in$  220,000 for a 30-second commercial during the semi-final if the French team is playing, and  $\in$  100,000 if it is not), revenues will come from match sponsoring ( $\in$  9.2m), games (Audiotel, Minitel, Internet) and merchandising (music, videos, mascot, magazine, clothing, etc.). Also, the investment is split between 2002 ( $\in$  61m) and 2006 ( $\in$  107m).

### How is TF1 approaching this project?

A 2002 World Cup Committee composed of TF1, Eurosport and LCI was set up the day after the contract was signed to figure out how to give maximum impact to this event. Its approach is simple: imagine different and complementary programming for the three channels that is in line with their respective identities. e-TF1, TF1 Entreprises and Une Musique will also be involved. The aim is to present a really spectacular event, one that draws people together.



## 14 years of musical comedies

#### 1988

L'Homme de la Mancha





**1994-1995 Les Années Twist** 1995 Molière award for best musical show

1995 Cabaret

1996 Les Z'années Zazous 1998-1999 La fièvre des années 80

#### 2001-2002

Roméo et Juliette 1 million spectators 5 million records sold

#### January 2002

Y a-t-il un magicien dans la salle ? Musical comedy and magic

**Georgian Legend** 90 performers and 1,000 years of Georgian legends in song and dance

#### February 2002

La Vie Parisienne Operetta by Offenbach, staged by Jérôme Savary

#### October 2002

Amalia The life of Amalia Rodriguez, the queen of fado



17 countries have acquired "Roméo et Juliette."

# The matchless power of DELETION

*Roméo et Juliette* has triumphed for over a year and *Georgian Legend* packed the Palais des Congrès in Paris. In 2002, stage and TV producer Glem will focus on musicals, at the request of TF1, its biggest shareholder. What makes a success? Gérard Louvin, Glem's founder and CEO, has some answers.

"Y a-t-il un magicien dans la salle?"

#### TF1 / Musical shows



#### Was "Roméo et Juliette" a first for Glem?

**Gérard Louvin.** No, it's a musical comedy – a mix of theater and music. We had done that before with "Cabaret" and "Les Années Twist." The English and American have been producing them for a long time. With "Roméo et Juliette," we did it the American way, a real super-production. And we made the sets and costumes more modern. So much so that the English, who have bought the show, want to stage it in a more traditional manner. Seventeen countries have already bought it, including Japan, Taiwan and Hungary. Given the success, Patrick Le Lay asked me to do more in the way of shows, and especially musicals, at Glem. With nine productions running, that's counting all types, we're the biggest creator of shows in Paris. I stress the word "creator." Out of the 46 productions Glem has staged since the beginning, only four or five were not created by us.

### Is there a recipe for making a hit show?

Not really. For it to work, the first thing you need is good songs. Having a subject isn't enough. Anyone can have an idea for a musical comedy. When Gérard Presgurvic, the author and composer of "Roméo et Juliette," came to present his project to us, he had just a few melodies, but we found them really exciting. We then chose the story with him. Composing songs is a real profession. A composer spends a year and a half coming up with 15 songs. If it were easy, it would take a day and a half! I played a cassette with the first numbers for Patrick Le Lay. When he saw the results on stage, he told me, "What you have managed to put together from a few tunes is incredible!"

#### So the songs are the foundation? They let you fill the theater right from the

They let you fill the theater right from the start. People who have bought the record hear songs they already know and like. But to make the success last, you have to give them something to look at so that they leave saying, "Oh, yes, I really had a great time." After that, it's word of mouth. There aren't any miracles. It works because it's good.

#### And how do you know when a show is "good"? If there is one recipe, just one, it is to

If there is one recipe, just one, it is to think like the public. It's not as easy as you might think. We're working for people

"Georgian Legend" triumphed in the United States before coming to France. who spend their evenings watching TV. They go to a show – some of them for the first time in their life – to dream and forget their troubles. So you have to surprise them. As soon as they sit down! With "Roméo et Juliette," the audience expects to see a traditional set with a balcony and Renaissance costumes. The curtain opens on six big boxes that move and transform into a street, a chapel, a room... The curtain makes you imagine what is behind it. If the audience sees the opposite of what it expected when the curtain opens, you've won. There are other ways to surprise. In "Georgian Legend," the traditional instruments - violins, accordions, and so on – are accompanied by a fiery rhythm section. "Y a-t-il un magicien dans la salle?" has a Monty Python, off-beat side to it. During the first month, I'm there every night to hear the reactions. When someone coughs, it's a bad sign. If a hundred people cough each evening at the same spot, I cut the scene.

#### What about promotion?

A show is an event. Whereas some do three days of promotion, we do eight. Our marketing allows us to expand the target to bring in more people than others do. With Maurice Béjart, in 2001, we ran some unusual promotion for a ballet: big posters in the metro and radio commercials. The result: 10,000 more people than expected. Especially young people. The mime Marcel Marceau draws 4,000 people on the average. His return to the stage, produced by Glem, is expected to pull in 9,000. The impact of a 4x3 billboard in a train station isn't the same as a poster on a sidewalk display! But don't misunderstand. Nothing works if it's not backed up by radio and television. People won't look at the posters unless they've heard the event talked about on TV.

#### And incidentally, what connection do you make between television and stage productions?

The common denominator is the spectacle, the entertainment. I've learned a lot from stage productions, and I apply the same principles in TV: captivate, make viewers dream as if they were at the theater.

## **TV** shows

Founded in 1982 by Gérard Louvin, the former artistic director of Claude François, Glem<sup>1</sup> has always produced shows for both stage and television. A record label, Baxter, was added to its activities in 1987, with Florent Pagny among the popular entertainers it has launched. The same year, TF1 became Glem's exclusive partner for TV production. Some 50 programs have come out of their cooperation, including "Ciel, Mon Mardi," "Sacrée Soirée" (265 shows!) and "Sans Aucun Doute." In 1995, TF1 took a 73% stake in the company. For the stage, Glem is the producer of the violinist André Rieu, whom it introduced in France in 1998, as well as comedians, plays, circuses and musical comedies. The triumph of "Roméo et Juliette" in 2001 prompted the decision by Patrick Le Lay and

1/ Gérard Louvin Editions Musicales



produce more stage shows. Nine are on the program for 2002: four new musical comedies. including "Georgian Legend" and "Y a-t-il un magicien dans la salle?" plus "La Griffe," a play with Muriel Robin, and the return of the mime Marcel Marceau. Glem is also organizing the "Star Academy"

tour.

Gérard Louvin to

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