

Report and Consolidated Accounts 2001







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# Chairman's Message



#### To the Shareholders,

2001 was a period of intense business activity at the EDP Group. During the past year we preserved our leadership in the national electricity sector, we extended even further the restructuring of our companies and activities in Portugal and abroad, and, no less important, we fortified our strategic position in the preparations for the imminent integration of the Portuguese and Spanish electricity markets.

These initiatives did not, unfortunately, bring about an improvement in the price of the company's shares on the stock market. A number of factors contributed to this negative trend, amongst which I cite the overriding influence of the vulnerable global economic conjunture and a period of heightened instability pervading the world's leading stock markets, above all in the wake of the dramatic September 11 events. Indeed, the trend in the EDP share price contrasts with our conviction that we are reinforcing a strategy and implementing management measures in a sustained and consistent manner that will create value for our shareholders over the medium and long term.

I shall now turn to the most salient aspects of the year under review.

2001 saw ongoing efforts being directed at consolidating EDP Distribuição's restructuring, which was initiated in 1999 with the merging of the four regional distribution companies into a single entity, whose primary mission is to provide a superior quality service with even higher efficiency levels to Public Electricity Sector customers. In 2001, the ongoing process of re-equating human resources to the company's real requirements led to a reduction in EDP Distribuição's workforce by approximately one thousand workers. This entailed reorganising in a rational manner the distribution of

the technical units around the country, the launching of new commercial products in order to satisfy our customers' needs, and the renegotiation of more than 200 concession contracts with municipal councils.

With respect to the electricity market's liberalisation, the Group strengthened its position in the Non-Binding Electricity System (Portuguese acronym SENV) via EDP Energia, successfully retaining within the Group's fold a large portion of the liberalised customers who had opted to adhere to the SENV.

Simultaneously and with the aim of responding to the SENV's future requirements, the EDP Group made a start to the construction of the first 800 MW (2 Groups x 400 MW) generating units of a new natural-gas-fired combined-cycle power station at Carregado, the Central Termoeléctrica do Ribatejo.

2001 was also the year in which EDP – Gestão de Produção de Energia, S.A. (EDP Produção) was incorporated. This new sub-holding company now coordinates all the companies associated with the production of electric power and the provision of allied services. This company will seek to take advantage of the considerable synergies stemming from the optimisation of resources and increased efficiency through the integration of the various companies operating in this business.

However, 2001 was indelibly marked by a particularly relevant and representative fact of the significant change in the direction of the EDP Group's core business. After a period of great perseverance and complex negotiations, EDP secured in December a controlling position in the Spanish

company Hidroelectrica del Cantábrico (Hidrocantábrico), assuming responsibility for the operational side of the business.

The EDP Group thus became the first Iberian company to own significant generating assets on both sides of the border, distributing electric power in Spain to around half a million customers.

EDP's entry into the Spanish market constituted a decisive step in the Group's strategy. Its importance is further underlined by the emergence of an Iberian electricity market in the wake of a protocol signed at the end of 2001 between the Portuguese and Spanish governments with this very objective in mind. Indeed, this protocol expresses in an unequivocal manner the political will of the two countries to give continuity to the integration of the two electricity markets within the context of the sector's progressive liberalisation.

Hidrocantábrico represents for EDP not only a growth opportunity in a market of such vital importance for the Group, but also the entry into a company boasting an extremely attractive portfolio of assets, a management team whose competence has been demonstrated in the success attained in the liberalisation of Spain's electrical sector, and operating and strategic complementarities that hold out the prospects of significant synergies in the near term.

Turning the spotlight now to international activity, of special note in 2001 was the restructuring of our international investments with the chief object of focusing more closely on resources and management in the Brazilian market.

Accordingly, we sold the 25.5% stake in ESSEL - a water distribution and basic sanitation services company in Chile,

while already in 2002, we sold (subject to the verification of certain conditions) the 29% shareholding in REDAL, in Morocco. In both cases, we not only recouped the initial investment made, but also realised substantial capital gains.

In the Brazilian electricity distribution business, we concentrated efforts on obtaining control of the companies in which we are present, since we believe that this is the route to follow for implementing the restructuring measures that will lead to boosting efficiency and the procurement of sustained positive results in these companies. In this connection, we concluded in 2001 the process involving Bandeirante Energia S.A.'s demerger, following which EDP now controls 96.5% of the post-split new company.

Still in Brazil, but switching our attention to the hydroelectric generation business – an area offering sound investment opportunities at controlled risk – the first generating unit entered into operation at the Lajeado hydroelectric power station which, in total, will have an installed capacity of 900 MW and where our shareholding is 27%. Also in 2001, we successfully bid for the concessions to build and operate hydroelectric power stations at Peixe Angical (452 MW) and Couto Magalhães (150 MW).

The less favourable Brazilian macroeconomic environment, coupled with acute electricity shortages and the subsequent rationing measures implemented, meant that 2001 was an extremely difficult year for the various electricity operators present in the country. With the object of attenuating to a certain extent this situation, the Brazilian government demonstrated a clear intention to implement a climate which, in regulatory terms applicable to the electricity sector, is intended to be stable and transparent. We can, therefore, view the future of our Brazilian operations with added confidence, while simultaneously looking forward to greater stability in operating results and a fairer and more equitable



compensation regime that will lead to the sector's healthier development.

In the telecommunications arena, the extension of the EDP Group's activity to this sector (which was embarked on in 2000) adhered to the logic of optimising the existing fibre optic infrastructures and taking advantage of the opportunity created by the liberalisation of the national telecommunications market.

In 2001, just two years since commencing its operations, ONI consolidated its prominent position as the leader amongst the new fixed-network operators, recording voice traffic handled of about 1,200 million minutes (or ten times more than the volume attained in 2000).

The consolidation of the strategy laid down by the EDP Group for its telecommunications activity involved Brisa's entry into ONI's capital. This operation not only resulted in the strengthening of the company's ownership base, which already included the solid presence of two other major business groups (Banco Comercial Português and Galp Energia), but it also fortified ONI's asset base, which now includes the entire communications infrastructure previously at the disposal of Brisatel.

Still in 2001, a start was made to reorganising ONI with the aim of adapting its organisation structure to the new realities of the telecoms business, where cost flexibility and the ability to respond to the specific needs of its customers constitute critical success factors.

Insofar as the EDP Group's financial and economic performance is concerned, shareholders will find ample information throughout this report relating to the Group results in 2001, as well as selected indicators relating to the 2000 and 2001 financial years. I shall limit my comments here to the essential aspects of this performance.

The EDP Group's net income for 2001 was EUR 451 million, which is 18% lower than the EUR 549 million earned in the previous year. This decrease is fundamentally attributable to the 7% drop in the Group's operating profit, the 17% deterioration in net financial items and the significant decline in net extraordinary items vis-à-vis the previous year.

The decrease in operating profit was motivated by two principal factors. The first is allied to the loss of the operating margin relating to REN following the sale to the Portuguese State in the first half of 2000 of a majority shareholding – the effects of which are partially compensated by the inclusion in 2001 of Bandeirante Energia, S.A. in the EDP Group's universe of consolidated companies. The second is due to the consolidation of the operating results of the telecommunications business which, in this second year of operations, made a negative contribution of some EUR 136 million (which was expected considering the initial phase of the project's evolution).

As for net interest and financial expense, the trend in 2001 is essentially ascribable to the higher finance costs associated with the expansion in the Group's indebtedness, as well as the decrease in the equity-accounted results of associated companies.

Also worth noting in relation to 2001's results was the positive contribution from the international investments, which represented roughly 15.5% of the EDP Group's net income. These results were positively influenced by Bandeirante's refinancing operation, via which EDP was instrumental in advocating the early repayment of about 93% of this company's dollar-denominated debt.

This operation, the realisation of which was only possible after the conclusion of Bandeirante's demerger, permitted the Group to obtain a substantial financial gain and the

elimination, at balance sheet date, of a substantial liability in foreign currency. With this operation, currency exposure risk, which in recent years has had a major negative influence on the Group's consolidated results, has been considerably reduced.

Reflecting clearly the EDP Group's commitment to share with all its shareholders the value created, EDP's Board of Directors proposed at the Shareholders' General Meeting to be held on 10th May 2002 the payment of a dividend equivalent to roughly 75% of 2001 net income, or 11.3 cents per share.

Right from its very beginning, 2002 has presented us with numerous challenges, to which we will respond with the same determination and renewed confidence in the strategy mapped out for the Group.

2002 will be marked by the coming into force of the new regulations which govern activity in the electricity sector, namely, the Tariff Regulations, the Commercial Relations Regulations, the Dispatch Regulations and the Regulations for Access to Networks and Interconnections.

In November 2001 and in accordance with the Tariff Regulations published by the electricity sector regulator ERSE - Entidade Reguladora do Sector Eléctrico, the tariffs to apply in 2002 were fixed, as were the parameters for the second tariff regulation cycle covering the three-year period 2002 – 2004.

The new regulatory framework for the next three years will entail a substantial reduction in the regulated revenues of EDP Distribuição and the widening of the customer base eligible to join the sector's liberalised group. For this reason, EDP will pursue its internal reorganisation drive so as to enable it to respond in a timely and efficient manner to these overriding factors. This means endowing EDP Energia

with the necessary resources that facilitate its action in the liberalised market.

The response to the foreseeable trend in regulated tariffs will require from the EDP Group in 2002 the implementation of a stringent cost reduction programme – known as the "Efficiency 2002" programme, via which it is hoped to attenuate, albeit partially, the negative effect of the above restrictions.

Meanwhile, on the Iberian front, we believe that with Hidrocantábrico it will be possible to build a solid and competitive platform that will enable the EDP Group to face with confidence the challenge posed by the edification of the Iberian market, and to develop the synergies flowing from its presence on the Portuguese and Spanish markets.

Also in 2002, we expect to continue with the reorganisation and consolidation of the telecommunications and information technologies (IT) businesses. We shall continue to extend and develop the multi-utility initiatives, from which it will be possible to generate value for the partners involved, while always preserving quality in the service provided to customers.

We also envisage in 2002 the consolidation of our strategy of affirmation and concentration in the Brazilian market, with the assumption of control or the solidification of beneficial partnerships in the companies where we are present. In the light of the political will manifested in this country as regards the clarification of the electrical market, we are confident that in 2002 there will be a very significant qualitative change in the operating and financial performance of the Group companies.

In 2001, we carried out painstaking and determined work in order to consolidate the expansion of our business. It was a year of fine-tuning and strategy realisation, as well as the



quest for new ways in an extremely adverse economic context. In 2002, we expect to reap the fruits of these labours, consistently improving the quality of our service, raising the efficiency of our business areas, and thus creating value on all the fronts in which we are present.

On the heels of the intense activity of 2001 - centred on the strategic realignment imposed by market conditions, internal business reorganisation and the conquest of market position, notably in the Spanish market -, 2002 will be an equally challenging year.

We shall remain permanently alert to the relevance on the strategy pursued so as to adjust it, as and when necessary; we shall continue to work on the new fronts of internal reorganisation, of which the creation and development of the shared-services company – EDP Valor – will be the most significant example.

But, above all else, 2002 will be the year for consolidating business and strategy, confident in our conviction that this is the correct course for fulfilling our principal mission: the creation of value for our shareholders.

Francisco de la Fuente Sánchez

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# The EDP Group



#### PRINCIPAL CONSOLIDATED DATA

#### Economic and Financial Data

Economic and Financial Data			EUR thousand
	2001	2000	△%
EDP Group consolidated			
Turnover (1)	5,650,374	4,388,911	28.7%
Operating income (1)	673,532	676,131	-0.4%
Net income	450,833	548,973	-17.9%
Cash flow before capital expenditure (1) (2)	1,231,510	1,232,617	-0.1%
Operating capital expenditure (3)	815,169	699,220	16.6%
Financial investment	587,820	1,546,863	-
Net total assets	16,233,143	14,886,931	9.0%
Shareholders' funds	6,096,758	6,204,730	-1.7%
Total liabilities	9,895,668	8,644,957	14.5%
Interest-bearing debt	5,799,124	5,012,368	15.7%
Stock market capitalisation	7,320,000	10,560,000	-30.7%
Return on shareholders' funds (4)	7.4%	8.8%	
Capital structure (5)	95.1%	80.8%	
Solvency (6)	164.0%	172.2%	
Electricity generation (Portugal)			
Turnover	1,291,776	1,202,482	7.4%
Operating income	516,266	508,692	1.5%
Net income	288,107	291,721	-1.2%
Operating capital expenditure	140,354	98,413	42.6%
Electricity distribution and commercialisation (Portugal)			
Turnover	3,304,059	3,045,459	8.5%
Operating income	195,397	216,972	-9.9%
Net income	187,451	153,866	21.8%
Operating capital expenditure	266,975	239,261	11.6%
Electricity in Brazil (7)			
Turnover	690,509	701,390	-1.6%
Operating income	64,610	93,106	-30.6%
Net income	69,847	14,949	367.2%
Operating capital expenditure	65,730	63,828	3.0%
Telecommunications			
Turnover	187,923	42,858	338.5%
Operating income	-136,131	-80,170	69.8%
Net income	-58,654	-6,549	795.6%
Operating capital expenditure	239,019	219,601	8.8%
Information technologies			
Turnover	189,032	115,661	63.4%
Operating income	31,129	16,635	87.1%
Net income	9,848	8,564	15.0%
0 27 5 1 19	70.077	00.000	400.00/

- (1) Figures relating to 2000 are pro forma amounts, that is, excluding REN from the consolidation
- (2) Net income + Depreciation and Amortisation + Net Provision +/- Hydraulicity Correction
- (3) Figure relating to 2000 is the pro forma amount, that is, REN is excluded. Bandeirante's capital expenditure is included on the grounds that this company's balance sheet was consolidated in the EDP Group in 2000.

  (4) Net income / Shareholders' funds

  (5) Interest-bearing debt / Shareholders' funds

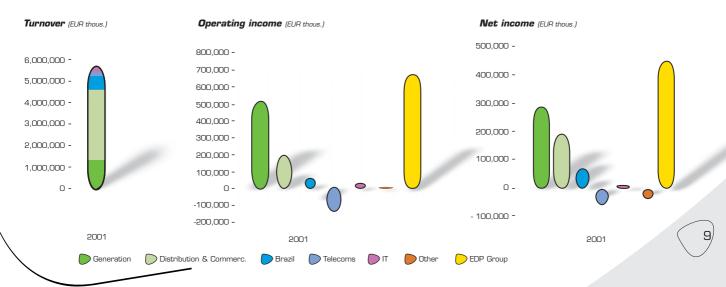
70,977

29,998

136.6%

Operating capital expenditure

- (6) Assets / Liabilities
- (7) Data relating to Bandeirante. Does not include Escelsa/Enersul nor CERJ.



#### PRINCIPAL CONSOLIDATED DATA

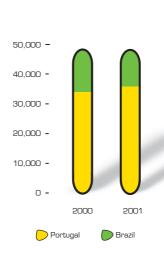
#### Operational Data

	2001	2000	△%
Number of employees:	14,722	12,674	16.2%
Electricity:	10,823	10,499	3.1%
a) Portugal	9,352	10,492	-10.9%
Generation	2,174	2,271	-4.3%
Distribution	7,178	8,221	-12.7%
b) Brazil	1,471	7	-
Telecommunications	1,719	558	208.1%
Information technologies	1,551	915	69.5%
Other	629	702	-10.4%
Electricity business in Portugal			
Generation of electric energy (GWh)	28,282	24,844	13.8%
Sales of electric energy (GWh)	36,025	34,307	5.0%
Number of electricity customers	5,541,418	5,415,313	2.3%
SEP	5,541,396	5,415,304	2.3%
SENV	22	9	144.4%
Electricity distribution customers / Distribution workers	772	659	17.2%
Distribution sales / Distribution workers (euros)	454	366	24.0%
Electricity business in Brazil			
Electricity sales (GWh) (1)	11,727	13,444	-12.8%
Number of customers (1)	1,142,034	2,168,525	-47.3%
Telecommunications			
Number of telephone lines	691,000	291,000	137.5%
Portugal	663,000	291,000	127.8%
Spain	28,000	-	-
Accumulated telephone service (minutes)	1,197,000,000	115,000,000	940.9%
Portugal	543,000,000	115,000,000	372.2%
Spain	654,000,000	-	-

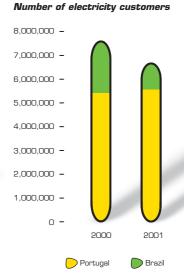
<sup>(1)</sup> Data relating to Bandeirante. Does not include Escelsa/Enersul nor CERJ.

#### 16,000 -14,000 -12,000 -10,000 -8,000 -6,000 -4,000 -2,000 -0 -2000 Generation Telecommunication □ IT Distribution & Commerc. Brazil Other

Number of employees

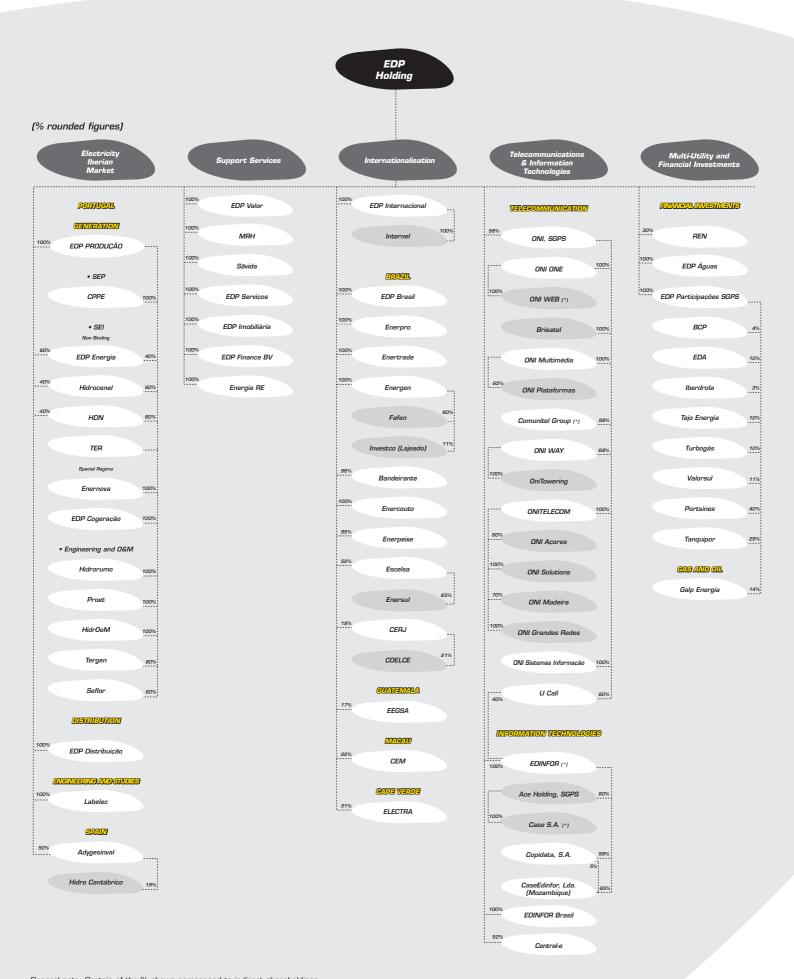


Sales of electric energy (GWh)



# Organisation Structure





General note: Certain of the % shown correspond to indirect shareholdings. [\*] For simplification purposes, the less important subsidiaries of the above companies have not been included above.

## EDP's Governing Bodies

Members of the Governing Bodies of EDP - Electricidade de Portugal, S.A. (EDP Group holding company)

#### **TERM 2000-2002**

#### **General Meeting Committee**

Dr. José Manuel Galvão Teles Chairman
Prof. Doutor António Campos Pires Caiado Vice-Chairman

#### **Board of Directors**

Eng. Francisco de la Fuente Sánchez Chairman
Eng. Jorge Fernando Alves F. Guimarães Vice-Chairman
Dr. Rui Miguel de Oliveira Horta e Costa Member
Dr. Fernando Noronha Leal Member
Eng. António Manuel Barreto Pita de Abreu Member
Dr. Manuel de Jesus Martins Member
Dr. Luís Filipe da Conceição Pereira<sup>(1)</sup> Member
Eng. Jorge Manuel Jardim Gonçalves Member
Prof. Engenheiro João Afonso Ramalho Pereira Bento Member
Prof. Doutor Ernâni Rodrigues Lopes Member

#### **Sole Supervisors**

Bernardes, Sismeiro & Associados, SROC, In office
Represented by Dr. Carlos Marques Bernardes, Statutory Auditor
Dr. Severo Praxedes Soares, Statutory Auditor, Alternate

#### **Company Secretary**

Dr. Manuel Jorge Pombo Cruchinho, In office
Dr. António José Marrachinho Soares, Alternate

#### **Remuneration Committee**

State (Chairman) - Dr. José Salvado Mesquita

Caixa Geral de Depósitos Dr. Victor Lilaia

Banco Comercial Português Dr. Filipe de Jesus Pinhal

(1) Co-opted by the Board of Directors on 8" March 2002, following the renunciation by the Director Eng. Vasco Valente. Dr. Luís Filipe Pereira presente his letter of resignation followin his appointment as Minister of Healt







## COMPLIANCE WITH THE RECOMMENDATIONS OF THE CMVM (CAPITAL MARKET REGULATOR) CONCERNING CORPORATE GOVERNANCE

EDP's management and governance are subject to the norms and standards enshrined in its statutes and in applicable company law. As regards the recommendations drawn up by the Capital Market Regulator (CMVM – Comissão do Mercado de Valores Mobiliários) dealing with Corporate Governance, EDP falls within the parameters defined therein, complying fully with this entity's proposals.

This set of recommendations has the object of defining a system of rules and procedures relating to the control of quoted companies, as well as the exercise by these companies' management bodies of their functions in a responsible manner that is oriented towards the creation of value.

In compliance with the provisions of CMVM Regulation 7/2001 dealing with the duty to disclose the degree and manner in which its Corporate Governance Recommendations have been adopted, we present as an annex to this Management Report a specific report in the standard format laid down by the CMVM.

# Management Report





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#### MACROECONOMIC BACKGROUND

#### **WORLD ECONOMY**

According to the most recent forecasts issued by various national and international organisations, world economic growth in 2001 and 2002 is not expected to exceed 2.5%, about 2.2 percentage points lower than the corresponding figure recorded in 2000. Since the initial growth projections for 2001 and 2002 were in the order of 4% (OECD), the above figure reveals a more prolonged and steeper slowdown in the world economy than initially anticipated. In 2003, with the revival of the principal economies, it is foreseen that global economic growth presents values that are more on a par with those of the last few years.

The increase in the oil price and the consequent rise in fuel prices, the depressed state of the stock markets (in particular, the pronounced stock market correction in the information technologies and communications segments) and the climb in interest rates, were the principal causes for the economic deceleration observed towards the end of 2000. With the signs of crisis, 2000 terminated with some misapprehension on the part of economic agents, with adverse repercussions on the evolution of the financial markets, consumption and investment.

Continuing this trend, the first half of 2001 was marked by the slowing pace of the world's principal economies (United States and European Union), by the persistent recessionary signals emitted by the Japanese economy, and by the deteriorating economic situation of Latin America's main countries. After having risen in 2000, interest rates initiated a downward movement, but the drop in business confidence indices proved to be decisive for the less favourable economic growth registered in the first six months of 2001.

2001 was indelibly marked by the September 11 terrorist attacks on the United States, which had a profound influence on the global economy in the last quarter of the year, rendering previous economic forecasts meaningless and forcing the revision of forecasts for following years.

At a time when the world economy was particularly vulnerable, this attack had a contrasting impact on the national economies and on the various economic sectors, but did, however, have a universal effect on consumers' and investors' confidence, putting paid to the goals of short-term economic recovery. The outlook for world economic growth in 2001 and following years led a host of companies around the globe to announce a downward revision in their earnings forecasts, staff retrenchments and corporate restructurings. Fixed investment was affected by the steep fall in demand, by lower corporate earnings projections and by the contraction on the stock markets. Exports also suffered an expressive decline.

Exceptional measures were taken with the object of re-launching economic growth and minimising the impact of the September 11 attacks, in particular, in the most affected sectors. Key interest rates, which had been declining since the beginning of the year, reached historical lows with the aim of boosting investment.

The price of Brent oil presented systematically values of between USD 25 and 30 per barrel up until September 11, having climbed slightly in the ensuing days. However, the economic behaviour after the attacks dictated a decrease in the oil price in the 4th quarter of 2001. The oil price in this period was generally below 20 dollars per barrel, having dipped to below 17 dollars.

Turning to the American economy, 2001 marked an end to the period of expansion dating back to 1991. Economic growth in 2001 did not surpass 1.2%, while the unemployment rate was 4.8%.

The Japanese economy, which in recent years has been posting low rates of growth, presented a negative GDP growth in 2001, with the recession being attributable to the decline in exports and investment. The economic recession, which is expected to continue in 2002, had a negative reflection on the unemployment rate, which in 2001 was situated at 5%.

2001 was marked by the strong instability in South America's principal economies, namely, in Brazil and Argentina. In global terms, the South American economic growth was practically nil, against the 4.5% initially forecast and a growth rate in 2000 of slightly more than 4%. Inflation presented a declining trend with the vast majority of countries achieving one-digit values. Projections for 2002 point to similarly low growth.

Even though the current economic conjunture makes it difficult to make reliable forecasts, it is expected that the world economy will reverse its present trend during the course of 2002, regaining in 2003 the growth figures of recent years.

In 2002 and according to European Commission estimates, the world economy will post growth of around 2.2% as a result of the economic performance forecast for the United States and European economies, Japan's persistent recession, but aided by the growth of Eastern European and Asiatic economies, which should post 3%-plus growth.

As for 2003, the same entity believes that the strong recoveries of the American and European economies will allow world economic growth to attain 3.7%.

#### **EURO AREA ECONOMY**

In line with international trends, the euro area experienced a slowdown in economic activity in 2001, having registered growth of just 1.5%, significantly below the values presented in 2000 and 1999 (3.4% and 2.5% respectively).

The deceleration in economic activity has been appreciable since the beginning of the year, with the year-on-year GDP rate of change at the end of June being situated at a mere 1.6%, less than half the figure registered in the preceding year. Shadowing the world economy, growth in the final half of the year was even less significant. As factors explaining this slowdown, of special note were the downswing in world

economic activity, its impact on export and import activity and the deceleration in private consumption growth (even though this outpaced GDP growth). Imports also registered an expressive contraction, having compensated for the decline in exports.

Economic agents who at the beginning of 2000 had expressed confidence in the economy's future, changed their opinions and became more pessimistic than in 2000 and 1999, thereby contributing to the downswing in investment and consumption. In the case of consumers, apprehension was chiefly directed at the outlook for the employment market.

Average inflation in the Euro zone was 2.5%, and is expected to ease further in 2002 to between 1.1% and 2.1%, and between 0.9% and 2.1% in 2003, according to the ECB's (European Central Bank) projections, which are in line with the forecasts of other international organisations.

The unemployment rate in the Euro area in 2001 was 8.3%, slightly lower than the 2000 (8.8%) and 1999 (9.6%) figures, while it is expected to edge back towards to the 9% mark in 2002. However, with the upswing in the world economy in 2003, the unemployment rate is once again forecast to fall. Even though the European Commission is more optimistic than the OECD, both expect the unemployment rate to hover at just over the 8% level.

The Euro area's key interest rate declined in 2001 in line with the global trend, and in particular after the September 11 attacks. The Euribor 12-month rate stood at 3.34% at the end of the year, against 4.75% at the end of 2000.

2001 was marked by the euro's continuing slide against the dollar, having remained almost permanently below the reference level of 0.90 dollars. The September 11 terror attack caused a slight depreciation in the dollar in the days immediately after the occurrence but recovered rapidly, with the euro closing the year at 0.89 dollars.

1st January 2002 will go down in the annals of the European



Union's history: it was the day the single currency entered into circulation in 12 of the 15 European Union (EU) countries. However, after a short period in which the euro appreciated marginally against the dollar, the exchange rates of these two currencies maintained within the usual bands seen in 2001.

#### **IBERIAN ECONOMY**

#### **Portugal**

The Portuguese economy accompanied international trends and, in particular, those of the Euro Area. After having presented growth rates of 2.5% in 1999 and 3.4% in 2000, the Portuguese economy in 2001 felt the effects of the slowdown in world and European economic growth. Bank of Portugal estimates point to a value of between 1.5 and 2.0%, an interval that is also the opinion of a number of national and international bodies.

After having climbed slightly in 2000, the inflation rate (average rate of change of the Harmonised Consumer Price Index) in 2001 was 4.4%, the highest figure since 1994 and 1.6 percentage points above that registered in 2000. This increase, which was already foreseeable in the first half of the year, outpaced the community average.

In marked contrast to the inflation rate's behaviour, Portugal's unemployment rate was situated well below the European average. After some oscillations during the course of the year, the unemployment rate at the end of 2001 settled at 4.1%, less than half the European Union average.

Economic agents' confidence indicators in Portugal deteriorated in 2001, notably amongst industrialists, who at the end of 2000 had manifested positive expectations concerning the national economy's performance.

The Portuguese economy's deceleration is expected to continue during 2002. Accordingly, the European Commission forecasts  $\frac{1}{2}$ 

Portuguese GDP growth of 1.5% in 2002, while the Bank of Portugal projects a level of between 1.0 and 1.75%, both of which are less optimistic that the projections presented in the State Budget, which contemplates a figure of more than 2%. Keeping pace with the world economy's revival, the national economy's growth rate should accelerate in 2003 to figures that approximate 2.5%.

Despite the discrepancy between the various international organisations' estimates, an easing in Portugal's inflation rate in 2002 to around European average levels is envisaged. The Harmonised Price Index forecast by the Bank of Portugal is situated between 2.2 and 3.2%, while the European Commission advances with an inflation figure of 2.8% in 2002.

It is anticipated that there will be a slight increase in the unemployment rate in 2002, although still keeping close to half the European average.

#### **Spain**

The Spanish economy's slowdown noted at the beginning of the year continued to be evident in the second half of 2001, a consequence of the lower exports and the weakening trend in private consumption. Economic growth in 2001 was 2.8%, down 1.3 percentage points on 2000 and 0.2 percentage points below the Spanish government's forecast. Nonetheless, it was one of Europe's better performing economies.

The decline in energy product prices restrained the increase in the inflation rate, which settled at 3.6%, up 0.1 percentage points on 2000. Spain's unemployment rate decreased slightly in 2001, but continued to remain the highest in the Euro Area and, together with Greece, are the only two countries to present double-digit unemployment rate.

The Spanish economy, with its important interest in Latin America, has (like Portugal) been affected by that region's economic instability. Unlike Portugal, however, Spanish investments in Latin America are concentrated in Argentina, a country which ended 2001 in a deep economic and political crisis, with negative reflections on the performances of Spanish--controlled companies.

The OECD predicts a minor increase in the unemployment rate in 2002, which will hover above the 13% mark. Economic growth will continue to slow down, in line with 2001's performance and latest Euro Area forecasts.

#### **BRAZILIAN ECONOMY**

After posting growth of 4.4% in 2000 (one of Latin America's highest growth rates), Brazil was affected by a severe energy crisis and by its significant exposure to the exterior.

In the first half of 2001, Brazil was affected by a period of drought and by the fact that Brazil's energy production is primarily of hydro origin. As a result, the Brazilian authorities were forced to impose power rationing whilst at the same time attempting to promote thermoelectric power generation. The energy rationing programme, which was implemented during the entire year, had repercussions on economic growth, which in 2001 was in the vicinity of 1.5%.

Strongly dependent on external investment, the economic slowdown had a major impact on the real's exchange rate, in particular, in the third quarter of the year, period in which it sank to below 0.40 euros. With the country's huge external debt (notably in dollars) the real's depreciation accentuated Brazil's economic deceleration. The end of the year saw the Brazilian currency stage a recovery, closing the year being quoted at 0.49 euros.

Inflation in 2001 was 6.8%, in line with the values presented in recent years.

The political and economic instability experienced by Argentina

throughout 2001, and in particular in the closing stages of the year, also had negative repercussions for Brazil's economic performance.

Shadowing international trends, and with the end of energy rationing in March 2002, the Brazilian economy should turn in a better performance in 2002 relative to 2001, outstripping initial forecasts. It is also anticipated that inflation will continue its sliding trajectory.



#### THE EDP GROUP'S DEVELOPMENT STRATEGY

#### THE ELECTRICITY SECTOR IN PORTUGAL

#### **Organisation**

The National Electricity System's organisation (Sistema Eléctrico Nacional - SEN) is founded on the coexistence of a public-service electricity system (Portuguese acronym - SEP) and an independent electricity system (Portuguese acronym - SEI).

Within the SEP the principal participants are the National Transmission Grid (Rede Nacional de Transporte de Energia Eléctrica - RNT), which is operated under a public-service concession regime by Rede Eléctrica Nacional, S.A. (REN), the Binding Producers (generators) and the Distributors of electric energy who are bound to the SEP by means of a contractual regime. Under this arrangement, the above players assume the obligation to supply the SEP, or be supplied by it, with the ultimate objective of ensuring an adequate supply of electric energy, security of supply and environmental protection.

The Binding Producers have commercial relations with REN by way of exclusive long-term supply contracts. Binding Distribution operators are obliged to supply SEP customers with the electricity these have contracted, subject to the tariffs and conditions laid down by the electricity sector regulator (Entidade Reguladora do Sector Eléctrico - ERSE).

The centralised planning of the power-generating system forms part of the SEP's public-service obligations. It is the government's responsibility not only to approve the plans for the power-generating system's expansion, but also decide on the construction of each new power station.

The SEI comprises the Non-Binding Electricity System (Sistema Eléctrico não Vinculado - SENV), which is primarily composed of non-Binding Producers and non-Binding Customers (that is, those who meet the minimum consumption thresholds fixed by the ERSE and who have exercised this option). Non-binding customers are entitled to use the SEP's networks provided that they pay the respective access tariffs (fixed by the ERSE).

Besides the SENV, the SEI encompasses the Special Generation Regime, which is characterised by the generation of electric power by recourse to renewable energies or at cogeneration installations. These producers deliver power to the SEP's network in terms of specific legislation which contemplates both technical and tariff issues – based on the principle of the SEP's avoided costs and on the consideration of an environmental award.

It is the ERSE's duty to supervise compliance with the SEP's functioning rules and the relationship between the SEP and the SENV, to formulate the eligibility criteria for customers to join the SENV, to regulate the activities conducted within the ambit of the SEP, namely to fix tariffs and prices for electric energy as well as for other services supplied by the RNT concessionaire and by the holders of binding distribution licences to other licence-holders or customers. Finally, it is responsible for publishing these tariffs and prices in the Official Journal.

During 2001 the ERSE carried out a revision of its regulations in anticipation of the second regulatory period which commenced on 1st January 2002 and which will remain in force until the end of 2004. On 1st September 2001, the following revised regulations were published in the Official Journal (Dispatch 18 413-A/2001, 2nd series):

- Tariffs;
- Commercial Relations;
- Access to the Networks and Interconnections;
- Dispatching.

With a view to accelerating the liberalisation and integration of the Portuguese and Spanish markets, a protocol was signed by these two countries' governments on 14th November 2001 establishing 1st January 2003 as the date for the creation in the Iberian Peninsula of an integrated electricity market (MIBEL) that will evolve according to two complementary systems:

- Bilateral contracting to be freely established between agents;
- Organised contracting through the Iberian Market Operator.

The electricity sector regulators in Portugal and Spain (ERSE and CNE, respectively) have been assigned the task of presenting an organisational model for the Iberian Electricity Market (MIBEL), taking into consideration the convergence of the two countries' electricity systems, community legislation and the recent experience of the functioning of both countries' electrical markets.



Based on this organisation model for the MIBEL, the system operators in Spain and Portugal (REE and REN, respectively) must submit by April 2002 a detailed plan for the implementation of the technical and organisational measures needed for the inauguration of the MIBEL on 1st January 2003.

#### Rede Eléctrica Nacional (REN)

Rede Eléctrica Nacional, S.A. (REN) is the entity holding the concession for the National Transmission Grid, the nucleus of the National Electricity System.

REN has been mandated to guarantee the SEP's overall technical management, coordinating the functioning of the SEP's installations (to which it is connected), ensuring the optimum operation of the SEP, and centralising the commercial relations between the SEP and the SENV.

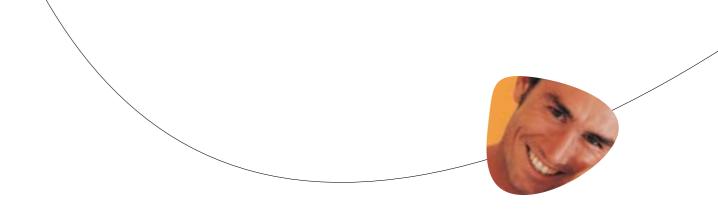
As envisaged in the legislation that transposes the Community Directive (Directive 96/92/CE), Portugal has implemented the legal separation of the company responsible for the transmission grid's management, as well as that of the

companies whose main business involves the generation and distribution of electricity.

Given REN's specific mission within the context of the National Electricity System and the interface with system and market managers in the European Union, namely, with Spain, REN was transferred from the EDP Group in the second half of 2000, with the Portuguese State becoming the major shareholder in REN with 70% of the capital, while the EDP Group retained the remaining 30%. At the end of December 2001, the Caixa Geral de Depósitos acquired 19.99% of REN's capital from the Portuguese State.

In this separation, REN's contractual relations with the EDP Group companies were safeguarded, namely, the Power Purchase Agreements (PPA's) with CPPE and the supply contracts with EDP Distribuição.

By way of regulation approved by the ERSE, the following functions at REN were individualised: SEP's Commercial Agent, Supply Manager, System Manager, Account Settlement and Electric Energy Transmission.



#### EDP's positioning

The EDP Group occupies an important position within the SEP:

In generation, through CPPE (which owns around 82% of the SEP's installed generating capacity), as well as via the 10% participating interests in the capital of the producers Tejo Energia and TURBOGÁS;

In transmission, EDP owns a 30% shareholding in Rede Eléctrica Nacional, S.A., concessionaire of the RNT;

In distribution, the EDP Group owns EDP Distribuição, licence-holder for binding distribution in high and medium voltage power and concessionaire of low-voltage distribution.

The EDP Group has been seeking new forms of participation in the SEI, in particular within the ambit of the SENV, namely through EDP Energia which, at the end of 2001, supplied 22 of the 33 customers that have opted to join the SENV.

Another aspect worth mentioning was the decision to build a new, natural-gas-fired combined-cycle power station composed of three 392 MW generating units, geared to operating in the SENV. This new plant is scheduled to become operational in a phased manner between 2004 and 2006 and is the responsibility of TER – Termoeléctrica do Ribatejo, a company 100%-held by the EDP Group.

#### Regulation

#### Opening up of the markets

In compliance with directive 96/92/CE, which prescribed the common rules for the internal electricity market, the ERSE within the scope of its powers, prescribed in December 1999 the minimum consumption threshold that confers the right of access to the status of non-binding customer for the years 1999, 2000 and 2001 at, respectively, 30, 20 and 9 GWh. It also specified the period of advance notice for joining the SENV and the portion of power and energy requirements that the entities holding

binding electricity distribution licences in MV and HV electricity can acquire outside the SEP (free portion which is currently situated at 8%).

The annual consumption threshold of 9 GWh, taking into account the consumption noted in 2001, corresponds to 18% of the mainland's total electricity consumption. Bearing in mind that binding distribution can acquire up to 8% of its requirements outside the SEP and that the auto-producers contribute with around 8%, it can be concluded that Portugal presents an open-market realisation level of around 33%, which exceeds the community minimum share of 30.2%.

In December 2001 there were 33 non-binding customers whose consumption represented 520 GWh in 2001, that is, roughly 1.5% of EDP Distribuição's total supplies. The majority of non-binding customers are connected in medium voltage (88%), with the remainder at high voltage.

Up until 19th December, the ERSE had attributed the statute of non-binding customer to some 50 installations whose consumption totals a value of 956 GWh, or around 2.7% of mainland Portugal's total electricity consumption.

On 1st January 2002, the ERSE defined the new eligibility thresholds, extending the possibility of access to the SENV to all the customers with very-high, high and medium-voltage connections. These correspond to a universe of close to 20 thousand customers and a total consumption in the order of 44%.

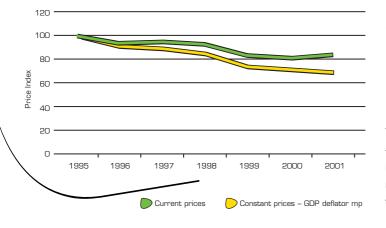
#### Tariff trends

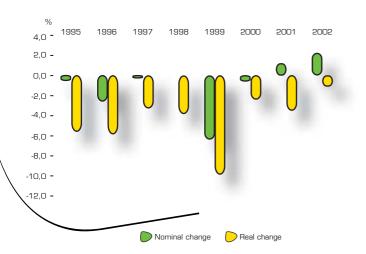
Over the last 6 years, average electricity prices registered an average annual decline in real terms of about 4 per cent in low voltage and about 6 per cent for the other voltage levels as a whole: medium, high and very-high voltage.

The following charts depict the trend in average prices for the above segments in the period 1995-2001, at current and constant prices.

# Trend in average low-voltage prices 120 100 80 60 20 1995 1996 1997 1998 1999 2000 2001 Current prices Constant prices - GDP deflator mp

#### Trend in average medium, high and very-high voltage prices





#### Electricity prices

2001 was the final year of the first regulation period fixed by the ERSE (1999-2001).

The tariffs are laid down in such a manner as to provide an amount of recognised revenue, calculated according to the formulae set out in the Tariff Regulations. The amount of revenue is determined at the end of each year for the following year, in this case 2001 taking into consideration:

- the parameters defined by the ERSE at the beginning of the regulatory period, for this year;
- the projected figures for costs and electric energy movements, accepted by the ERSE;
- the amount of the tariff adjustment reflected in the 2001 tariffs which result from any deviations between the permitted and billed revenues in 1999, updated by applying the three-month Lisbor interest rate in force in June 2000, plus half a percentage point.

The tariffs fixed for 2001, taking into account the above--mentioned factors, translated themselves into a nominal increase in electric energy prices applied to SEP final customers relative to 2000 of 1.19%, practically uniform for the various tariffs (by voltage level) and options:

- VHV: 1.21% – HV: 1.20%
- MV: 1.16%
- SLV: 1.25%LV: 1.19%.

In terms of the SENV access tariffs, the tariff for global use of the system rose 5.67%, whilst the tariffs for use of the networks had the following reductions:

- VHV transmission: 11.05%
- HV transmission: 12.70%



HV distribution: - 6.32%MV distribution: - 3.46%LV distribution: - 2.03%.

The tariffs for 2001 include a number of alterations to the tariff structure, amongst which:

- the introduction of an additional power scale in the normal low-voltage segment, corresponding to 2.3 kVA;
- in the social tariff, the increase in the maximum annual consumption threshold to 400 kWh;
- the introduction of an additional hourly period, designated as super off-peak with a daily duration of 4 hours, applied to the tariffs for VHV, HV and MV consumption with contracted power ratings in excess of 2 MW;
- the creation of a new interruptibility regime offering two
  options, with changes in the valuation of interruptibility, which
  is now defined by way of an absolute discount applied to the
  value of the interruptible power contracted by the customer,
  replacing the previous percentage discount applied to the
  total bill. These options are directed at customers who accept
  a reduction in the load in the Electricity System's critical
  operating periods.

The tariffs fixed by the ERSE at the end of 2001 for 2002 represent a nominal increase in sales tariffs charged to the SEP's final customers of 2.2%. It should be pointed out that this increase incorporates the deviations in the cost of fuel acquisitions projected in 1999 for 2000, which were very expressive (some EUR 130 million).

Within the ambit of the second regulation period (Dispatch 18 413-A/2001, 2<sup>nd</sup> series, Official Journal) which began on 1<sup>st</sup> January 2002 (period 2002-2004), the ERSE, in order to obviate a repetition of situations similar to those referred to previously, considered it appropriate to reflect in a more immediate manner the variation in the fuel acquisition charge vis-à-vis the projected cost, with the deviations being passed on

to VHV, HV and MV customers every quarter, with a deferral period of six months.

For LV customers, the variability of charges with the acquisition of electric energy is reflected in the tariffs for the following year, based on previsional figures, with the definitive adjustment being effected two years later.

Within the ambit of the second regulation period, the ERSE redefined the rules for calculating the revenue and prices of the tariff components Energy and Power, Overall Use of the System, Use of the Transmission Network and Use of the Distribution Network. Two new tariff components were introduced: Network Commercialisation and SEP Commercialisation. The calculation of the sales tariff structure for final customers falling under the SEP is now based on the concept of the pancaking of the tariff structure of the above-mentioned tariff components.

With a view to guaranteeing the progressive pancaking of the sales tariff structure to final customers, the ERSE harmonised power billing variables and fixed costs applicable to the tariffs for use of the networks and to the sales tariffs for final customers.

Accordingly and for the purpose of guaranteeing the application of the principle of pancaking:

- the concept of the power taken was replaced by the introduction of the concept of power in peak hours;
- contracted power was redefined and now corresponds to the maximum average active power in any 15-minute interval in the last twelve months;
- a fixed tariff term was introduced in the sales tariffs to final customers of very-high, high, medium and special-low voltage consumption.

Also worth mentioning is the fact that the discounts defined in article 90 of the first Tariff Regulations were built into the sales

tariffs for final VHV and HV customers, while the discount attributed to MV customers will be gradually phased out by 2005.

#### International price comparison

In order to evaluate the positioning of Portuguese electricity tariffs relative to the universe of EU countries, a comparative study is conducted periodically using, for this purpose, a survey carried out by EUROSTAT covering electricity prices for both residential and industrial uses.

In the present environment of market opening, a comparison of electricity sales prices to final customers is proving to be an increasingly difficult task. This is essentially due to the lack of information, not only qualitative but also quantitative, on account of the EUROSTAT survey not having been adapted to the market's new reality.

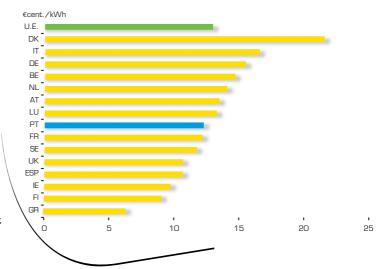
Taking into consideration the above difficulties, as well as the current level of customer access to the market in the different EU countries – with much greater incidence amongst industrial customers relative to residential customers – it is generally felt that the methodology adopted in recent years is no longer pertinent as regards the industrial segment, while continuing to remain valid in the residential segment.

Using the method defined by the ERSE's Tariff Council, it will be seen that on 1st January 2001 the tariffs in Portugal in force in the residential segment were roughly 3.9% below the community average.

As for the industrial segment, and due to the overriding factors already referred to, the comparison of electricity prices in the way still adopted by EUROSTAT is inadequate, with the result that it was abandoned.

The following chart presents the comparison of electric energy prices for an equivalent residential consumer in mainland Portugal on 1st January 2001 vis-à-vis the group of European Union countries.

## International Comparison of Electric Energy Prices (household consumer)



#### Quality of service

The service provided by SEP entities must comply with the minimum service quality standards laid down in the Service Quality Regulations (Portuguese initials – RQS) published in Dispatch 12917 – A/2000, in the  $2^{nd}$  series of the Official Journal no. 143 of  $23^{nd}$  June 2000, which came into force on  $1^{st}$  January 2001.

The drafting of the RQS (as well as its revisions) is the responsibility of the Directorate-General for Energy (body of Portuguese Economy Minister responsible for the conception, execution and evaluation of the portuguese energy policy), which must request a proposal by the ERSE for the commercially-related provisions. For those of a technical nature, it has to consult the RNT concession-holder (REN) and the binding distributors (EDP Distribuição).

The ERSE is responsible for verifying the complete application of the RQS.

The RQS prescribe the minimum technical and commercial standards that must be observed in the service provided by the entities falling under the SEP.

The technical aspects of service quality refer to:



- continuity of service: number, duration and frequency of service interruptions;
- quality of the voltage wave: amplitude, frequency, wave form and symmetry of the threephase system of the feed voltage.

The quality of the commercial service embraces the relationship aspects relating to the RNT concessionaire and the binding distributors, on the one side, and their customers on the other, notably as concerns attendance, information, technical assistance and the assessment of customer satisfaction.

This regulation lays down the obligation, effective from 2002, to publish an annual report on service quality by the RNT concessionaire and by the binding distributors.



#### THE ELECTRICITY BUSINESS IN THE EDP GROUP

#### In Portugal

#### Generating activity

With EDP Produção's start-up on 2<sup>nd</sup> July 2001, a beginning was made to a new phase in the rationalisation of activities and in the reorganisation of all the EDP Group companies involved in electricity generation.

The legal formation of EDP - Gestão da Produção de Energia, S.A. took place on  $28^{\text{th}}$  March 2001 with the object of

optimising the coordination and operating efficiency of the various EDP Group companies linked to the power-generating sector. The goal is also to consolidate leadership in the generating area of the national electricity market, the realisation of which will occur through the increased profitability of activities in the regulated market and the affirmation of a stalwart presence in the liberalised market.

EDP Produção seeks to provide a new organisational model for the areas associated with the EDP Group's electricity generation, satisfying the objectives of rationalisation and coordination of activities. It also endeavours to give more effective support to the EDP Group's involvement in the international market. At the end of 2001, EDP Produção included the following companies:

### EDP Produção SUB-HOLDING COMPANY SEP Ge CPPE HDN ENERNOVA HIDRORUMO HIDROCENEL EDP Cogeração SOPORGEN TER SEFLOR ENERGIN HIDR0eM CARRIÇO TERGEN ENERPRO

#### A) Binding generation

EDP maintains a prominent position in the SEP's binding generation system through CPPE - Companhia Portuguesa de Produção de Electricidade, S.A., the company that forms part of EDP Produção. CPPE has a contracted power rating of 7,184 MW which on its own represents around 82% of total power, of which 3,903 MW refers to hydroelectric facilities and 3,281 MW to thermoelectric power plants.

EDP owns 10% participating interests in two companies, Tejo Energia and TURBOGÁS, which possess the other two major thermoelectric installations within the SEP: in the first case, with two coal-fired generating units (Pego), and in the second, with 3 natural-gas-fired combined-cycle generating units (Tapada do Outeiro).

#### Installed capacity at 31st December 2001 (MW) Binding producers

EDP Group power stations	7,184
Hydroeletric power stations	3,903
Thermoelectric power stations	3,281
Thermoelectric power stations of other SEP producers	1,574
Pego	584
Tapada do Outeiro	990
Total	8,758

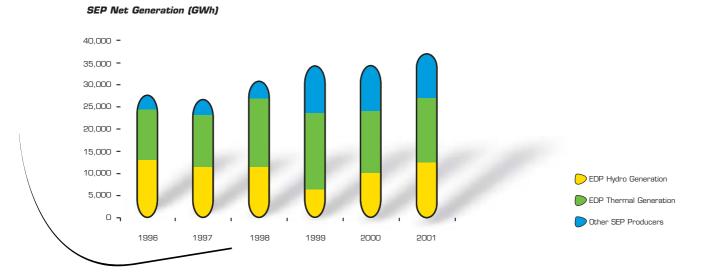
CPPE's net generation in 2001 was 26,947 GWh, of which 12,607 GWh is of hydro origin and 14,340 GWh is of thermal origin. Hydro-sourced generation benefited from an above-average hydrological year, with a hydroelectric capability factor during the first quarter of around 1.55.



CPPE's generation was equivalent to 73% of binding generation and contributed to meeting roughly 67% of emission-related consumption (net production), up on the previous year's figures (respectively 70% and 68%). It should be mentioned that the growth rate in emission-related consumption was 5.5%.

Net Generation (GWh) Binding producers

	1996	1997	1998	1999	2000	2001	△ % 00/01
CPPE	24,350	23,034	26,898	23,458	24,000	26,947	12.3%
Hydro generation	13,138	11,523	11,506	6,456	10,229	12,607	23.2%
Thermal generation	11,212	11,511	15,392	17,002	13,771	14,340	4.1%
Other SEP producers	3,261	3,605	4,057	10,951	10,493	9,973	-5.0%



The 12.3% increase noted in CPPE's net generation received a significant contribution from the hydroelectric capability, which translated itself into a 23.3% increase relative to the preceding year, satisfying via this source around 34% of the SEP's consumption needs. This means, therefore, that there was an expressive use of natural resources and, consequently, an enormous contribution to reducing the country's energy bill.

Also in the case of CPPE's thermoelectric capability there was an increase of 4.1% in net generation, as a result of the bigger contribution noted in the second half of the year, essentially due to the greater recourse of the fuel-oil-fired power stations.

Coal-based generation (Sines power station) represented 61% of CPPE's thermal generation and about 32% of its overall generation. In hydroelectric generation, the main contributors were the power stations of the Douro Generating Centre, accounting for some 26% of CPPE's total generation.

The storage level at CPPE's reservoirs at the end of the year was situated at around 1,105.4 GWh, which represents  $45.8\,\%$  of the maximum, against 85% noted at the end of the previous year.

In thermal generation, 3,263 million tons of coal, 1,373 million tons of fuel-oil and 60 million  $m^{\rm a}$  of natural gas were consumed.

The availability of CPPE's generating centres was situated at 94.3% as concerns thermoelectric plants and 93.1% in the case of hydroelectric plants. This behaviour continues the favourable trend seen in recent years in this indicator and places CPPE on a par with the best counterpart companies, thereby underlining the company's sustained efforts in this domain.

## **Availability of the Generating Centres (CPPE)**Binding producers

	1996	1997	1998	1999	2000	2001
Hydro availability	91.1%	91.6%	96.1%	94.3%	94.7%	93.1%
Thermal availability	91.0%	88.4%	90.4%	92.7%	93.1%	94.3%
MW / Employee	3.4	3.5	3.8	4.0	4.2	5.8(a)

(a) Combined effect of reduction in the number of employees and the transfer of employees to the central areas of the new sub-holding company EDP Produção.

#### Significant facts and indicators

The following facts merit special mention:

- CPPE's reorganisation and restructuring in the wake of its integration in EDP Produção, with the enormous contribution to the consolidation of the structures of the new sub-holding company's central areas;
- the obtainment in September of the Sines power station's environmental management system's certification by Lloyd's Register Quality Assurance in accordance with ISO 14001, as part of the environmental certification process covering our thermoelectric power stations;

- the obtainment, in the ambit of the implementation of the Quality Management Systems, of accreditation for the Sines power station's chemical laboratory for coal analysis, issued by the Portuguese Quality Institute according to NP EN 45001. It is worth pointing out that in the accreditation audit realised on 17th October, no non-compliance situations were detected;
- the development of the project for the installation of natural gas at the Setúbal power station, with a view to adapting burning conditions during the generating units' start-up phase.
   This project involves both REN and TRANSGÁS;
- monitoring the successive flood situations, with the
  participation of the entire operating structure of the Hydraulic
  Generation Division, in coordination with the National Civil
  Protection Service and INAG (National Water Institute).
   On 21<sup>st</sup> March the heavy rainfalls that occurred in the Cávado
  basin gave rise to exceptional water flows to the reservoirs,
  which in certain cases saw their full storage levels being
  surpassed.

Within the context of the implementation of the Kyoto Protocol and the market's liberalisation, EDP decided to promote the realisation of a CO2 emissions market simulation organised by PricewaterhouseCoopers and which used a trading platform supplied by EURONEXT, via Internet.

#### B) Special regime generation

#### B.1) Renewable energies - wind power and biomass

EDP Produção maintained the EDP Group's orientation to intensify projects resorting to renewable energies, as a form of reducing external energy dependence and thus contributing to the national goal of attaining 39% of total generation from renewable energy sources by 2010.

Accordingly, insofar as wind-powered energy is concerned, three wind farms were in operation at the end of 2001 – Fonte da Mesa, Pena Suar and Cabeço da Rainha (the last-mentioned was formally inaugurated on 6th July 2001) – to



which can be added the Cadafaz wind farm which entered experimental service, all of which are operated by ENERNOVA, an EDP Produção company specialising in this field.

Meanwhile, studies continued for the projection of new wind farms.

At the end of 2001, these four ENERNOVA complexes with 40.6 MW, corresponded to around 32.7% of the total installed capacity in this technology in mainland Portugal.

ENERNOVA's generation at the end of the year totalled 90.6 GWh at wind farms, signifying an overall increase of 29% when compared with the previous year. National wind-sourced generation was 485 GWh, registering a decrease of 13% in relation to the previous year.

As regards the Mortágua Biomass power station, with an installed capacity of 9 MW, the adjustments to its functioning conditions were virtually concluded. In 2001, generation totalled 19 GWh, representing an increase of 217% vis-à-vis the previous year.

#### B.2) Cogeneration

EDP Cogeração continued to evolve its activity essentially focused on two areas of operations – the national cogeneration market and lending support to EDP Internacional.

With respect to the national cogeneration market, three facets of the business merit highlighting:

- detection of new projects prospecting for the most interesting potential projects in this market, promoting negotiations and advantageous partnerships, on account of the mutual repercussions they can engender in energy optimisation;
- implementation of projects in progress namely, Energin Azóia and Carriço Cogeração, both in partnership with Galp Power;

 operational management of implemented projects – notably SOPORGEN, majority-held by EDP, with 67 MW installed, which supplied 485 GWh of steam and 366 GWh of electricity to Soporcel – Sociedade Portuguesa de Papel, S.A. (a major company in paper industry), 152% more than a year earlier.

Of the projects under way, the ENERGIN AZÓIA power plant located inside the factory complex of Solvay Portugal, has an installed capacity of 45 MW (65% owned by EDP Cogeração). At the end of the year, it was undergoing commissioning trials. This plant will be operated by SEFLOR, a company falling within EDP Produção's universe.

The Carriço Cogeração power plant, owned jointly by EDP Cogeração (35%) and Galp Power (65%), has a power rating of 30 MW and is associated with the industrial processes of UNITECA - União Industrial Têxtil e Química, involving the brine resulting from the construction of TRANSGÁS' subterranean natural-gas storage caverns, in the parish of Carriço, in the Pombal district.

At the end of the year, the plant was undergoing trials and its entry into functioning is scheduled to take place during the first half of 2002.

It should be noted that all these cogeneration power plants use natural gas as fuel.

2001 was the first full year of operations of the cogeneration plant belonging to Soporgen - Sociedade Portuguesa de Geração de Electricidade e Calor, S.A., a company formed in March 1999 and its capital is majority-held by EDP Cogeração (82%), the other shareholders being Soporcel (10%) and ABB (8%).

EDP Cogeração continued to provide services to the holding company (EDP) and to EDP Internacional, involving the evaluation of the situation and study of the solution for conversion to combined-cycle operation of the FAFEN project in Brazil (Fábrica de Fertilizantes Nitrogenados da Bahía, belonging to PETROBRÁS).

## C) Non-binding generation

#### C.1) Non-binding hydro power stations

The group of power stations belonging to HDN and HIDROCENEL possess an installed capacity of 224.5 MW.

In 2001, the total net generation of these companies attained 532 GWh, up 13% on the previous year, while generation at HDN reached the company's historical maximum of 245 GWh. In this total generation, some 33% (176 GWh) resulted from power stations with power ratings of less than 10 MW owned by HDN and HIDROCENEL.

In the process of integrating the non-binding generating companies (HDN and HIDROCENEL) within EDP Produção's new organisational and functioning model, it can be noticed:

- a start to the coordinated functioning with EDP Energia in the SENV, following the attainment of the status of Supply Agents;
- the drawing up with EDP Energia of a generating sales contract and the definition of a Programming and Dispatching model for power stations with a power rating of more than 10 MW;
- formation on 29th October 2001 of HidrOeM Gestão,
   Operação e Manutenção de Centrais Eléctricas, S.A., whose mission is to assume responsibility, under a contract regime, for the activities connected with the management, operation and maintenance of the 31 power-generating centres with a total power rating of 310 MW, and whose operating activities scheduled to start in January 2002.

The new company's shareholders are EDP Produção (32.5%), HDN, HIDROCENEL and EDP Energia (22.5% each).

# C.2) New natural-gas combined-cycle power station

Continuing the activities leading up to the commissioning in 2004 of the first two generating units at the Ribatejo thermoelectric power station, TER carried out a significant

number of management, technical monitoring and contractual initiatives during 2001, amongst which:

- signing on 12<sup>th</sup> December 2001 of a turnkey contract with the Siemens-Koch consortium for the supply of two generating units with a unit power rating of 392 MW, with the option to acquire a third group generator;
- obtainment on 4<sup>th</sup> December of the Environmental Impact Declaration;
- attribution on 7th December of the Licence for Non-Binding Electric Energy Generation;
- incorporation on 28<sup>th</sup> December of the company TERGEN –

   Operação e Manutenção de Centrais Termoeléctricas, S.A.,
   which will be responsible for the Operation and Maintenance
   (O&M) of the new CRJ power station. This new company's shareholders include TER, EDP, EDP Produção, Siemens and Koch.

#### D) Engineering

The EDP Group possesses a strong engineering projects arm (study, projects, management and supervision of works and contracts), primarily geared towards lending support to activities conducted in the electricity sector at national and international level. This nucleus was created from the structures of the companies traditionally dedicated to projects for the construction and remodelling of power-generating centres, and is presently divided between two companies forming part of the sub-holding company EDP Produção: PROET and HIDRORUMO.

# D.1) PROET

2001 at PROET was marked by the company's integration into EDP Produção's organisational structure.

In this way, the provision of engineering services directly related to the renovation and expansion of the EDP Group's power-generating facilities assumed greater importance at PROET. On the other side, the company's operations gained a new



dimension, thanks to the role it was summoned to play in the preparation of possible future thermoelectric generation investments in Brazil.

However, the consolidation of PROET's position as a specialist in the area of thermoelectric projects was not restricted to the EDP Group. Other prominent entities within the National Electricity Sector contracted PROET to conduct studies in the technical, economic and environmental fields covering not only to the development and upgrading of electricity-producing installations, but also the construction of new power-generating complexes.

Also worth noting during the course of the year was PROET's continued certification by APCER of the company's quality system according to standard NP EN ISO 9001, and the renewal of its grading by LNEC (National Civil Engineering Laboratory) as General Quality Manager of Construction Projects. This recognition of the company's good technical and organisational performance constitutes an additional guarantee to its clients of the quality of its services.

With respect to PROET's involvement within the EDP Group, the company's activity was directed at two essential areas: on the one hand, the renovation and technological modernisation of the thermoelectric power stations run by CPPE; on the other, the construction of the EDP Group's first combined-cycle power station owned by TER.

The Ribatejo thermoelectric power station marks the resumption of the Group's construction of large-scale thermal power plants.

As for participation in initiatives promoted at national level by EDP Produção and affiliated companies, the main highlights were PROET's involvement in the Solvay cogeneration power station project (Energin Azóia) and the Mortágua forest-waste power plant.

In the international and non-EDP Group arena, PROET rendered a wide range of services to ONE (Morocco), as

well as to CEM (Macau) within the ambit of the coordination and supervision of the commissioning activities at the Coloane B power station.

Furthermore, PROET contributed to the reorganisation of Timor's electricity sector as part of the project adjudicated to EDP by the UNO.

As in previous years, PROET received a number of requests during the course of 2001 to carry out studies in the realm of thermoelectric generation. This demand clearly demonstrates the market's acknowledgement of the company's capacity and expertise in its main business area. Of special note were the services rendered to EDA – Electricidade dos Açores (giving continuity to the fruitful cooperation of the past), as well as to Tejo Energia (owner of the Pego power station).

PROET was also involved in a vast number of initiatives: with REN, which continues to contract PROET for the realisation of wide-ranging of civil engineering works; with Valorsul, Valorização de Resíduos Sólidos Urbanos da Área Metropolitana de Lisboa Norte, in the management and supervision of works and technical assistance; and also for several industrial customers, notably in the cement, oil and solid urban waste areas, in the conduct of studies covering atmospheric dispersion, the characterisation of gaseous emissions and other pollutant sources.

# D.2) HIDRORUMO

During 2001, HIDRORUMO - the engineering company forming part of the generating division and specialising in hydroelectric and renewable-energy projects - continued to carry out a significant number of studies, projects and management and supervisory activities in the construction of new hydroelectric developments and wind-farm schemes, as well as various projects aimed at increasing capacity, remodelling and rehabilitating existing installations. Also of note was the company's involvement in work covering safety control at dams from the structural and hydraulic perspectives.

Within the scope of providing back-up services, the company continued to evolve a comprehensive array of innovation and technological development activities, notably in the automatic retrieval and tele-transmission of observation data applied to the surveillance of the dams belonging to HIDROCENEL, HDN and EDP Energia; the application of bi and tri-dimensional mathematical models to the underground works with the realisation of the Venda Nova II project and the treatment of Fault 22 of the Alqueva dam's foundations; and in the development/streamlining of the computational models for the study of the flooding waves resulting from accidents at the dams.

HIDRORUMO also continued to develop initiatives aimed at implementing management systems in this engineering company: Quality Management System according to the requirements of NP EN ISO 9001:2000, and an Environmental Management System according to the requirements of NP EN ISO 14001:1999, as well as the respective certification process by an entity accredited in accordance with standard NP EN 45012.

Confirming the growth trend, HIDRORUMO's services to EDP Group companies climbed once again, accounting for roughly 55% of the company's turnover.

Amongst the principal work undertaken during the year, the following are summarised owing to their size and/or technical complexity or volume of resources involved:

# For the Group:

- Continuation of work for reinforcing the installed capacity at CPPE's Vila Nova/Venda Nova (Venda Nova II) power plant;
- realisation, also for CPPE, of the Prior Study of the Alto Côa hydroelectric projects and monitoring of the Environmental Impact Study (EIS) and of the comparative assessment of the Baixo Sabor and Alto Côa projects;
- construction of the Lagoa Comprida power station, property of HIDROCENEL;

- studies and works relating to Santa Luzia Dam, property of HIDROCENEL;
- works for EDP Energia (Belver hydroelectric facility).

In the area of work carried out for the Group, also worth mentioning was that carried out for ENERNOVA as part of the construction of the wind farms in the light of the growth noted in 2001 and the expected expansion in coming years, stemming from new legislation governing electric energy generation based on renewable energies.

#### Outside the Group - National market:

- technical assistance, project execution, contracting, management and supervision of contracting works and supplies at the Alqueva hydroelectric scheme, on behalf of EDIA:
- addition to the base project for the Pedrógão dam, also for EDIA:
- conclusion in consortia led by HIDRORUMO, of the Basin Plans covering the Douro, Lima, Cávado, Ave and Leça rivers, on behalf of INAG (national water institute) and the DRAOT-N – Direcção Regional de Ambiente e Ordenamento do Território Norte:
- drawing up of the Special Plan for Dam Inspections 2001
   North of the Douro and Aveiro, for INAG;
- activities undertaken on behalf of REN, namely, studies relating to hydro-meteorological observations, revision of water flows and the creation of hydrological series.

# Outside the Group - International market:

 collaboration in the feasibility study into the Tupiratins and Peixe Angical hydroelectric schemes, in the evaluation of the feasibility study and pre-basic project for the São Salvador hydroelectric project, the plants on the river Tocantins basin in Brazil, and also in the viability study



of the Couto Magalhães hydroelectric project on the river Araguaia;

 the studies and engineering services provided for the Peixe Angical, São Salvador and Couto de Magalhães hydroelectric projects supporting the bidding proposals submitted by ENERPAULO – Energia Paulista Ltda, a subsidiary of EDP Brasil, joint with Caiua and Celtins, companies of the Rede Group. These consortia won the concession to build and operate the Peixe Angical and Couto Magalhães generating complexes.

#### E) Capital expenditure

# Operating capital expenditure EDP Producão

	E	UR thousand
2001	2000	△%_
140,354	98,413	42.6%
52,345	48,433	8.1%
58,662	3,701	1,485.0%
5,491	8,399	-34.6%
6,953	11,368	-38.8%
14,532	25,459	-42.9%
2,371	1,053	125.2%
140,354	98,413	42.6%
	140,354 52,345 58,662 5,491 6,953 14,532	2001     2000       140,354     98,413       52,345     48,433       58,662     3,701       5,491     8,399       6,953     11,368       14,532     25,459       2,371     1,053

<sup>(1)</sup> Capital expenditure carried out at SOPORGEN and ENERGIN AZÓIA, given that they are majority controlled by EDP Cogeração.

EDP Produção's operating capital expenditure in 2001 (expressed in total costs) amounted to EUR 140 million. Included in this figure was the amount allotted to the construction of TER's new combined-cycle thermoelectric power station, of close to EUR 59 million, and which absorbed around 42% of EDP Produção's operating capital expenditure.

## E.1) Capital expenditure on binding generation (CPPE)

CPPE's capital expenditure totalled EUR 52 million, of which EUR 19.6 million refers to new generating centres and EUR 32.4 million was outlaid on existing power stations. Of the

amount spent on plants in operation, EUR 11.3 million was channelled to hydraulic generation and EUR 21.1 million to thermal generation.

With regard to the principal projects, the following are the most salient aspects:

- at the Venda Nova II complex (additional power rating), work
  continued at a good pace on the principal civil engineering
  contract, with the conclusion of the mounting of the power
  station's gantry bridge, a start was made to the installation of
  the reversible generating units and the supply of the hydromechanical equipment, while tenders were called for the
  supply of the stand-by generating plant and the group
  transformers:
- at the Baixo Sabor/Alto Côa hydroelectric complexes, work continued on the environmental studies: HIDRORUMO conducted the Prior Study for the Alto Côa hydro schemes, giving continuity to the initiatives that are directed at the comparative evaluation of the Baixo Sabor and Alto Côa projects;
- work was followed through on the Castelo do Bode hydroelectric installation aimed at extending its useful life under operating conditions which are compatible with contractual requirements, involving in 2001 mainly the equipment, systems and installations of no.1 generating unit;
- work continued at the Crestuma-Lever hydroelectric scheme with the object of improving the functioning and reliability of the respective generating units, especially in terms of the alternators. Work on the no. 2 generating unit was completed in the first quarter. The improvements to no.1 generating unit will only be concluded in 2002;
- as concerns the project for the substitution of process computers at the Sines power station, work was carried out on generating unit 2 and tenders held to supply unit 1 to be concluded in 2002. This investment began in 2000 on

<sup>(2)</sup> Unspecified capital expenditure carried out by the sub-holding company, PROET, HIDRORUMO, SEFLOR and HIDROEM.

generating unit 4 and will terminate in 2003 with unit 3, and is aimed at introducing operating and cost-cutting advantages to the power station's operations.

#### E.2) Non-binding generation:

Capital expenditure on non-binding generation in 2001 represented roughly EUR 64 million, at technical costs, of which some EUR 5.5 million was spent on the hydro plants of HDN and HIDROCENEL and EUR 58.6 million on the new thermoelectric complex (natural-gas-fired combined-cycle power station) owned by TER.

HDN and HIDROCENEL pursued the capital expenditure programmes on the expansion of the power-generating capability through the construction of new facilities, as well as the realisation of modernisation and remodelling work at existing installations with the object of prolonging their useful lives, maximising the existing energy potential and cutting operating costs.

With the objective of reducing operating costs and enhancing the management flexibility of HDN, HIDROCENEL and EDP Energia's hydroelectric facilities, prior studies were conducted relating to the implementation of a centralised tele-dispatching system at the hydro power plants operating within the non-binding system, which will be located at Ermal's installations, with conclusion scheduled for the third quarter of 2003.

The capital investment associated with the construction of TER's new natural-gas-fired combined-cycle power station underwent an important phase in 2001 with the signing of the turnkey contract (TC) with the Siemens-Koch consortium. The capital expenditure for the first phase (2 generating units) is budgeted at some EUR 500 million and will cover the costs of the TC, the complementary works, as well as the financial and project management commitments. Up until the end of 2001, the amount relating to the TC absorbed EUR 53 million at technical costs.

#### E.3) Special regime generation:

The capital expenditure effected in renewable wind power was in the region of EUR 7.0 million and essentially referred to the conclusion of the Cadafaz wind farm, the continuing carrying out of studies for the constitution of a portfolio of potential sites and to the bringing forward of the enlargement of the Cabeço da Rainha wind farm. The pluriannual investment plan was formulated in 2001 in harmony with the national targets defined for the generation with recourse to renewable energies, the development of projects aimed at the installation by 2007 of wind farms with an installed capacity of around 500 MW, with the result that capital expenditure in 2002 will be appreciably higher than in 2001.

Capital expenditure on cogeneration was situated at close to EUR 14.5 million, of which EUR 11.2 million was allocated to the construction of ENERGIN AZÓIA's power station and some EUR 3.3 million for SOPORGEN's power plants already in operation, both of which are majority-owned by EDP Cogeração.



# F) Energy balance - generation

The growth in Portugal's electricity consumption registered very positive rates at the end of the year, as reflected in the rise of 5.5% on emission-related consumption (energy sent out to the transmission grid).

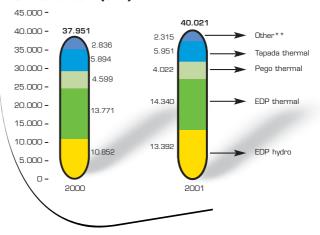
# Energy balance (GWh) Generation

	2001	2000	△%
EDP Produção power stations			
Hydroelectric emission	12,607	10,229	23.3%
Thermoelectric emission	14,340	13,771	4.1%
Embedded emission	785	623	26.0%
Wind-powered emission and biomass	109	75	45.5%
Total EDP Produção emission	27,841	24,698	12.7%
Pumping	(485)	(559)	13.2%
EDP Produção net emission	27,356	24,139	13.3%
Pego thermal power station emission	4,022	4,599	(12.6%)
Tapada thermal power station emission	5,951	5,894	1.0%
Auto-producers	2,453	2,388	2.7%
Import / (Export) balance	239	931	(74.3%)
Emission-related consumption (Net Production)	40,021	37,951	5.5%
Synchronous compensation	(34)	(39)	12.7%
Own consumption - generation	(3)	(4)	8.6%
Own consumption - transmission	(10)	(9)	(5.9%)
Losses	(729)	(695)	(4.9%)
Energy delivered to Distribution	39,245	37,204	5.5%

Note: 2001 figures are previsional.

Notwithstanding the fact that, in the final quarter of 2001, thermoelectric emission recorded a bigger increase when compared with that from hydroelectric plants, in annual terms the latter increased strongly thanks to the favourable hydrological conditions which characterised the first nine months of the year. Consequently, hydroelectric emission posted an annual increase of 23.3%, whilst thermoelectric emission grew by just 4.1%.

#### SEP Generation \* (GWh)



- \* Electricity generation after deducting hydro station pumping, corresponding to "Emission-related consumption" (Net Production).
- \*\* Other = Wind-powered emission + Auto-producers + Import/Export balance Pumping

The positive trend referred to above in hydroelectric emission, coupled with the growth in consumption, meant that the net emission of energy generated by the EDP Group in 2001 reached 27,356 GWh versus 24,139 GWh at the end of 2000, reflecting an increase of more than 13%.

EDP Produção's market share rose from 70% in 2000 to 74% in 2001, representing a positive variance of 4 percentage points.

# Binding distribution activity

# A) Restructuring of distribution activity

In 2001, the company pursued the consolidation of the reorganisation process embarked in November 1998, attributing a vertical structure to the different business areas and introducing uniformisation into the operating area throughout EDP Distribuição.

Amongst the measures taken in order to attain this project's objectives – enhancing management efficiency and business efficacy, besides guaranteeing quality in the service provided – the following warrant special reference:

- reorganisation of the organisational units involved in fieldwork, so as to render them more efficient and substantially reduce intervention times in terms of manoeuvring network and insulation equipment and in repairing breakdowns;
- implementation of the process management methodology, with the selection and design of the most important from a business standpoint, involving the various business areas;
- start to the process directed at optimising the number of existing commercial and technical installations with the consequent reflection on the management of available resources.

In the year under review, it was necessary to reinforce the cultural adjustments related to change, of which the main aspects were: the preparation of a system of goals and incentives applicable to all the organisation's units and, to all the company's employees, the identification of the "Business Vision" and the organisation's "Values", as well as the publication of the "Code of Ethics" applicable to the company's entire workforce.

# B) Binding commercial activity

As a means of adapting EDP Distribuição to the new market conditions resulting from the liberalisation process, the principal initiatives in the commercial sphere during 2001 have as their objective not only raising the level of customer satisfaction, but also fostering their loyalty. Accordingly, close attention was paid to improving the quality of the commercial service provided and the promotion of EDP Distribuição's image.

In order to pursue to these goals, it was necessary to adjust the company's structures entailing the uniformisation, in terms



of computer systems, of the commercial function through the "Customer Plus" project, translated by the introduction of the SAP/IS-U (Industrial Solutions for Utilities) and in this fashion making available to the customer integrated information.

The policy of customer approximation was stepped up with the dynamisation of the Customer Manager teams and the creation of the Direct Customer Contact Teams in the business and residential segments respectively.

The focus continued to be on fostering a close and cooperative relationship with municipalities,

whereby it was possible to renew roughly 80% of LV distribution concession contracts.

In addition, the diversification of customer access to the company merited special attention, namely, with the opening of the Citizen's Store (Setúbal and Braga), with the enlargement of the collection network through the Energy Points and PayShop, and with the signing of a protocol with the Post Office that makes it possible to enter into contracts at this organisation's counters.

As regards telephone attendance, there continues to be a substantial increase in the recourse to this facility on the part of customers, with the result that its installations, equipment and human resources were enlarged and modernised. This process resulted in the extension of its services, transforming it into a genuine contact centre.

Similarly, EDP's home page on the Internet warranted special attention, leading to the creation of the Virtual Shop, the launch of which was preceded by its dissemination through a



promotional mailing targeted at a selected group of residential customers.

On the rational utilisation of energy front, of special note was the signing of a protocol with the ADENE – Agência para a Energia (Energy Agency), with the goal of carrying out a number of actions directed at the study and dissemination of the efficient use of electric energy.

# C) Acquisition and sale of electric energy

Despite some slowdown noted in 2001, EDP Distribuição's activity was characterised by an increase in the number of customers and sales of electric energy to the Public Electricity System (SEP) – respectively 2.3% and 4.1% relative to the preceding year's levels. In 2001, with the increased accession by consumers to the non-binding electricity system (SENV), energy traffic to these customers climbed from 223 GWh in 2000 to 537 GWh in 2001, with the quantity of energy sent out from the distribution networks posting an increase of 5.0%.

The increase in the SEP's consumption was satisfied through the acquisition of more energy, either directly from REN (representing the major portion – 91.1%) or from Independent Electricity System (SEI) producers – special regime producers (PRE), whose contribution was 6.6%, and the non-binding system (SENV) with a contribution of 2.3%.

In 2001, purchases of electric energy totalled 38,726 GWh, corresponding to EUR 2,048 million, or 10% more than in 2000.

Electric Energy Purchases (GWh) EDP Distribuição

	2001	2000	∆%
From REN	35,282	33,915	4.0%
From SENV	891	622	43.2%
From PRE (Special Regime Producers)	2,552	2,469	3.3%
Total	38,726	37,007	4.6%

Of the energy sales to the SEP totalling 35,505 GWh, the main highlight owing to their weight relative to total sales, were the sales to final low-voltage customers. Sales to this customer segment continued to register high growth (in the order of 5.2%) when compared with the previous year.

In 2001, the effect of the market's opening up continued to be felt with the passage from the SEP to the SENV of 15 customers (1 in high voltage and the remainder in the medium-voltage segment). This movement had some impact on the level of sales considering that MV supplies recorded an increase of just 2.4%, whereas the number of customers grew 3.7%. However, if the SEP and the SENV are taken together, consumption of MV and HV rose by 4.7% between 2000 and 2001.

Sales of Electric Energy SEP (GWh) EDP Distribuição

	2001	2000	△%
VHV (Very high voltage)	797	776	2.6%
HV (High voltage)	3,462	3,328	4.0%
MV (Medium voltage)	11,354	11,092	2.4%
SLV (Special low voltage)	2,806	2,658	5.6%
LV (Low voltage)	16,022	15,227	5.2%
Public illumination	1,064	1,010	5.4%
Total	35,505	34,091	4.1%

#### Number of SEP Customers EDP Distribuição

	2001	2000	∆%
VHV (Very high voltage)	11	11	0.0%
HV (High voltage)	98	90	8.9%
MV (Medium voltage)	19,536	18,834	3.7%
SLV (Special low voltage)	26,519	25,394	4.4%
LV (Low voltage)	5,455,273	5,332,331	2.3%
Public illumination	39,959	38,644	3.4%
Total	5,541,396	5,415,304	2.3%

Billing relating to the sale of electric energy to final customers in 2001 was EUR 3,213.2 million (net of discounts, excluding sales to the Group and without VAT), of which 29.1% refers to supplies in VHV, HV and MV and 70.9% to LV supplies.

## Electric Energy Billing EDP Distribuição

		E	UR thousand
	2001	2000	△%
VHV (Very high voltage)	28,392	27,129	4.7%
HV (High voltage)	137,051	133,198	2.9%
MV (Medium voltage)	770,785	743,302	3.7%
SLV (Special low voltage)	261,227	245,691	6.3%
LV (Low voltage)	1,931,839	1,833,882	5.3%
Public illumination	83,918	80,279	4.5%
Total	3,213,212	3,063,481	4.9%

Having noted an increase in sales to final customers of 4.1%, billing rose by some 5% as a result of the higher average selling price of electricity in 2001.

In 2001 billing to SENV customers for use of the distribution network was EUR 2.8 million, more than double the figure invoiced in 2000. This increase is in line with that noted in the corresponding energy traffic.

Customer receivables at the end of 2001 totalled EUR 633.4 million, which is equivalent to 19.7% of revenues from electric energy sales and translates itself into a deterioration of 10%. This deterioration is essentially due to the State Business Sector (+9.3%) and the Business Sector (+21.8%).

Trade Debtors EDP Distribuição

		EL	JR thousand
	2001	2000	∆%
State and official bodies	29.5	27.0	9.3%
Local authorities	246.9	258.0	-4.3%
Business and private sector	357.0	293.0	21.8%
Total	633.4	578.0	9.6%

# D) Quality of service

Service quality has always been a constant concern in electricity distribution activity. However, the coming into force on 1st January 2001 of the Service Quality Regulations placed an array of new obligations at EDP Distribuição's doorstep.

In terms of commercial service quality during 2001, several activities were undertaken with a view to improving the relationship with customers and the consequent raising of service quality levels.

Despite the efforts made, it was still not possible to gather all the information relating to the Service Quality
Regulations. However, on the commercial side, with respect to the Feeder Line and Arrival Budgets and respective execution, between December 2000 and December 2001 there was a clear improvement in performance. In fact, the budgets for feeder lines prepared up to 15 calendar days after submission of applications climbed from 96% to 98%, while in terms of the execution rate for feeder lines and arrivals within 30 calendar days rose from 89% to 92%.

In terms of technical service quality, it is worth to be refered the execution of the Annual Quality Monitoring and Voltage Wave Continuity Plan at the distribution networks which made it possible already in 2001 to gather measurements relating to Service Quality indicators at all the country's boroughs, as well as the drawing up of Service Quality Improvement Plans in the most needy zones which,



although already initiated, will be extended further during 2002. The Monitoring Plan for 2002 was submitted to the Directorate-General for Energy for approval.

In recent years the trend in the overall values of technical service quality indicators for the electricity distribution networks shows a marked improvement. The only exception has been the last two years where some deterioration was noted as a consequence of the extremely adverse atmospheric conditions that occurred last winter. However, in 2001 (relative to 2000) and in spite of the severe penalisation associated with the storms that raged during the first quarter of the year and in October, there was an improvement in service quality indicators, with a decrease of around two hours in Equivalent Interruption Duration. This was possible thanks to the efforts directed at reinforcing the networks and the information systems for the purpose of allowing greater speed in the restoration of service.

In fact, following the incident recorded in the transmission network in May 2000, automated devices were installed at substations and the installation of remote-control systems intensified with a view to accelerating their resumption of service in the event of accidents.

Given the importance of geo-referenced information systems as a support for business and organisational processes, and in response to the need for their large-scale implementation, a start was made to the GeoEDP Programme, including the access to updated maps, network information surveys and applicational components.

Within this context, work began on the integration of the Technical Information System, information manager and the new Dispatching System (Genesys), as well as the interconnection with the planning programme (DINIS). Still on the issue of system integration, a new Incidents Management System (Active Network) and modules for telecommunications networks (ModellT) were acquired, as well as the integration of the network optimisation functionalities (DPlan).

#### E) Capital expenditure

The construction of new distribution network installations took into account the pronounced increase in consumption, while also focusing on improving the quality of service, both as concerns the continuity of service and voltage stabilisation. In 2001, the connection of generating installations within the ambit of the SEI, also entailed a major financial effort directed at the construction of new lines and substations.

In liaison with local authorities, significant capital projects were also executed with a view to improving public lighting, with particular emphasis on the recuperation of the historical centres of cities and within the scope of the POLIS Programme (urban recoupment initiative promoted by the portuguese Government and City Halls of the cities included in the Programme).

Preparations for entry into operation of new computer systems to address the changeover to the Euro and market liberalisation were also responsible for a large portion of capital expenditure in this domain.

Consequently, and notwithstanding the stringent selection criteria applied to the investments made, operating capital expenditure rose by 12.1% (at current prices) when compared with 2000, being situated at EUR 265.9 million.

#### Operating Capital Expenditure EDP Distribuição

			EUR thousand
	2001	2000	△%_
High/medium voltage	82,765	66,965	23.6%
Low voltage	125,569	115,050	9.1%
Public illumination	16,890	11,513	46.7%
Other	40,650	43,664	-6.9%
Total	265,874	237,192	12.1%

#### F) Energy balance - Distribution

The total energy distributed at the end of 2001 was 36,025 GWh, 5% more than in 2000, of which 35,505 GWh was in the SEP and 520 GWh in the SENV.

Energy sales in the SEP registered a positive variance of 4.1%. The SLV segment (Special Low Voltage) presented the highest growth rate (5.6%). The PL (Public Lighting) and LV (Low Voltage) segments also posted very significant growth rates of 5.4% and 5.2%, respectively.

#### Energy Balance (GWh) EDP Distribuição

	2001	2000	△%
Energy delivered to Distribution	39,245	37,204	5.5%
Distribution's own consumption	-40	-38	6.7%
Distribution losses	-3,180	-2,859	11.2%
Electric energy sales = (1) + (2)	36,025	34,307	5.0%
(1) Electric energy sales - SEP	35,505	34,091	4.1%
VHV (Very high voltage)	797	776	2.6%
HV (High voltage)	3,462	3,328	4.0%
MV (Medium voltage)	11,354	11,092	2.4%
SLV (Special low voltage)	2,806	2,658	5.6%
LV (Low voltage)	16,022	15,227	5.2%
PI (Public illumination)	1,064	1,010	5.4%
(2) Electric energy sales - SENV	520	216	140.3%
EDP customers	241	85	181.9%
Non-EDP customers	279	131	113.2%

Note: 2001figures are previsional

# Supply in the non-binding system (SENV)

The EDP Group participates in the SENV through its subsidiary EDP Energia. This company's chief strategy is centred on a high level of interaction with its customers with the object of offering them a service that on the one hand contributes to the competitiveness of their business, and on the other, which transmits to them the EDP Group's considerable credibility and unquestioned technical capacity.

In this context, during 2001 EDP Energia was immersed in intensive activity, both at commercial level with its customers and from the standpoint of consolidating the company's own organisation. This approach was adopted in order to secure from the very outset a leading position from which to face the new challenges posed by the new regulatory framework that came into effect on 1st January 2002.

Having commenced supplying electric energy to the SENV in May 2000, EDP Energia sold 85 GWh in that year. In 2001, electric energy sold totalled 241 GWh, an increase of 181.9%. This appreciable variation is explained by the clear increase in the number of customers adhering to the non-binding system, as well as by the fact that at the end of 2001 roughly 2/3 of these customers were supplied by EDP Energia, a fact that validates the commercial strategy pursued.

Supplies were satisfied by own generation from the Belver power station and by means of substitution contracts entered into with other Iberian suppliers or producers. Complementarily, the company continued to be involved in trading activity on the basis of a portfolio of energy purchase and sale contracts concluded with external agents.

EDP Energia has endeavoured to approach the challenge from liberalisation in a useful and effective manner, contributing to the market's credibility and responding to the new challenges from the perspective of maintaining the EDP Group's clear leadership in the Portuguese electricity market.

# In Brazil

# Strategy

In Brazil, 2001 was marked by two factors of paramount importance. The first, of a global reach, refers to the behaviour of the world economy, influenced by the North American economy's recession (the repercussions of which were further aggravated after the September 11 terrorist attacks); and the second, at national level, refers to the matter of energy rationing in the major part of the country.



The combination of these two factors led to a strong fluctuation of the dollar, forcing the Brazilian Central Bank to act by adopting a number of measures aimed at controlling inflation and curbing speculation in the North American currency. Of particular note was the rise in key interest rates to 19% per annum. Inflation in 2001 hovered around the 6.8% level, compared with the 6% initially forecast. Gross domestic product (GDP) slipped from 4.4% in 2000 to around 1.5% in 2001.

This difficult scenario began to change course from the third quarter onwards, since the currency depreciation resulted in the change in trade balance expectations, closing the year with a positive balance of USD 2.6 billion. This favourable performance, allied to other internal factors such as the lower risk of "black-outs" and the greater flexibility of energy-consumption reduction targets, helped to change international sentiment about the Brazilian economy, isolating it from any contagion effect emanating from the Argentinian crisis. This perception curtailed demand for the dollar, thereby enabling the local currency to recover to pre-crisis levels.

It is important to underline the fact that the issue of energy rationing found the electricity sector in a fragile and divided state. The transitional phase from a vertical and statecontrolled model to a competitive and privately-owned one did not find a response to the issues that the Restructuring Programme for the Brazilian Electricity Sector was intended to address. Moreover, it evidenced the lack of comprehension of how much had still to be done in terms of public policies in order to offer an adequate incentive to private investment, above all in the finalisation of the regulatory framework needed for the new model's full functioning. In addition, the Thermoelectricity Priority Programme did not advance any further, not on account of the lack of interested parties, but because of a lack of clear conditions of a regulatory and contractual nature. The impasse created by the non-compliance with the rules of the Wholesale Energy Market (Brazilian acronym MAE) had a profound effect on the market's credibility and created an environment of insecurity amongst investors and financiers.

Although seemingly contradictory, on balance 2001 was not entirely negative. On the contrary, the Federal government's reaction to the rationing problem and its awareness that this provoked (including for private agents) of the urgent steps needed to be taken – the creation of the Energy Crisis Management Council as a supra-ministerial body is proof of this – meant that the results for the year were better than the 2000 scenario held out.

2001 also left a lesson. The business groups, amongst whom the EDP Group, who practised conservative financial policies, and who channelled their efforts and resources into developing hydroelectric projects, have emerged fortified and capable of giving a sustained push to expanding the Brazilian electricity sector. Although rationing causes as an immediate consequence the more rational use of electric energy, notably amongst residential consumers, the expansion in demand, combined with the review that will naturally arise in the renegotiation of the initial contracts as from 2003 of the amount of energy guaranteed, will mean that the expansion in electric energy supply in Brazil will be intense and certainly outpace the international average.

EDP's priority in Brazil for the distribution business, which entailed consolidation of the shareholder position in the distribution companies, can be considered a success. The operations involving Bandeirante, Escelsa and Enersul brought in their wake a substantial increase in the capacity to participate in the distributors' management.

In generation, the entry into operation of the Lajeado hydroelectric and the Fafen thermoelectric power stations represented an important growth in EDP's participation in Brazil's power-generating capability. Furthermore, the fact that the EDP Group won the concession auctions for the construction of the Peixe Angical and Couto Magalhães hydroelectric plants will give rise to an increase of 600 MW in its generating capacity.

Much hope has been deposited in the future. There is the enlargement of the EDP Group's institutional presence, in

particular that of the sub-holding EDP Brasil S.A., within the general context of the Brazilian electricity sector, the consolidation of its role as interlocutor with the sector regulator, the expansion the Group's generating capacity, through the development of projects by ENERGEN, the commercial operations realised by ENERTRADE, and the beginning of the Group's ownership structure consolidation in Brazil via the full control of BANDEIRANTE Energia and the usufruct contract that enabled control of IVEN. All these aspects will unquestionably influence projected results for 2002.

#### Organisation of the EDP Group's activity in Brazil

Previously located in more modest premises, the move of EDP Brasil's head office to new offices rapidly constituted a signal of the Group's intentions in that country. It engendered recognition amongst the market players, at the same time as it enabled the expansion of the company's human resources and productivity. The project for the implementation of the new headquarters fully accommodated the needs of ENERGEN, ENERTRADE and ENERPRO. At the same time, it induced an administrative modernisation, the main feature of which is the implantation of the Document Management System, given that this provoked an important administrative overhaul.

EDP Brasil, S.A.'s continuing activities in its role as the EDP Group's holding company in the country led to an expansion in the staff complement. This gave origin to the need to define a policy addressing recruitment and human resource development. In this regard, the formalisation of a training policy directed at raising the skills of the workforce was a major step to render the team more cohesive, synergetic and modern.

In fact, endeavours were made to fulfil the role of an asset manager by the adoption of a posture advocating greater control at the companies in which the EDP Group participates.

# Regulation of the Brazilian electricity sector

The crisis experienced by Brazil's electricity sector in 2001, the effects of which were felt under the rationing system

decreed during the year, had its origins in previous years, due primarily to a combination of the structural imbalance between supply and demand and to an unfavourable hydrological scenario since 1998. Also contributing to the worsening of the country's energy situation were the problems associated with the implementation of the new Wholesale Energy Market (MAE) which, owing to the clash of interests amongst the various agents, saw the accounting and financial settlement process become paralysed. This state of affairs forced the government to decree intervention in market's operation.

With effect from May 2001, after the public announcement of the crisis in electricity supply, Brazilian society responded with a voluntary reduction in load of around 20%, leading the government to decide not to impose rationing, but instead to opt for the adoption of measures aimed at stimulating lower consumption. If, on the one hand, this reduction in consumption helped to alleviate the supply crisis, then it is equally true that, on the other, it caused financial losses for electricity sector operators.

For energy distributors, the losses were derived from the decrease in the market and, for the producers, they arose from the obligation to repurchase at spot prices the surpluses on energy sales contracts. These enormous losses dictated an urgent solution under pain of sparking off another crisis in the sector, this time emerging from payment difficulties amongst agents.

Conscious of the difficulties faced by Brazil's electricity sector agents, and in the light of the need for an action plan to manage the crisis in the near term and to make the expansion of electric power supply viable over the long term, the Brazilian government created the Electric Power Crisis Management Council. Its mission centred on managing and regulating the Emergency Programme for Consumption Reduction, establishing the Strategic Electric Power Emergency Programme, proposing measures for attenuating the negative effects of rationing



consumption, and extending the transmission and supply of electric energy.

Having overcome the implementation stage of consumption reduction measures, the government (through the Electric Power Crisis Management Council) intervened in the market with the aim of promoting an agreement between generators and distributors, where the losses arising from rationing would be recouped through tariff adjustments, whilst the contractual surpluses after rationing would be settled at a price that is substantially lower than the spot market price.

Having fulfilled these two stages – lower consumption and negotiation of losses – the government announced long-term measures aimed at reconciling the growth in supply in a balanced manner, establishing a stable regulatory environment and defining in a clear way the structure for the Wholesale Energy Market, while at the same providing the conditions to make investments in the sector feasible. The Brazilian Electric Power Market was created in order to replace the Wholesale Energy Market, with the definition of the rules for its functioning entrusted to the Poder Concedente (an official law-making body), and not to sector agents themselves, in addition to other structural measures.

EDP increased its market visibility, contributing with its know-how at the meetings between the Poder Concedente, the Power Crisis Management Council, their committees and the energy companies, which expanded the set of permanent rules for the Brazilian electricity sector. It is also important to mention that EDP participated in the construction of the rationing architecture – namely, in the definition of the rules for this exceptional period – and has been devoting special attention to finding a solution for compensating the financial losses suffered by distributors due to rationing.



There were a number of initiatives negotiated with the Poder Concedente and implemented by the sub-holding company EDP Brasil, which had a favourable impact on the Group's earnings in the country:

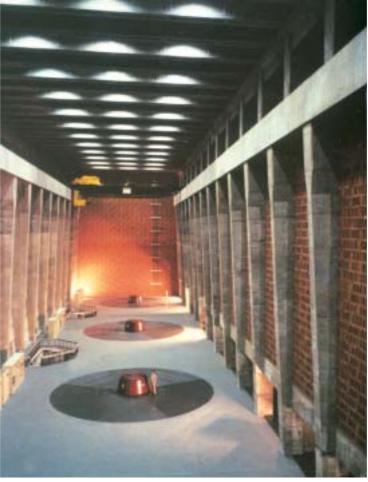
- action aimed at the consolidation of the understanding and the right of the UHE LAJEADO to locate itself in the Southeast submarket, which will have a favourable impact for the EDP Group;
- discussion of that part of the manageable gains by the concessionaire controllers discounted in the tariff adjustment period, known as factor X.

In the case of ESCELSA discussions were held about how much of these gains would be discounted from the tariff. Meetings with the regulatory body led to the fixing of an annual reduction of 1.89%, and the tariff readjustment for 2001/2002 of 19.89%, improving the company's results by 22.6 million reais in the period August 2001/August 2002;

· negotiation of the mechanisms for the recoupment of billing losses incurred by the electricity distributors and resulting from the electricity rationing still in force in Brazil. Electric power tariffs were increased for all the distributors affected by rationing with effect from 27<sup>th</sup> December 2001 by 2.9% for residential and rural customers and by 7.9% for the other customers. This increase will stay in force until the losses arising from rationing have been fully compensated, and is unrelated to any other tariff corrections which the distributors are

compensated, and is unrelated to any other tariff corrections which the distributors are entitled to annually. For a full recoupment, it is estimated that the above-mentioned readjustment will have to be maintained for at least 36 months;

in the same series of measures, portion of distributors' claims were recognised relating to the non-controllable costs which have not been passed on to tariffs in the past. It was decreed that all the figures for the period 1st January to 25th October 2001 will be recouped through the extension of the period the above-mentioned tariff remains in force. It is estimated that on average an additional 15 to 20 months will be needed. The values arrived at with effect from 26th October 2001 will be passed on automatically each year when setting the tariff readjustments for distributors.



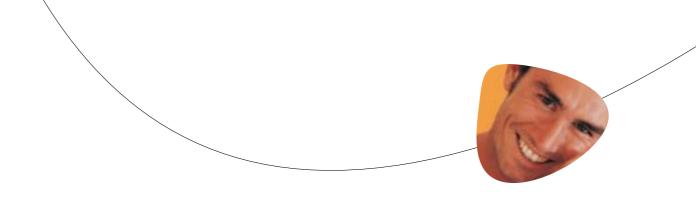
In addition, an optional financing line was created through the Banco Nacional de Desenvolvimento Económico e Social (BNDES - a national economic and social development bank), of up to 90% of the amount of the losses from rationing and to be made available from the end of January 2002. The financial costs of this line are added to the amounts to be recouped by the special tariff increase of 2.9% and 7.9%.

# Generation

UHE LAJEADO – The first generating unit of the LAJEADO hydroelectric power complex located in the

State of Tocantins, with a capacity of 180.5 MW, entered into operation 60 days before the scheduled date. This was particularly noteworthy due to the energy crisis being experienced by Brazil. From the start of its operation till 31st December, the power station generated 97 GWh, of which 26 GWh belong to EDP, corresponding to revenue of 1.3 million reais. Long-term electric power sales contracts (PPA's) were concluded with BANDEIRANTE for the portion of electric power destined for public service, and with ENERTRADE for the freely disposable energy portion. The management of the exposure risk to the Wholesale Energy Market is being undertaken by ENERTRADE.

When concluded in September 2002, the power station will have an installed capacity of 902.5 MW and will be of



great importance for covering the EDP Group's energy needs in Brazil. In order to complement the power station's financing, Banco Unibanco, S.A. was contracted to coordinate the issue of 250 million reais in simple debentures. The placing of these securities should take place during January 2002.

UTE FAFEN – The FAFEN thermoelectric power plant, installed in the Camaçari petrochemical complex, in the State of Bahia, is already functioning. Built in partnership with Petrobrás, the power station generates 26 MW driven by a gas turbine. In this phase the installed power is 54 MW, of which 22 MW must be delivered to the FAFEN fertiliser factory, in addition to steam.

Originally conceived to be a cogeneration power plant for supplying steam and electricity to the industries in the Camaçarí complex, changes had to be made to the project due to the difficulties in selling the steam. To safeguard the project's continuity, a study was made of the unit's amplification using the surplus steam in a condensation turbine, on the one hand, and enlargement through the installation of one more gas turbine and the closure of the combined cycle, on the other. With this proposal, we await the formalisation of the sale of electric energy to Petrobrás by means of a swap operation which will allow the project to attain the profitability level required for EDP's projects in Brazil.

Between September and December 2001, the power station generated a total of 33 GWh, sold on the Wholesale Energy Market, corresponding to an anticipated revenue of 18.9 million reais, to be effected when the Wholesale Energy Market resumes normal settlements.

UHE PEIXE ANGICAL - EDP was, together with the Rede Group, the winning bidder for the concession of a new hydroelectric power station on the Tocantins River, the UHE PEIXE ANGICAL. The total budgeted investment in the project is EUR 525.8 million (November 2001 values). For 2002, EDP anticipates investing some 115.2 million Reais.

The power station will have a capacity of 450 MW and should be completed in 2005.

UHE COUTO MAGALHÃES - On 30th November, ANEEL - the Brazilian electricity sector regulator - realised the last auction of the year of concessions for hydroelectric power stations. Once again in a consortium with the Rede Group, EDP won the bid for the Couto Magalhães hydro project, with an installed capacity of 150 MW and located on the border of the Mato Grosso and Goiás states. The project's total investment will be 269 million reais, with the construction work scheduled to start at the beginning of 2003. EDP's participation in this hydro development will be 49%.

#### Distribution

BANDEIRANTE ENERGIA – 2001 was marked by the demerger of BANDEIRANTE Energia, whose structure had already been defined in the Shareholders' Pre-Accord entered into between EDP and CPFL – Companhia Paulista de Força e Luz as regards the participation in the privatisation auction in 1998.

In the run-up period, of special note was the takeover bid for the minority interest in the company which, although realised in November 2000, enabled on the one hand the controlling shareholders to hold 96.48% of the total capital and, on the other, a dilution in the average acquisition price of the company, from 92.14 reais per thousand shares to 42.65 reais.

The demerger's approval in the terms sought by the controlling shareholders involved complex negotiations with the regulator. The company, whose single controlling shareholding is now EDP with 96.48% of total capital, will continue with its original name distributing energy in the concession area of Vale do Paraíba and Alto Tietê, totalling 28 municipalities serviced with more than 1.1 million customers in an area of 9.8 thousand km².

At the end of the year BANDEIRANTE had concluded the early repayment of its dollar-denominated debt through the exchange

of Brady Bonds, an operation that generated financial gains of USD 71.9 million and removed currency risk from the balance sheet. After this operation, BANDEIRANTE's debt-servicing costs now have a direct relationship with discounted revenue streams, thus averting a repetition of the last three years when currency depreciation had a strong negative impact on the Company's results.

CERJ – At CERJ, where EDP's stake in the capital is just 19%, the participation as chairman of the Board of Directors had as the main objective preserving EDP's decision-making power,

Internacional by the mutual investment fund (the Opportunity Fund) came into force. It covers 32,038,357 shares of Calibre Participações, S.A., representing 56.16% of its share capital and which corresponds to the same proportion of its voting rights. Under this usufruct, EDP is given the exclusive right to elect Calibre's management bodies and, consequently, exercise control over this company's management and its subsidiary IVEN, S.A..

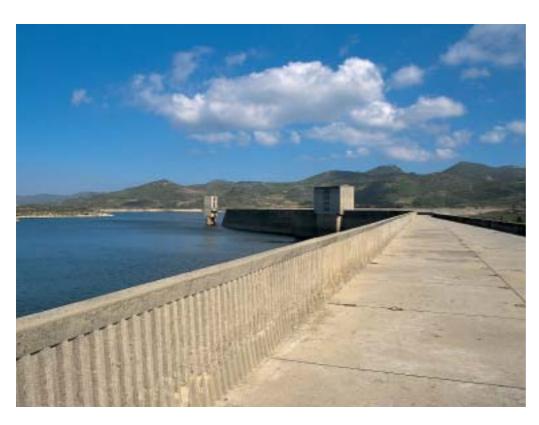
IVEN, S.A., together with GTD Participações, S.A., control Escelsa – Espírito Santo Centrais Elétricas, S.A., and Enersul –

> Empresa Energética do Mato Grosso do Sul, S.A..



ENERTRADE's implantation in 2001 marked EDP's participation in the recentlyformed electric-power trading market. Taking into consideration that its first year of activity was affected not only by all the Wholesale Energy Market's setbacks, but also by power rationing, the consolidated result was extremely positive. The initial objectives of protecting the EDP Group's electricity assets from market risk associated with the Wholesale Energy Market and taking advantage of opportunities from price difference arbitrage, were fully attained. ENERTRADE earned revenue

of 6.5 million reais in 2001 from its operations as a return on the investments made for their implementation, which were 2.4 million reais on the development of its operating model, installations and software, and 1 million reais for working capital.



while monitoring the management actions with the limits of the power laid down in the Shareholders' Agreement.

ESCELSA/ENERSUL – After due approval by ANEEL, the 25 year usufructuary contract constituted in favour of EDP



The trading mandate defined by EDP lays down as a first priority the reduction of market risk which, with liberalisation, all market agents now face, especially as regards the volatility of wholesale prices and the measured volumes of energy (produced or consumed). A secondary activity stipulated in ENERTRADE's mandate is the realisation of gains engendered by the maximisation of market opportunities.

Another highlight was the integration with other EDP Group companies, namely with ENERGEN and BANDEIRANTE. The joint work with ENERGEN meant that it was possible that the assessment of new projects could count upon the analysis of the market risks involved and respective measures for their limitation.

ENERTRADE unveiled the implantation of its internet portal in December. This constitutes not only an important communication channel with customers, but above all an efficient mechanism for trading energy.

#### Shared services

The introduction of Shared Services following the creation of ENERCORP will foster the attainment of synergies as a result of the greater integration of the affiliated distributors.

The project's development will be continued with special attention being paid to the creation of a structure that does not conflict with the specific legislation for regulated services, which govern the services provided by the Group's companies.

# Repayment of Bandeirante's debt

EDP, S.A., advocated the repayment of roughly 93% of Bandeirante Energia, S.A.'s US dollar-denominated debt amounting to USD 275.63 million, through the use of Brazilian external debt securities (Brady Bonds). These securities, which were used to increase EDP Brasil, S.A.'s capital, were handed over to the creditor, the Brazilian government, for the account and by order of Bandeirante Energia, S.A. for repayment of this debt.

The operation enabled the EDP Group to realise a financial gain (reflected in 2001 results) resulting from the repayment of the debt in dollars through the delivery for payment of securities acquired at a substantial discount relative to their nominal value. Simultaneously and equally important, of a foreign-currency denominated liability was eliminated from Bandeirante's balance sheet, thereby significantly reducing the currency risk that in recent years has prejudiced the EDP Group's consolidated results. Also as a result of this operation, Bandeirante is now indebted to EDP Brasil, S.A. in the amount of 472.9 million reais.

#### Investment in Brazil

The total capital expenditure outlaid in Brazil in 2001 was EUR 313 million, of which EUR 244 million was related to financial investments.

Financial investment had as its overriding objective pursuing the strategy mapped out for Brazil. The cornerstones of this strategy are reinforcing EDP's presence in generating activity and consolidating the positions previously acquired in distribution companies, notably with the securing of a majority position in ESCELSA's share capital.

The following table summarises the investments made in Brazil during 2001:

#### **Capital Expenditure** Brazil

		EUR thousand
	2001	2000
Operating capital expenditure	68,314	63,828
Bandeirante (1)	65,730	63,828
EDP Brasil	2,584	-
Financial investment	244,399	231,726
Electricity generation	34,311	25,703
Electricity distribution	210,088	206,023
Total capital expenditure in Brazil	312,713	295,554

(1) In 2000 Bandeirante was consolidated for balance sheet purposes using the proportional consolidation method.

# In the Iberian market

Since 1996 with the publication of the community directive 96/92 CE, the European Commission has been the driving force behind the energy sector's liberalisation, advocating the creation of a future single electricity market in the European Union.

However, in the near term the integration of the various electricity markets is encountering a host of physical and administrative barriers. Examples of this situation are the reduced electric interconnection capacity amongst the various European Union countries or the differing local regulations governing the electricity business. The outcome of this scenario is that in the initial phase we have seen the creation of various regional markets.

A patent example of a regional market is the Iberian Peninsula. Due to the poor interconnections between Spain and France, the Iberian Peninsula is virtually an island from the electricity perspective.

The EDP Group has understood for some time that its natural market would sooner or later be the Iberian market. It has also

realised at an early stage that there are competitive advantages to be drawn from establishing operations and assets of both sides of the border. This realisation gave birth in 1998 to the strategic partnership with the Spanish power utility lberdrola.

Midway through 2000, Iberdrola publicly announced its intention to merge with another operator in the same market, thereby putting paid to the partnership agreement entered into with the EDP Group.

After a period of analysis and conversation, EDP concluded a partnership alliance with a savings bank in Spain's Astúrias region and a key shareholder in Hidrocantábrico. On 25th January 2001, the two companies launched a joint takeover bid for Hidrocantábrico's shares.

As a result of this bid, Adysengival (the corporate vehicle formed in the meantime for the purpose of this operation) acquired 18% of Cantábrico.

After the Spanish authorities approved this operation, EDP and CajaAstur concluded a partnership agreement with EnBW (also a key shareholder of Hidrocantábrico) in terms of which it was stipulated that the EDP Group would guarantee a 40% stake in Hidrocantábrico's capital, as well as assuming responsibility for the company's operations, while the remainder of the capital was divided between EnBW (35%) and the CajaAstur Group (25%).

This new accord has already been approved by the European Union's competition authorities, while the formal aspects of the respective equity transactions will take place during 2002.

From the EDP Group's standpoint, the entry into Hidrocantábrico's capital represents not only a growth opportunity in a strategically important market, but also the control of a company in which the quality of its assets and management has been clearly demonstrated with the success attained in the recent liberalisation of the Spanish electricity sector.



#### **MULTI-UTILITY SERVICES**

The EDP Group has been pursuing a multi-utility services strategy ever since 2000 with the objective of reducing costs. These costs are associated with the processing of the commercial cycle of more than 5 million electricity customers and refer mainly to activities involving meter reading, the issue and collection of bills and commercial information systems.

The fulfilment of this strategy is only possible within the context of partnerships with other companies providing general consumption services (utilities), more specifically water and gas, with the aim of diluting the costs associated with the commercial activities by the customers of these three businesses. In this regard, the EDP Group has been seeking to establish and solidify partnerships by way of participation in the equity of gas and water companies.

The EDP Group's acquisition of an 11% stake in GALP Energia, in an operation realised in January 2000 and which involved the shareholder restructuring of the national gas and oil holding company, was already a clear step in this direction. With this acquisition, the EDP Group reinforced its shareholding in GALP Energia to 14.27%, which will not only boost the multi-services project, but also the development of projects in the area of electricity generation and cogeneration projects.

It is also with this goal in mind that the EDP Group's interest in strengthening its links with the water business must be seen, namely to the AdP – Águas de Portugal Group. Negotiations between the two business groups were held throughout 2001, with a partnership understanding having been reached at the end of the year.

All that is needed now is an understanding with AdP's main shareholder, IPE – Investimentos e Participações Empresariais, S.A., in order to conclude the operation for the EDP group's entry into Águas de Portugal's capital.



In 2001, multi-utility activity contributed some EUR 13 million to the EDP Group's revenue from services. This activity encompasses meter reading, billing and collection management services carried out for 300,000 gas customers and billing of more than 2,000,000 water services customers in more than one hundred Portuguese municipalities.

The EDP Group continues committed to pursuing this multi-utility strategy believing that it represents an excellent platform for reducing the costs associated with the commercial cycle. At the same time this will be very beneficial for customer convenience.

#### **TELECOMMUNICATIONS**

#### Strategy

ONI has stamped its presence in the Iberian market, standing out as the uncontested leader amongst the new operators, basing its performance on the fundamental pillars that guide its strategy:

- consolidation as leader amongst the new operators and as catalyst for effective market liberalisation;
- maintenance of its positioning as global operator in Portugal and focus on the business segment at Iberian level;
- continued efficacy in the pace of market conquest, paying special attention to the efficient use of resources;
- increased control of the network as a form of ensuring high standards of quality and reliability, with a more comprehensive portfolio of products and services;
- quest for permanent innovation, both in the approach to market needs and in the technological solutions required to satisfy them.

Ever since its constitution in 1998, ONI has been committed to creating its own space in a still highly regulated sector.

Leadership and innovation have been crucial factors behind ONI's growth, with significant milestones having been reached along the road, namely:

1999 First operator's licence for public telecommunications networks;

first licence for fixed telephony service provider;

2000 First alternative operator to offer direct-access telecommunications services using exclusively its own resources; first alternative operator to implement Virtual Private Networks Internet Protocol in Multiple Protocol Label Switching

2001 First alternative operator to offer a pre-selection service.

On the strategy front, 2001 was a fundamental year, in parallel with its strong affirmation on the Portuguese market, for starting the implementation of the Iberian option. In this connection, we highlight the following developments:

- reinforcement of ONI's shareholder structure following Brisa's entry into the capital of ONI SGPS through the incorporation of Brisatel, Brisa's telecommunications subsidiary;
- acquisition of 99.1% of Comunitel, a company focused on the Spanish business market and with a turnover in 2001of approximately EUR 76 million.

# Liberalisation and regulation of the Telecommunications sector in Portugal $\,$

2001 was an important year for the telecommunications sector in Portugal, progressing in a decisive manner to greater market openness and transparency. For the first time, the new operators made their presence felt and left an indelible mark in the fixed telecommunications market, with the incumbent operator having lost an estimated 8% and 10% of its fixed-line market share.

In this context, ONI stood out amongst the new operators, spearheading the market penetration process. By attaining revenue from telecommunications services of more than EUR 100 million in Portugal, ONI consolidated roughly 40% of the market share captured from Portugal Telecom (the incumbent operator), which surpassed the objectives delineated for the company's strategic plan.

This performance was achieved in a strongly regulated sector, as well as marked by factors that influenced the evolution of the new operators' activity. Liberalisation has progressed in a positive manner, although certain constraints still remain. However, the posture assumed by the ICP (now ANACOM, the communications authority) leaves a positive message as



regards the acceleration in the liberalising process, in concert with Community directives and with the will and aspirations of all the new sector players.

2001 was also supposed to be the start-up of third-generation mobile operations. However, owing to technical difficulties, namely as concerns terminal equipment, this process suffered a delay, not only in Portugal, but around the globe. Recent developments point to some of these constraints being overcome in 2002 that will herald a new stage in the evolution of the information society in Portugal, in which

ONI will consolidate its leading role amongst alternative operators in the Iberian market.

2001 was marked by the consolidation of the liberalisation process and by the development of new regulatory instruments for the sector. Of special note during the year was the liberalisation of indirect-access short-distance calls and the alteration to the model for internet interconnection.

Also noteworthy was the Government's intervention in the area of UMTS services, extending till the end of 2002 the deadline for operating start-up of the respective operators due to the delay in the availability of the terminal equipment. It also extended to 31st March the period for the compulsory sale of shareholdings in various operators and establishing a minimum period of 30 days between the sale of the interest held by OPTEP in Optimus and the commencement of ONI Way's activity.



In the period under review, ONI maintained a constructive role with the regulator, having participated actively in the liberalisation process through the submission of credible proposals and always with a view to boosting market transparency. However, and despite the intensive legislative and regulatory activity and the key role played by the ICP-ANACOM (Telecommunications sector regulator), it must be recognised that certain constraints of a legal and regulatory nature were not overcome, notably:

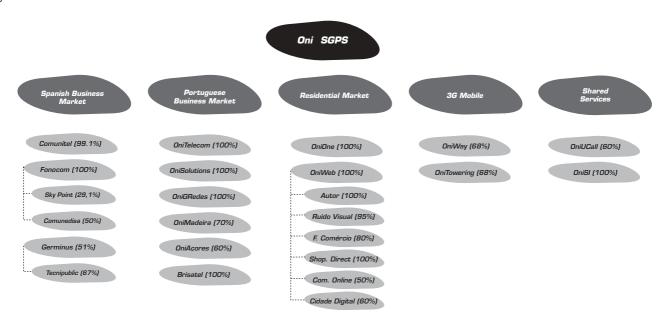
- interconnection tariffs well above European averages, with particular penalisation in the off-peak timetable and origination tariffs;
- significant limitations in the implementation of number portability, in particular due to the delays and lack of coordination on the part of the principal donor operator, which complicated the effective portability of numbers:

• important delays in the implementation of the local loop's unbundling (OLL), whereby one year after the date fixed for this purpose by European Union Regulations, loops have been transferred at only 3 pilot stations.

It is hoped that these factors will be re-appraised in 2002, given that in certain cases measures have already been announced in this connection.

## The EDP Group in Telecommunications: ONI

In overall terms, ONI represents some two dozen companies geared to operating in the Iberian market, with the following organisation:



This market definition allows ONI to adopt an approach that is simultaneously broad in geographic terms and focused from the standpoint of the specific needs of each macro segment. This organisation was created so as to permit the subdivision of the ONI Group's operations into four distinct areas: fixed network, mobile network, internet projects and support services.

In terms of the Group's operations, 2001 was a key year in ONI's development, with positive responses having been given to the majority of strategic and operational question marks which prevailed at the end of 2000 and the early stages of 2001.

ONI responded with commercial efficacy, capacity for technological and processing innovation, and the launching of its Iberia-wide project to the deceleration in internet expansion, the sluggish liberalisation process, doubts surrounding UMTS and the commercial difficulties felt by all operators due to the incumbent operator's dominant position.



The development of the network's own infrastructure, the cultivation of a wide corporate-sector customer base, the accession of hundreds of thousands of residential customers to the 1050 prefix, the Brisa's integration into the shareholder structure, the roaming agreement with TMN (major player in Portugal's mobile communications' market), are just some examples of ONI's ability to deliver, supported by an unmatched shareholder platform in the national market.

In summary, the following are ONI's key operating indicators:

Operating Indicators		2001	2000	∆%
Voice services				
Active customers	(thousand customers)	224	93	140.9%
Direct customers	(customers)	261	40	552.5%
Registered lines	(thousand lines)	651	295	120.7%
Voice traffic	(million minutes)	1,197	372	221.8%
Data services				
Direct customers	(customers)	1,649	913	80.6%
Access circuits	(circuits)	5,480	4.458	22.9%
Access band	(E1 equivalents)	1,026	654	56.9%
Internet traffic	(million minutes)	593	252	135.3%

Note: For purposes of comparison, the figures presented for 2000 and 2001 include 12 months of Comunitel's operations

#### Investment

Being present in a number of markets and segments which display different maturity phases, from the initial stage of the UMTS project through to the operating maturity of the carriers' segment, the investment function continued to be one of the drivers behind ONI's activity in both technical and financial terms, namely in Spain and in the mobile segment.

# Technical investments

The telecommunications services offered by ONI to the various segments are supported by a modern and integrated

infrastructure, embracing the basic functions of transmission, access, broad band commutation, narrow band commutation, private commutation systems, and technical support functions. The development of this telecommunications infrastructure is propelled by the following factors:

- adapting technological platforms to the services made available:
- geographic coverage of the product range, seeking to reach the target market areas and minimising the associated operating costs;
- maintenance of service quality indices, involving the reinforced capacity to support the growth in the volume and use of services;
- technological upgrading of the network's principal functions, namely in the quest for improved profitability and performance.

# Basic infrastructures

In terms of the development of basic infrastructures, 2001 was marked by two major facts:

- the integration of Brisatel's network, which added some 950 kms of high-quality fibre optic cable out of an approximate total of 90,000 kms of FO (fibre optics), and with 69 points of presence;
- the agreements for the exchange of capacity in Spain, with Comunitel serving as the pivot for a series of accords which permitted the financial leverage of the assets in national territory. The capacity resulting from these agreements will boost the Iberian business plan and enable ONI to gain control over some 8,000 kms of infrastructure in the Iberian Peninsula.

In addition to reinforcing the backbone, ONI continued to develop network infrastructures at the level of the MAN

(Metropolitan Area Network) and LAN (Local Area Network) and in several forms of direct access, namely FWA (Fixed Wireless Access), FITL (Fibre into the Loop) and OLL (Local Loop Supply), with total investments of around EUR 13 million.

#### Communications networks

ONI pursued its strategy of developing network infrastructures in terms of the various platforms: transmission, narrow band commutation, broad band commutation, access network (wireless FWA and FH – Hertzian Beam – and also wireline with FITL and LL – Local Loop) and technical support functions for operations, totalling around EUR 43 million.

In this area, of special note is the research currently under way into the economic feasibility of Powerline technology (utilisation of the low-voltage power lines for the transmission of voice, data and access to the internet).

In 2001, technological tests were conducted which culminated with the demonstrations held at the Electricity Museum and at ONI's head office, as well as the setting up of joint work groups with EDP for the project's development.

# Financial investments

The ONI Group's financial activity in 2001 amounted to EUR 538 million, of which around EUR 136 million did not represent cash flow since it involved accounting movements associated with the Group's reorganisation, and an additional amount of some EUR 81 million referring to capital increases in the mobile business not realised until 2001. Thus, 2001 cash flow associated with financial movement totalled around EUR 321 million.

The group's financial activity was centred on three cornerstones:

• The UMTS project: represented close to half of total financial investments to the extent that the holding company assumed,

directly and indirectly, close to EUR 231 million in the reinforcement of ONI Way's shareholders' equity. The mobile area absorbed around 44% of the group's total financial activity;

- The Iberian project: the acquisition of Comunitel and the increased stake in Germinus represented around EUR 79 million, the major portion of which was spent on the acquisition of the telecommunications operator;
- The Group's reorganisation: as referred to above, accounting
  movements represented around EUR 137 million associated
  with the ONI group's restructuring, namely due to the
  integration of ONI Telecom in the SGPS universe in the
  amount of EUR 113 million.

ONI SGPS reinforced its shareholders' equity in 2001 by some EUR 264 million, earmarked to support the holding company's financial activity, as well as compliance with the ratios associated with ONI Telecom's telecommunications operator's licence. For its part, the last-mentioned company reinforced its shareholders' equity by some EUR 90 million.

# **Human resources**

ONI recognises that the constitution of a highly motivated and specialised team is critical for ensuring operating success, constituting one of the more distinguishing strategic assets of a telecommunications operator's activity.

2001 was marked by the increase in the Group's workforce, propelled by two structural factors: the evolution of the mobile project and by the realisation of operations in Spain

The principal indicators present the following trend (it should be noted that the 2000 figures include Comunitel for comparative purposes):



#### **Human Resources** Telecommunications

	200	2001 2000		∆%	
	no. Employees	%	no. Employees	%	no. Employees
Distribution of employees:					
Geographic					
Portugal	1,110	65%	563	55%	97%
Spain	609	35%	456	45%	34%
By business					
Fixed	779	45%	591	58%	32%
Mobile	304	18%	14	1%	2,071%
Projects & Contents	409	24%	246	24%	66%
Support areas	227	13%	168	16%	35%
By career					
Marketing & Sales	395	23%	289	28%	37%
Technical	928	54%	472	46%	97%
Admin. Staff	396	23%	258	25%	53%
Total ONI					
Group employees	1,719		1.019		69%

Note: In 2000 the employees of Comunitel (Spain) have been taken into account.

The group's average age is about 30, while at academic qualification level, there is a relative stability, with the majority of employees being in possession of higher learning degrees.

#### **INFORMATION TECHNOLOGIES**

#### **EDINFOR**

Information Technologies (IT) constitute a very important sphere of economic activity, with EDP assuming a meaningful presence in this area owing to the fact that it is decisive for the appreciation in value of the Group's assets and business. Thus EDP, through EDINFOR Sistemas Informáticos, S.A., as the Group company dedicated to the

Information Technologies sector, has been honing its expertise in this domain.

## Strategy

EDINFOR is a wholly-owned EDP Group company. Its activity in 2001 was subordinated to the following strategy:

- Strong relationship with the EDP Group.
   EDINFOR has assumed the role of the EDP Group's expertise centre in the IT field. In this regard, it has supported the Group in all IT-related initiatives and fortified its relations with the Group companies, acquiring skills and means based on the EDP Group's industrial and service companies' requirements;
- Market leadership and skills development.
   EDINFOR is the national leader in the sector specialising in the provision of Systems Integration services. The company has been pursuing a strategy directed at one-stop-shopping, reuniting strong points and the resources capable of supplying complete solutions for the customers of target markets. Its main areas of intervention were: Systems Integration, Process and Applications Outsourcing, Information Technologies Infrastructures, Geo-referenced Systems, Graphic and Finishing Solutions and Complementary Processes. EDINFOR has focused its efforts primarily on large companies and complex organisations, in particular the Utilities, Industry, Telecommunications, Central and Local Public Administration, Banking, Insurance and Health segments.

Also worth highlighting are the provision of services to companies in the telecommunications sector, notably ONI, with whom it has been possible to develop a closer cooperation, cultivating the synergy arising from the affinity of the areas in which they operate.

In the expertise arena, the developments in SAP and processes for the Web are the most important growth areas for the company;

 Internationalisation
 EDINFOR has focused its internationalisation drive primarily on Brazil and Spain, supporting EDP's strategy in this arena, while taking advantage of opportunities in existing markets.

# **Acquisitions**

2001 was marked by the creation of the ACE Group, in which EDINFOR holds 60% of the capital. As part of the ACE's business consolidation, a number of acquisitions of companies in the final phase of specialisation were made. These companies operate in the following areas:

- Datawarehouse, following on from an existing partnership that made it possible to bolster expertise in this field;
- workflow and Document Management, an area not covered by ACE at the date of its formation, where the target company had a very interesting customer portfolio;
- development and integration of Microsoft products and solutions. This company already formed part of CASE's traditional business;
- consulting in the areas of strategy, technologies and information systems. The target company was created by a qualified group of consultants and operates in an area where ACE intends to reinforce its expertise.

It should be pointed out that these acquisitions formed part of a strategy of consolidation and acquisitions of the prime attributes needed to ensure an offer of complete quality based on the one-stop-shopping concept.

# Reorganisation

During 2001, EDINFOR carried out important reorganisation steps with a view to improving its market positioning and taking better advantage of existing strong qualities in the pursuance of a strategy which points to the probable constitution of a holding company. Accordingly, business

units were created from EDINFOR's existing divisions and organisational initiatives evolved with the object of putting into operation the ACE formation agreement, thereby assuming a more effective market posture.

The principal action in this domain encompassed:

- creation of the company IT-LOG, formed from a division already in existence, 100% owned by EDINFOR. This company's core business is consulting and the conception and building of Information Technologies infrastructures, as well as the selling of hardware and software;
- creation of a Call Centre/CRM unit devoted to the management and operation of Call Centre/CRM services.
   The conduct of this activity will be coordinated with the recently-formed U-CALL, the product of a partnership with ONI that is geared to the joint operation of Call Centre units:
- restructuring of the Board of Directors' Support Units, which has become necessary in order to respond to the new demands stemming from the company's pronounced growth and the strategic guidelines taken.

As regards the ACE companies, a series of important reorganisation measures were taken that became necessary in their first year of functioning and which are designed to permit a more rapid market affirmation as a key global supplier of services and solutions in the information technology and systems' areas. The chief aspects of the reorganisation procedures carried out were:

- implanting at ACE the best industry practices;
- growth through the creation of new companies or acquisitions, whenever these afford new projects and new knowledge in emerging business areas;
- consolidation in Portugal of the position as the number 1 service provider in this area;



• business development in other priority markets: Brazil, Spain and Portuguese-speaking Africa.

Still on the issue of the reorganisation of the ACE companies, of special note is the GO-ACE project which is still in progress and is essentially directed at:

- defining and implementing a new organisational model throughout the Group and applicable to the ACE companies;
- specifying the organisational procedures underlying the Organisation Model, to be instituted as common practice within the universe of the ACE companies;
- identifying and materialising business areas and product ranges by the various ACE companies;
- contributing to the implementation of the company ACE Gestão, staff of holding company ACE;
- launching and monitoring implementation projects at all the Group companies.

# **Principal activities**

# A) Activities for the EDP Group

During 2001, great importance continued to be attached to the intensive work carried out by EDINFOR on behalf of the EDP Group companies. Due to their strategic relevance for the Group and the amounts involved, special reference is made to the involvement in the SIAG (Integrated Management Support Systems) and SGCD/ISU (Commercial Management System for Distribution) projects which partially entered production during the course of 2001.

Within the ambit of these two major projects, EDINFOR's CPD (Data Processing Centre) was the chief protagonist behind the creation of the environments for both projects, lending support to the respective project teams. Besides defining the architecture, the CPD intervened actively in

the acquisition of the necessary equipment and software, as well as in the installation, configuration and implementation of the environments. With these equipment purchases, the CPD became at mainframe level the biggest Centre in Portugal, and in terms of computer support for SAP, the world's 99th biggest (18th at European level).

The implementation of the Geo-EDP by the S&IG division (Geo-referenced Systems and Information) was also an extremely important project. From the standpoint of EDP's Systems Master Plan, the Geo-EDP contributed to the new architecture for the Group's information systems in general, and to that of EDP Distribuição, in particular, guaranteeing the integration of the geo-referenced information management components with the new corporate systems, namely with the SAP platforms. Activities such as Planning, Projects and Construction, Dispatching and Maintenance are this Programme's prime target areas, endowing them with powerful instruments for supporting the optimisation of business processes. Examples of these are customer connections, resolution of breakdowns, management of service quality and information updating. This project, by satisfying the EDP Group's priority needs in terms of cartographic data, provides the country with large-scale mapping information, with a very positive repercussion for Portuguese municipalities.

The ACE companies participated in some high-profile projects for the EDP Group, amongst which a consultancy project and the implementation of the information system for the deregulated electric energy market on behalf of EDP Energia. Also noteworthy was the provision of consultancy services in Billing and Customer Care for ONI, as well as the participation in the selection and development of ONIWAY's BSS system (Business Support System).

In terms of support for IT services to the EDP Group companies, another highlight is the activity undertaken by the new company IT-LOG, which sold hardware and software to all the companies within the EDP universe, provided management

and maintenance services for the Group's information technology infrastructures, and executed large-scale and important projects for the EDP Group and ONI in the areas of infrastructures and applications development.

Finally, in the area of graphic solutions and finishing, EDINFOR's Finishing Centre was intensely involved in the computerised development of new publishing solutions for the Group companies, amongst which the SGCD/ISU project (for EDP and GDL – Lisbon Gas Company), mentioned earlier on account of their importance and complexity.

#### B) Activities outside the Group

In pursuance of initiatives adopted previously, the creation of ACE led to market share gains and greater visibility outside the confines of the EDP Group, above all at the level of the ACE companies. Amongst other projects, two carried out for the Social Security Services are highlighted:

- Financial Information System implementation of the SIF (Financial Information System) for adaptation to the Euro and POCISSSS (Official Chart of Accounts for Social Solidarity and Security System Institutions).
- Taxpayers' Management System implementation of a Taxpayers' Management System at the IGFSS (Social Security Financial Management Institute).
   Owing to its pioneering nature, another noteworthy project

Owing to its pioneering nature, another noteworthy project refers to the implementation by ACE of a SAP R/3 application at the INA (National Administration Institute). This was the first ever SAP R/3 solution installed at the Central Public Administration under the ASP regime (Application Service Provider) for the Public Administration's administrative and financial area.

Finally, the ACE companies also provided important maintenance services to the CTT (National Postal Services) for its SAP-run ERP (Enterprise Resource Planning) applications.

EDINFOR's CPD (Data Processing Centre) division also collaborated actively in the increased extra-Group business



turnover. This division was selected by the company POTABIL (a consortium between CASE/Edinfor and the Norwegian company Port-it) for the outsourcing of the ICP's (Instituto das Comunicações de Portugal, now ANACOM – the Portuguese communications authority) portability application for national operators, production of which commenced at the end of 2001. During the final quarter 2001, the CPD was also involved in the creation of the infrastructure for CASE/Edinfor's ASP SAP project.

In the year under review, EDINFOR's companies and divisions continued their important support activities and permanent upgrading of the commercial IT systems of a number of sanitation, water and gas companies and local authorities in various regions of the country.

In the area of Geo-referenced Systems, of special note was the increased collaboration with municipal authorities through the placing at their disposal of a global solution for urban management, encompassing cartographic data, specific applications, integration with the licensing system for private building works and functionality for public attendance outlets.

Finally, in the Graphics and Finishing area, EDINFOR also recorded a considerable increase in commercial links with the BCP Group in the wake of partnerships forged for the supply of



finishing services. In this context, this Group's finishing outsourcing has been undertaken by EDINFOR since 1st January 2001 following the transfer and integration of this activity at EDINFOR's Finishing Centre located in Sacavém. Copidata also made a meaningful effort to reduce its dependence on the computer-stationery market in line with the policy aimed at diversifying its product range and founded on the establishment of partnerships with external entities at production level.

#### C) Activities abroad

In Brazil, EDINFOR, Ltda., (often referred to as EDINFOR Brazil) completed its second year of operations, consolidating support in the area of information technologies to the principal shareholder, namely, providing services to EDP Brasil and Bandeirante Energia in the State of São Paulo. It also widened its operations to companies outside the EDP group and Utilities area. The principle highlights in this domain were the outsourcing projects for CPFL (Companhia Piratininga de Força e Luz) and TVCidade (TV cable network in Brazil), and in the geo-processing area the projects for Intelig (Telecom) and CERJ (Companhia de Electricidade do Rio de Janeiro).

With the above-mentioned expansion in activities, EDINFOR, Ltda. extended its operations to the States of Rio Grande do Sul, Minas Gerais, Rio de Janeiro, Baía, Sergipe, Pernambuco and Ceará. The company made important investments in its Data Centre with the object of improving its service and keeping pace with EDP's international strategy of stepping up its investments in Brazil, namely in ESCELSA and ENERSUL.

Still in Brazil, the company rendered services to SABESP which covered ERP, Customer Attendance and Services, Billing, Operation and Management of the Consumer Network.

In Spain and with reference to the telecommunications sector, of note was the implementation of management systems for PPS Quest prepaids on behalf of XFERA. In Morocco, the

chief assignments were other system implementations at MEDITEL (maintenance of the PPS prepaid system) and REDAL (implementation of the Commercial System for electricity, water and sanitation at the cities of Rabat and Salé). Finally, in Mozambique, the company was involved in a re-engineering process project and the implementation of the SAP/R3 system at the Banco de Moçambique (Mozambique's central bank).

## **CENTRAL-e**

2001 saw the effective start-up of forumb2b.com's business, with activity becoming more intense in the second half of the year.

In an economically unfavourable climate and with expectations surrounding the business-to-business market not materialising, even so Central-e was able to record a turnover of EUR 1,077.5 thousand.

Two important auctions were realised at forumb2b.com (dynamic prices solution): the reverse auction for Galp Energia covering a maintenance service for a crude oil tank at the Sines refinery (where the saving was 12% when compared with the normal process) and the auction for the purchase of portable computers for the CTT (National Postal Services), representing the first B2B purchase made by the CTT. This operation resulted in a major saving when compared with the previous acquisition of similar products and negotiating time with suppliers.

An electronic buying system was implemented at EDP and Galp Energia. The company also developed an employment portal for the Galp Energia Group in partnership with the consulting firm Cap Gemini Ernst & Young. 2001 was also the year in which the first community was implemented at forumb2b.com, dedicated to electronic business-to-business commerce between PME's (Small and Medium Enterprises), Forum Digital Commerce Market.

Insofar as the Public Administration sector is concerned, a

contract was signed between Central-e and the Secretary-General of the Ministry for Science and Technology covering the use of forumb2b.com's buying system.

As was the case in the previous year, 2001 saw large investments being made with the object of endowing forumb2b.com with a wide range of services and functionalities for adhering companies.

A national and international contents channel was made available on the Forumb2b.com portal in July 2001. This channel's primary mission is to provide companies sharing forumB2B.com's technological platform with newsworthy material, incorporating practical cases and national and international analyses that make a positive contribution to the understanding of the present state of business-to-business.

A partnership was forged with the Luís Simões Group for the transport area as part of the strategy of broadening the product range. This partnership enables companies using the Forumb2b.com transaction to contract transport services on-line, which in conjunction with the electronic commerce processes, complete the buying and selling cycle.

In this regard, forumB2B.com makes available the following applications: Analysis of purchases, suppliers' directory, electronic purchases, digital market, buying auctions, proposal requests, sales auctions, buying control panel, supplier performance.

# **DEVELOPMENT OF SHARED SERVICES PLATFORMS**

# Creation of sub-holding for the service companies

Work continued on reorganising the Group's structure so as to adapt it to the growth in the number of constituent companies and implanting greater demarcation of the different business areas. In this context, work started in the final part of the year on the creation of the sub-holding company for the EDP Group's service companies with a view to:

- coordinating all the companies and organic units with the principal object of providing transversal support to the entire Group, amongst which are MRH, Sāvida, SCS, EDP Serviços and EDP Imobiliária;
- centralising the support functions in the economic-financial, procurement (negotiation and purchases), logistics and human resources areas:
- freeing the holding company from the direct coordination of certain operating areas, facilitating the concentration on the Group's major strategic options;
- creating value founded on efficiency gains which this centralisation permits, as well as by the improved quality of inhouse services.

This gave rise to EDP Valor - Gestão Integrada de Serviços, S.A., whose implementation will be gradual, initially concentrating on serving a group of non-key companies. The project under way mobilised a significant number of employees and will make it possible that by the end of the first quarter of 2003, EDP Valor will also provide services to the Generating and Distribution companies. Amongst the priorities laid down for the new company in the near term is the attainment of substantial savings for the EDP Group through the centralised negotiation of non-specific general goods and services.

EDP Valor will therefore play a vital role in the improved efficiency programme that will allow EDP to successfully meet the challenges presented by market deregulation.

EDP Valor's evolution will be marked by the creation of a strong orientation to its internal customers, based on the clear definition of the clauses embodied in formal contracts and which envisage incentives for the improvement in the



quality of service rendered. The investment made in recent years in systems and communications places at the company's disposal a crucial lever for the standardisation of procedures and thus minimising the impact of geographic dispersion.

#### Training of human resources

During 2001, the EDP Group was very actively involved in vocational training directed not only at employees but also at third parties. Training embodied the "Development" aspect referred to in the Human Resources Policy on the one hand, and reinforcing the partnership relationship with suppliers and other interested parties on the other.

Similarly, important steps were taken during the year with respect to the development of the methods and resources allocated to training activity with the object that these are in a position to give a speedier and more adequate response to the needs stemming from the implementation of the Group's strategies.

Accordingly, there was a significant increase in the technical training of executor workers, with particular emphasis on the thematic area of distribution networks, including the maintenance of the intensive level of initial training directed at users, associated with the Navegador and Cliente Mais projects, of the SAP-run computer platform at the Group.

In parallel with these two main areas of training activity, courses were also held covering IT system users, Development of Management Efficiency, Preventaion and Safety, Foreign Languages, amongst others of a periodic nature or reduced scope. In global terms, training initiatives during the year represented more than 35,000 training days.

As a result of a candidacy submitted previously, part of this investment thrust was financed by the POEFDS (Operating Programme for Employment, Training and Social Development),

which contributed with more than EUR 1 million.

The provision of training or consultancy services to non-EDP Group customers also registered an appreciable increase of around 60%, not only keeping pace with the development of management systems and the qualification of EDP Distribuição suppliers, but also as a result of the policy of market expansion and diversification that has been pursued with the object of guaranteeing greater efficiency in the resources allocated to this activity.

In this domain the main highlights were the collaboration given under the protocol signed with the APIEE (Associação Portuguesa dos Industriais de Engenharia Eléctrica – the Portuguese Association of Electrical Engineering Industrialists), the initiatives directed at Empresa de Electricidade dos Açores (EDA – the Azores electricity utility), as well as those directed (via Internel) at REDAL (Morocco), CEM (Macau) and the Angolan Ministry for Energy and Water.

EDP continued to collaborate closely with CERTIEL (Associação Certificadora de Instalações Eléctricas, an association responsible for certifying electrical installations), in particular in work involving the conception of a new series of information and awareness seminars for installers, to be conducted in 2002.

In terms of resources, 2001 saw the reorganisation of MRH, the amplification and consolidation of its expertise base and its external recognition. In this domain, activity was centred on the approval by the IEFP (Employment and Vocational Training Institute), of two educational courses for training staff, MHR's accreditation by the ANEFA as promoter of a Skills Recognition, Validation and Certification Centre (CRVCC) in Seia, the certification of its quality management system according to standard NP EN ISO 9001:2000. In addition, a start was made to renewing its accreditation as a training entity by INOFOR for the entire training cycle, but this time also including distance learning.

Although all these developments are important for what they

represent, no less significant was the project for the setting up of the CRVCC in Seia, not only due to the impact this Centre may have on the requalification of a meaningful part of the Group's resources, but also because it extends the EDP Group's resources and know-how in the field of adult vocational training to a much larger population in this region of the country.

As for training methods and in response to the new circumstances surrounding the Group's activity, decisive advances were recorded in the use of e-learning.

Indeed, within the scope of the various partnerships forged, four new distance-learning products were produced with notable success and developed from a management platform for this type of training. In addition, two of the Group's companies with expertise in this field (MRH and ACE Bnet) were behind the candidacy for participation in a community R&D project for the conception and testing of an adaptive e-learning platform (Alfanet Project).

Still in the realm of innovation, MRH launched a project for the development of a methodology for evaluating the efficacy of training, the first pilot run of which took place at EDP Produção at the end of the year.

# Real estate management

During the year under review, EDP Imobiliária was involved in a series of initiatives aimed at enhancing the value of surplus properties and the vacation offices with a view to their disposal.

In the case of properties which have the characteristics and scale for transforming them into property developments, the result was a surface building capacity of more than 150,000  $\rm m^2$  earmarked for housing for the medium-high end of the market.

Land lots which do not possess these characteristics will be sold after upgrading, a process that involves the clarification of

the entities which are the registered owners of such properties and the gathering of information from the respective municipal councils and other market players of their present and future classification

The past year saw the sale of the Repeses township in Viseu, and of a plot of ground with an approved project in Peniche. These sales generated capital gains of more than EUR 2.3 million.

As regards office premises, the Group began construction of the Arregaça building in Coimbra, and drew up a PIP (Prior Information Plan) for the Cabo Ruivo site in Lisbon. These offices will allow for the concentration of various departments and the freeing of the most valuable dispersed premises.

A start was also made to remodelling work at the EDP Group's future head office at the Praça Marquês de Pombal, in downtown Lisbon.

As a consequence of the decrease in staff numbers and the rationalisation of occupied premises, the Rua Mouzinho da Silveira building in Lisbon was sold. During the current year the sale of a further three properties is envisaged, while simultaneously accommodating EDP Produção at a single Group building in Lisbon.

It is the Group's policy in this domain to reduce the number of properties, disposing of surplus premises and enhancing the value of land sites and buildings with a view to their subsequent disposal.

#### Health-care services

In 2001, Savida continued to provide medical and medicinal assistance to the entire universe of the EDP Group's employees. This service complements the National Health Service.

The policy of continued improvement in service quality, as well as personalised attendance, were goals that remained ever



present in 2001.

The policy of upgrading certain facilities was also pursued, with special reference to the recoupment works at the Bolhão Medical Centre in Oporto, and the new medical post in Sines, to be inaugurated shortly.

The staff complement rose from 121 at the end of the previous year to 147 owing to the transfer to SÃVIDA of personnel who, although they previously rendered services to the company, were legally employed by the companies engaged in the electricity business.

In the Work Medicine arena, the company continued to underwrite the provision of health services to all the Group's companies and, taking advantage of synergy without compromising its principal activity, provided services to 11 companies outside the EDP Group.

At EDP Group level a total of 7,800 examinations were conducted (periodic, admission and occasional), some 54 thousand complementary diagnosis exams, 64 training sessions on first aid and health education, 15 meetings with safety commissions and sub-commissions, as well as 146 visits to work sites.

The quotient between the number of medical exams performed and the average number of Group workers was situated at 68%. At the end of 2001 a start was made to the creation of SCS – Serviços Complementares de Saúde (Complementary Health Services), with a view to separating from SÃVIDA activities associated with medical acts that are not covered by the Protocol with the National Health Service, providing health care to users not covered by the ACT (Collective Employment Agreement) and to promote quality and flexibility in the management of the respective services.

# Computer systems

# New corporate systems

The year was basically marked by the entry into production of the essential components for the new SAP-run corporate systems. In

fact and continuing the implementation of the Systems Master Plan drawn up in 1998, with a view to renovating and adapting the applications to the changeover to the euro, the intensive preparatory work culminated in January with the entry into production (first wave companies) of the Navegador Project – SAP R/3 and, in November, with the entry into production of the Cliente Mais (Customer Plus) Project – SAP ISU-CCS.

Simultaneously with the development and production start-up of the new applications, the entire central processing, communications and local networks' infrastructure was profoundly strengthened, in tandem with the overhaul of user work posts in order to adapt to the new environments.

#### Computer security

Still on the guidelines contained in the Systems Master Plan, and with a view to establishing the mechanisms for improving the degree of information security and its back-up systems, a Computer Security Project for the EDP Group's systems was conducted. It covered all the processes in the information life cycle, including the back-up systems (processing, storage and communications). A number of new documents were approved encompassing Principles, Organisation and Computer Security Standards forming part of the Computer Security Manual.

Simultaneously with this project, initiatives were launched targeted at safeguarding the exposure of the new projects to the emerging risks. A security Manual for SAP environments was prepared setting out the security rules to be adopted during the project and operating phases. Intrusion tests relating to the EDP Group's internet platform were carried out, with positive results, prior to the production of EDP's most recent internet site features.

A Computer Security Monitoring Group was formed with the task of prescribing and coordinating the IT systems security procedures throughout the EDP Group.

# New Systems Master Plan (PDS)

Since the last PDS was drawn up three years ago, the EDP Group's economic surroundings, business and information

systems have evolved significantly, justifying the need to reappraise the guidelines and initiatives embodied therein.

The impact of the changes in the business environment and the investments made in information technologies was greater than anticipated, resulting in a far-reaching restructuring of the previous Systems Master Plan.

The intensive and in-depth analysis of the present situation, coupled with the strategic determining factors which map out the electricity sector's future, culminated in the drafting of the new 2001 Systems Master Plan.

This new version of the PDS had as catalysts:

- new market rules;
- customer retention:
- consolidation of investments;
- connectivity, including an inclination towards mobility;
- the internet era and the collapse of the dot.coms;
- reorientation of the investment in ERP-type applications to peripheral and collaborative applications (CRM, B2B, Supply Chain Management, Workflow, amongst others).

The new version of the PDS is geared towards the development of initiatives within the ambit of the various business areas and the organisation of computer-related processes, as well as in support technologies.

#### EDP's site and EDPonto

As part of the Human Resources Policy – to encourage the use of the intranet within the EDP Group – it was decided to congregate the various existing intranets under one single entry point – EDPonto – so as to consolidate the Group's image and culture.

Platforms were harmonised and the use of new technologies fostered with a view to improving staff productivity.

A new version of EDP's internet site was inaugurated, with additional features that boosted interactivity with our partners thus facilitating customer and supplier relations.

#### Corporate systems - SAP

2001 marked the realisation phase of the Navegador Project with the entry into operation of the new information systems at the first-wave companies (holding company, EDP Produção and all the service companies). The Implementation Plan delineated in 1999 was therefore realised as programmed, with the conclusion of the work for the preparatory phase of the project's second wave in January 2002.

The various corporate systems that made up the information technologies infrastructure, enveloped in a highly heterogeneous environment developed internally, was replaced by the SAP R/3 platform. This new application has put at the Group's disposal an extremely powerful management support tool that provides more consistent, real-time information, thereby adding value to the group and its companies.

The SAP R/3 system has now become the day-to-day tool for thousands of EDP Group employees. The following key areas are now supported by the SAP programme: Human Resources Management, Salary Processing, Financial and Cost Accounting, Materials Management, Fixed Asset Management, Treasury and Cash Flow Management, Unconnected Internal Sales, Investment Projects Management and Maintenance Works Management. The system incorporates a powerful data base that makes available management information, rationalises processes, simplifies circuits, reinforces the internal customer/supplier relationship, adds value in the execution of tasks, contributes to professional advancement and interconnects with other systems – GeoEDP and Cliente Mais (Customer Plus).

Innovation in communication systems involving interaction with SAP R/3, the intranet and Lotus Notes, associated with



Workflow processes, have translated themselves into a vanguard solution for dispensing with red tape, at the same time eliminating paper and reducing circuits.

The implementation of SAP R/3 was received with great enthusiasm, right from its initial specification phase launched in 1999 through to its final implementation.

The system's successful implementation can be attributed to the commitment, the high level of motivation, the decision power and the liaison between the various members of the team constituted for the purpose of managing the entire process. Other factors also contributed to the successful launch, such as the direct training given to the substantial part of the universe of users by the project team members themselves, as well as the technical and functional monitoring following the system's commissioning.

This management support platform will facilitate the adoption of the new management methods and models imposed by the new liberalised and competitive landscape.

# Fleet and Installations Management and Administrative Procurement

EDP Serviços (EDP Group company dedicated to activities involving fleet and premises management and administrative procurement) managed more than 50% of the Group's vehicles and hopes to cover the entire Group during the coming year.

In this area, it was possible to achieve reductions of more than 20% in vehicle maintenance and repair costs, fundamentally due to the results of negotiating maintenance and workshop contracts. It was also possible during the year, thanks to the major support of EDP Distribuição, to reduce the Group's motor fleet by some 5%.

In the real-estate management area, a number of services were provided to the Group and to REN. It is hoped in the coming year to extend real-estate management to EDP Distribuição and EDP Produção, at least in Lisbon, Oporto and Coimbra.

During the year work was carried out with a view to the centralisation and negotiation of several security, messenger and installation maintenance contracts.

The company continued to be responsible for the management of rental contracts, as well as for complementary services covering telecommunications, energy, water and equipment at various installations.

With the aid of an IT system acquired for this purpose, work continued on drawing up the detailed specifications of installations and respective occupational situation with a view to building an essential data base for the effective management of premises.

As regards administrative procurement, contracts were renegotiated on the Group's behalf with substantial economic benefits for the acquisition of vehicles and respective maintenance services, vehicle rentals, fuel, telecommunications, postal services, office equipment and consumables, travelling and accommodation.

This area assumed responsibility for managing the catalogue of the Group's routine consumption of goods and services, cutting the number of articles and implementing uniformisation, with particular emphasis on stationery materials.

Pursuing the development of the e-procurement project, The Group are implementing the use of the forumb2b.com portal for the acquisition of vehicles, stationery, travel and accommodation services.

# **OTHER SUPPORT ACTIVITIES**

## Research and development

The EDP Group's Research and Development (R&D) and technological innovation policy was the object of reorganisation during 2001, with the activities previously carried out by the Research and Development Office now being entrusted to Labelec, an EDP Group subsidiary company.

Under this new arrangement, attention was focused on optimising the Group's R&D potential so as to promote competitiveness, notably through new technological solutions and the development of the technical abilities of its qualified workforce.

During the past year, the Group participated in 20 R&D Projects (8 Community and 12 National), 7 of which were completed during 2001.

These projects cover a vast spectrum of technological sectors, with special reference to materials, information systems, telecommunications, automation and control, conventional electricity generation, renewable energies and the environment.

Of special note are the following areas of intervention:

- Conclusion of the development of the Telemetering Project via PLC (Power Line Carrier) and the installation of some units in a pilot area of Lisbon;
- Experimentation in the broadband transmission of information, supported in the Low Voltage Electricity Network – Digital
   Power Line (DPL) – a pilot project equipped with internet and telephony services;
- Promotion and dynamisation of candidacies for Community projects in new areas, namely; e-learning (Alfanet), microtrigeneration (µtrigen), decentralised generation, energy and domotic efficiency (SAVE II) and wave energy (SUBWAVE).

EDP was also represented at several organisation and international forums dedicated to the R&D area, namely:

- $\bullet \ \mathsf{EURELECTRIC} \mathsf{Working} \ \mathsf{Group} \ \mathsf{"Research} \ \& \ \mathsf{Development"};$
- AIE "Photovoltaic Power Systems Programme";
- EnerSearch.com reinforcing the sharing of experience and knowledge with other partners.

#### Laboratory activities

During the year under review, Labelec – the group company specialising in laboratory activities – continued to be involved in a considerable number of activities in the applied research and technological development fields, either independently or through participation in studies being conducted by the EDP Group and by other national and foreign entities.

Confirming the growth trend, service provided by Labelec rose appreciably during 2001 (around 30%), registering values of 25% for the Group and 43% for non-Group entities.

With the aim of complying with regulatory norms relating to the quality of energy supplied, Labelec intensified the provision of services in the area of quality monitoring and voltage wave continuity, with the object of detailing the parameters of service quality.

Labelec unveiled a new activity in the year under review: the reconditioning of Measurement Transformers.

For strategic reasons, the traditional manufacturer of this equipment ceased production and, consequently, the support for reconditioning of the devices in service (which are estimated to number around 9,500).

As it has the appropriate testing means and the diagnostic experience covering the state of the Measurement Transformers insulation, Labelec equipped itself to undertake the reconditioning work with the agreement and interest of the EDP Group companies.



#### THE EDP GROUP'S MANAGEMENT POLICIES

#### **HUMAN RESOURCES POLICY**

Since the EDP Group's strategy is strongly founded on its human resources, its human resources policy addresses three fundamental areas:

- "Vitalise" and "Renovate" the corporate culture;
- "Rejuvenate" the workforce;
- "Develop" individual skills and the Group's expertise.

This policy is underpinned by 33 measures covering the different aspects of the EDP Group's human resources management, to be put into operation with the assistance of an external consultant.

Work continued on the re-scaling of staffing requirements at the Group companies, as a result of which the staff complement situation by area of Group activity presented the following distribution at the end of the year:

#### **Number of employees** EDP Group

1999	2000	2001	∆%
11,430	10,532	10,861	3.1%
11,430	10,525	9,390	-10.8%
2,371	2,272	2,174	-4.3%
1,811	1,699	1,246	-26.7%
405	436	408	-6.4%
155	136	520	282.4%
9,030	8,221	7,178	-12.7%
29	33	38	15.2%
-	7	1,471	-
-	-	-	-
-	7	1,471	-
458	558	1,719	208.1%
637	915	1,551	69.5%
1,353	669	591	-11.7%
13,878	12,675	14,722	16.1%
	11,430 11,430 2,371 1,811 405 155 9,030 29 - - - 458 637 1,353	11,430         10,532           11,430         10,525           2,371         2,272           1,811         1,699           405         436           155         136           9,030         8,221           29         33           -         7           -         -           458         558           637         915           1,353         669	11,430         10,532         10,861           11,430         10,525         9,390           2,371         2,272         2,174           1,811         1,699         1,246           405         436         408           155         136         520           9,030         8,221         7,178           29         33         38           -         7         1,471           -         -         -           458         558         1,719           637         915         1,551           1,353         669         591

<sup>(1)</sup> In 2001 are included the employees of Non Binding Generation, Special Regime Generation and of the Generating Management companies (398 workers, which explains the sharp increase).

In order to meet these goals, it was necessary to resort to early retirements and mutual-agreed employment contract rescissions, while as regards rejuvenation, 184 new employees were admitted to the Group companies.

However, the age structure remains at the high end, with the average age being around 45, while the personnel profile is essentially male (81%).

As part of the human resources policy, the end of the year saw the staging of the "EDP Group Reunion with New Employees". This welcoming programme was divided up into three sessions and covered some 260 new Group employees recruited in 2000 and 2001.

During 3 days (one lecture hall presentation and two visits to the premises of EDP Produção and EDP Distribuição), these employees were afforded the opportunity to become better acquainted with the Group, its businesses, its technologies and its people.

The goals of this initiative were achieved, as evidenced by the level of satisfaction amongst the participants (97%) and which endorses one of the human resource policy's slogans "It's good to be a part of EDP!".

The HR module (SAP platform) was put into service at the Group's electrical sector companies, embracing the entire universe of current employees, as well as the administrative handling of all pensions-related processes.

A number of other modules dealing with Personnel Administration and Personnel Development were also implemented.

Another instrument of human resources policy launched on a trial basis was the Quiosque Interno Multimédia (QUIM – an inhouse multimedia kiosk). This interface between the SAP/HR module, hierarchies, employees and the Human Resources Departments speeds up the communications between these parties, making available on their personal computers

<sup>(2)</sup> In 2001, with the first consolidation of Bandeirante's accounts, the total number of its employees have been taken into account.

<sup>(3)</sup> In 2000 the employees of Comunitel have not been included because this company was acquired in 2001.

<sup>(4)</sup> Includes the current employees of overseas affiliated companies, members of the Board of Directors, in addition to the current employees at EDP, S.A.; EDP Águas; Valorágua; EDP Internacional; EDP Serviços; EDP Imobiliária; Săvida; MRH and Internel. In 1999 also includes REN employees.

(employees/management tiers) important information for consultation and/or action.

The company's approximation to universities was reinforced by way of direct contacts, with the EDP Group participating actively in a number of events organised by these institutions. EDP also adhered to the Trainee Programmes which allow final-year students and recent graduates in essentially the engineering and management fields to share knowledge and to experience working in a business environment.

Furthermore, as a manner of giving support to staff recruitment, the Group promoted the submission of candidacies via our home page on the internet and made available the respective Candidate Data Bases throughout the EDP Group.

#### **ENVIRONMENTAL POLICY**

The electricity sector companies play a fundamental role in the development of a sustainable society. From the very outset, through the reduction of the direct environmental impact of their own activities: but also in the aspects relating to the final use of electricity and the manner how this can contribute to improving environmental, economic and social performance.

The chief national and international concerns pertaining to the environment in 2001 continued to be centred on the themes directly relating to EDP's activities, the evolution of which the company continued to monitor closely.

The question of climate change merited special attention. There were significant developments in the field of international negotiations concerning the Kyoto Protocol. By the end of the year important agreements had been reached regarding the manner in which the Treaty would be put into operation.



The European Union assumed the intention to ratify the Protocol in 2002 and to introduce the community scheme for emissions trading with effect from 2005. Viewing this new fact as a business opportunity, EDP continued to acquire know-how in this domain through its participation in a new initiative promoted by EURELECTRIC in the area of emissions trading. At local level, and in conjunction with Pricewaterhouse Coopers, we took part in the exercise entitled "PGETS – Portuguese Greenhouse Gases & Energy Trading Simulation", simulating a national emissions market.

Also worth noting was the approval of the new Community Directives relating to the limitation of acid pollutant emissions. The relevant national regulations will force a revision of the National Emissions Reduction Programme, the initial work on which EDP participated at the end of the year in conjunction with other national operators of large combustion installations.

The Ministry of the Economy presented the E4 Programme at the end of the year – Energy Efficiency and Endogenous Energies, which institutes a new framework of driving measures



in the area of energy demand and the use of renewable energies, that EDP will take advantage of in order to inject a new dynamic to its action in these areas.

Also in 2001, the revision of the Tariff Regulations introduced new conditions for upgrading initiatives undertaken by regulated operators in the environmental field. In this regard, EDP submitted to the regulator a comprehensive proposal for the Demand Management Plan to be conducted by EDP Distribuição in the period 2002-2004.

At operating level, the company pursued a number of environmental protection and promotion actions that give concrete expression to the principles laid down in its Environmental Policy.

Under one of this policy's fundamental strategic cornerstones – the gradual implementation of Environmental Management Systems throughout the Group – the Sines thermoelectric power station was attributed its certification, thereby concluding the process involving the environmental certification of EDP's major thermal power-generating centres. With the assistance of HIDRORUMO, a start was made to extending the implementation of Environmental Management Systems to the hydroelectric generating facilities owned by HDN and HIDROCENEL.

With regard to Environmental Impact Assessment studies into projects currently under way, the Ministry for the Environment and Territorial Planning issued a favourable report on the Ribatejo Thermoelectric Power Station, while work continued on the preparation of the Comparative Environmental Impact Study of the Baixo Sabor and Alto Côa hydroelectric schemes.

#### **RISK MANAGEMENT POLICY**

#### Operating risk

The EDP Group's responsibilities towards society, the market and its stakeholders have led to the holding company's top

management becoming directly involved in monitoring the different risks and accident performance.

With a view to instituting an appropriate cost and risk-sharing management system, an international reinsurance company was formed in 1994 within the Group's universe – Energia RE – headquartered in Luxembourg (favoured European centre for this area of activity), enabling the EDP Group to obtain, amongst others, the following benefits:

- uniformisation of its insurance programme;
- direct access to the international reinsurance market;
- retention of part of the risk, through primary material damage, machinery breakdown and public liability policies;
- control and insurance cost stability.

This management instrument positioned the Group in the international reinsurance market on a par with the other reinsurance companies, thus reducing the Group's dependence on the market.

With the objective of obtaining specialised collaboration, the EDP Group receives the regular assistance of an international assistant, with the following principal goals:

- design, management and placing of insurance and reinsurance programmes;
- administration of the primary programmes placed at Energia RE;
- preparation of risk-management and prevention programmes in the engineering areas;
- claims management and monitoring of reinsurance inspection teams.

In 2001, a major awareness and risk control drive was embarked on through the promotion of the following initiatives:

- sharing and characterisation of insurance cover and claims at meetings with the management tiers of the Group companies;
- top management's involvement in monitoring the different risks and claims trends;
- widespread dissemination by the Group companies of an information and educational brochure concerning the different policies;
- high degree of implementation of the recommendations emanating from the technical audits realised at the industrial sites by international reinsurers;
- substantial level of capital expenditure on maintenance, with significant reflections on the safety of installations and availability level;
- significant capital expenditure channelled into environmental protection technologies and the quality certification of the industrial installations.

The EDP Group's insurance package covers the risks of all the business areas: generation, distribution, services, information technologies and telecommunications, as well as the risks of REN - Rede Eléctrica Nacional, S.A..

The EDP Group's insurance portfolio has the following composition and scope:

# Insurance policies which protect employees:

- Work accidents;
- Personal accidents;
- Employees seconded overseas;
- Temporary rentals;
- Directors' and managers' responsibilities.

# Insurance policies which protect assets:

- Property damage and machinery breakdown;
- Motor vehicle fleet.

#### Insurance policies which cover responsibilities to society:

- Public liability;
- Guarantee.

EDP's low claims level has allowed us to benefit, in the area of potential risk relating to property damage and machinery breakdown in the period 1999 to 2001, from a Long Term Agreement entered into between Energia RE and the reinsurance market. This agreement has made it possible not only to keep insurance premiums relatively low, but also to receive in 2002 a part of those paid in contractual terms. In 2001 the previous policy cover and excesses of the preceding year were maintained, as well as the rate corresponding to the premium paid to the insurance market and international reinsurer.

In relation to general public liability insurance, there was no change from 2000 to 2001, whilst with regard to the public liability of directors and managers, the insurance cover of 2000 was maintained, with the costs borne by the Group decreasing slightly.

Besides these insurance policies, which are the largest in terms of the capital involved, EDP maintained its motor vehicle fleet insured in 2001 on the same conditions as the preceding year.

As regards the insurance to protect employees (work and personal accidents), there were no changes in cover levels when compared with the previous year, but the EDP Group was able to obtain more favourable market terms in placing as a result of the low claims level of the recent past.

#### Financial risk

In the EDP Group's financial activity, risk essentially resides in the debt portfolio and consists of interest-rate and



currency risks and, to a more limited degree, counterparty default risk.

EDP manages interest-rate risk through the use of interest-rate derivative instruments. These operations have as their objective reducing financing charges and/or limiting the impact on finance charges of fluctuations in market interest rates. To this end, EDP has entered into swap operations converting fixed interest into variable rates, as well as some more structured operations incorporating caps. All the operations are realised over existing liabilities forming part of the Group's debt portfolio and constitute a perfect hedge in that they provide a match between the payment/receipt dates of the hedging operation and the underlying debt, taking into consideration its capital repayment profile.

At the present time, the EDP Group's exposure to currency risk in terms of debt results from the consolidation of the Brazilian companies that have foreign-currency denominated borrowings, namely American dollars, bearing in mind that the total debt contracted by the holding company is denominated in Euros. EDP follows attentively the trend in the BRL/USD and USD/EUR exchange rates and seeks to identify ways of hedging/mitigating the impact of currency variations on the finance charges of these companies and, consequently, on their consolidated results via derivatives or debt restructuring.

In terms of counterpart risk, in its negotiation and contracting of all financial operations (debt or derivatives) EDP takes into consideration the technical capacity, competitiveness, credit rating, as well as EDP's exposure to the entity concerned with a view to avoiding concentrations of counterparty risk.

Another risk that has recently gained greater relevance is documentation risk, and in this respect EDP has adopted market standards whenever possible. In this connection, all derivative operations are contracted in accordance with ISDA MASTER AGREEMENTS, while bond

issues are issued via its Programme for the Issuance of Debt Instruments.

Finally it's worth to point out that all derivative operations require Board of Directors approval, which lays down the operation's parameters so that it may be executed under the most favourable market conditions. EDP's policy is to enter into derivative operations solely for hedging purposes, while any speculative operations are totally barred. The operations are monitored during their maturity term and periodically their efficacy evaluated in the continuing pursuance of control and risk-cover objectives, as well as the market value of the instruments contracted so as to support decisions concerning the continuity or alterations to operations realised.

#### **FINANCIAL POLICY**

The EDP Group's finance function played an important role during the course of 2001 in supporting the implementation of the strategies defined by the Group, namely, in the reinforcement of its position in its domestic market (Iberian Peninsula), through the acquisition of Hidrocantábrico, and in the consolidation of its internationalisation policy with special focus on the Group's position in the Brazilian market.

At the end of the year under review, the Group's consolidated debt totalled EUR 5,799 million, of which EUR 4,796 million (not including bank overdrafts of EUR 72 million) corresponds to debt contracted by the holding company. The Group maintains its policy of centralising the contracting of interest-bearing debt at the holding company, except in those cases where the company is not wholly owned by the Group or their geographic location does not allow this, as is the case with the Brazilian companies. Of the debt contracted by the Group companies, of special note was the EUR 261 million relating to Adygesinval, the corporate vehicle for the acquisition of Hidrocantábrico, EUR 217 million relating to ONI and EUR 115 million relating to Bandeirante. These operations were

the principal factors explaining the EDP Group's 15.7% growth in debt.

Presently, EDP, S.A.'s debt portfolio from the standpoint of medium and long term borrowings, is composed 60% by bond loans, with the balance comprising bank and European Investment Bank loans.

EDP continued to pursue the policy embarked on two years ago of extending the average maturity period of EDP's debt portfolio. In this arena during the year and following the review and stepping up of EDP, S.A.'s and EDP Finance B.V.'s Euro Medium Term Notes Programme for EUR 5,000 million, the second 10-year international bond issue was floated under the programme totalling EUR 1,000 million with a coupon of 5.875%. In terms of this programme and via EDP Finance B.V. three private placements were executed totalling approximately EUR 100 million with maturities of three, five and seven years, thereby flattening the EDP Group's debt maturity curve.

In medium-term financing EDP effected the partial repayment of the 22<sup>nd</sup> (EUR 48 million), 23<sup>rd</sup> (EUR 139 million) and 24<sup>th</sup> (EUR 236 million) bond issues as a result of the exercise of the put option by bondholders set into motion by the reduction of the Portuguese State's participation in EDP's share capital.

On the short-term finance front, a Euro Commercial Paper programme amounting to EUR 1,000 million, was attributed the highest rating by the international agencies Moody's (P1) and Standard & Poor's (A1+). This new short-term funding instrument affords the EDP Group greater flexibility at extremely competitive cost. This market allows the Group to broaden its universe of creditors and boost its exposure to international investors.

Complementing the above Euro Commercial Paper, a EUR 750 million revolving syndicated credit line was contracted. This line's syndication attracted great interest on the part of banking entities, with demand exceeding the operation amount by 80%.

At the end of the year, EDP, S.A. had at its disposal contracted and undrawn credit lines of EUR 1,060 million and unused commercial paper facilities of EUR 1,495 million, of which EUR 200 million was contracted in 2001 with Banco Santander de Negócios, as Agent and Underwriter.

Turning to the question of managing interest rate attaching to EDP, S.A.'s debt portfolio and in order to benefit from the decline in interest rates, EDP entered into some interest rate swap operations, paying variable rate and receiving fixed rate. This enabled the company to reduce the finance charges on certain liabilities, namely in the international bond coupon of 5.875%. With these derivative operations and the downward movement in interest rates, the average interest rate on EDP, S.A.'s financial debt at the end of 2001 stood at 3.70% (4.65% at the close of 2000), with no major change taking place between fixed and variable rate.

The EDP Group's debt is denominated in euros, with the exception of the debt contracted by the Brazilian companies, whose borrowings are in American dollars and reais.

Of the operations realised during the past year by the companies in which EDP, S.A. has invested, of special note is the issue of debentures totalling 250 million reais by Investco (11% held by EDP).

With the object of reducing currency risk on the EDP Group's debt associated with Bandeirante, a repurchase operation was transacted involving Brady Bonds which mirrored this company's debt to the Brazilian Treasury. For this purpose, some USD 274 million worth of securities were bought on the international markets at an average discount of 25%. These securities were subsequently transferred to Bandeirante, which in turn handed them over to the Secretary of the Brazilian National Treasury. In this manner it was possible to eliminate some 93% of Bandeirante's dollar debt. At the same time, this operation produced a significant financial gain for the EDP Group, equal to the difference between the nominal and market values of these securities.



With regard to medium and long-term ratings, S&P lowered its long-term to AA- with Negative Outlook, while Moody's placed EDP's Aa3 rating on observation pending possible downgrade, at the time of the announcement of the signing of the Hidrocantábrico Shareholders Agreement. This agreement signified the conclusion of the transaction and defined the parameters for the respective shareholders' capital contributions, entailing a future increase in the volume of the EDP Group's assets and liabilities equivalent to EDP's investment in Hidrocantábrico.

At the end of the year, the EDP Group continued to display a strong capacity to comply with its financial obligations and a solid balance sheet structure which is reflected in the financial ratios, such as EBITDA/finance charges with a value of 5.46 and the capital structure (Debt to Capital ratio) which attained 91.51% in 2001, placing EDP on a par with European electricity companies with the best credit risk.

#### **INTERNAL AUDIT**

During 2001, internal audit activity was profoundly marked by an internal process of reflection of its role and modus operandi within the EDP Group, during which a broad poll was conducted involving the company's entire macro-structure. The overriding objective of this exercise was the formulation of the major guidelines for a more effective internal audit tailored to the organisation's needs.

This process led to the establishment of an internal audit vision centred on risk and the work plan for 2002. The latter's fundamental goal is the implementation of an organisational model for functioning that is consistent with this vision and with the other guidelines adopted and capable of responding effectively to the Group's present and future needs.

Current internal audit activity, in line with previous years, focused on audits aimed at assessing the adequacy of control

systems and operational conformity and the integrity of the information associated with various transversal processes involving the Group companies, with special incidence on those operating in the electricity and telecommunications sectors and at certain service companies.

#### **PREVENTION AND SAFETY AT WORK**

Adhering to the commitments expressed in the Safety Policy Declaration, EDP is resolute in continuously improving safety and quality standards, underpinned by a strong leadership and by an undertaking with practical goals for progress. Moreover, EDP believes that the management of safety, hygiene and health at work form an integral part of its activities.

With this objective, a host of initiatives were evolved in 2001 that will be pursued and extended in 2002 with the aim of preventing work accidents – not only amongst Group employees but also subcontractors – the protection of installations and property and the minimisation of risks for third parties arising from the Group's normal activities.

The following warrant special mention:

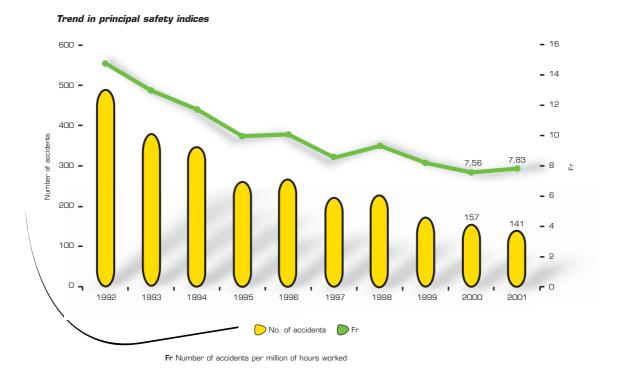
- The revision of the Safety Manual procedures with a view to the implementation of a Work Safety, Hygiene and Health Management System based on the structure of Standard Norma NP 4397:2001 (OSHAS 18001), directed at creating the conditions for safety certification at the companies;
- Approval of the Distribution Network's Consignment
  Regulations which came into effect in July 2001, and the
  ensuing training and information sessions for EDP Distribuição
  workers and for Subcontractors;
- Increased involvement with service providers (subcontractors) for the purpose of adapting their

organisation and work methods at sites to the European Directive covering temporary or mobile worksites and to compliance with Safety and Health Plans;

• EDP's decision to adhere to the Safety Passport, a certificate which allows service providers to demonstrate that their workers have acquired skills in the areas most prone to work accidents and the respective prevention and protection measures.

It is also with satisfaction that is highlighted the fact that EDP was distinguished with 2<sup>nd</sup> place in the award "Henrique Salgado Risk Prevention and Management 2001", promoted by Companhia de Seguros Tranquilidade, with a presentation addressing "Safety at Work Risk Characterisation Plan" and the system of "Internal Safety Audits" as essential elements of the Safety Management System.

As regards the results measured by the usual indicators, and notwithstanding the fact that the number of accidents at work fell by around 10%, the frequency and gravity indices remained more or less at the same level as the previous year.





# ECONOMIC AND FINANCIAL REVIEW OF THE EDP GROUP

# **EDP GROUP**

# **B**alance sheet and income statement

# Balance Sheet

Sulante Sheet		EUR million
	2001	2000
Assets	16,233	14,887
Intangible and tangible fixed assets (net)	10,980	10,347
Financial investments (net)	3,023	2,729
Medium/long term accounts receivable	103	104
Current assets (net)	1,386	1,117
Accruals and deferrals	741	590
Shareholders' funds + Liabilities	16,233	14,887
Provisions for risks and contingencies	831	708
Hydraulicity Correction	388	366
Interest-bearing debt	5,799	5,012
Other liabilities	1,140	892
Accruals and deferrals	1,737	1,667
Shareholders' funds	6,097	6,205
Minority shareholders' interests	241	37

# Income Statement

EUR thousand

				EUR thousand	
	2001	2000	2000 pro forma*	∴% 2001/2002 pro forma*	
Operating revenue	5,948.2	4,125.7	4,627.5	28.5%	
Sales and services provided	5,650.4	3,846.5	4,388.9	28.7%	
Own work capitalised	232.5	229.1	224.5	3.6%	
Supplementary revenue	40.0	7.9	7.5	433.8%	
Other operating revenue	25.3	42.2	6.6	285.0%	
Operating costs	5,274.7	3,401.4	3,951.4	33.5%	
Cots of inventories sold and consumed	3,079.7	1,731.0	2,335.1	31.9%	
Outside supplies and services	651.2	368.5	363.6	79.1%	
Personnel costs	592.0	439,3	425.9	39.0%	
Depreciation and amortisation	664.7	613.6	579.9	14.6%	
Provisions	116.0	105.1	103.7	11.8%	
Concession and power-generating centre rentals	149.1	132.6	132.6	12.4%	
Other operating costs	22.0	11.2	10.6	107.7%	
Operating income	673.5	724.4	676.1	-0.4%	
Financial income	384.0	229.1	264.3	45.3%	
Financial costs	589.3	403.9	404.7	45.6%	
Net financial items	-205.3	-174.8	-140.5	46.2%	
Extraordinary income	186.6	302.5	299.1	-37.6%	
Extraordinary costs	60.6	13.7	10.8	462.5%	
Net extraordinary items	126.0	288.8	288.3	-56.3%	
Income before taxation	594.2	838.4	824.0	-27.9%	
Corporate income tax	203.0	312.6	298.2	-31.9%	
Minority shareholders' interests	-59.6	-23.3	-23.2	156.2%	
Net income	450.8	549.0	549.0	-17.9%	

<sup>\*</sup> EDP Group excluding REN



# Operating income

The EDP Group's consolidated operating income for 2001 was EUR 673.5 million, down 0.4% on the 2000 pro forma figure.

This result reflects the alteration to the universe of consolidated subsidiaries' 2001 financial statements, which on the one hand does not include REN (partially sold in June 2000) and, on the other, includes Bandeirante Energia (which did not fall within the consolidation perimeter in 2000).

#### Operating Income by Business

		E	UR thousand
	2001	2000	△%
EDP Produção	516,266	508,689	1.5%
EDP Distribuição	191,239	215,976	-11.5%
EDP Energia	4,158	997	317.2%
Telecommunications	-136,131	-80,171	-69.8%
Information technologies	31,129	16,635	87.1%
Bandeirante	64,610	-	-
Other	2,260	14,005	-94.7%
Total pro forma	673,532	676,131	-0.4%
REN	-	48,234	-
Accounting total	673,532	724,365	-7.0%

Taking into consideration the EDP Group's pro forma accounts (corrected for the exclusion of REN's operating income in 2000), the Group's comparable operating income presents a decrease of 0.4% relative to 2000.

In the electricity generation business, the hydrological conditions observed during the year (with the hydroelectric capability factor rising from 1.08 in 2000 to 1.19), permitted hydro generation to increase its weight when compared with the generating mix recorded in 2000. EDP

Produção's operating revenues grew 8.1%, reflecting essentially the expansion in the variable portion (portion that remunerates generating costs) of the power purchase agreements (PPA) stemming from the greater recourse to thermal generation during 2001.

Turning to the distribution business, the decline in operating income in 2001 was principally due to the reduction in the regulated tariff for electricity distribution fixed by the ERSE (sector regulator) for 2001. EDP Distribuição's operating performance reflects the impact of a significant rise in the cost of electricity purchases from REN due to the increase in the energy and power tariff – an effect that was not compensated by the 1.2% increase in the average sales tariff to final customers.

EDP Distribuição's operating income was also negatively influenced by the higher costs induced by the greater level of repair and maintenance expenditure.

As concerns telecommunications, there was also a marked deterioration in operating income. However, these results are in line with business plan projections.

In the information technologies domain, the increase in operating income is linked to the inclusion of CASE in the Edinfor Group.

## Net interest and financial expense

Net financial items of EUR 205.3 million posted a negative variation of 17.4%.

The chief reason for this deterioration was the rise in financing interest (due to the increase in debt and higher interest rates). Despite the real's steep depreciation against the dollar (-19%) during 2001, the amount of unfavourable foreign exchange differences fell in 2001 as a result of the reduction in Bandeirante's exposure to the dollar that was accomplished at the end of the year.

#### Financial Income Statement

			EUR thousand
	2001	2000	∆%
Interest paid / received	-235,257	-198,269	18.7%
Gains in Group and associated			
companies	11,620	41,792	-72.2%
Net foreign exchange differences	-1,345	-1,894	-29.0%
Income from investments	16,831	23,077	-27.1%
<mark>Amortisatio</mark> n of Ace Holding			
S.G.P.S. goodwill	-4,407		
Amortisation of Bandeirante		-	-
goodwill	-12,839	-11,084	15.8%
Amortisation of Iven goodwill	-18,414	-18,414	0.0%
Amortisation of Optep goodwill	-8,509	-10,589	-19.6%
Amortisation of Comunitel goodwill	-5,522	-	-
Capital gains on Brady Bonds	86,196	-	-
Other	-33,687	553	-6.191.6%
	-205,333	-174,828	17.4%

The deterior ation in the balance interest paid/received of some EUR 37.0 million is due primarily to two factors:

- the broadening of the base on which interest is borne due to the increase in the EDP Group's total debt due to the new investments, the consolidation of Bandeirante's debt and ONI's higher debt;
- the increase in finance charges associated with the debt of the holding company (EDP, where 75% of the Group's total debt is concentrated) as a consequence of the EDP, S.A.'s increased borrowings. The average annual interest rate in this period was 4.35% compared with 4.24% in 2000.

Net interest and financial expense benefited by around EUR 86.2 million from the early repayment of Bandeirante's dollar-denominated debt through the acquisition of Brady Bonds at a significant discount to their nominal value.

The following table presents the contribution of group and associated companies to the EDP Group's net income in 2001:

#### Impact on financial income

		EUR thousand
	Capital held	2001
CEM	22%	5,681
IVEN (Escelsa/Enersul)	73%	-13,485
REN	30%	13,356
Other		6,068
Total (*)		11,620

<sup>(\*)</sup> CERJ does not appear because it is in the process of being sold.

# Interest-bearing debt

At the end of 2001, the EDP Group's total interest-bearing debt stood at EUR 5,799 million, 15.7% more than in 2000. Of this figure, EUR 115 million refers to Bandeirante's debt (debt now consolidated in the holding company) and EUR 424 million to ONI's debt.

In 2001, the debt contracted directly by EDP, S.A. rose 12% to EUR 4,796 million (not including bank overdraft facilities of EUR 72 million) representing around 83% of the EDP Group's total interest-bearing debt.

#### Interest-bearing debt EDP Group

		EUR thousand
	2001	2000
Debt - medium / long term		
Non-convertible bond loans	2,361,355	1,807,810
Bank loans	1,679,244	1,380,524
Other loans	14,181	16,947
	4,054,779	3,205,281
Debt - short term		
Non-convertible bond loans	23,385	134,160
Bank loans	1,720,959	1,672,927
	1,744,344	1,807,087
Total EDP Group	5,799,124	5,012,368



## Net extraordinary income

At the end of 2001, the EDP Group's financial statements disclosed net extraordinary income and gains of EUR 126.0 million, a decrease of approximately 56.3%. It should be pointed out, however, that net extraordinary items in 2000 included a capital gain of EUR 197.5 million relating to the sale of 27.5% of Oni.

Insofar as extraordinary income is concerned, the two main components are the surplus associated with the Hydraulicity Correction and the depreciation set-off on subsidised fixed assets.

The extraordinary income (surplus) associated with the Hydraulicity Correction totalled EUR 47.5 million in 2001. This result is due to a surplus on this account relative to the reference level specified to compensate for the effects of hydrological variations.

The favourable hydraulicity conditions enabled the fund to be restored to the required reference level and still generate the above surplus, which by law is attributed to the EDP Group.

#### Hidraulicity

EUR thousand

Opening balance	Transfer	r to the Hydraulicity Account EDP Extraordinary Closing		Closing balance	
(31 Dez 2000)	2001	Financial cost	income	(31 Dez 2001)	
365.521	1.425	20.560	47.466	387,506	

The set-off of depreciation on subsidised fixed assets totalled EUR 63.9 million; this recurrent extraordinary income refers to the financial contributions received which, in turn, are linked to the capital expenditure incurred by the Group in the past.

#### Total capital expenditure

#### Operating capital expenditure

#### Operating Capital Expenditure

Uperating Capital Expenditure			EUR thousand
	2001	2000	△%
EDP Produção	140,354	98,413	42.6%
Binding - CPPE	52,345	48,433	8.1%
TER	58,662	3,701	1485.0%
HDN and Hidrocenel	5,491	8,399	-34.6%
Wind-powered - Enernova	6,953	11,368	-38.8%
EDP Cogeração	14,532	25,459	-42.9%
Engineering and O&M	2,371	1,053	125.2%
Transmission (1)	-	15,079	-
EDP Distribuição	265,874	237,192	12.1%
High/Medium voltage	82,765	66,965	23.6%
Low voltage	125,569	115,050	9.1%
Public illumination	16,890	11,513	46.7%
Other	40,650	43,664	-6.9%
Commercialisation (EDP Energia)	1,102	2,070	-46.8%
Electricity - Portugal	407,330	352,753	15.5%
Bandeirante (2)	65,730	63,828	3.0%
EDP Brasil	2,584	-	-
Electricity - Brazil	68,314	63,828	7.0%
Telecommunications	239,019	219,601	8.8%
Information technologies	70,977	29,998	136.6%
Other	29,529	33,040	-10.6%
Total operating capital expenditure	815,169	699,220	16.6%

Note: The figures include the participation of minority shareholders.

(1) Only takes into account capital expenditure undertaken in the 1st half of 2000, due to the fact that following the sale of 70% of the shareholding in REN to the State, this company's operations ceased to be consolidated.

(2) In 2000 Bandeirante was only consolidated for balance sheet purposes using the proportional consolidation method.

There are three factors which explain the 16.6% rise in operating capital expenditure.

In the first place, capital expenditure on the core business in Portugal grew 15.5%. In the generation business, the increase is attributable to the start of construction work on the new combined-cycle power station belonging to TER – Termoeléctrica do Ribatejo. As concerns the distribution business, the higher

expenditure is due to the increased number of substations, the expansion of the public lighting network and an improvement in meters and accessories.

The second factor explaining the above-mentioned growth stems from the introduction of Bandeirante's operating capital expenditure in 2001 in the amount of EUR 65.7 million.

Of the Edinfor Group's capital expenditure, some EUR 60 million was absorbed by information systems, while EUR 10 million is the result of ACE's capital expenditure of an operational nature.

#### Financial investment

#### Financial Investment

		EUR thousand
	2001	2000
Generation	226	0
Distribution	-	-
Internationalisation - Brazil	244,399	231,727
Hidrocantábrico	262,388	-
Telecommunications (1)	69,554	130,690
Information technologies	2,913	66,146
Sub-total Sub-total	579,480	428,563
BCP	-	502,918
Galp Energia	-	317,974
EDA - Electricidade dos Açores	813	5,726
Internationalisation - Other markets	7,527	72,500
Other	-	219,182
Total financial investment	587,820	1,546,863

<sup>[1]</sup> Notwithstanding the fact that the EDP Group controls just 56.03% of ONI, 100% of financial investments in telecommunications has been taken into account since ONI is consolidated using the full consolidation method.

In the internationalisation arena and in line with the strategy mapped out, EDP's financial investment was concentrated in Brazil. This expenditure had two main objectives: on the one hand, reinforcing the Group's presence in electricity generation (EUR 34.3 million); on the other, the consolidation of positions previously acquired in electricity distribution companies (EUR 210 million), namely with the securing of a majority position in the capital of Escelsa.

An important percentage of EDP's financial investment in 2001 was directed at the acquisition of a shareholding in the fourth largest Spanish electricity company, Hidrocantábrico, following the launching of a joint takeover bid with the Spanish bank Cajastur. The above-mentioned investment (EUR 262 million) referred to the initial position of 9.5% acquired by the EDP Group in this company, a position that was stepped up to around 40% at the beginning of 2002.

In 2001, the EDP Group (via ONI), acquired virtually the entire capital of the Spanish operator, entailing a capital outlay of some EUR 68 million.

# Pension fund and obligations for health-care services

EDP maintains social benefit plans which embrace retirement benefits, that is, complementary retirement and early retirement pensions, and the provision of medical care for current staff and retired personnel and pensioners.

The Group accounts for the respective costs in accordance with the requirements of International Accounting Standard 19.

Financial cover for past obligations matured at 31 December 2001 is guaranteed by the EDP Group Pension Fund, with assets totalling EUR 754 million at the end of 2001, and by provisions of EUR 746.8 million carried in the balance sheet. The Group will continue to allocate resources corresponding the obligations maturing in each financial year.

Details of the obligations, assumptions and respective accounting movement which occurred in 2001 are presented in the Notes to the Consolidated Financial Statements (Note 21).

#### Consolidated taxation of the EDP Group

In terms of a dispatch issued by the Minister of Finance, the EDP Group is authorised to be taxed on a consolidated (group



relief) basis. In this manner, the Corporate Income Tax (Portuguese initials IRC) is levied on the EDP Group's global activity carried out by subsidiaries which are more than 90%-controlled and whose head offices are situated in Portugal.

#### **Employee profit-sharing scheme**

The distribution of profits to its employees forms part of the EDP Group's human resources policy. This policy is implemented in the companies to which employees are assigned.

#### Proposed appropriation of 2001 net income

Pursuant to Article 27 of the Company's Statutes, the Board of Directors proposes that net income of EUR 450,794,716.53 be appropriated as follows:

# Appropriation of net income

	EUR thousand	
	2001	
Legal reservel	22,540,000.00	
Dividends	339,000,000.00	
Retained earnings	89,254,716.53	
Net income	450,794,716.53	

The proposed dividend is EUR 0.113 per share, corresponding to a pay-out of 75%.

#### **EDP PRODUÇÃO**

EDP Produção, which embraces all the Group companies involved in electric energy generation in Portugal and with the provision of allied services, was formed at the beginning of 2001. As such, the financial statements relating to 2000 presented in this document are a pro forma reconstitution of what would have been the company's activity in that year.

#### Operating income statement EDP Produção

		E	UR thousand
	2001	2000 pro forma	△%
Operating revenue	1,329,246	1,229,482	8.1%
Electricity sales	1,267,924	1,181,338	7.3%
Other sales	12,360	6,504	90.0%
Services provided	11,492	14,640	-21.5%
Other operating revenue and gains	5,577	4,494	24.1%
Own work capitalised	31,893	22,506	41.7%
Operating costs	812,980	720,790	12.8%
Electricity	3,651	2,674	36.6%
Fuel for electricity generation	377,192	306,942	22.9%
Sundry materials and goods for resale	3,900	4,434	-12.1%
Outside supplies and services - non-Group	52,464	49,191	6.7%
Outside supplies and services - Group	21,931	20,161	8.8%
Personnel costs	113,482	100,917	12.5%
Depreciation and amortisation	225,182	221,362	1.7%
Provisions	9,806	9,362	4.7%
Concession rentals	3,437	3,726	-7.8%
Other operating costs and losses	1,935	2,021	-4.2%
Operating income	516,266	508,692	1.5%

Nota: Sub-consolidation not audited. Pro forma accounts are presented for 2000 given that the sub-holding company EDP Produção was only incorporated in 2001.

EDP Produção's operating revenue rose by 8.1%, reflecting essentially the growth in the variable portion (the part which remunerates generating costs) of the power purchase contracts (PPA) stemming from the greater recourse to thermal generation sources during 2001.

As concerns own work for the company (own work capitalised), 2001 saw an increase of 41.7%, reflecting a greater dynamism in the engineering companies PROET and HIDRORUMO.

Also worth noting was the substantial increase in the sales revenue of cogeneration power stations operating

outside the SEP of some EUR 18.6 million relative to 2000.

#### Revenue from electricity sales EDP Produção

			EUR thousand
	2001	2000	△%
PPA fixed portion - CPPE	850,798	829,293	2.6%
PPA variable portion - CPPE	363,278	317,113	14.6%
Total CPPE	1,214,076	1,146,406	5.9%
HDN	12,906	13,667	-5.6%
Hidrocenel	12,585	13,715	-8.2%
Total mini hydro plants	25,491	27,382	-6.9%
Wind-powered (Enernova)	5,530	4,150	33.2%
Biomass	1,208	333	262.8%
Cogeneration (Soporgen)	21,618	3,066	605.1%
Total Generation	1,267,924	1,181,338	7.3%

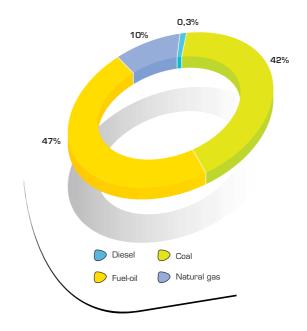
The cost of fuel for electricity generation rose 22.9% to EUR 377.2 million relative to the EUR 306.9 million recorded at the close of 2000. This trend was the effect of the generalised rise in fuel prices at the beginning of 2001 and a greater recourse to thermal sourced generation in the final quarter of the year. The entry into functioning of Soporgen led to an increase in the consumption of natural gas.

#### Fuel purchases EDP Produção

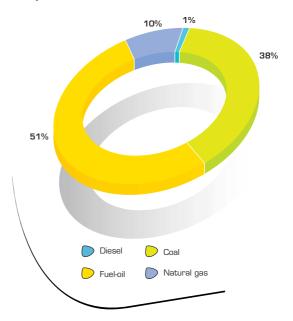
			EUR thousand
	2001	2000	△%
Coal	142,810	128,901	10.8%
Fuel-oil	193,867	146,720	32.1%
Natural gas	35,897	29,426	22.0%
Diesel	4,618	1,895	143.7%
Total Fuel	377,192	306,942	22.9%

The gross margin of EDP Produção rose from EUR 871.7 million in 2000 to EUR 887.1 million in 2001, which represents an increase of 1,8%, reflecting the earnings of EUR 21 million and EUR 46 million in the fixed and variable portion (respectively) of the Power Purchase Agreements (PPA).

Fuel purchases - 2000



#### Fuel purchases - 2001





As regards outside supplies and services, those relating to services of non-Group companies rose by roughly 7%.

Outside supplies and services from EDP Group companies increased by around 9% when compared with the preceding year. This appreciable increase is primarily due to the start-up of Energin in 2001 and Soporgen's increased activity (which in 2000 was only operational in the second half of the year).

## Personnel costs EDP Produção

		E	UR thousand
	2001	2000	△%
Personnel costs	113,482	100,917	12.5%
Pension premiums  Correction for early retirements  Social benefits for early retirement	7,542 10,293 1,132	2,898 7,254 798	160.2% 41.9% 41.9%
Corrected personnel costs	94,515	89,967	5.2%

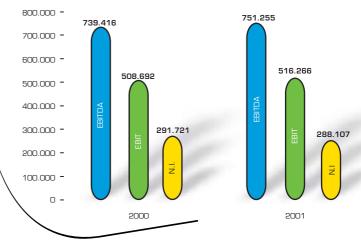
EDP Produção's personnel costs after correcting for pension premiums and early-retirement charges totalled EUR 19 million (up 5.2%). This increase mirrors the effect of the ACT (collective employment agreement) revision and the salary review relating to 2001.

**General Indicators** EDP Produção

	2001	2000	△%
Market share	74%	70%	3.6%
Gross profit margin (electricity) (EUR thousand)	887,080	871,722	1.8%
Operating capital expenditure (EUR thousand)	140,354	98,413	42.6%
Number of employees	2,174	2,271	-4.3%
EDP Produção	398	-	-
CPPE	1,246	1,699	-26.7%
HDN	63	79	-20.3%
Hidrocenel	28	36	-22.2%
Enernova	15	12	25.0%
EDP Cogeração	10	4	150.0%
Seflor	41	25	64.0%
TER	6	5	20.0%
Proet	126	138	-8.7%
Hidrorumo	241	273	-11.7%

In terms of staff numbers, there was a decrease of 4.3%, representing a reduction of 97 workers.

**EDP Produção** (EUR thousand)



NOTE: Sub-consolidation not audited.

EDP Produção's operating income of EUR 516.3 million improved 1.5% relative to 2000.

# EDP DISTRIBUIÇÃO

At the end of 2001, the number of EDP Group customers rose to 5.5 million, representing annual growth of 2.3%. As concerns the SENV (non-binding system), EDP increased its number of customers from 9 to 22, corresponding to 67% of the system's total customers.

# Number of SEP customers EDP Distribuição

	2001	2000	△%
VHV ( Very high voltage)	11	11	0.0%
HV (High voltage)	98	90	8.9%
MV (Medium voltage)	19,536	18,834	3.7%
SLV (Special low voltage)	26,519	25,394	4.4%
LV (Low voltage)	5,455,273	5,332,331	2.3%
Public illumination	39,959	38,644	3.4%
Total	5,541,396	5,415,304	2.3%

Revenue from electricity sales climbed 8.2% when compared with the preceding year, portraying not only the higher level of consumption but also the sales tariffs fixed for 2001 by the ERSE (sector regulator).

#### Energy sales - Domestic market EDP Distribuição

		E	UR thousand
	2001	2000	△%
VHV (Very high voltage)	36,837	35,314	4.3%
HV (High voltage)	173,254	164,178	5.5%
MV (Medium voltage)	777,036	748,205	3.9%
LV (Low voltage)	1,931,840	1,833,882	5.3%
SLV (Special low voltage)	261,227	245,691	6.3%
Public illumination	83,918	80,279	4.5%
Interruptibility discounts	-25,555	-19,345	32.1%
Tariff correction discounts	-25,345	-24,723	2.5%
Subtotal	3,213,212	3,063,481	4.9%
Tariff adjustments:	42,218	-55,996	-175.4%
Distribution 1999 reposition	35,509	-35,509	-
Distribution 2000	-	-20,486	-
Distribution 2001	6,709	-	-
EDP Distribuição sales	3,255,430	3,007,485	8.2%
EDP Energia sales (HV + MV)	8,794	3,202	174.6%
Sales to customers	3,264,224	3,010,687	8.4%

#### Analysis of gross profit margin after adjustments EDP Distribuição

EDP DISCINDUÇÃO		EUF	R thousand
	2001	2000	△%
Accumulated sales for the year	3,213,212	3,063,481	4.9%
Tariff adjustments - Distribution 1999 reposition Tariff adjustments - Distribution 2000	35,509	-20,486	-
Tariff adjustments - Distribution 2001	6,709	-	-
EDP Distribuição sales after			
adjustments	3,255,430	3,042,995	7.0%
Cost of electricity sales	2,047,706	1,861,540	10.0%
Gross profit margin	1,207,724	1,181,455	2.2%
Gross profit margin/ Electricity sales	37,1%	38,8%	-1.7%
Gross profit margin (€/MWh)	34,0	34,7	-1.8%



In 2001, the average tariff for SEP customers was increased by around 1.2%, whereas the tariffs for use of the distribution network and those for commercial activity were reduced by about 3%. In order to compare the gross margin between the two periods under review, it has been excluded the amount of the 1999 distribution restitution on the grounds that it refers to 1999, despite being accounted for in 2000. Taking into account these adjustments, the gross margin/electricity sales declined by 1.7 percentage points. Looking at the gross margin/MWh, its value fell to EUR 34/MWh.

The provision of services recorded a drop of 9.2% to EUR 19.9 million in 2001. Of this figure, EUR 7.6 million refers to multi-utility activity.

The cost of electricity purchases escalated from EUR 1,862 million in 2000 to EUR 2,048 million in 2001, which represents growth of 10%. This trend reflects not only the

#### Energy sales - Domestic market EDP Distribuição

EUP DISTRIBUIÇÃO EUR thou			JR thousand
	2001	2000	△%
Operating revenue	3,454,023	3,187,749	8.4%
Electricity sales - outside Group	3,255,430	3,007,485	8.2%
Electricity sales - Group	3,054	2,424	26.0%
Services provided	19,895	21,902	-9.2%
Other sales	1,620	2,204	-26.5%
Other operating revenue and gains	20,516	13,781	48.9%
Own work capitalised	153,507	139,953	9.7%
Operating costs	3,262,784	2,971,773	9.8%
Electricity	2,047,706	1,861,540	10.0%
Sundry materials and goods for resale	107,544	98,500	9.2%
Outside supplies and services - non Group	133,416	121,639	9.7%
Outside supplies and services - Group	79,873	67,245	18.8%
Personnel costs	367,004	338,379	8.5%
Depreciation and amortisation	324,576	313,955	3.4%
Provisions	54,655	39,119	39.7%
Concession rentals	145,642	128,895	13.0%
Other operating costs and losses	2,368	2,501	-5.3%
Operating income	191,239	215,976	-11.5%

growth in consumption but also the increase in the energy and power tariff prescribed by the ERSE.

As for the other operating costs, outside supplies and services provided by non-Group companies climbed 9.7%. This increase is mainly due to the higher costs incurred with maintenance and repairs. In terms of intra-Group supplies, the increase was in the order of 18.8%, primarily due to the implementation of the new customer management system.

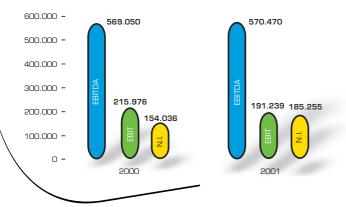
EDP Distribuição's personnel costs were 0.2% lower than the corresponding figure for 2000.

#### Personnel cost EDP Distribuição

		EL	JR thousand
	2001	2000	△%
Personnel costs	367,004	338,379	8.5%
Pension premiums Correction for early retirements Social benefits for early retirement	26,601 58,599 7,032	14,884 43,097 5,171	78.7% 36.0% 36.0%
Corrected personnel costs	274,772	275,227	-0.2%

This variation takes into account the corrections relating to pension premiums (contributions to the Pension Fund) and to early-retirement charges amounting to EUR 26.6 million and EUR 58.6 million, respectively. It also reflects the effect of the reduction in the number of workers on the one hand, and the revision of the ACT (collective employment agreement) and the salary increase of 3.4% for 2001.

#### EDP Distribuição (EUR thousand)



EDP Distribuição's operating income was EUR 191.2 million, 11.5% less than in 2000. Despite this drop in terms of EBIT, the EBITDA figure remained stable, posting a rise of 0.25%.

The EBIT and EBITDA margins at the close of 2001 were situated at 5.8% and 17.4%, respectively, which represents a decline of about 1.3 percentage points relative to 2000.

## General indicators EDP Distribuição

	2001	2000	△%
Gross profit margin (electricity)	37.2%	38.2%	-1.0%
Number of employees	7,178	8,221	-12.7%
Operating capital expenditure EUR thousand	265,874	237,191	12.1%

The number of employees at EDP Distribuição fell to 7,178 in 2001, corresponding to a decline of 12.7%. This reduction is in line with the pre-defined objectives of improving the company's efficiency.

Operating capital expenditure in 2001 was EUR 265.9 million in 2001, 12% more than in 2000, and consistent with the goals announced by the Group. The main reasons for this increase are related to the improvement in service, in particular, the increase in substations, the expansion of the public lighting network and the upgrading of meters and accessories.

#### **BANDEIRANTE**

On 1<sup>st</sup> October 2001 Bandeirante Energia (96.48% held by EDP) started its activity as an independent company.

For purposes of comparison, the financial statements, as well as other operating data, have been prepared on a pro forma basis, taking into consideration:

- in 2000: 54% of Bandeirante;
- in 2001:
  - up till the end of September, 54% of Bandeirante;
  - from the end of September to the end of 2001, full consolidation of the new Bandeirante (post split).

Bandeirante Energia's electricity sales at the end of 2001 were 11,727 GWh, down 12.8% on 2000.

The decline in consumption during the period under review was recorded in all segments. However, the Residential and Other segments were the most affected. The Other segment includes rural, central government and public lighting. This drop is explained by the power rationing plan implemented by the Brazilian government and aimed at curtailing the demand for electricity, notably, in the residential segment.



#### Energy sales (GWh) Bandeirante

	2001	2000	∆%
Energy acquisition	13,516	15,140	-10.7%
(Furnas and Itaipú)			
Energy sales	11,727	13,444	-12.77%
Residential	2,296	2,681	-14.4%
Industrial	6,410	6,813	-5.9%
Commercial	1,363	1,423	-4.2%
Other	1,658	2,527	-34.4%

In terms of operating revenue, electricity sales registered a decrease of 1.6%, falling to EUR 690.5 million at the end of 2001. This decrease reflects the real's depreciation against the escudo (11.6% since the end of 2000). Expressed in local currency, operating revenue was actually 11.5% higher.

# **Operating income statement**Bandeirante

milhares de euros

	2001	2000	△%
	(96%)	pro forma (54%)	
Operating revenue	690,509	703,273	-1.8%
Electricity sales	690,509	701,390	-1.6%
Own work capitalised	0	1,883	-100.0%
Operating costs	625,899	610,167	2.6%
Electricity	497,387	492,538	1.0%
Sundry materials and goods for resale	2,785	3,489	-20.2%
Outside supplies and services	36,367	31,722	14.6%
Personnel costs	43,878	57,293	-23.4%
Depreciation and amortisation	35,827	34,450	4.0%
Provisions	4,912	-14,767	-133.3%
Other operating costs and losses	4,743	5,442	-12.8%
Operating income	64,610	93,106	-30.6%

As regards the recoupment of rationing costs, an amount of some EUR 109 million was recorded under the caption revenue from electricity sales, with EUR 95.4 million relating to Annex V(\*) and EUR 11 million in additional expenses of initial contracts being withdrawn.

From the standpoint of operating costs, expenditure on the acquisition of electricity rose by about 1% in EDP's consolidated financial statements. The principal reason behind this minor growth is the inclusion of EUR 59.4 million referring to "Portion A" accounted for in electricity acquisition expenses. Analysing the trend in electricity acquisition costs expressed in local currency, it can be seen that there was in fact an increase of 14.5%.

# General indicators Bandeirante

	2001	2000	△%
Gross profit margin (electricity)	28.0%	29.8%	-1.8%
Number of employees	1,471	2,764	-46.8%
Operating capital expenditure*	65,730	63,828	3.0%

<sup>\*</sup> The figures presented refer to the company's total outlay.

In 2000 the EDP Group effected the proportional consolidation (54%) of the Bandeirante account In 2001, Bandeirante was consolidated proportionally (54%) as regards the balance sheet and the income statement up until September. With effect from October 2001

2001, following the company split and the increased shareholding to 96.5%, the EDP Group now fully consolidates its financial statements.

Operating income was EUR 65.6 million, which corresponds to a decline of 30.6% when compared with the accumulated figure at the end of 2000. The EBITDA and EBIT margins fell to 16.1% and 9.4%, respectively.

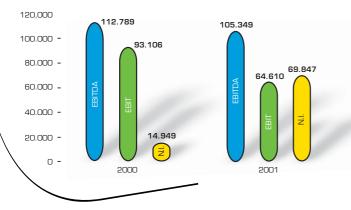
In terms of the gross margin, there was a negative variation of 1.8 percentage points, to settle at 28% at the end of 2001.

<sup>(\*)</sup> The figure presented in the 3rd quarter results corresponds to 54% of Annex V accounted for in the financial statements of Bandeirante, at an exchange rate 1 Reals 0.410 Euro

Insofar as the staff complement is concerned, there was a decrease of 46.8%, the main factor being the demerger which took place in October 2001.

Current capital expenditure at the end of 2001 totalled EUR 65.7 million, 3% more than in 2000. Expressed in local currency, there was a positive variation of 16.8%.

#### Bandeirante (EUR thousand)



#### **TELECOMMUNICATIONS**

The consolidated financial statements at the close of 2001 reflect the contribution from Comunitel since its acquisition date (12 June 2001).

The operating revenues of the Group's telecommunications companies rose from EUR 39.8 million at the end of 2000 to EUR 157 million in 2001.

This increase in the revenue of the companies included in ONI's universe is explained principally by the following factors:

 the inclusion in the year-end accounts of approximately EUR 49.4 million relating to Comunitel's operating revenue from acquisition date to the end of 2001;

- the increase in revenue generated by telecommunications services (voice and data) which amounted to EUR 79.5 million at the end of 2001, or EUR 128.9 million if included Comunitel;
- the increase in equipment sales which at 31<sup>st</sup> December 2001 totalled EUR 30.9 million.

Accumulated revenue at the end of 2001 resulting from voice services was EUR 108.8 million, representing 69% of total revenue from telecommunications services. The piercing of the EUR 220 million revenue barrier places ONI in third place in the Iberian market's table of fixed-line operators.

Voice traffic handled by ONI at the end of 2001 was 1,197 million minutes, compared with a total of 115 million minutes in 2000. This voice traffic had its origin in the following segments: 74% business customers, 21% residential customers and 6% operators.

This strong expansion in voice traffic can be attributed not only to the impact of the liberalisation of short-distance calls (local traffic) which occurred on 1st January 2001, representing in Portugal some 50% of the total traffic commuted, but also the significant increase in the number of equivalent lines (CLIs), which grew from roughly 291 thousand at the end of 2000 to around 651 thousand at the end of 2001. Of the total CLIs, 200 thousand are business and 341 thousand residential customers.

These figures include Comunitel's contribution, whose services are directed at the Spanish corporate segment. At the end of 2001 it had 110,564 CLIs and recorded traffic of 657 million minutes (mostly from voice services).

Revenue from data services, which account for about 12.8% of telecommunications revenue, totalled EUR 20.2 million. At the end of 2001, ONI already had 371,733 registered Internet accounts which translated itself into ISP traffic of more than 593 million minutes.



The gross sales margin generated by the ONI Group from telecommunications services at the end of 2001 was EUR 54.6 million, or about 34.8% of total revenue originated by this activity during 2001.

# Operating income statement

Telecommunications		El	JR thousand
	2001	2000	△%
Revenue from telecommunications services	157,032	39,845	294%
Voice telecommunications services	108,839	9,822	1008%
Data telecommunications services	20,152	15,711	28%
Other telecommunications revenue	28,041	14,312	96%
Revenue from equipment sales	30,891	3,013	925%
Equipment sales Group	768	1,202	-36%
Equipment sales Non Group	30,123	1,811	1564%
Operating revenue	187,923	42,858	338%
Cost of equipment sales	20,685	2,878	619%
Cost of telecommunications services	102,399	29,126	252%
Direct costs of activity	123,084	32,004	285%
Outside supplies and services Group	7,402	6,754	10%
Outside supplies and services Non Group	109,401	63,680	72%
Personnel costs	76,022	25,758	195%
Other operating costs (or revenue)	-5,931	-1,132	424%
Own work capitalised	-38,537	-46,314	-17%
Operating costs	148,357	48,746	204%
EBITDA	-83,518	-37,892	120%
EBITDA / Revenue	-44%	-88%	
Depreciation and amortisation	48,872	23,304	110%
Provisions	3,741	18,974	-80%
EBIT (Operating income)	-136,131	-80,170	70%
EBIT / Revenue	-72%	-187%	

Note: Sub-consolidation not audited. These figures refer to the universe of the ONI Group companies, which in 2001 includes Comunitel and Germinus XXI acquired in the meantime

The direct costs of telecommunications presented a significant rise, amounting to EUR 123.1 million.

This increase is chiefly due to the higher business volume, as well as to the higher cost of renting access circuits to PT's network and interconnection costs paid to the same entity.

The increase in operating costs which, excluding the direct costs of telecommunications activity, totalled EUR 148.4 million at the end of 2001, stems from the natural increase in certain costs associated with the development of the telecommunications business.

Personnel costs amounted to EUR 76.0 million in 2001 against EUR 25.8 million in 2000. This increase reflects not only the higher number of employees at ONI, but also the inclusion of Comunitel's personnel costs since the date of its acquisition. In spite of this rise, the figures presented were in line with the company's business plan objectives.

#### **General indicators** Telecommunications

			EUR thousand
	2001	2000	△%
Number of employees ONI	1,719	558	208.1%
Portugal	1,110	558	98.9%
Fixed	804	557	44.3%
Mobile	306	1	30.500.0%
Spain	609	0	-
Operating capital expenditure	239,019	219,601	8.8%

The number of ONI employees in Portugal at the end of 2001 stood at 1,110 versus 558 the previous year. At the end of 2001, Comunitel's workforce numbered 331, while the staff complement at Germinus was 278.

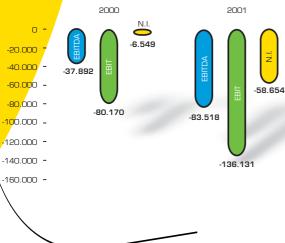
At the end of 2001 the ONI Group's accumulated capital expenditure was EUR 777 million, of which EUR 239 million refers to operating capital expenditure and EUR 538 million

to financial investment. Of this total capital expenditure, EUR 231 million relates to investments in the field of UMTS. The most salient financial investments made in 2001 included:

- Increases in capital/shareholder loans at OniWay EUR 218 million;
- Incorporation of ONI TELECOM into ONI SGPS EUR 113 million;
- Acquisition of COMUNITEL (additional)
   EUR 68 million;
- Incorporation of Brisatel EUR 23 million.

It should be pointed out that the integration of ONI Telecom and Brisatel, in the amount of EUR 136 million, did not entail any financial outlay.

# **Telecommu**nications (EUR thousand)



Note: Sub-consolidation not audited.

#### **INFORMATION TECHNOLOGIES**

Edinfor, the EDP Group company dedicated to the information technologies, centres its activity on the provision of services in the areas specialising in the development and operation of information systems.

In 2001, the Edinfor Group's accounts include the Case Group, which was not the case in 2000.

# Operating income statement

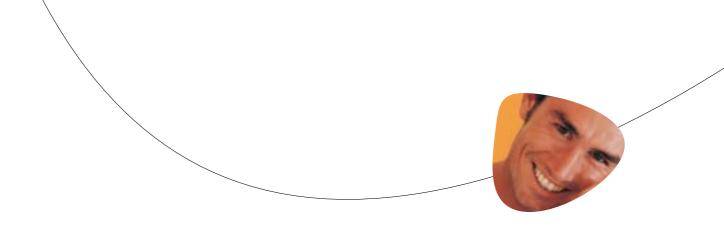
Information technology

			EUR thousand
	2001	2000	△%
Operating revenue	215,918	121,472	77.8%
Sales	39,149	30,237	29.5%
Services	149,883	85,424	75.5%
Other operating revenue and gains	5,206	5,502	-5.4%
Own work capitalised	21,680	309	6.916.1%
Operating costs	184,789	104,837	76.3%
Sundry materials and goods for resale	34,164	23,713	44.1%
Outside supplies and services - Non Group	58,812	36,926	59.3%
Outside supplies and services - Group	6,853	8,654	-20.8%
Personnel costs	65,398	24,905	162.6%
Depreciation and amortisation	17,796	10,225	74.0%
Provisions	960	414	131.9%
Other operating costs and losses	806	0	-
Operating income	31,129	16,635	87.1%

Note: Sub-consolidation not audited. These figures refer to the universe of the Edinfor Group companies, which in 2001 includes the Case Group acquired in the meantime.

Revenue from operations totalled EUR 189.0 million at the end of 2001. The services division contributed the most to this growth, of which 51% (about EUR 114 million), corresponds to services rendered to entities outside the EDP Group. This growth was to a large extent due, besides the consolidation of CASE's accounts, to the involvement of the Edinfor Group companies in the development and installation of SAP-related projects.

In terms of operating costs, the increase noted was in the order of 76.3%, in large part explained by the trend in



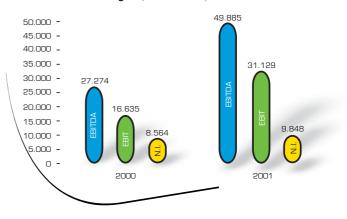
personnel costs (up 162.6%). These increases are explained not only by the inclusion of CASE's accounts in the Edinfor Group, but also to the greater recourse to outside contracting in order to accommodate the increased demand for services.

#### **General indicators** Information technology

			EUR thousand
	2001	2000	△%
Number of employees	1,551	915	69.5%
Operating capital expenditure	70,977	29,998	136.6%

The number of workers climbed 69.5% to 1,551 as a consequence of the inclusion of CASE's staff.

#### Information technologies (EUR thousand)



Note: Sub-consolidation not audited.

Operating income rose to EUR 31.1 million, 87.1% more than in 2000, while the EBIT and EBITDA margins represented 16.4% and 26.4%, respectively in 2001.

# HIGHLIGHTS

#### **HIGHLIGHTS OF 2001**

#### A) General

The partnership between EDP and Iberdrola was given as terminated. Following the intention manifested by Iberdrola to merge with Endesa, which resulted in the elimination of prospects for developing the partnership with EDP, the strategic partnership between the companies was given as terminated.

EDP and Cajastur acquired 35% of Hidrocantábrico. On 25th January 2001, EDP and Caja de Ahorros de Asturias (Cajastur) launched a takeover bid for 100% of the Spanish electricity company Hidroeléctrica del Cantábrico (Hidrocantábrico) at a price of EUR 24 per share. This operation resulted in the joint acquisition of 19% of Hidrocantábrico's share capital, with EDP and Cajastur jointly holding around 35% of Hidrocantábrico. In terms of Spanish legislation relating to acquisitions in the electricity sector by companies with public capital, the Government temporarily suspended EDP's voting rights in Hidrocantábrico.

EDP floats a EUR 1,000 million bond loan. On 21st March 2001, as part of its EMTN (European Medium Term Notes) programme, EDP floated a EUR 1,000 million Bond Issue at a fixed rate of 5.875%, maturing on 28th March 2011. The issue proceeds will be used to refinance the EDP Group's medium and long-term debt. It also constitutes a diversification in funding sources, boosting EDP's presence on the European capital market.

**EDP's Annual General Meeting.** On 10th May 2001, the Annual General Meeting approved the EDP Group's individual and consolidated accounts for 2000, together with the proposed appropriation of net income.

Change to the Board of Directors. The Board of Directors passed a resolution on 10<sup>th</sup> August 2001 to co-opt Prof. Dr. António José Fernandes de Sousa, Chairman of the Caixa Geral de Depósitos Group, as a non-executive director of

EDP, S.A. This co-option, which must be ratified at the next General Meeting, fills the vacancy left by the resignation of Eng. Ignácio Francisco Javier Herrera Sorriqueta, nominated by Iberdrola.

EDP constitutes sub-holding company "EDP Participações".

EDP constituted a sub-holding company - "EDP Participações - SGPS" - for the purpose of grouping and better coordinating its minority shareholdings.

**Brisa holds 2% in EDP's capital.** Brisa communicated on 30<sup>th</sup> August 2001, that it had acquired a direct interest corresponding to 2% of EDP's share capital.

Creation of "EDP Valor". In December 2001, a sub-holding company - "EDP Valor" – was formed with the object of providing back-office services to the EDP Group's other companies, thereby creating the conditions, through the centralisation of various departments and services, for the implementation of the company's cost-reduction policy.

EDP, EnBW, CAJASTUR and CÁSER reach agreement of the control and management of Hidrocantábrico. On 4th December 2001, EDP, Energie Baden-Wurttemberg AG, Caja de Ahorros de Asturias, ad Compañía de Seguros y Reaseguros, S.A. signed a shareholders' agreement setting out the future management and the allocation amongst these shareholders of each one's final position in Hidrocantábrico's share capital. EDP, EnBW and Cajastur/Cáser hold, respectively and in approximate figures, 40%, 35% and 25% of the capital of Adygesinval.

# B) Electricity sector

Constitution of "EDP Produção". On 28th March 2001, the EDP Group formed a sub-holding company for the area of power generation – "EDP – Gestão de Produção de Energia S.A." (EDP Produção). This new structure coordinates all the Group companies involved in the production of electric energy and the provision of associated services. Its mission will be to optimise



the coordination and efficiency of the various companies engaged in this business.

Inauguration of the Cabeço da Rainha wind farm. The EDP Group (via Enernova, the subsidiary for the renewable energy business) inaugurated on 6th July 2001 a wind farm at Cabeço de Rainha, a project which cost EUR 11.5 million. This facility will provide enough power to service a community of 15 thousand inhabitants.

**New regulations for the electricity sector.** In August, ERSE (electricity sector regulator) approved alterations to the electricity sector's regulations. The revision covered regulations governing tariffs, commercial relations, dispatching and access to networks and interconnections.

#### ERSE publishes tariff parameters for 2002-2004.

On 30th November 2001, ERSE published tariff parameters for 2002-2004. This document deals with tariffs and prices for Electric Energy and other services in 2002. This decision contemplates average sales tariff increases for residential customers of 2.4% and of between 1.4% and 2.4% for business customers in 2002.

# C) Internationalisation

First turbine at the Lajeado (Brazil) hydroelectric power station enters service during 2001. After completion of around 90% of the construction work at the new hydroelectric power station at Lajeado, situated in the Tocantins State (Brazil), with an installed capacity of 850 MW, the first turbine has been operational since October 2001. EDP has a stake of 10.57% in the capital of INVESTCO, the company responsible for the Lajeado project, ad is entitled to 27.65% of the total energy produced by this power station.

EDP launches FAFEN Energia cogeneration plant in Bahia (Brazil). In February 2001, a project was launched for the construction of a cogeneration power plant – FAFEN Energia,

situated at the important petrochemical centre of Camaçari, in the Brazilian state of Bahia. This new power plant represents an investment of EUR 65 million and is being financed up to 80% by EDP through one of its subsidiaries, Energen – Empresa Brasileira de Geração de Energia, with the remaining 20% coming from the Brazilian energy group Petrobrás. FAFEN Energia has as its object the guaranteed supply of electric power to the fertiliser factory belonging to Petrobrás.

EDP will build and operate the Peixe Angical hydroelectric power station (Brazil). The consortium made up of EDP (95%) and the Rede do Brasil group (5%) won the tender to build and operate yet another power station on the Tocantins river, downstream from the Lajeado facility in which EDP also participates. The construction of the Peixe hydroelectric power station, with an installed capacity of 450 MW, will commence in 2002, with the first generating unit scheduled to become operational in 2005.

EDP concluded negotiations for control of IVEN. EDP concluded in August 2001, negotiations that will enable it to exercise control over the majority of the voting rights in IVEN, the holding company which participates in the control of the Brazilian distribution companies Escelsa and Enersul. The agreement signed with another of IVEN's shareholders, the Opportunity Fund, was definitively formalised after the granting of the necessary approval by ANEEL – the Brazilian electricity sector regulator.

# EDP signs usufructuary contract with Opportunity.

On 10th October 2001, following due approval by the ANEEL, the usufructuary contract came into force. The 25-year contract was constituted by the mutual investment fund – the Opportunity Fund – and by EDP. Under the abovementioned usufruct, EDP is granted control over the management, amongst others, of Escelsa – Espírito Santo Centrais Eléctricas, S.A. and Enersul – Empresa Energética do Mato Grosso do Sul, S.A., both of which are electricity distributors.

# ANEEL approves the splitting of Bandeirante Energia S.A.

On 16th August 2001, ANEEL approved an application for the partial split of the electricity distributor Bandeirante and the partial transfer of the concession covering certain municipalities in the State of S. Paulo to Companhia Piratininga de Força e Luz. Bandeirante's capital was held as follows: 54.02% by Enerpaulo (100%-owned EDP subsidiary) and 42.44% by Draft 1 (company controlled by CPFL). This operation involved the transfer of shares in such a manner that Enerpaulo no longer has shares in Piratininga nor Draft 1 in Bandeirante. Following approval of Bandeirante's splitting, the two companies started to operate independently with effect from 1 October 2001.

**Takeover bid for IVEN.** On 27th November 2001, a takeover bid was launched, by means of which EDP acquired 17.38% of Iven's share capital held by various minority shareholders. IVEN is the company through which the EDP Group participates in Escelsa and Enersul.

EDP wins auction for the construction and operation of the Couto Magalhães hydroelectric power station. On 30th November 2001 EDP won the auction for the construction and operation of the Couto Magalhães hydroelectric power station, which will have a total installed capacity of 150 MW and a guaranteed annual production of approximately 790 GWh. Construction of this new power station will begin in 2002, while the first generating unit is scheduled to become operational in the last quarter of 2005; the total capital investment is expected to be in the region of EUR 122.7 million.

EDP signs agreement with Thames Water for the sale of its stake in ESSEL. On 10th December 2001, EDP and Thames Water plc agreed that Thames Water would acquire the EDP Group's 25.5% interest in ESSEL - Empresa de Servicios Sanitarios del Libertador, S.A., a water and wastewater treatment and distribution company in Chile. At the time, the EDP Group and Thames Water jointly held 51% of ESSEL, while the remaining 49% belonged to CORFO - Corporacion de Fomento de la Produccion, a Chilean public-sector utility. The

EDP Group's shareholding in ESSEL was acquired in 1999 during this company's privatisation by the Chilean State, for EUR 69.8 million. The agreement also provides that the EDP Group will acquire Thames Water's 50% shareholding in ValorÁgua – Águas e Saneamento de Portugal, S.A., a business development company set up to explore opportunities in the Portuguese water sector, which is now wholly owned by EDP Águas.

Early repayment of Bandeirante Energia's dollar-denominated debt. The EDP Group was behind the early repayment of roughly 93% of Bandeirante's dollar-denominated debt in the amount of USD 275.63 million through the use of Brazilian external debt securities (Brady Bonds) acquired for USD 203.74 million. This operation enabled the EDP Group: to obtain a financial gain on the settlement of the dollar-denominated debt through the acquisition of Brady Bonds with a significant discount relative to their nominal value; and the removal from Bandeirante's balance sheet of a foreign-currency-denominated liability, thereby substantially reducing currency risk.

#### D) Telecommunications and Information Technologies

# Brisa is integrated into ONI, SGPS's shareholder structure.

As a result of a strategic alliance accord entered into in May 2001 between EDP, BCP, Brisa and GALP for the telecommunications sector, Brisa Auto Estradas de Portugal, S.A. now forms part of ONI, SGPS's shareholder structure with a stake of 17%. The agreement is aimed at integrating the two companies' asset and expertise bases, thus permitting the consolidation of ONI's leading position amongst the new operators in Portugal. Following this operation, EDP now controls 56% of ONI's share capital, BCP 22.8%, Brisa 17% and Galpenergia 4.2%.

ONI reinforces its presence in the Iberian market via Grapes Espanha. ONI acquired almost 100% of Grapes Espanha (formerly Comunitel), a telecommunications operator offering a



vast array of telecoms solutions especially geared to meeting the needs of PME's (Small and Medium Enterprises).

**ONI SGPS** alters shareholder position in **ONI** Way. During 2001, ONI SGPS changed its shareholder position in ONI Way from 55% to 68%, through the incorporation of the investments in Brisatel (4%), Grapes NV (2%), Impresa (4%) and Jerónimo Martins (3%).

**Capital increase at ONI SGPS.** In October 2001, ONI SGPS carried out a share capital increase from EUR 113 million to EUR 400 million.

ONI Way signs roaming agreement with TMN. In November 2001, ONI Way entered into a national roaming agreement with TMN (major player in Portugal's mobile communications' market) for a period of five years, following which OniWay anticipates that it will be able to start providing mobile telecommunication services in the first half of 2002.

Edinfor Group wins IT project in Brazil. A consortium composed of ACE - a company 60%-owned by Edinfor (a company operating in the IT sector and 100%-held by the EDP Group) - was the successful bidder in a tender for the implementation of the IT system covering the various management areas of the world's largest water utility, Brazil's SABESP. The project with this São Paulo water company is valued at around EUR 50 million. The system is scheduled to be implemented within two years.

#### **IMPORTANT POST-BALANCE SHEET EVENTS**

Inauguration of the Macau combined cycle power station. In January 2002, the first generating unit at the Macau combined cycle power station was inaugurated, which will be completely ready in March 2003. This power station represented an investment of EUR 170 million and will have a capacity of 136 MW, corresponding to 38% of the CEM's (company in which EDP has a 22% equity interest).

Change to EDP, S.A.'s Board of Directors. EDP, S.A.'s Board of Directors underwent changes due to the departure of Eng. Vasco Pereira Valente, who was replaced by Dr. Luís Filipe da Conceição Pereira.

ONI enters into new contract for the use of REN's optical fibre network. In February 2002, ONI Telecom, S.A. and REN – Rede Eléctrica Nacional, S.A. signed a new contract for ONI's use of REN's optical fibres network. Rede Eléctrica Nacional is the entity responsible for the National Transmission Grid in Portugal. It has been granted a licence to operate public telecommunications networks by Anacom – the national communications authority. The renegotiation of the contract is due to the REN's new legal framework and the substantial change in ONI's position in the telecommunications infrastructure business which, with Brisatel's integration, can now use a modern fibre network that if nothing more is the company's own infrastructure.

EDP signs agreement with Compagnie Générale des Eaux to sell its stake in Redal. On 4th March 2002, EDP concluded jointly with Urbaser, S.A., Pleiade S.A. and SLN – Sociedade Lusa de Negócios, SGPS, S.A., as sellers and Compagnie Générale des Eaux (Vivendi Group) as buyer, a promissory purchase and sale contract for the entire share capital of the Moroccan company Redal, S.A..

Authorisation of Shareholder Agreement for the management of Hidrocantábrico. In March 2002, the European Commission made public that it would not raise objections to the Shareholders' Agreement entered into between EDP, EnBW, Cajastur and Cáser covering Hidrocantábrico's management.

Sale of EDP's interest in Optimus. In March 2002, EDP sold OPTEP, a company owning 25% of Optimus, to Thorn Finance SA, a Luxembourg-law company, for EUR 315 million.

#### **OUTLOOK FOR 2002**

In 2002 three aspects will mark the Group's activity in the Iberian electricity business (that is, EDP's core business).

- The creation of the Iberian Electricity market. As is known, the Portuguese and Spanish authorities have agreed to the constitution of an Iberian electricity market, which should become functional in 2003. Keeping abreast of the studies leading to the implementation of this new market, both at regulatory and organisational level, will without any shadow of doubt warrant the Group's closest attention during 2002. Moreover, and still on the issue of the Iberian market, 2002 will also be the year in which EDP assumes its full role as a key shareholder in Hidrocantábrico.
- The opening up of the market to a further 20,000 business sector customers. As from 1st January 2002, all customers connected to the VHV, HV and MV networks will be able to choose their electricity supplier. With this new eligibility threshold, the level of liberalised consumption is now situated at around 45% of the country's total consumption. The EDP Group remains committed to retaining its leading position in the liberalised segment, and faces this new challenge with reinforced confidence.
- Launch of the Efficiency 2000 programme. The new challenges posed to the Group, namely, the Iberian electricity market, the liberalisation of 45% of electricity consumption with effect from 2002 and the non-recognition by the ERSE of a significant portion of EDP Distribuição's costs by when fixing the tariff parameters for the period 2002-2004, led to the launching at the beginning of the current year of a programme directed at cost containment and the improvement of operating efficiency. On account of its scale and far-reaching nature, this programme, which is being implemented at all the Group's companies, has been selected as one of the main pillars of activity in 2002.

On the internationalisation front, the EDP Group will continue to pursue the strategy of consolidating the capital investments made in the distribution business in Brazil and implant a new dimension to its presence in that country, in particular, through the construction of new hydroelectric power plants.

In the fixed telecommunications arena, 2002 will be devoted to continuing evolving the business plans and boosting ONI's positioning as Portugal's second fixed-network operator. As concerns mobile telecommunications, and taking into consideration the delay in the availability of UMTS technology, 2002 will be mostly dedicated to preparing the range of products and services that will enable the 3<sup>rd</sup> generation mobile communications to become operational.

The EDP Group will respond in a serene, competent and determined manner to all these challenges in order to continue meriting the full confidence of its customers, shareholders and employees.



#### **ACKNOWLEGEMENTS**

The Board of Directors expresses its gratitude to the group of key shareholders who are more intimately involved in monitoring the company's evolution and affairs, and in particular, to the Portuguese State through the respective members of Government, namely, the Ministers of Finance and of the Economy and the Secretaries of State for the Treasury and for Finance and the Deputy Minister of the Economy.

Our appreciation is also extended to all the entities that collaborated with the EDP Group, namely:

- CMVM (Capital Market Supervisor), BVLP (today Euronext Lisbon) and Interbolsa;
- the EDP Group companies' statutory auditors and external auditors;
- Financial Institutions;
- Scientific, university and technical institutions.

A special word of thanks is also due:

- To the customers of EDP Group companies, to whom we reaffirm our commitment to strive towards improving the quality of service levels in order to fully satisfy their needs;
- To the shareholders, for their continuing trust in the EDP Group;
- To the workers and employees, for the positive manner in which they have contributed to the EDP Group's growth, for the competence and professionalism shown in the performance of their functions, and for the positive and open spirit they have demonstrated in the light of the essential changes introduced with the object of creating value.

Pursuant to the resolutions of 10th August 2001 and 8th March 2002, and in compliance with the provisions of paragraph four of article fourteen of the company's articles and memorandum

of association, the Board of Directors co-opted the Directors Prof. António José Fernandes de Sousa and Dr. Luís Filipe da Conceição Pereira, in substitution of Eng. Ignácio Javier Herrero Sorriqueta and Vasco Fernandes Pereira Valente, respectively. The Board of Directors takes this opportunity to express its appreciation for the contributions made to the EDP Group by the above Directors.

#### **Board of Directors**

Eng. Francisco de la Fuente Sánchez - Chairman

Eng. Jorge Fernando Alves Ferreira Guimarães

– Vice-Chairman

Dr. Rui Miguel de Oliveira Horta e Costa - Member

Dr. Fernando Noronha Leal - Member

Eng. António Manuel Barreto Pita de Abreu - Member

Dr. Manuel de Jesus Martins - Member

Eng. Jorge Manuel Jardim Gonçalves - Member

Prof. Engenheiro João Afonso Ramalho Pereira Bento - Member

Prof. Doutor Ernâni Rodrigues Lopes - Member

Prof. Doutor António José Fernandes de Sousa - Member

Lisbon, 10th April 2002





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Consolidated income statement (cost of sales format) 175



# CONSOLIDATED BALANCE SHEET AT 31<sup>ST</sup> DECEMBER 2001

Net	As		2001				
Notes	Assets	Gross	Deprec./prov.	Net	2000 Net		
	Fixed assets:						
22.b./25/27.	Intangible:						
	Start-up costs	145,810,212.99	47,648,581.91	98,161,631.08	46,522,228.34		
	Research and development costs	18,691,454.57	13,126,456.34	5,564,998.23	10,071,003.33		
	Industrial property and other rights	928,794,654.90	79,324,303.96	849,470,350.94	640,679,985.52		
	Capital expenditure in progress	183,044,011.73 1,276,340,334.19	140,099,342.21	183,044,011.73 1,136,240,991.98	109,698,406.49 <b>806,971,623.68</b>		
23.c./27.	Tangible:	1,276,340,334.15	140,033,342.21	1,130,240,331.30	000,371,023.00		
20.0., 27.	Fixed assets (DL 344-B/82)	259,915,575.48	238,981,252.37	20,934,323.11	22,245,744.24		
	Land and natural resources	112,614,398.16		112,614,398.16	97,390,148.58		
	Buildings and other facilities	325,675,733.26	132,165,297.58	193,510,435.68	166,390,022.74		
	Basic equipment	20,287,647,802.65	11,541,625,575.59	8,746,022,227.06	8,721,456,206.04		
	Vehicles, transport equipment	76,056,885.32	45,197,371.65	30,859,513.67	21,648,737.54		
	Loose tools	4,823,471.32	3,703,841.14	1,119,630.18	1,234,373.75		
	Administrative equipment	175,954,518.35	111,240,445.50	64,714,072.85	55,705,838.14		
	Returnable containers Other fixed assets	1,659.56 10,272,165.63	1,659.56 2,639,075.62	7,633,090.01	6,663,270.53		
	Capital expenditure in progress	640,524,472.07	L,000,070.0L	640,524,472.07	419,216,824.94		
	Advance payments for capital items	1,789,892.44		1,789,892.44	3,162,392.22		
23.c./27.	Multi-purpose projects (part not assigned):	24,055,920.71		24,055,920.71	24,427,603.69		
	Hydroelectric generation	17,513,086.23		17,513,086.23	17,513,086.26		
	Works under construction	6,542,834.48		6,542,834.48	6,914,517.43		
		21,919,332,494.95	12,075,554,519.01	9,843,777,975.94	9,539,541,162.41		
23.d./27.	Financial investments:	100 005 010 00	0.007.050.00	405 007 000 00	400 450 454 0		
	Group companies	192,205,940.28	6,937,956.39	185,267,983.89	432,450,451.09		
	Associated companies	1,458,398,572.92 1,461,085,575.88	81,075,094.34	1,377,323,478.58 1,459,907,397.53	917,599,037.59		
	Securities and other investments Capital expenditure in progress	1,057,767.41	1,178,178.35	1,057,767.41	1,378,453,913.42 688,431.26		
	Capital experiuture in progress	3,112,747,856.49	89,191,229.08	3,023,556,627.41	2,729,191,833.36		
	Current assets:	2,112,111,222112	22,121,220	2,022,022,021	_,,,,,,		
23.e.	Inventories:						
50.f.	Raw and consumable materials	89,408,542.20		89,408,542.20	105,566,662.40		
30.1.	Goods and work in progress	2,540,602.98		2,540,602.98	1,360,758.05		
	Goods for resale	11,997,603.68		11,997,603.68	5,899,483.73		
	Advance payments to suppliers	5,089,790.56		5,089,790.56	1,048,315.37		
		109,036,539.42		109,036,539.42	113,875,219.55		
33.b.	Medium and long-term receivables:	400 404 007 00	400 004 007 44	70 000 000 77	00 100 750 01		
50.a.	Local authorities - debt at 31/12/88	188,424,927.88	109,221,327.11	79,203,600.77	89,426,750.66		
50.a.	Shareholders and investee companies	15,789,246.11 19,246,239.07	11,387,107.60	15,789,246.11 7,859,131.47	8,802,195.75 5,790,422.57		
JU.a.	Fixed assets in course of integ debt set-off	223,460,413.06	120,608,434.71	102,851,978.35	104,019,368.98		
	Short-term receivables:	220,400,410.00	120,000,404.71	102,001,070.00	10-1,010,000.00		
50.b.	Trade debtors	787,426,279.00		787,426,279.00	499,975,320.29		
50.b.	Debtors - notes receivable	1,238,089.57		1,238,089.57	1,157.21		
50.b.	Debtors - doubtful recovery	134,621,576.21	127,318,712.46	7,302,863.75	9,228,841.11		
	Shareholders and investee companies	106,324,521.51		106,324,521.51	230,204,155.14		
	Suppliers - advance payments	1,187,455.46		1,187,455.46	4,223,972.84		
50.e.	State and other public entities	59,736,296.64		59,736,296.64	52,041,001.17		
50.c.	Other debtors	240,257,805.76	6,335,600.37	233,922,205.39	149,711,621.45		
	Share capital subscribers	45,281,168.34 1,376,073,192.49	133,654,312.83	45,281,168.34 1,242,418,879.66	945,386,069.21		
	Trading securities:	1,376,073,132.43	133,634,312.63	1,242,410,075.00	343,366,063.2		
	Other short-term investments	33,944,265.45		33,944,265.45	35,438,509.05		
	Surer street surry investments	33,944,265.45		33,944,265.45	35,438,509.05		
	Bank deposits and cash:						
	Bank deposits				22,165,227.51		
	Cash .	441,515.04		441,515.04	86,873.91		
		441,515.04		441,515.04	22,252,101.42		
50.d.	Accruals and deferrals:						
	A server d'in server	4.40 500 505 70		4.40 500 505 70	00 000 740 11		
	Accrued income	140,589,565.72		140,589,565.72	93,298,712.18		
	Deferred costs	600,284,448.26		600,284,448.26	496,956,132.82		
	Total depreciation	740,874,013.98	12,297,907,133.91	740,874,013.98	590,254,845.00		
	Total depreciation Total provisions		261,200,703.93				
	rosa. providiono		201,250,700.00				

# Accounting Consolidation Office

Manager: Dr. Carlos Manuel Fernandes de Almeida Carvalho Registered Accountant No. 26000

iO.m			
U.M	Shareholders' funds:		
	Share capital	3,000,000,000	3,000,000,000.00
	Treasury stock - nominal value	-11,726,209.00	-2,400,000.00
	Treasury stock - premiums and discounts	-21,368,993.34	-5,638,472.57
	Equity-accounting adjustments	-36,965,571.08	-6,478,321.10
	Currency adjustments	-79,439,987.59	-30,621,232.61
	Revaluation reserves	2,020,902,537.49	2,020,902,537.49
	Reserves:	_,,,,	_,,,
	Legal	221,187,440.75	193,738,592.47
	Other	78,732,985.46	78,732,985.46
	Retained earnings - holding company	343,629,001.87	257,922,829.76
	Retained earnings - consolidated subsidiaries	131,011,803.54	149,597,089.23
	Subtotal	5,645,963,008.10	5,655,756,008.13
	Consolidated net income for the year	450,794,716.53	548,973,774.10
	TOTAL SHAREHOLDERS' FUNDS	6,096,757,724.63	6,204,729,782.23
		0.00 7.00 00.4 70	07.040.004.44
	Minority shareholders' interests	240,716,931.58	37,243,931.11
	Liabilities:		
	Provisions for risks and contingencies:		
	Other	831,489,197.10	707,583,956.32
		831,489,197.10	707,583,956.32
n./50.j.	Hydraulicity Correction	387,506,423.96	365,520,715.26
а.	Medium and long-term payables:		
.k.	Bond loans - non-convertible	2,361,354,529.56	1,807,809,988.20
ık. I.	Bank loans	1,679,243,507.80	1,380,523,984.39
.1.	Other loans	14,181,280.94	16,946,659.87
	Other creditors	43,101,996.30	173,131,320.46
.b.	State participation in multi-purpose projects	19,739,517.76	19,739,517.76
.b.ii.	Adjustment account-(Reg.DL344-B/82)	20,934,323.11	22,245,744.24
.D.II.	, , , , , , , , , , , , , , , , , , , ,	4,138,555,155.47	3,420,397,214.92
	Short-term payables:		
	Bond loans - non-convertible	23,385,253.88	134,159,717.51
.k.	Bank loans	1,720,959,220.71	1,672,927,753.88
.l.	Advance payments on sales account	283,790.78	230,025.13
	Trade creditors	567,002,489.36	394,452,234.90
	Suppliers - pending invoices	3,560,731.54	5,112,122.12
	Other shareholders	7,098,103.61	4,610,231.36
	Customer advances	724,058.89	1,741,875.74
	Suppliers - fixed assets	183,781,286.11	149,376,530.51
.e	State and other public entities	196,685,588.27	47,681,097.29
e c.	Other creditors	97,837,818.47	74,491,601.23
	Accruals and deferrals:	2,801,318,341.62	2,484,783,189.67
d.			
	Accrued charges	213,255,577.41	206,882,807.31
	Deferred income	1,523,543,435.46	1,459,789,135.84
	TOTAL LIADULTICO	1,736,799,012.87	1,666,671,943.15
	TOTAL LIABILITIES	9,895,668,131.02	8,644,957,019.32
	TOTAL SHAREHOLDERS' FUNDS AND LIABILITIES	16,233,142,787.23	14,886,930,732.66

#### Board of Directors

Eng. Francisco de la Fuente Sánchez – Chairman
Eng. Jorge Fernando Alves Ferreira Guimarães – Vice-Chairman
Dr. Rui Miguel de Oliveira Horta e Costa
Dr. Fernando Noronha Leal
Eng. António Manuel Barreto Pita de Abreu

Dr. Manuel de Jesus Martins Eng. Jorge Manuel Jardim Gonçalves Prof. Engenheiro João Afonso Ramalho Pereira Bento Prof. Doutor Ernâni Rodrigues Lopes Prof. Doutor António José Fernandes de Sousa

# CONSOLIDATED INCOME STATEMENT

Notes	Expenses	20	001	2000		
	Cost of inventories sold and consumed:					
	Electricity Fuel for power generation Sundry materials	2,524,293,349.17 377,192,497.05 122,679,049.47		1,278,626,663.77 306,942,991.30 110,047,649.26		
	Goods for resale	55,542,013.35	3,079,706,909.04	35,366,782.21	1,730,984,086.54	
	Outside supplies and services Personnel costs:		651,230,185.63		368,544,067.96	
	Remuneration Staff welfare costs:	402,399,701.96		299,930,087.65		
	Complementary pensions Current pension contributions Social security contributions	37,492,144.01 95,740,835.96		18,974,270.53 80,469,416.30		
	Social welfare initiatives Other	6,458,558.68 49,882,248.21	591,973,488.82	7,334,274.23 32,604,955.22	439,313,003.93	
27.b.	Depreciation and amortisation Provisions Indirect taxes Direct taxes Other operating costs and losses	664,691,412.75 115,986,158.13 12,850,221.58 897,398.38 8,227,710.55	780,677,570.88	613,600,696.76 105,090,645.32 7,978,754.75 1,154,320.71 2,072,981.46	718,691,342.08	
23.c./50.g.	Concession and generating centre rentals Hydraulicity correction - diff.year - charge	149,114,155.87	171,089,486.38	132,636,657.09	143,842,714.01	
	A - Operating costs and losses		5,274,677,640.75		3,401,375,214.52	
44.	Financial costs and losses:  Losses in group and associated companies Interest	13,485,344.99 399,173,681.58		51,495.76 318,609,043.68		
27.b.	Provision for diminution in value of investments Unfavourable foreign-exchange differences Other	106,297.10 63,666,000.06 112,919,416.58	589,350,740.31	106,379.51 6,740,993.10 78,447,195.70	403,955,107.75	
	C - Current costs and losses		5,864,028,381.06		3,805,330,322.27	
45.	Extraordinary costs and losses  Bad debts Inventory losses Fixed asset losses Increase in depreciation and provisions Prior-year charges Hydraulicity correction - additional charge	1,384,997.50 2,635,002.47 2,635,377.39 3,068,836.86 7,467,438.07		24,041.05 631,075.66 997,251.47 2,830,069.53 5,514,470.65		
	Other	43,414,535.50	60,606,187.79	3,688,378.04	13,685,286.40	
	E - Costs and losses for the year		5,924,634,568.85		3,819,015,608.67	
	Corporate income tax Income tax for the year Income tax for the year - deferred	244,011,679.38 -41,059,093.77	202,952,585.61	310,743,132.48 1,898,141.03	312,641,273.51	
	G - Total costs		6,127,587,154.46		4,131,656,882.18	
	Minority shareholders' interest Consolidated net income for the year		-59,558,724.48 450,794,716.53		-23,285,853.95 548,973,774.10	
	TOTAL		6,518,823,146.51		4,657,344,802.33	
	Operating income (B) - (A) Net interest and financial expense ((D) - (B)) - ((C) - (A)) Net operating income (D) - (C)		673,532,448.76 -205,333,289.93 468,199,158.83		724,364,946.93 -174,828,268.70 549,536,678.23	

# Accounting Consolidation Office

Manager: Dr. Carlos Manuel Fernandes de Almeida Carvalho Registered Accountant No. 26000

Unit: EUR

Notes	Income	20	001	20	000
36. 36. 36.	Sales: Electric power Other Services provided	5,201,275,203.90 97,966,532.94 351,132,352.06	5,650,374,088.90	3,675,867,625.00 60,891,160.12 109,734,477.32	3,846,493,262.4
	Variation in production: Goods and work in progress: Closing inventories Opening inventories	2,203,417.62 1,360,758.05	842,659.57	1,792,902.29 1,531,386.67	261,515.6
23.i./50.h.	Own work capitalised		232,518,748.98		229,071,807.6
	Supplementary income	39,961,257.07		7,894,020.20	
50.i.	Operating subsidies	1,898,662.18		601,602.71	
23.n./50.j.	Other operating income and gains Hydraulicity correction - diff.year - income	22,614,672.81	64,474,592.06	6,009,287.73 35,408,665.12	49,913,575.7
	B - Operating income and gains		5,948,210,089.51		4,125,740,161.4
44.	Financial income and gains:  Profit in group and associated companies Investment income Income from trading and other securities Other interest and similar income Favourable foreign-exchange differences	25,104,850.55 16,831,122.72 18,324,509.08 261,435,745.44 62,321,222.59	384,017,450.38	41,839,641.84 23,076,646.89 6,132,511.84 153,231,152.84 4,846,885.64	229,126,839.0
	D - Current income and gains		6,332,227,539.89		4,354,867,000.5
45.	Extraordinary income and gains: Fixed asset gains Decreases in depreciation and provisions Prior-year income adjustments Hydraulicity correction - surplus	27,681,504.13 18,680,924.73 13,304,933.79 47,465,629.76		206,469,343.94 11,053,883.37 4,270,571.92	
	Other interest and similar income	79,462,614.21	186,595,606.62	80,684,002.61	302,477,801.8
	F - TOTAL INCOME		6,518,823,146.51		4,657,344,802.3

 Net extraordinary income
 ((F) -(D))-((E)-(C))
 125,989,418.83
 288,792,515.43

 Income before taxation
 (F) - (E)
 594,188,577.66
 838,329,193.66

 Consolidated net income for the year
 (F) - (G)
 450,794,716.53
 548,973,774.10

#### Board of Directors

Eng. Francisco de la Fuente Sánchez – Chairman
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Prof. Doutor Ernâni Rodrigues Lopes
Prof. Doutor António José Fernandes de Sousa

# NOTES TO THE GROUP CONSOLIDATED ANNUAL FINANCIAL STATEMENTS AT 31<sup>ST</sup> DECEMBER 2001

#### 00 - INTRODUCTION

#### a) Organisation and business

EDP - Electricidade of Portugal, S.A. was formed in 1976 in the wake of the government-decreed nationalisation and merger of the principal companies operating in the electricity sector in mainland. Portugal.

The EDP Group was formed in 1994 following the restructuring plan embodied in Decree-Laws 7/91 and 131/94. These two enactments entailed the unbundling of EDP – Electric idade of Portugal, SA (EDP), giving birth to a group of companies owned 100% (directly and indirectly) by EDP - Electric idade of Portugal, S.A.

The EDP Group's activities are centred on the generation and distribution of electric power, as well as the telecommunications and information technologies areas. In addition, the Group's business embraces complementary and related areas, such as water, gas, engineering, laboratory testing, vocational training and real estate management.

In Portugal, the EDP Group carries out its principal activity in the National Electricity System (Portuguese acronym SEN) which is founded on the co-existence of a Public Service Electricity System (SEP) with an Independent Electricity System (SEI). The last-mentioned is composed of the Non-Binding Electricity System (SENV) and a number of producers operating under a special regime (renewable energies and co-generators) who deliver electric energy to the SEP's networks under the terms of specific legislation.

The SEP is made up of the National Transmission Grid (RNT) belonging to REN (the company responsible for guaranteeing the transmission of electric power and the SEN's overall management), the Binding Producers (connected to the RNT under long-term contracts providing for exclusive supply), and the Binding Distributors who undertake to supply power to their customers in accordance with the tariffs and conditions laid

down by the Electricity Sector's Regulator (ERSE), in terms of applicable legislation.

The SENV is essentially composed of non-binding Producers and non-binding Customers. Non-binding Customers are entitled to use the SEP's networks, for which they pay regulated tariffs.

Through its subsidiary companies, the EDP Group plays a fundamental role within the entire SEN. It occupies a prominent position at the heart of the SEP, at the same time as its generating companies operate in the SEI.

Non-EDP Group companies also operate in the SEI under an auto-generation regime for own consumption, as do other independent producers whose activities are regulated under a specific regime.

In terms of the law, the Electricity Sector's Regulator (ERSE) is responsible for the sector's regulation via the drafting, issue and enforcement of regulations, as well as laying down the tariffs covering both the use of infrastructures and the supply of electric power to SEP customers.

#### b) Shareholders

Initially a State-owned company, EDP was first transformed into a State-owned public-limited company and subsequently into a State-controlled public-limited company. EDP is now a public-limited company in which the State and other public entities hold a minority interest.

1997 marked the start of EDP - Electricidade of Portugal, S.A.'s partial reprivatisation, with the second and third phases taking place in 1998. 2000 saw the fourth reprivatisation phase, following which the State's direct and indirect interest in EDP's equity capital fell to roughly 30%. EDP's share capital at 31st December 2001 was distributed amongst the following shareholders:



Portuguese State	18.96%
PARPÚBLICA	7.14%
Caixa Geral of Depósitos, S.A.	4.75%
Banco Comercial Português, S.A.	5.06%
Iberdrola	4.00%
Brisa Auto-Estradas of Portugal, S.A.	2.00%
Other private shareholders	57.70%
EDP - Treasury stock	0.39%
Total	100%

The percentage of the capital held directly or indirectly by EDP-Electricidade of Portugal, S.A. in the companies included in the group financial statements using the purchase (or full-consolidation) method is disclosed in Note O1.

#### c) Electric power price regime

In terms of prevailing legislation, the Electricity Sector Regulator (Portuguese acronym ERSE) is responsible for exercising the sector's regulatory function, through the drafting, issue and application of regulations, as well as the definition of the tariffs for the use of the infrastructures and the supply of electric power to SEP customers.

# d) Concession regime for the distribution of low-voltage electric power

Pursuant to the provisions of specific legislation (Decree-Law 344-B/82), the right to distribute low-voltage electric power is attributed to municipal councils. However, the forementioned enactment envisages the possibility of this right being exercised by EDP under concession contracts for terms which generally span 20 years, although these contracts may be revoked subject to giving 2 years prior notice.

In the demerger process which took place in 1994, the right to distribute low-voltage electric power was transferred to the newly-formed Electricity Distribution Companies.

The quid pro quo for this concession is the payment of a rental to the ceding municipalities (Note 50.g).

#### e) Public domain assets

The fixed assets deployed in the generation and distribution of electric power are subject to the public domain (ownership) regime. These fixed assets are assigned to the Group's operations where they can be administered freely, but cannot be disposed of under the terms of private commercial law whilst such assets remain so assigned.

#### f) Basis of the preparation of the financial statements

The financial statements were prepared on the basis of the historical cost convention, as modified by the revaluation of tangible fixed assets and financial investments in fixed property, and on the basis of the Group's continued business operations (i.e. the going concern principle). They also comply with the fundamental accounting principles of prudence, consistency, substance over legal form, materiality and the accruals system (or the matching concept) (except as indicated in Note 23.N).

The consolidated (group) financial statements were prepared in accordance with requirements applicable in Portugal and are, therefore, in accordance with the accounting principles and standards prescribed in the Official Chart of Accounts, as amended by Decree-Law 238/91 of July 2.

#### g) General

The notes that are presented hereunder follow the same numbering sequence as that laid down in the Portuguese Official Chart of Accounts (Portuguese acronym - POC). Those notes that have been omitted are either not applicable or material for an understanding of the accompanying group financial statements.

Except where expressly indicated otherwise, all amounts are stated in euros.

01.Companies included in the consolidation

COMPANY	HEAD OFFICE	PRINCIPAL ACTIVITY	SHARE- HOLDERS	CAPITAL HELD %	SHAREHOLDERS' FUNDS	2001 NET INCOME/(LOSS)	Reasons for compulsory consolidation Nº 1 Art. 1 DL 238/91 of 2/Jul
EDP - Electricidade de Portugal, S.A.	Av. José Malhoa, Lote A-13, Lisbon	Promotion, evolvement and management, directly or indirectly, of capital projects and activities in the electricity sector at both national and international level, for the purpose of enhancing and streamlining the performance of the universe of companies making up the EDP Group.	Portuguese State PARPÚBLICA C.G.D. B.C.P. IBERDROLA Treasury Stock Brisa Other private shareholders	18.96% 7.14% 4.75% 5.06% 4.00% 0.39% 2.00% 57.70%	5,645,963,008.10	450,794,716.51	Majority of voting rights
EDP - Gestão da Produção de Energia, SA	Av. Barbosa do Bocage, 45 Lisbon	Promotion, evolvement and management, directly or indirectly, of installation, capital projects and activities in the areas of power generation and sales, namely in the form of electricity, the carrying out of studies and the development of projects in the same domain, as well as the provision of any other allied services	EDP	100%	1,494,989,998.23	288,106,889.73	Majority of voting rights
CPPE – Companhia Portuguesa de Produção de Electricidade, S.A.	Av. Barbosa do Bocage, 45 Lisbon	Generation and sale of energy in the form of electricity and others, resulting from the operation of its own and/or third parties' installations, under the obligation to guarantee, in the final instance, the sustained development of the national power-generation system.	EDP PRODUÇÃO	100%	2,065,935,061.62	295,448,651.66	Majority of voting rights
HIDRORUMO – Projecto e Gestão, S.A.	Rua do Bolhão,36 Oporto	To conduct studies and projects, the management of capital projects and the supervision of works in any engineering field, principally in the hydraulics area, in the total or partial realisation of these capital projects and the development of connected and complementary activities.	EDP PRODUÇÃO	100%	5,334,404.13	1,069,634.66	Majority of voting rights



COMPANY	HEAD OFFICE	PRINCIPAL ACTIVITY	SHARE- HOLDERS	CAPITAL HELD %	SHAREHOLDERS' FUNDS	2001 NET INCOME/(LOSS)	Reasons for compulsory consolidation Nº 1 Art. 1 DL 238/91 of 2/Jul
PROET - Projectos, Engenharia e Tecnologia, S.A.	Avenida Estados Unidos da América, 55, 2º Lisbon	The provision of general, multi- disciplinary and specialist engineering services, involving consultancy, conception, execution and management of capital projects, supporting and participating at national and international level in Research, Development and Testing work with special relevance for the electricity sector, in particular in the domain of thermoelectric generation, integrating also the prospecting, analysis and appraisal of activities, projects and undertakings in the energy and industrial fields.	EDP PRODUÇÃO	100%	4,221,202.22	1,118,492.42	Majority of voting rights
TER - Termoeléctrica do Ribatejo, S.A.	Av. Estados Unidos da América, 55 Lisbon	The establishment and operation of a combined-cycle thermo-electric power station, the sale of the energy produced and any other allied activity.	EDP PRODUÇÃO	100%	496,641.21	-8,838.01	Majority of voting rights
HDN - Energia do Norte, S.A.	Rua do Caires, 292 Braga	Generation and sale of energy in the form of electricity and others resulting from the operation of its own or third parties' installations.	EDP PRODUÇÃO EDP, SA	60% 40%	27,865,775.00	2,224,632.69	Majority of voting rights
HIDROBASTOS	Oporto	Generation and sale of energy in the form of electricity and others resulting from the operation of its own or third parties' installations.	HDN	60%	99,180.80	2,808.92	Majority of voting rights
HIDROCENEL – Energia do Centro, S.A.	Lugar de Quintela, Seia	Generation and sale of energy in the form of electricity and others resulting from the operation of its own or third parties' installations.	EDP PRODUÇÃO EDP, SA	60% 40%	52,041,048.10	3,475,465.27	Majority of voting rights

COMPANY	HEAD OFFICE	PRINCIPAL ACTIVITY	SHARE- HOLDERS	CAPITAL HELD %	SHAREHOLDERS' FUNDS	2001 NET INCOME/(LOSS)	Reasons for compulsory consolidation Nº 1 Art. 1 DL 238/91 of 2/Jul
HidrOeM	Rua Sá da Bandeira, 567 - 1º Oporto	Operation, maintenance of power stations and generation of electric power	EDP PRODUÇÃO HIDROCENEL HDN EDP ENERGIA	32.5% 22.5% 22.5% 22.5%	1,000,000.00	-261.84	Majority of voting rights
ENERNOVA – Novas Energias, S.A.	Avenida José Malhoa, lote A-13, Lisbon	To project, build and operate the means for the generation of electric power in the alternative renewable energies sector	EDP PRODUÇÃO	100%	8,476,410.46	1,758,279.57	Majority of voting rights
SEFLOR	Lugar do Freixo Mortágua	Production and sale of electric energy in the form of electricity resulting from the operation of its own or third parties' thermal power plants destined, as a matter of priority, to take advantage of forest waste.	EDP PRODUÇÃO	60%	547,953.86	212,092.25	Majority of voting rights
EDP - COGERAÇÃO	Avenida José Malhoa, lote A-13, Lisbon	Carrying out activity in the field covering the promotion, execution, operation, for its own account or that of others, of projects involving the combined production of electric power and thermal energy by means of co-generation processes, as well as the sales thereof. Carrying out of studies and the development of projects covered by its business objects and the provision of any other connected services.	EDP PRODUÇAO	100%	4,878,155.80	-1,303,371.27	Majority of voting rights
SOPORGEN	Av. José Malhoa, Lote A-13 Lisbon	Conception, construction, financing and operation of a cogeneration power plant for the production of electric power and steam, and the sale to Soporcel of electric power and steam produced.	EDP- COGERAÇÃO	82%	-959,689.91	-1,268,569.80	Majority of voting rights



COMPANY	HEAD OFFICE	PRINCIPAL ACTIVITY	SHARE- HOLDERS	CAPITAL HELD %	SHAREHOLDERS' FUNDS	2001 NET INCOME/(LOSS)	Unit: EUR Reasons for compulsory consolidation Nº 1 Art. 1 DL 238/91 of 2/Jul
ENERGIN AZOIA	Av. José Malhoa, lote A-13, 1070-157 Lisbon	Generation in the form of cogeneration , and the sale of electric and thermal energy	EDP COGERAÇÃO	60%	50,000.00	0.00	Majority of voting rights
ENERFIN - Sociedade de Eficiência Energética, S.A	Rua Guerra Junqueiro, nº 495, S/L, Oporto	Carrying out activities in the field of energy efficiency and productivity through the conduct of technical-economic and financial studies of projects for the optimisation of energy consumption and productivity in general, as well as the sale, manufacture and operation of equipment destined for the rational use of energy and enhancement of productivity.	EDP PRODUÇÃO	75%	-916,866.81	-36,432.10	Majority of voting rights
TERGEN	Vala do carregado 2850-510 Carregado	Operation and Maintenance of the new Ribatejo thermoelectric power station.	EDP PRODUÇÃO	79.99%	250,000.00	0.00	Majority of voting rights
EDP DISTRIBUIÇÃO	Rua Camilo Castelo Branco, nº 43, Lisbon	Distribution and sale of electric power in the areas where it is legally authorised to do so.	EDP	100%	1,393,681,437.28	185,254,503.22	Majority of voting rights
EDP ENERGIA, SA	Praça Marquês de Pombal, 13 Lisbon	Generation and the purchase and sale of energy, in the form of electricity or others, resulting from its own or others' installations, as well as any other type of energy selling.	EDP PRODUÇÃO EDP	40% 60%	71,612,352.57	2,196,544.71	Majority of voting rights
OPTEP, SGPS	Av. José Malhoa, Lote A-13, Lisbon	Telecommunications.	EDP	100%	37,120,477.36	-59,077,945.68	Majority of voting rights

COMPANY	HEAD OFFICE	PRINCIPAL ACTIVITY	SHARE- HOLDERS	CAPITAL HELD %	SHAREHOLDERS' FUNDS	2001 NET INCOME/(LOSS)	Reasons for compulsory consolidation Nº 1 Art. 1 DL 238/91 of 2/Jul
ONI, SGPS	Av. José Malhoa Lote A-13 Lisbon	Management of investments in other companies as a direct form of engaging in economic activities.	OPTEP, SGPS	56%	398,309,174.07	-141,589,485.56	Majority of voting rights
ONITELECOM	Av. da República,2 4 Lisbon	Establishment, management and operation of telecommunications infrastructures and systems, the provision of telecommunication services, as well as the conduct of any other complementary, subsidiary or accessory activities, directly or through the constitution of or equity participation in companies.	ONI, SGPS	100%	203,062,936.46	-87,546,525.51	Majority of voting rights
ONI GRANDES REDES	Av. José Malhoa Lote A-13 Lisbon	Establishment, management and operation of telecommunications infrastructures and systems, the provision of telecommunications services, as well as the conduct of any other complementary, subsidiary or accessory activities, directly or through the constitution of or equity participation in companies.	ONITELECOM	100%	50,000.00	-241,881.94	Majority of voting rights
ON! ONE	Av. José Malhoa Lote A-13 Lisbon	Establishment, management and operation of telecommunications infrastructures and systems, the provision of telecommunication services, as well as the conduct of any other complementary, subsidiary or accessory activities, directly or through the constitution of or equity participation in companies.	ONI, SGPS	100%	50,000.00	-16,991,041.93	Majority of voting rights



COMPANY	HEAD OFFICE	PRINCIPAL ACTIVITY	SHARE- HOLDERS	CAPITAL HELD %	SHAREHOLDERS' FUNDS	2001 NET INCOME/(LOSS)	Reasons for compulsory consolidation Nº 1 Art. 1 DL 238/91 of 2/Jul
ONI WAY	Av. José Malhoa Lote A-13 Lisbon	Establishment, management and operation of telecommunications infrastructures and systems, the provision of telecommunication services, as well as the conduct of any other complementary, subsidiary or accessory activities, directly or through the constitution of or equity participation in companies.	ONI, SGPS BRISATEL	64% 4%	339,950,000.00	-781,224.58	Majority of voting rights
ONI WEB	Av. José Malhoa Lote A-13 Lisbon	Establishment, management and operation of telecommunications infrastructures and systems, the provision of telecommunication services, as well as the conduct of any other complementary, subsidiary or accessory activities, directly or through the constitution of or equity participation in companies.	ONI ONE	100%	50,000.00	-13,841,181.89	Majority of voting rights
ONI SOLUTIONS	Av. Da República,2 4 Lisbon	Operation of data and other communication networks, as well as the provision of allied services.	ONITELECOM	100%	589,598.57	-15,401,004.74	Majority of voting rights
ONI AÇORES	Rua Engº José Cordeiro, 6 Ponta Delgada	Establishment, management and operation of telecommunications infrastructures and systems, the provision of telecommunication services, as well as the conduct of any other complementary, subsidiary or accessory activities, directly or through the constitution of or equity participation in companies.	ONITELECOM	60%	217,326.64	-52,714.69	Majority of voting rights

01.Companies included in the consolidation

COMPANY	HEAD OFFICE	PRINCIPAL ACTIVITY	SHARE- HOLDERS	CAPITAL HELD %	SHAREHOLDERS' FUNDS	2001 NET INCOME/(LOSS)	Reasons for compulsory consolidation Nº 1 Art. 1 DL 238/91 of 2/Jul
ONI MADEIRA	Rua Brigadeiro Oudinot, edificio Odinot, 3ª, salas 301 e 302 Funchal	Establishment, management and operation of telecommunications infrastructures and systems, the provision of telecommunication services, as well as the conduct of any other complementary, subsidiary or accessory activities, directly or through the constitution of or equity participation in companies.	ONITELECOM	70%	50,000.00	-324,866.06	Majority of voting rights
093X	Av. José Malhoa, Lote A-13, Lisbon	Telecommunications.	OPTEP, SGPS	100%	22,052,256.14	-263,309.98	Majority of voting Rights
SHOPPING DIRECT	Rua Eugénio de Castro, 352 – 1ª Oporto	Establishment, management and operation of telecommunications infrastructures and systems, the provision of telecommunication services, as well as the conduct of any other complementary, subsidiary or accessory activities, directly or through the constitution of or equity participation in companies.	ONI WEB	100%	-4,488,790.89	-1,971,910.77	Majority of voting rights
ONI MULTIMÉDIA	Av. José malhoa, Lote A-13 Lisbon	Establishment, management and operation of telecommunications infrastructures and systems, the provision of telecommunication and multimedia services, namely, digital television, as well as the conduct of any other complementary, subsidiary or accessory activities, directly or through the constitution of or equity participation in companies.	ONI, SGPS	100%	50,000.00	-691.74	Majority of voting Rights



Unit: EUR

COMPANY	HEAD OFFICE	PRINCIPAL ACTIVITY	SHARE- HOLDERS	CAPITAL HELD %	SHAREHOLDERS' FUNDS	2001 NET INCOME/(LOSS)	Unit: EUR Reasons for compulsory consolidation Nº 1 Art. 1 DL 238/91 of 2/Jul
ONI PLATAFORMAS	Av. José malhoa, Lote A-13 Lisbon	Establishment, management and operation of telecommunications infrastructures, systems and networks, the provision of telecommunication services, as well as the conduct of any other complementary, subsidiary or accessory activities, directly or through the constitution of or equity participation in companies.	ONI MULTIMÉDIA	100%	50,000.00	-252.99	Majority of voting Rights
COMUNITEL	Area Portuaria de Bouzas, Zon Franca, Vigo	Purchase, sale, exchange, administration, letting, operation and cession of any type of property, whether rural or urban. The promotion and development of commercial, industrial, agricultural and service companies. The administration, management, organisation and control of any type of assets and businesses.	TLD ACTEIN	87.13% 11.97%	23,455,584.92	-9,400,038.44	Majority of voting Rights
BRISATEL	Quinta da Torre da Aguilha, Edifício Brisa	Establishment, management and operation of its own or others' telecommunications infrastructures and systems, the provision of telecommunications services and the provision of services in the area of contents and multimedia, as well as the conduct of any other complementary, subsidiary or accessory activities, directly or through the constitution of or equity participation in companies.	ONI, SGPS	100%	13,636,263.25	-1,137,127.27	Majority of voting Rights

COMPANY	HEAD OFFICE	PRINCIPAL ACTIVITY	SHARE- HOLDERS	CAPITAL HELD %	SHAREHOLDERS' FUNDS	2001 NET INCOME/(LOSS)	Reasons for compulsory consolidation Nº 1 Art. 1 DL 238/91 of 2/Jul
ACTEIN	Camelias, 114 Portal 2- Bajo. 36211 VIGO	Acquisition, subscription and holding of shares, participating interests, simple or mortgage bonds, financial assets and securities or securities in general, in any type of company, whether civil or commercial.	ONI, SGPS	100%	287,130.13	-1,171.65	Majority of voting rights
AUTOR	Praça of Goa, 14	Production and development of multimedia products and equipment. The company can acquire and sale participating interests in companies with a different company object than that indicated above, in companies governed by special laws, in limited or unlimited liability companies, as well as associate itself with other legal persons for, in particular, the purpose of forming complementary corporate groupings, European groupings of other forms of association, temporary or permanent, between companies and/or entities of another nature.	ONY WEB	100%	189,259.78	-57,383.21	Majority of voting rights
CD RAPID	Muelle Príncipe de España, Edificio Tersaco 3ª planta. 08039 BARCELON	Provision of services involving the creation, development, production and editing of computer-related material and dissemination applications relating to multimedia, internet, training and computer systems in general, as well as the sale of software, hardware and the necessary accessories.	FONOCOM	100%	-6,229.43	55,636.44	Majority of voting rights



COMPANY	HEAD OFFICE	PRINCIPAL ACTIVITY	SHARE- HOLDERS	CAPITAL HELD %	SHAREHOLDERS' FUNDS	2001 NET INCOME/(LOSS)	Unit: EUR  Reasons for compulsory consolidation Nº 1 Art. 1 DL 238/91 of 2/Jul
CIDADE DIGITAL	Avenida da Républica, nº26-9 Lisbon	Carrying out of the activity involving the production and disclosure of computer contents, including in particular the canvassing, management, study, publicity, communication, promotion and disclosure of information systems and services and geographic and marketing planning, constitution of communities for functioning on electronic commerce platforms, and organisation of events relating to the information and communication technologies, as well as the carrying out of any other activities which are complementary, subsidiary or accessory to these, directly or through the constitution of or equity participation in companies.	ONI WEB	60%	50,000.00	-9,129.40	Majority of voting rights
F.C.T.E.FORUM COMÉRCIO	Av. Da República, 26 - 9º Lisbon	Establishment, management and operation of its own or others' telecommunications infrastructures and systems, as well as the conduct of any other complementary, subsidiary or accessory activities, directly or through the constitution of or equity participation in companies.	ONI WEB	80%	500,000.00	-413,855.99	Majority of voting rights
FONOCOM	Muelle Príncipe de España, Edificio Tersaco 3ª planta. O8039 Barcelona	Installation of technical infrastructures and the commercialisation of information management services by computerised means and, in particular, electronic mail and services of electronic exchange of information. The creation and commercialisation of computer programmes, as well the provision of computer consulting services.	COMUNITEL	100%	1,009,752.97	246,434.94	Majority of voting rights

COMPANY	HEAD OFFICE	PRINCIPAL ACTIVITY	SHARE- HOLDERS	CAPITAL HELD %	SHAREHOLDERS' FUNDS	2001 NET INCOME/(LOSS)	Reasons for compulsory consolidation Nº 1 Art. 1 DL 238/91 of 2/Jul
U CALL, SA	Av. José Malhoa Lote A –13 Lisbon	Provision of integral telematic services to companies, including telemarketing, customer telephone attendance, tele-collections and all call centre activities, as well as all accessory and complementary services required for the pursuance of the above-mentioned. The company can participate in other companies, with the same or different object to its own, even if governed by special laws, as well as in complementary corporate groupings.	ONI, SGPS EDINFOR	60% 40%	50,000.00	-85,027.56	Majority of voting rights
GERMINUS SOLUTIONS	Calle Velázquez nº12 Madrid	Development and provision of services in the telecommunications, new technologies and internet sectors, and the development and provision of any other type of services to companies and individuals, directly or indirectly related with this sector. The research, development and commercialisation of projects in the sector of telecommunications, internet and in particular additional tariff and value-added telecommunications services, as well as the collaboration with companies in the development of projects in this sector, investing in projects or in entities which carry out projects in this area and, the incubation of projects in this sector of activity with the object of being subsequently commercialised totally or partially, as well as render services to third parties with respect to incubated projects. The creation, development and participation in companies which operate via the internet and within the ambit of telecommunications.	ONI WEB	100%	1,000,000.00	-1,347,759.65	Majority of voting rights



COMPANY	HEAD OFFICE	PRINCIPAL ACTIVITY	SHARE- HOLDERS	CAPITAL HELD %	SHAREHOLDERS' FUNDS	2001 NET INCOME/(LOSS)	Reasons for compulsory consolidation Nº 1 Art. 1 DL 238/91 of 2/Ju
TLD	Camelias, 114 portal 2- bajo. 36211 VIGO	Purchase, sale, exchange, administration, letting, operation and cession of any type of property, whether rural or urban. The promotion and development of commercial, industrial, agricultural and service companies. The administration, management, organisation and control of any type of assets and businesses.	ONI, SGPS	100%	1,164,102.08	-3,586.75	Majority of voting rights
RUÍDO VISUAL	R. Jorge Barradas, 34 Lisbon	Creation and implementation of internet applications and services. Provision of computer services and consulting in networks, interactive telecommunications and internet services.	ONI WEB	95%	-58,748.48	-180,380.92	Majority of voting rights
ONI-SISTEMAS INFORMAÇÃO	Av. José Malhoa, lote A-13, 1070-157 Lisbon	Conception, development and maintenance of networks destined for the transmission of computer data, conception and development, implementation and maintenance of computer programmes and systems, its own or others', as well as the provision of data centre services, personalisation, updating of IT systems and computer programmes, professional training and the provision of consulting services in the management and information organisation areas.	ONI, SGPS	100%	50,000.00	-181,936.37	Majority of voting rights

01.Companies included in the consolidation

COMPANY	HEAD OFFICE	PRINCIPAL ACTIVITY	SHARE- HOLDERS	CAPITAL HELD %	SHAREHOLDERS' FUNDS	2001 NET INCOME/(LOSS)	Reasons for compulsory consolidation Nº 1 Art. 1 DL 238/91 of 2/Jul
GERMINUS XXI	Calle Velázquez nº12 - MADRID	The research, development and commercialisation of projects in the sector of telecommunications, internet and in particular additional tariff and value-added telecommunications services.  Collaboration with companies in the development of projects in the telecommunications, internet and in particular additional tariff and value-added telecommunications services, as well as the investment in projects in this sector of activity with a view to their subsequent sale, totally or partially, as well as providing services to third parties with respect to incubated products.  The creation, development and participation in companies which operate via the internet and telecommunications, as well as with the creation of companies and business on the internet and within the ambit of telecommunications.	ONI WEB	79.5%	16,437,269.58	-5,494,889.72	Majority of voting rights
TECNIPUBLICATIONES	Av. Manoteras, 44; 3ª planta 28050 MADRID	Printing, editing and publication, periodic or isolated, of magazines, books, newspapers, leaflets, catalogues, yearbooks, cassettes, records or any other manifestation of thought or art. The provision of services through the hire, sale or subscription of any publication, whole or partial, both national and foreign. The drawing up of projects, reports and studies covering communication in its broadest form.	GERMINUS XXI	67%	728,736.67	587,708.05	Majority of voting rights



COMPANY	HEAD OFFICE	PRINCIPAL ACTIVITY	SHARE- HOLDERS	CAPITAL HELD %	SHAREHOLDERS' FUNDS	2001 NET INCOME/(LOSS)	Reasons for compulsory consolidation Nº 1 Art. 1 DL 238/91 of 2/Ju
GRAPES ESPANHA	Avenida Josep Tarradellas 20-30, 4º 08029 Barcelona	Consultancy in telecommunications, direction of networks for private channels, as well as the provision of all types of telecommunications services in local or business markets in Spain and/or abroad, except those which are the object of special legal regulation and require compliance with special conditions not covered in this object.	ONI, SGPS	100%	7,669,198.17	-556,403.74	Majority of voting rights
TECNIVIA	Av. Manoteras, 44; 3ª	Design, creation, commercial promotion, reproduction, disclosure, operation and	TECNIPUBLICA- TIONES	70%	999,170.46	286,268.88	Majority of voting
	planta 28050 MADRID	distribution of computer programmes, web pages and other computer products, audiovisual recordings, cinematographic works, record players and all types of editorial productions regardless of the type of support for transmission by any means of communication, and, in particular, by internet, and the provision to companies and users in general of services associated with these activities. Printing, editing and publication, periodic or isolated, of magazines, books, newspapers, leaflets, catalogues, yearbooks, cassettes, records or any other manifestation of thought or art. The provision of services through the hire, sale or subscription of any publication, whole or partial, both national and foreign. The drawing up of projects, reports and studies covering communication in its broadest form	GERMINUS SOLUTIONS	30%			

COMPANY	HEAD OFFICE	PRINCIPAL ACTIVITY	SHARE- HOLDERS	CAPITAL HELD %	SHAREHOLDERS' FUNDS	2001 NET INCOME/(LOSS)	Reasons for compulsory consolidation Nº 1 Art. 1 DL 238/91 of 2/Jul
EDINFOR - Sistemas Informáticos, S.A.	Rua Particular EDP à Rua Cidade of Goa, SACAVÉM	Operation of its own or others' information systems, the design. Implementation and operation of data networks, the development of computer programmes and systems with recourse to data-processing equipment, management and organisation consultancy, vocational training and the sale and importation of IT products and equipment, and related activities.	EDP	100%	56,445,909.40	9,847,349.39	Majority of voting rights
COPIDATA, S.A.	Rua Heróis de Chaimite, 12 e 12-A LOURES	Creation, execution and sale of computerised forms and graphic systems for computers, or any other industrial, commercial or service activity.	EDINFOR	99.3%	9,504,529.53	555,766.76	Majority of voting rights
COPIDATA, LDA	Rua Heróis of Chaimite, 12 e 12-A LOURES	Marketing of equipment and supplies connected with the rationalisation and security of companies and persons, namely, those relating to offices and computer systems, as well as the carrying out of any other commercial or industrial business.	EDINFOR COPIDATA,SA	11% 89%	1,200,452.46	3,172.39	Majority of voting rights
ESCRITOMÁTICA, LDA	Rua Heróis de Chaimite, 12 e 12-A LOURES	Creation, execution and sale of computerised stationery and graphic systems for computers, or any other industrial, commercial or service activity.	EDINFOR COPIDATA,SA	40% 60%	296,293.05	389,497.72	Majority of voting rights



Unit: EUR

COMPANY	HEAD OFFICE	PRINCIPAL ACTIVITY	SHARE- HOLDERS	CAPITAL HELD %	SHAREHOLDERS' FUNDS	2001 NET INCOME/(LOSS)	Reasons for compulsory consolidation Nº 1 Art. 1 DL 238/91 of 2/Jul
MECARESOPRE	Rua Formoso de Cima, 150 Lisbon	Provision of IT services, sale of IT equipment and accessories, electrical and electronic material, as well as the provision of technical assistance.	EDINFOR	80%	231,631.00	178,440.73	Majority of voting rights
CASE, SA	Av. Dr. Mário Moutinho,Lt 1732/A Lisbon	Involvement in the area of information systems by way of consultancy, training, development, analysis, conception, engineering and commercialisation of computerbased solutions.	ACE	100%	4,465,946.56	309,839.09	Majority of voting rights
ACE, SGPS	Av. Dr. Mário Moutinho,Lt 1732/A Lisbon	Management of equity participations of other companies, national or foreign, irrespective of their corporate object, as an indirect manner of being engaged in economic activity.	EDINFOR	60%	10,417,179.11	7,718,676.85	Majority of voting rights
ACE BI	Lisbon	Provision of services and outsourcing of information systems, conception, architecture, implementation and management of integrated solutions, namely for decision support and customer relationship management.	ACE	100%	250,000.00	7,556.10	Majority of voting rights
ACE BNET	Av. Dr. Mário Moutinho,Lt 1732/A Lisbon	Consultancy, development, supply and commercialisation of solutions, services and information system, information technology and communication products, in particular, for the electronics business.	ACE	100%	250,000.00	323,265.26	Majority of voting rights

01.Companies included in the consolidation

	COMPANY	HEAD OFFICE	PRINCIPAL ACTIVITY	SHARE- HOLDERS	CAPITAL HELD %	SHAREHOLDERS' FUNDS	2001 NET INCOME/(LOSS)	Reasons for compulsory consolidation Nº 1 Art. 1 DL 238/91 of 2/Jul
	ACE QS	Av. Dr. Mário Moutinho, lote 1732/A Lisbon	Provision of consulting services, sales training tools, audit technique, testing. Outsourcing of testing in information systems and communications.	ACE	100%	250,000.00	172,394.39	Majority of voting rights
	ACE SISTEMAS COMERCIAIS	Av. Dr. Mário Moutinho, lote 1732/A Lisbon	Commercial systems associated with the operation and management of computer and information systems.	ACE	100%	250,000.00	1,174,365.36	Majority of voting rights
	ACE SOURCE	Av. Dr. Mário Moutinho, lote 1732/A Lisbon	Provision of overall services related to the outsourcing of its own or others' computer systems.	ACE	100%	250,000.00	566,246.84	Majority of voting rights
	CASE/EDINFOR ACE	Rua Alameda António Sérgio,22 Algés	Drawing up of projects and provision of services in the areas of business management systems.	ACE	100%	498,797.90	-54,471.92	Majority of voting rights
	CASE/EDINFOR II	Rua Alameda António Sérgio,22 Algés	Drawing up of projects and provision of services in the areas of business management systems.	ACE	100%	496,047.85	3,498,846.82	Majority of voting rights
7	CASINFOR ACESSORIA	Alameda Araguaia, 1293-4º, sala 408 006455- 000 Aphaville BRAZIL	Advisory, consultancy, planning and other technical services in IT systems	CASINFOR Participações CASE	69.47% 29.77%	797,338.57	-372.84	Majority of voting rights



COMPANY	HEAD OFFICE	PRINCIPAL ACTIVITY	SHARE- HOLDERS	CAPITAL HELD %	SHAREHOLDERS' FUNDS	2001 NET INCOME/(LOSS)	Reasons for compulsory consolidation Nº 1 Art. 1 DL 238/91 of 2/Ju
CASINFOR PARTICIPAÇÕES	Alameda Araguaia, 1293-4°, sala 408 006455- 000 Aphaville BRAZIL	Participate in the share capital of other companies.	CASE	100%	1,426,792.85	-34,315.08	Majority of voting rights
CENTRALBIZ	Travessa de São Nicolau, nº 1-2º Oporto	Providing solutions for information technology systems.	ACE	51%	58,865.49	-1,993.74	Majority of voting rights
CONSULTEAM	Rua General Firmino Miguel, nº5 Torre 1 12-B Lisbon	Provision of management consultancy, computer, company valuation and investment project services.	ACE	100%	116,989.75	310,975.55	Majority of voting rights
EDINFOR BRASIL	BRAZIL	Operation of its own or others' information systems, the design. Implementation and operation of data networks, the development of computer programmes and information systems with recourse to data-processing equipment, management and organisation consultancy, vocational training and the sale and importation of IT products and equipment, and related activities, including participation in joint ventures or companies with others, even if the respective business object has no direct or indirect relationship with its own business objects.	EDINFOR EDP BRASIL	90% 10%	1,032,123.17	308,998.53	Majority of voting rights

01.Companies included in the consolidation

COMPANY	HEAD OFFICE	PRINCIPAL ACTIVITY	SHARE- HOLDERS	CAPITAL HELD %	SHAREHOLDERS' FUNDS	2001 NET INCOME/(LOSS)	Reasons for compulsory consolidation Nº 1 Art. 1 DL 238/91 of 2/Jul
EDINFOR - MOÇAMBIQUE	Mozambique	Operation of its own or others' information systems, the design. Implementation and operation of data networks, the development of computer programmes and information systems with recourse to data-processing equipment, management and organisation consultancy, vocational training and the sale and importation of IT products and equipment, and related activities.	EDINFOR COPIDATA,SA	95% 0.5%	15,877.53	0.00	Majority of voting rights
INOVECASE	Av. Dr. Mário Moutinho, lote 1732/A Lisbon	Business solutions using information technologies, communication and consultancy and provision of services.	ACE BNET	80%	50,000.00	-39,541.15	Majority of voting rights
INFORSYS	Alameda Araguaia, 1293-4º, sala 408 006455-000 Aphaville BRAZIL	Provision of computer services and equity participation in other companies.	CASINFOR Participações	98.57%	791,858.97	51,313.08	Majority of voting rights
INOVIS	Av. João Crisóstomo, Nº 30-5º Lisbon	Provision of computer services and export, import, representation and commercialisation of computer products and information systems.	ACE	100%	315,408.88	55,824.92	Majority of voting rights



COMPANY	HEAD OFFICE	PRINCIPAL ACTIVITY	SHARE- HOLDERS	CAPITAL HELD %	SHAREHOLDERS' FUNDS	2001 NET INCOME/(LOSS)	Reasons for compulsory consolidation Nº 1 Art. 1 DL 238/91 of 2/Jul
NO LIMITS	Av. Dr. Mário Moutinho,lote 1732/ A Lisbon	Provision of consultancy services and systems integration in the areas of information systems and the transformation of business processes.	ACE	70%	250,000.00	55,022.73	Majority of voting rights
ITLOG	Av. Sidónio Pais, 28 Lisbon	Conception, projection, production, installation, logistics and management of information technology systems.	EDINFOR	100%	1,000,000.00	458,179.11	Majority of voting rights
INTEGER	Av. João Crisóstomo, Nº 30-5º Lisbon	Development of computer systems, consultancy and vocational training.	ACE	100%	760,297.90	274,614.79	Majority of voting rights
ON SOURCE	Av. Dr. Mário Moutinho,lote 1732/ A Lisbon	Global provision of services relating to the outsourcing of its own or others' computer applications and systems, involving the following components and activities: purchase and sale of all the technological infrastructure needed for the provision of consultancy services in the areas of management and organisation, the design and reengineering pf processes and procedures, the conduct of economic-financial feasibility studies, vocational training in computer applications and systems, preparation of support manual and documentation in various formats, after-sales functional support, telephonic held-desk support, implementation and operation of call centre and contact centre systems, and control and management of projects.	ACE	100%	1,250,000.00	1,306,847.48	Majority of voting rights
PRIMITIVA	Lisbon	Tourism and handicrafts.	ACE	100%	177,484.03	221,734.63	Majority of voting rights
PSIDOC	Lisbon	Analysis of systems, production, development of computer programmes.	ACE	80%	42,863.88	1,343.36	Majority of voting rights

COMPANY	HEAD OFFICE	PRINCIPAL ACTIVITY	SHARE- HOLDERS	CAPITAL HELD %	SHAREHOLDERS' FUNDS	2001 NET INCOME/(LOSS)	Reasons for compulsory consolidation Nº 1 Art. 1 DL 238/91 of 2/Jul
SIGMAPLANO	Lisbon	Provision of consultancy and training services, and development of decision-support systems.	PRIMITIVA	65%	213,571.14	348,964.05	Majority of voting rights
S-TECNO, SA	Lisbon	Commercialisation of equipment, services, consultancy and training in the information technologies areas.	ACE	100%	372,884.03	1,031,570.75	Majority of voting rights
S-TECNO BRASIL	Alameda Araguaia, 1293-4º, sala 408 006455-000 Aphaville BRAZIL	Provision of information technology services and consultancy in computer systems.	S-TECNO	100%	205,797.65	351,575.09	Majority of voting rights
Electricidade de Portugal Internacional, SGPS, S.A.	Avenida José Malhoa, Lote A13 Lisbon	Management of equity participations in other companies as an indirect manner of being engaged in economic activities	EDP	100%	42,267,975.35	-23,390,904.74	Majority of voting rights
BANDEIRANTE	BRAZIL	Distribution and sale of electric power.	ENERPAULO	96.5%	140,730,169.79	69,853,483.37	Majority of voting rights
ENERGEN	BRAZIL	Participation in other companies as shareholder, as well as in businesses and capital projects in the energy sector.	EDP EDP Internacional EDP Brasil, SA	66.3% 14.2% 19.6%	67,203,741.49	-1,878,747.24	Majority of voting rights
INVESTCO	BRAZIL	Carrying out of activity in the promotion, execution and operation for its own account or on behalf of others, of projects for the generation of electric power, as well as its commercialisation.	EDP LAJEADO	10.6%	86,626,094.69	-602,883.72	Majority of voting rights



COMPANY	HEAD OFFICE	PRINCIPAL ACTIVITY	SHARE- HOLDERS	CAPITAL HELD %	SHAREHOLDERS' FUNDS	2001 NET INCOME/(LOSS)	Unit: EUR Reasons for compulsory consolidation Nº 1 Art. 1 DL 238/91 of 2/Jul
ENERCORP	BRAZIL	Provision of representation services on behalf other others, intermediaries, as well as advisory, consultancy and planning technical services relating to matters associated with studies and projects for the construction and operation of power stations and transmission lines and distribution of electric power, market research and all the allied activity or consultancy of the forementioned activities.	EDP Internacional	95.9% 4.14%	3,040,691.58	89,976.08	Majority of voting rights
EDP Brasil, SA	BRAZIL	Participation in other compa- nies as shareholders, as well as in businesses and capital proj- ects in the energy sector.	EDP Balwerke	96.2% 3.4%	34,791,815.79	5,640,395.95	Majority of voting rights
ENERTRADE	BRAZIL	Carrying out activity in the electric energy purchase and sale market.	EDP BRASIL,SA	90%	2,101,750.34	955,062.8	Majority of voting rights
EDP LAJEADO	BRAZIL	Conduct of activity involving the promotion, execution and operation for its own or others' account of electric energy generation projects, as well as power sales.	ENERGEN	100%	48,854,414.67	-581,715.9	Majority of voting rights

COMPANY	HEAD OFFICE	PRINCIPAL ACTIVITY	SHARE- HOLDERS	CAPITAL HELD %	SHAREHOLDERS' FUNDS	2001 NET INCOME/(LOSS)	Reasons for compulsory consolidation Nº 1 Art. 1 DL 238/91 of 2/Jul
EDP CHILE	CHILE	Carrying out all types of investments, for its own or others' account, in all types of immovable and movable goods, tangible and intangible, buying shares and other negotiable securities, bonds, credits, rights and commercial effects, maintain and administer such investments, entering into and executing contracts and financial and commercial operations, including futures, and to carry out all the acts and contracts relating to these investments, for its own or others' account. To create, finance, promote, develop and administer all types of firms, businesses or companies, industrial or commercial, especially in the area of regulated public services, such as water sanitation, electricity, gas, telephones and telecommunications. Offer advise in connection with all types of investments. Participate in the financing of companies, administer them, participate in companies, irrespective of the type and activity and, in general, accept and execute all types of commissions and meatos, guarantee, deposit or in any other way afiançar the business and obligations of firms or companies, including their branches, subsidiaries or related legal persons. The company can also constitute any type of companies and incorporate as shareholder or member in any one already in existence, carrying out the activities embodied in its objects, by itself or through companies which it forms or in those it which it becomes a shareholder or member. To comply with the company objects, the company can execute all types of commercial acts and activities which are related to its objects, as well as all the other acts which the shareholders agree with and which permit the development of its activity.	EDP ÁGUAS	100%	505,758.91	8,605,225.84	Majority of voting rights



COMPANY	HEAD OFFICE	PRINCIPAL ACTIVITY	SHARE- HOLDERS	CAPITAL HELD %	SHAREHOLDERS' FUNDS	2001 NET INCOME/(LOSS)	Reasons for compulsory consolidation Nº 1 Art. 1 DL 238/91 of 2/Ju
FAFEN	BRAZIL	Generation, in Majority of voting rights the form of generation and sale of electric and thermal energy.	ENERGEN	80%	488.66	-864,674.77	Majority of voting rights
ENERPAULO	BRAZIL	Investment-holding company and therefore has no other business activity (equity accounted)	EDP	80.99%	139,167,471.74	54,559,293.04	Majority of voting rights
			Internacional  EDP BRASIL,SA	6.32% 12.69%			
BALWERK	Lisbon	Participation in other companies as shareholders, as well as in business and capital projects in the electricity sector.	EDP Participações	100%	5,000.00	5,671,289.74	Majority of voting rights
NTERNEL CONSULTADORIA	Av. José Malhoa, lote A13 Lisbon	Corporate organisation and management consultancy, consultancy and technical assistance in the field of electric power generation, transmission and distribution, preparation and management of projects, promotion and entering into commercial contracts, for its own or others' account, and the control of their execution, vocational training of senior staff, as well as related activities.	EDP Internacional	100%	550,444.05	718,318.25	Majority of voting rights
CENTRAL -e	Rua Cidade de Goa, 4 Sacavém	Electronic commerce.	EDP, SA	52%	4,775,011.15	-4,506,562.36	Majority of voting rights
LABELEC - Estudos, Desenvolvimento e Actividades Laboratoriais, S.A.	Rua D. Luis, 12, 21 Lisbon	Undertaking of engineering works, mainly laboratory-related, with a view to assisting in the conception and operation of installations and quality control of equipment and systems, within the ambit of the generation, transmission and distribution of electricity, including giving support to manufacturers or companies linked to the electronics industry and allied entities.	EDP	100%	4,043,789.46	1,812,413.90	Majority of voting rights

01.Companies included in the consolidation

COMPANY	HEAD OFFICE	PRINCIPAL ACTIVITY	SHARE- HOLDERS	CAPITAL HELD %	SHAREHOLDERS' FUNDS	2001 NET INCOME/(LOSS)	Reasons for compulsory consolidation Nº 1 Art. 1 DL 238/91 of 2/Jul
MRH – Mudança e Recursos Humanos, S.A.	Rua D. Luís, 12, 21 Lisbon	Consultancy and the provision of services in the fields of vocational training and human resources management, as well as the exercise of connected activities.	EDP	100%	1,032,424.08	110,793.29	Majority of voting rights
SÃVIDA – Medicina Apoiada, S.A	Avenida Casal Ribeiro, nº 15, Lisbon	Provision of health-care services, management and operation of its own or others' hospitals, medical-assistance and similar establishments, the provision of services in the area of company management and human resources, as well as the exercise of safety, hygiene and health at work activities.	EDP	100%	1,168,693.65	-367,463.58	Majority of voting rights
SCS – Serviços Complementares de Saúde	Av.Casal Ribeiro, 15 – 6º Lisbon	Provision of health-care services, management and operation of its own or others' hospitals, medical-assistance and similar establishments, the provision of services in the area of company management and human resources, as well as the exercise of safety, hygiene and health at work activities.	SĀVIDA	100%	50,000.00	2,903.34	Majority of voting rights
EDP – Serviços de Gestão de Frotas, Instalações e Logística, S.A.	Av. Estados Unidos da América, 55 Lisbon	Fleet and transport management and brokers, real estate management and services, and the acquisition, contracting, management and broking of goods and services aimed at providing logistical support to companies.	EDP	100%	827,048.26	20,200.65	Majority of voting rights
EDP – Imobiliária, S.A.	Av. Estados Unidos da América,55 Lisbon	Study, conception, development and sale, for its own or others' account, of real estate and tourist projects and the undertaking of all operations associated with the marketing of real estate; administration of its own or third parties' assets, including the letting, purchase and sale of fixed properties and the resale of those acquired for this purpose.	EDP	100%	5,457,920.73	3,078,043.16	Majority of voting rights



Unit: EUR

COMPANY	HEAD OFFICE	PRINCIPAL ACTIVITY	SHARE- HOLDERS	CAPITAL HELD %	SHAREHOLDERS' FUNDS	2001 NET INCOME/(LOSS)	Unit: EUR  Reasons for compulsory consolidation Nº 1 Art. 1 DL 238/91 of 2/Jul
EDALPRO – Imobiliária, Lda.	Avenida José Malhoa, lote A-13, Lisbon	Purchase and sale of fixed properties, and resale of those acquired for this purpose; study, conception, development and selling for its own account or for that of others, of property and tourist developments; administration of assets and the carrying out of all operations relating to real estate business.	EDP	100%	809,169.35	38,197.26	Majority of voting rights
EDIPOMBAL – Imobiliária, S.A.	Praça Marquês de Pombal, 13 Lisbon	Property promotion, purchase and sale of fixed properties, and resale of those acquired for this purpose; administration of its own properties and the provision of property-related services.	EDP-Imobiliária	100%	1,539,502.83	814,447.98	Majority of voting rights
EDP ÁGUAS  - Gestão de Águas e Saneamento, S.A.	Av. José Malhoa, Lote A13 Lisbon	Promotion, development and management, direct or indirect, of business activity in the water, sanitation and related sectors, at home and abroad, in particular, the feasibility study of new businesses, the acquisition and management of participating interests, the management and operation of water catchment, treatment, supply and distribution systems, the management and operation of effluent collection, treatment and rejection systems, the management and operation of solid waste collection and treatment systems; technical assistance and vocational training and the promotion and signing of commercial contracts for its own or others' account, and the control of their execution.	EDP	100%	-4,446,930.39	5,738,744.71	Majority of voting rights
VALORÁGUA – Água e Saneamento de Portugal, S.A.	Av. da República, 57- 3º Lisbon	Promotion, development and management, direct or indirect, in the water and sanitation business sectors.	EDP ÁGUAS	100%	1,831,244.75	-263,670.94	Majority of voting rights
ADYGESINVAL, SL	SPAIN	Participation in other companies as shareholders, as well as in businesses and capital projects in the electrical sector.	EDP, SA	50%	1,388,381.91	-9,976,428.95	Majority of voting rights
EDP Participações, SGPS	Av. José Malhoa, Lote A-13 Lisbon	Management of equity investments.	EDP, SA	100%	125,811,084.75	-23,081,155.22	Majority of voting rights

# 02. Companies excluded from the consolidation

COMPANY	HEAD	SHAREHOLDERS	% CAPITAL	LA	TEST APPROVED A	CCOUNTS	REASON FOR EXCLUSION
SSIIII AIRT	OFFICE	O I A I E I I O E E E I I O	HELD	YEAR	SHAREHOLDERS' FUNDS	NET INCOME/(LOSS)	ART. 4 DL 238/91 OF 2/7
ENERGIA, RE	LUXEMBOURG	EDP	100%	2001	1,239,464.00	0	Substantially different business activity (equity accounted)
EDP Finance BV	HOLLAND	EDP	100%	2000	20,000.00	-8,310.00	Substantially different business activity (equity accounted)
EDP IRLANDA	IRELAND	EDP	100%	2000	1,000,000.00	-58,561.00	Substantially different business activity (equity accounted)
EDP- Investimento, Gestão de Participações e Assistência Técnica, Lda.	MACAU	EDP	99%	2001	22,587,334.00	2,855,799.00	Investment-holding company and therefore has no other business activity (equity accounted)
SOGESTE	MACAU	EDP-Investimento, Gestão de Participações e Assistência Técnica,Lda	85%	1999	16,781,342.00	8,910,610.00	Investment-holding company and therefore has no other business activity (equity accounted)
EDP 2000 - Participações, Lda	BRAZIL	EDP Internacional	100%	2001	89,931,979.00	-643,808.00	Investment-holding company and therefore has no other business activity (equity accounted)
EDP Investimentos, SA	BRAZIL	EDP Internacional	100%	2001	74,460,510.00	-377,110.00	Investment-holding company and therefore has no other business activity (equity accounted)

Note: Shareholders' funds do not include net income for the year



# 02. Companies excluded from the consolidation

HEAD	CHAREHOI DEDC	% CAPITAL	LA	TEST APPROVED A	REASON FOR EXCLUSION	
OFFICE	SHAREHOLDERS	HELD	YEAR	SHAREHOLDERS' FUNDS	NET INCOME/(LOSS)	ART. 4 DL 238/91 OF 2/7
BRAZIL	EDP 2000	49%	2001	43,119,512.00	-1,313,894.00	Investment-holding company and therefore has no other business activity (equity accounted)
BRAZIL	ESCELSA	100%	2001	374,038,213.00	4,652,630.00	Investment-holding company and therefore has no other business activity (equity accounted)
BRAZIL	EDP Internacional	100%	2001		-4,133,410.00	Investment-holding company and therefore has no other business activity (equity accounted)
BRAZIL	EDP Investimentos Fundo Aphelion 135 Part. AS	5.35% 58.64% 18.64%	2001	265,712,378.00	-7,048,790.00	Investment-holding company and therefore has no other business activity (equity accounted)
MOROCCO	EDP Internacional	100%				Investment-holding company and therefore has no other business activity (equity accounted)
BRAZIL	IVEN	52.27%	2001	362,534,400.00	-13,485,345.00	Lack of control over the company
BRAZIL	MAGISTRA	65.2%	2001	235,311,433.00	7,135,936.00	Lack of control over the company
	BRAZIL  BRAZIL  BRAZIL  BRAZIL	BRAZIL EDP 2000  BRAZIL EDP 2000  BRAZIL EDP Internacional  BRAZIL EDP Investimentos Fundo Aphelion 135 Part. AS  MOROCCO EDP Internacional	BRAZIL EDP 2000 49%  BRAZIL ESCELSA 100%  BRAZIL EDP Internacional 100%  BRAZIL EDP Investimentos 5.35% Fundo Aphelion 135 Part. AS 18.64%  MOROCCO EDP Internacional 100%  BRAZIL IVEN 52.27%	HEAD OFFICE         SHAREHOLDERS         % CAPITAL HELD         YEAR           BRAZIL         EDP 2000         49%         2001           BRAZIL         ESCELSA         100%         2001           BRAZIL         EDP Internacional         100%         2001           BRAZIL         EDP Investimentos Fundo Aphelion 135 Part. AS         53.5% 18.64% 18.64% 18.64%         2001           MOROCCO         EDP Internacional         100%         100%           BRAZIL         IVEN         52.27%         2001	SHAREHOLDERS	OFFICE         SHAREHULDERS         HELD         YEAR         SHAREHULDERS' INCOME/(LOSS) INCOME/(LOSS)           BRAZIL         EDP 2000         49%         2001         43,119,512.00         -1,313,894.00           BRAZIL         ESCELSA         100%         2001         374,038,213.00         4,652,630.00           BRAZIL         EDP Internacional         100%         2001         -4,133,410.00           BRAZIL         EDP Investimentos Fundo Aphelion 135 Part. AS         58.64% 18.64%         2001         265,712,378.00         -7,048,790.00           MOROCCO         EDP Internacional         100%         2001         362,534,400.00         -13,485,345.00           BRAZIL         IVEN         52.27%         2001         362,534,400.00         -13,485,345.00

Note: Shareholders' funds do not include net income for the year

# 03. Associated companies included in the consolidation using the equity method

COMPANY	HEAD	SHAREHOLDERS	% CAPITAL HELD	ÚLT	IMAS CONTAS APRO	VADAS
COMPANY	OFFICE	SHAREHULDERS	HELD	YEAR	SHAREHOLDERS' FUNDS	NET INCOME/(LOSS)
REN – Rede Eléctrica Nacional, S.A.	Av. Estados Unidos da América Lisbon	EDP	30%	2001	701,474,825.00	44,519,783.00
EDEL – Empresa Editorial Electrotécnica, Lda.	Rua de Dona Estefânia, nº 48, 3º, Lisbon	EDP	47.77%	1998	1,501.00	80.00
PORTSINES – Terminal  Multipurpose de Sines, S.A.	Largo do Depósito, nº 4, Sines	EDP	39.60%	2001	22,834,968.00	1,197,115.00
TANGUIPOR - Movimentação e Armazenagem de Líquidos, S.A.	Parque Industrial da Quimiparque, Barreiro	EDP	28.89%	2001	2,688,520.00	374,098.00
CEM – Companhia de Electricidade de Macau	MACAU	EDP-Investimento, Gestão de Participações e Assistência Técnica, Lda	5%	2001	320,623,301.00	29,364,202.00
		SOGESTE	20%			
ELECTRA	CAPE VERDE					

Note: Shareholders' funds do not include net income for the year.



# 06. Companies in which investment is equal to or higher than 10%, excluded from the consolidation

COMPANY	HEAD	SHAREHOLDERS	% CAPITAL	LAT	EST APPROVED ACC	OUNTS
COMPANY	OFFICE	SHAREHULDERS	HELD	YEAR	SHAREHOLDERS' FUNDS	NET INCOME/(LOSS)
EID – Empresa de Investigação e Desenvolvimento de Electrónica, S.A.	Guinta das Medronheiras Lazarim Plataforma Ribeirinha da CP	EDP	11.43%	1999	8,147,315.00	548,428.00
VALORSUL S.A.	Estação of Mercadorias da Bobadela S.João da Talha	EDP	11%	2001	23,817,600.00	9,641,763.00
MOTRON – Edifícios Inteligentes, S.A.	Avenida Estados Unidos da América, 27 - B e E, Lisbon	EDP	15%	2001	361,316.00	1,209.00
TEJO ENERGIA S.A.	Central Termoeléctrica do Pego, EN 118, Km 142,1, Pego Abrantes	EDP	10%	2001	99,934,159.00	37,010,804.00
TURBOGÁS – Produtora Energética, S.A.	Avenida Miguel Bombarda, 36, 6º – Lisbon	EDP	10%	2001	10,125,597.00	-25,987,370.00
GALP ENERGIA, SGPS, S.A.	Torre C, Rua Tomás da Fonseca Lisbon	EDP	14.268%	2001	1,310,064,000.00	96,853,000.00

Note: Shareholders' funds do not include net income for the year.

# NOTES TO THE CONSOLIDATED ANNUAL FINANCIAL STATEMENTS AT 31 DECEMBER 2001

#### 7. STAFF COMPLEMENT

The average number of employees in the service of Group companies during the year was 13,798 (13,713 in 2000); there are no casual workers.

At  $31^{\text{st}}$  December 2001, the number of employees on the staff payroll, including those on fixed-term contract, was 14,722 (12,662 in 2000).

The following table gives a breakdown of the full-time staff complement at 31st December 2001 by managerial//departmental head positions and by professional categories:

Total	11,709
Unskilled staff	30
Semi-skilled staff	983
Skilled staff	4,641
Highly-skilled staff	2,718
Section heads	220
Middle managers	528
Senior managers	2,054
Senior executives/ Departmental heads	535

Note: The above breakdown does not include Bandeirante, ONI-Espanha and the ACE Group.

## **10. CONSOLIDATION DIFFERENCES**

These include the balances remaining after offsetting the book values of the interests in the equity capitals of the companies included in the consolidation against the proportional interest in their respective shareholders' funds (or net assets) after, and to the extent possible, imputing directly to those items carried in the consolidated balance sheet values that are either higher or lower than their respective net book values. Except in exceptional cases, these remaining balances are written off over five years, as more fully explained in the respective note. Differences arising at the time of the first consolidation are disclosed as a separate item under shareholders' funds.

When an investee company is no longer considered to be a subsidiary and, therefore, is excluded from the consolidation, the consolidation differences and the corresponding accumulated amortisation are written off and transferred to «net extraordinary items». Those shown under «shareholders' funds» are reclassified under «retained earnings».

In the restructuring operations (mergers and demergers), the consolidation differences relating to the investee companies involved are retained in the new aggregate.

#### 14. CHANGE TO THE CONSOLIDATION PERIMETER

- i) In the first half of 2001, Adygesinval, a company in which EDP has a 50% shareholding, acquired 35% of Hidrocantábrico, S.A. As a result, the accounts of Adygesinval have been proportionally consolidated, which are reflected in the increases in the captions «Assets – financial investments (Hidrocantábrico)» and «Liabilities – bank loans» of about EUR 261 million.
- ii) In the first half of 2001, EDP recognised for the first time in its financial statements the 27.65% investment that it holds in the joint-venture Investco, the company which is building the Lajeado hydroelectric power development of Lajeado in Brazil. Previously this investment was recognised indirectly through the financial investment held by EDP Lajeado. As a consequence, there was an increase in the consolidated financial statements of EUR 140 million in the caption «Assets tangible fixed assets» and EUR 70 million in the caption «Liabilities bank loans», as well as the elimination of the amount of the financial investment previously disclosed.
- iii) In the first half of 2001, ONI reorganised its participating interests in Spain, swapping the 10.4% shareholding in Grapes Communications N.V. for a shareholding of virtually 100% in Grapes Espanha (formerly Comunitel).



iv) Finally, and also in the first half of 2001, ONI, SGPS carried out a capital increase operation that was fully subscribed for in specie by Brisa, as a result of which EDP's shareholding in ONI, SGPS fell from 67.5% to 56%.

# 17. AMORTISATION OF CONSOLIDATION DIFFERENCES

Consolidation differences are amortised over the period the investment is expected to be recouped. The consolidation differences arising from an increased investment in a subsidiary are amortised during the remaining useful life, as defined for the amortisation of the initial consolidation differences.

# 18. ACCOUNTING TREATMENT OF INVESTMENTS IN ASSOCIATED COMPANIES

Financial investments in associated companies are accounted for using the equity method.

This method includes implicitly the fair value differences attributed to identifiable assets and liabilities, namely, concession rights not recorded in the relevant companies' individual accounts. These rights are amortised over the period of the respective concession.

## 21. FINANCIAL COMMITMENTS

- a) Contractual commitments for the acquisition of fixed assets totalled EUR 18,796,969.96 at balance sheet date.
- b) Welfare benefits for employees

As referred to note 23.g, EDP has instituted retirement benefit plans for employees of the Group companies resulting from EDP's demerger in 1994, that is, complementary retirement and early retirement pensions and medical care.

### i) Retirement benefits

The components of net cost for the period are as follows:

		EUR thousand
	2001	2000
Service cost	14,525	10,151
Interest cost	74,710	62,290
Return on fund assets	-57,531	-60,823
Amortisation of the transitional obligation	5,826	5,896
Net cost for the period - IAS 19	37,530	17,514

The following table presents the breakdown of the changes which occurred in retirement obligations and in the pension fund:

		EUR thousand
	2001	2000
Change in benefit obligations		
Obligations at the beginning of the period	1,213,456	1,040,123
Sale of REN	0	-50,354
Reallocation of non-current staff	0	13,931
Restructuring 2000-2002	0	217,421
Service cost	14,525	10,151
Interest cost	74,710	62,290
Actuarial (gains)/losses	175,653	27,574
Benefits paid	-123,434	-107,680
Obligations at the end of the period	1,354,910	1,213,456
Changes in fund assets		
Fair value of assets at the beginning of the period	801,179	863,913
Sale of REN	0	-46,523
Reallocation of non-current staff	0	13,931
Return on fund assets	57,531	60,769
EDP contributions	31,930	17,034
Benefits paid	-54,225	-57,207
Actuarial gains/losses	-82,145	-50,738
Fair value of assets at the end of the period	754,270	801,179
Surplus (shortfall) in Fund cover	-600,640	-412,276
Actuarial (gains)/losses not recognised	232,361	78,516
Deferred transitional obligation	62,330	68,151
Deferred costs (accrued) - IAS 19	-305,949	-265,610

The following are the most important assumptions used in the actuarial calculation of retirement benefit obligations

	2001	2000
Annual discount	6.5%	6.5%
Annual growth rate of pensions	3.5%	3.5%
Fund annual rate of return	7.5%	7.5%
Expected percentage of eligible staff opting for		
early retirement	(*)	(*)

<sup>[\*]</sup> All the employees who meet the conditions for transition to pre-retirement in accordance with the ACT (36 years of service and at least 60 years old or 40 years of service) will acquire pre-retirement status by 31/12/2002.

In 2000, 2001 and 2002, 30%, 90% and 70% respectively of employees aged 55 or more will transfer to pre-retirement.

As from 2003 inclusive, 40% of the employees who meet the ACT conditions will transfer to pre-retirement.

#### ii) Medical care

The components of net cost for the period were as follows:

		EUR thousand
	2001	2000
Service cost	6,714	6,494
Interest cost	28,781	26,885
Amortisation of transitional obligation	4,873	5,302
Net cost of the period – IAS 19	40,368	38,682

The following table shows the changes in benefit obligations and in the respective provision:

		EUR thousand
	2001	2000
Change in obligations		
Obligations at the beginning of the period	453,223	434,488
Sale of REN	0	-23,588
Service cost	6,714	6,494
Interest cost	28,781	26,885
Actuarial (gains)/losses	6,533	25,419
Benefits paid	-20,880	-16,475
Obligations at the end of the period	474,371	453,223
Surplus (shortfall) in Fund cover	-474,371	-453,223
Actuarial (gains)/losses not recognised	44,308	37,769
Deferred transitional obligation	52,124	56,998
Deferred costs (accrued) - IAS 19	-377,939	-358,456

The following are the most important assumptions used in the actuarial calculation of retirement benefit obligations:



	2001	2000
Annual rate of increase in health costs	5.0%	5.0%
Annual rate of increase in salaries	3.5%	3.5%
Annual discount rate	6.5%	6.5%

In the application of the equity method, the book value of the investments in group companies is replaced in the consolidating company's balance sheet by its proportional interest in the relevant group company's shareholders' funds.

#### 22. CONTINGENT LIABILITIES

In addition to the obligations referred to in the preceding note, the Group is contingently liable in respect of guarantees furnished in the amount of EUR 304,291,677.41.

These guarantees comprise almost exclusively bank guarantees, with the remainder being in the form of cash guarantees. There are no corporeal (real) guarantees.

#### 23. ACCOUNTING AND VALUATION CRITERIA

#### a) Consolidation of accounts

Three methods were used in the consolidation of the Group's accounts: for the companies referred to in Note O1, the full consolidation (or purchase) method was used, with the exception of Investco and Adygesinval, in respect of which the proportional consolidation method was applied; for the companies referred to in Notes O2 and O3, the equity method was used.

In the application of the full consolidation method, all assets, liabilities and shareholders' funds were included in the balance sheet, while the income statement includes all costs and losses, income and gains. Intercompany balances were eliminated from the balance sheet, at the same time as costs and losses, income and gains relating to operations between the companies included in the consolidation under this method were also eliminated.

The proportional consolidation method is identical to the full consolidation method, the only difference being that the figures included correspond to the percentage shareholding in the investee company.

#### b) Intangible assets

Intangible assets are valued at cost of acquisition or production, net of amounts amortised. These intangible assets are written off (amortised) over three years, except in the case of concession rights, which are written off over the concession period.

#### c) Tangible fixed assets

i) Fixed assets belonging to the Group

Tangible fixed assets are disclosed at the values resulting from the revaluation effected during the 1992 financial year. This revaluation was applied either to the respective cost (of acquisition or construction), or to the carrying value as adjusted by similar previous revaluations, and in both cases are shown net of accumulated depreciation. The carrying value of fixed assets includes finance charges and foreign-exchange differences capitalised during the construction phase, both of which result from loans contracted to finance such investment, as well as administrative overheads, as indicated in the following paragraphs.

Finance charges are split between those that are considered to be associated with loans contracted to fund capital works in progress, and are calculated by applying an average rate of interest to the average value of capital expenditure in progress, and those resulting from other loans. The first-mentioned are imputed to capital works in progress (Note 50.h), while the others are accounted for in the income statement covering the period to which they relate (Note 44). Up until 1994, the Company capitalised foreign exchange differences resulting from loans denominated in foreign currency raised to finance capital investments.

The general overheads of departments responsible for the realisation of investment projects (General administrative

overheads - Note 50.h) are imputed to the various capital projects under construction. General administrative overheads are apportioned between investment (Administrative overheads - Note 50.h) and current operating results in accordance with pre-determined percentages, with the portion relating to investment being subsequently imputed to the various capital projects under construction.

Depreciation is calculated on the straight-line basis at specific rates applicable to EDP which were fixed by governmental dispatch for fixed assets deployed in the generation, transmission and distribution of electricity. Other fixed assets are depreciated at the rates which are generally used in Portugal and are consistent with the estimated useful lives of each category of assets concerned.

The finance charges, foreign-exchange differences and administrative overheads are depreciated at the same rates as those applied to the fixed assets to which they are imputed.

The depreciation rates used correspond to the following estimated average useful lives;

	Years
Buildings and other facilities	8 - 50
Basic equipment	
Hydroelectric generation	32 - 60
Thermoelectric generation	25 - 30
Electricity distribution	10 - 30
Other basic equipment	5 - 10
Vehicles, transport equipment	4 - 25
Loose tools	3 - 10
Administrative equipment	4 - 10
Currency differences	10 - 60
Other tangible fixed assets	10 - 25

Those fixed assets which have been subsidised by third parties are depreciated on the same basis and at the same rates as the Group's own property, with the respective charge being offset in the «extraordinary income and gains account» (Note

45.c) by the same amount the subsidised asset is amortised (reflected in Accruals and Deferrals - Investment Subsidies). These subsidies are written off over a period of 30 years, which corresponds to the average useful life of the Group's subsidised fixed assets.

Current maintenance and repairs expenditure on fixed assets is expensed in the year in which it is incurred. Expenditure relating to major repairs and improvements is treated as a deferred cost, and charged against income over a maximum period of 6 years, as described in paragraph c) of this note and in Note 50.d.).

#### ii) Fixed assets assigned to concessions

In terms of Decree-Law no. 344-B/82, and as referred to in paragraph d) of note OO, the concession of low-voltage electricity distribution does not involve the sale of the ceding municipalities' own fixed assets, which continue to remain their property despite the deployment thereof in the EDP Group's operations. Pursuant to this arrangement, concession fixed assets are recognised under tangible fixed assets (Note 27.b.iii), with a corresponding amount being included as a medium/long-term liability (reflected under Other debtors and creditors - Adjustment account - DL 344-B/82).

These fixed assets are stated at the amounts resulting from the revaluation carried out during the 1992 financial year, net of accumulated depreciation.

Concession-held fixed assets are depreciated on the same basis and at the same rates as those applied to the Group's own assets, with the respective charge being offset in the extraordinary income and gains account (Note 45.a), by the reduction of an equal amount in the liability to the Municipalities.

The Group is responsible for the maintenance and repairs of these fixed assets during the term of the concession contract, with the relevant expenses being recorded in the same manner as maintenance and repairs expenditure incurred on the Group's own fixed assets.



iii) Multi-purpose projects (part not assigned to power generation)

The multi-purpose projects relate to that part of hydroelectric schemes built by the Group that are used for various purposes which do not fall within its principal business activities (irrigation, supplying water to the public, etc.). For this reason they are partly subsidised by the State.

These fixed assets are valued at cost of construction, which also includes general administrative overheads, as indicated in the paragraph dealing with fixed assets belonging to the Group. These fixed assets are not depreciated.

The value attributed to the investment for which the State assumes responsibility in the multi-purpose projects of Aguieira, Raiva and Alqueva, was computed by applying the following provisional percentages to the accumulated direct costs relating to these projects at balance sheet date:

Aguieira and Raiva ...... 50% Algueva ...... 65%

The contribution received from the State in respect of these projects is shown as a medium/long-term liability (Note 33.a).

# d) Financial investments (except consolidation differences)

Equity interests (financial investments) in subsidiary and associated companies are stated at the amounts derived from the application of the equity accounting method.

This caption reflects the amounts corresponding to the fair values of assets and liabilities, namely, concession rights which are not recorded as such in the individual accounts of the companies included in the consolidation universe.

Investments in fixed property are shown at the value resulting from the revaluation effected in the 1992 financial year which was applied to the cost (of acquisition or construction) or to similar previous revaluations, net of accumulated depreciation.

Other financial investments are stated at cost. Income arising from investments is recognised in the income statement in the year in which it is received.

#### e) Inventories

Inventories are valued at cost, or at market price if this is lower than the cost of inventories purchased from third parties, and at cost of production, in the case of inventories manufactured internally, with items withdrawn from stores (consumption) being valued at average cost.

#### f) Deferred costs

Costs incurred with bond issues, as well as those relating to major repairs and improvements, are disclosed under Accruals and Deferrals - Deferred Costs, and written off against income over the maturity term of the debt securities or over a maximum period of 6 years, respectively (Note 50.d).

#### g) Employee welfare benefits

The Group accounts for costs pertaining to pensions and associated charges in accordance with the requirements of International Accounting Standard (IAS) 19, thereby derogating from the requirements of local Accounting Directive 19 (Note 21). This last-mentioned directive corresponds to the transposition into Portuguese law of the previous version of IAS 19.

The Group companies resulting from EDP's demerger in 1994 have a commitment to supplement retirement and survivors' pensions to the extent that these are not covered by the Social Security scheme, so as to safeguard the amounts that have been pre-defined in the Collective Employment Agreement .

To this end, the Group constituted an independent Pension Fund common to all these companies, to which it has transferred part of the obligations arising from past services outstanding at 31/12/2001. The Group will continue to allocate resources to this Fund: the amount of such allocation corresponds to the

obligations maturing during each financial year. With the aim of complementing this Pension Fund, the Group created a provision for recognising the remaining portion of past obligations outstanding as at 31/12/2001.

The Group's employees may opt for early retirement when predetermined conditions relating to age and period of service have been complied with.

The Group's employees who have taken retirement retain the right to medical assistance upon the same conditions as personnel still in active service.

#### h) Holiday pay and related subsidy

At the end of each year the Group reflects under the item «Accruals and deferrals - accrued charges» the amount owing in respect of accrued holiday pay and related subsidy, the payment of which is only due in the following financial period.

#### i) Own work capitalised

The expenditure incurred by the Group in the construction of fixed assets (as principal contractor) using its own resources and recognised in the income statement, is capitalised. The effects of this capitalised expenditure are disclosed under operating income and gains (Note 50.h).

### j) Corporate income tax

The computation of corporate income tax for the year is effected based on estimated taxable income.

The income tax charge for the year is corrected for deferred taxation calculated in accordance with IAS 12.

### k) Accounts receivable and payable in foreign currency

Transactions involving foreign currencies are translated into local currency at the rate of exchange ruling on the date of the respective operations.

At the end of the year, all accounts receivable and payable which were originally denominated in a foreign currency are translated into local currency at the exchange rate ruling at the balance sheet date (Note 24).

The resulting foreign-exchange differences (favourable or unfavourable), except those capitalised to fixed assets up until 1994 (Note 23.c), are recognised in the income statement for the relevant financial year (Note 44).

#### I) Derivative financial instruments

The Group holds a portfolio of derivative products with the sole object of reducing financial expenses. These derivative products have as their overriding objective the provision of cover against interest and exchange-rate risks in view of the Group's exposure under financing contracts concluded with various leading financial institutions.

### i) Hedging interest rate risk

With the object of reducing financial risks and respective costs associated with the funding of its business operations, the Group entered into interest-rate swap contracts whose maturity dates vary between 4 and 7 years. The Group does not intend to cancel these contracts before the date initially envisaged.

#### ii) Hedging currency risk

The Group uses exchange-rate risk management instruments for the purpose of hedging its exposure on loans denominated in foreign currency, such as forward currency contracts and currency swaps. The forward currency contracts have maturity terms varying between 2 and 6 years.

## m) Electricity sales

The billing of electricity is effected on a monthly basis during the course of each month. Monthly electricity bills are based on the reading of actual consumption or on estimated consumption based on the historical data relating to each consumer.



Electric power tariffs for SEP customers are fixed by the ERSE in such a manner as to permit the recovery of the necessary costs for providing the regulated services, as well as to ensure a specified return on the capital invested.

The adjustments in future tariffs of any surpluses or shortfalls arising from the non-confirmation of certain tariff assumptions require the creation of methods which permit the recording on an accrual basis of any such surpluses or shortfalls.

Hence, the surpluses or shortfalls arrived at in the financial year vis-à-vis the figures approved by the electricity sector Regulator are recorded under Accruals and Deferrals (Note 50.d).

The income pertaining to energy to be billed for electricity consumed, but not yet read, at balance sheet date is accrued based on the average of the latest consumption figures (Note 50.d).

The revenue derived from the sale of electricity (except for the above-mentioned) and of other goods or services provided, is recognised on the date of billing.

#### n) Hydraulicity Correction

The Hydraulicity Correction constitutes a legally-conceived mechanism (Decree-Law no. 338/91) for compensating the variable costs of electric-power generation.

In low rainfall years, the thermoelectric generating system is over-utilised and consequently, expenditure on fuel and electricity imports increases substantially. In years with abundant rainfall, the exact opposite occurs. The Group cannot alter the tariffs charged for supplying electric power to SEP customers according to the variability of costs resulting from hydraulicity.

In terms of Ministerial Order 987/2000, the hydraulicity correction account is included in EDP's accounts. Consequently, this account is shown as a liability in the balance sheet, while

the corresponding annual movements are described in the notes to the annual financial statements (Note 50.j).

The annual amount of the Hydraulicity Correction is calculated in accordance with the parameters laid down in applicable legislation and includes:

- The difference between the economic costs of generating electric energy and the economic reference cost which is borne by REN in its capacity as concessionaire of the National Transmission Grid (RNT) and exclusive manager of the hydraulicity correction account. EDP pays REN every month the positive differences and receives from REN the negative differences. These payments and receipts are made against the hydraulicity account.
- The financial expenses or income associated with the Hydraulicity Correction's accumulated balance represent a cost or revenue item of EDP;
- The portion corresponding to the amount required to make the expected balance over a period of 10 years equal to an adequate reference level, when it involves a debit to the hydraulicity account represents income for EDP; when it involves a credit, REN must make the respective payment to EDP. REN must incorporate the corresponding cost in its electricity sales tariff to be charged to the binding distribution company (EDP Distribuição), which in turn constitutes a charge to be recouped in the sales tariffs applied to its consumers.

The movements on the hydraulicity account are subject to approval by way of a ministerial dispatch.

#### **24. FOREIGN EXCHANGE RATES**

The foreign-exchange rates relative to the Euro used to convert accounts receivable and payable expressed in foreign currency at balance sheet date were those published by the Bank of Portugal - official foreign-exchange quotations (indicative) on 28/12/2001, as follows:

AUD	1,728	DKK	7,4365	LTL	3,5228	SEK	9,3012
BGN	1,9463	EEK	15,6466	LVL	0,5563	SGD	1,6306
BRL	2,046	GBP	0,6085	MAD	10,19223	SIT	218,8364
CAD	1,4077	GTQ	6,994437	MOP	7,0785	SKK	42,78
CHF	1,4829	HKD	6,8723	MTL	0,3994	TRL	1269,5
CLP	582,5393	HUF	245,18	NOK	7,9515	USD	0,8813
CVE	110,265	ISK	91,48	NZD	2,1215	ZAR	10,4302
CYP	0,57504	JPY	115,33	PLN	3,4953		
CZK	31,962	KRW	1161,55	ROL	27,817		

# 25. START-UP, RESEARCH AND DEVELOPMENT COSTS

«Start-up costs» essentially comprise expenditure incurred with the formation of companies. «Research and development costs» basically refer to studies carried out within the scope of European Community programmes.



# 27. INTANGIBLE AND TANGIBLE FIXED ASSETS AND FINANCIAL INVESTMENTS

## a) Fixed assets

ltem	Opening Balance	Revaluation/ /Adjustment	Additions	Disposals	Change in Consolidation Perimeter	Transfers and Scrapped	Closing Balance
Intangible assets							
Start-up costs	61,412,304.93		22,919,510.97		59,852,920.87	1,625,476.22	145,810,212.99
Research and development costs	19,607,711.60		28,280.32		48,214.35	(990,751.70)	18,691,454.57
Industrial property and other rights	677,916,613.66		28,618,511.19		1,114,425.10	221,145,104.95	928,794,654.90
Capital expenditure in progress	109,698,406.49		76,538,280.61			(3,192,675.37)	183,044,011.73
Total (1)	868,635,036.68		128,104,583.09		61,013,560.32	218,587,154.10	1,276,340,334.19
Tangible fixed assets							
Fixed assets DL 344-B/82	251.749.490.59					8.166.084.89	259.915.575.48
Subtotal (2.1)	251,749,490.59					8,166,084.89	259,915,575.48
Subtotal (E. 1)	201,740,400.00					0,100,004.00	200,010,070.40
Land and natural resources	97,390,148.58		11,704,339.14	4,465.64	567,024.69	2,948,420.11	112,614,398.16
Buildings and other facilities	279,428,310.30		36,381,152.75	1,354,997.26	3,638,166.77	4,873,106.18	325,675,733.26
Basic equipment	19,764,977,524.81	(81,117,041.65)	148,235,396.36	3,678,820.48	167,949,587.78	I ' '	20,305,160,888.88
Specific technical equipment	19,545,048,805.29	(81,117,041.65)	94,462,799.53	0,0,0,020.10	140,126,096.86	281,076,486.63	19,979,597,146.66
Electricity generation	10,085,590,703.64	(81,117,811.88)	25,964,640.11		140,126,096.86	35,953,058.10	10,287,634,498.71
Hydroelectric	6,772,694,625.59		22,732,496.06		140,126,096.86	19,393,599.11	6,954,946,817.62
Thermoelectric	3,274,279,366.17		3.232.144.05		-, -,	5,184,290.74	3,282,695,800.96
Renewable energies	21,103,625.62		, , ,			11,375,168.28	32,478,793,90
Multi-purposes projects (part not assigned)	l					(0.03)	17,513,086.23
Electricity distribution	9,459,458,101.65	(81,117,041.65)	68,498,159.42			245,123,428.53	9,691,962,647.95
Other basic equipment	219,928,719.52		53,772,596.83	3,678,820.48	27,823,490.92	20,360,114.47	325,563,742.22
Vehicles, transport equipment	63,209,564.71		12,021,835.11	9,833,407.66	3,003,631.67	(12,011,553.83)	76,056,885.32
Loose tools	11,785,931.19		316,656.99		40,814.81	(7,319,931.67)	4,823,471.32
Administrative equipment	183,445,342.43	(1,602,115.20)	11,535,917.44	207,083.34	6,715,802.91	(24,347,512.57)	175,954,518.35
Returnable containers	1,659.56						1,659.56
Other fixed assets	9,119,150.82		107,002.19	634.82	117,718.01	927,659.79	10,272,165.63
Subtotal (2.2)	20,409,357,632.40	(82,719,156.85)	220,302,299.98	15,079,409.20	182,032,746.64	266,506,789.11	21,010,559,720.48
Expenditure in progress	419,216,824.94	(4.729,123.86)	552,744,599.40	25,089.00	25,629,542.27	(352,362,459.68)	640,524,472.07
Multi-purpose projects (part not assigned)	6,914,517.43	(, 20, 120.00)	302,7 77,000.40	25,003.00	180,564.82	(371,682.95)	6,542,834.48
Advance payments for cap. Expenditure	3,162,392.22		11,000,875.19		100,004.02	(12,553,939.79)	1,789,892.44
Subtotal (2.3)	429,293,734.59	(4.729,123.86)	563,745,474.59	25,089.00	25,810,107.09	(365,288,082.42)	648,857,198.99
Total (2)	21,090,400,857.58	(87,448,280.71)	784,047,774.57	15,104,498.20	207,842,853.73		21,919,332,494.95
10001 (2)		(=:,::=,===:::,	, ,	,,		(,,,	,,,,
Financial investments							
Participating interests	2,793,756,720.00	(9,215,178.31)	576,531,173.93	24,542,009.53	10,715,311.43	(469,099,953.35)	2,927,230,083.23
Investment properties	2,643,331.92						2,643,311.92
Other	218,495.24		40,967,265.65		167,304.27	140,463,608.77	181,816,673.93
Capital expenditure in progress	688,431.26		2,078,453.44		6,398,000.00	(8,107,117.29)	1,057,767.41
Total (3)	2,797,306,978.42	(9,215,178.31)	619,576,893.02	24,542,009.53	17,280,615.70	(336,743,461.87)	3,112,747,856.49
Grand Total (1) + (2) + (3)	24,756,342,872.68	(96,663,459.02)	1,531,729,250.68	39,646,507.73	286,137,029.75	(208,771,516.19)	26,308,420,685.63

# b) Depreciation and provisions

ltem	Opening Balance	Revaluation	Increases	Change in consolidation perimeter	Adjustments and transfers	Closing Balance
Intangible assets						
Start-up costs	14,890,076.59		13,393,431.30	12,727,564.77	6,637,509.25	47,648,581.91
Research and development costs	9,536,708.27		3,883,233.63	728.55	(294,214.11)	13,126,456.34
Industrial property and other rights	37,236,628.13		38,209,905.67	158,852.58	3,718,917.58	79,324,303.96
Total (1)	61,663,412.99		55,486,570.60	12,887,145.90	10,062,212.72	140,099,342.21
Tangible fixed assets	000 500 740 05		4 004 044 00		4 505 504 04	000 004 050 07
Fixed assets DL 344-B/82	229,503,746.35		4,881,944.98		4,595,561.04	238,981,252.37 238,981,252.37
Subtotal (2.1)  EDP Group fixed assets	229,503,746.35		4,881,944.98		4,595,561.04	
Buildings and other facilities	113,038,287.56		6,161,537.63	394,255.07	12,571,217.32	132,165,297.58
Basic equipment	11,026,008,232.50		607,414,038.77	6,337,040.49	(98,133,733.17)	11,541,625,578.59
Specific technical equipment	10,950,105,433.69		562,763,256.77		(91,166,548.46)	11,421,702,142.00
Electricity generation	5,876,013,209.08		223,252,339.31		(7,365.18)	6,099,258,183.21
Hydroelectric Hydroelectric	3,789,993,229.94		125,406,029.68		(7,365.18)	3,915,391,894.44
Thermoel <mark>ectric</mark>	2,083,463,680.75		96,506,749.15			2,179,970,429.90
<mark>Renewab</mark> le energies	2,556,298.39		1,339,560.48			3,895,858.87
Electricity distribution	5,074,092,224.61		339,510,917.46		(91,159,183.28)	5,322,443,958.79
Other basic equipment	75,902,798.81		44,650,782.00	6,337,040.49	(6,967,184.71)	119,923,436.59
Vehicles, transport equipment	41,560,827.17		7,558,318.62	1,001,025.36	(4,922,799.50)	45,197,371.65
Loose tools	10,551,557.44		407,622.67	26,162.68	(7,281,501.65)	3,703,841.14
Administrative equipment	127,739,504.29		17,761,916.46	2,709,755.45	(36,970,730.70)	111,240,445.50
Returnable containers	1,659.56					1,659.56
Other fixed assets	2,455,880.29		1,790,084.31	94,924.30	(1,701,816.28)	2,639,072.62
Subtotal (2.2)	11,321,355,948.81		641,093,518.46	10,563,163.35	(136,439,363.98)	11,836,573,266.64
Total (2)	11,550,859,695.16		645,975,463.44	10,563,163.35	(131,843,802.94)	12,075,554,519.01
Financial investments						
Participating interests	67,045,458.63		24,683,105.54	472,937.46	(4,188,450.90)	88,013,050.73
Investment properties	1,069,686.43		106,297.09	2,194.83		1,178,178.35
Total (3)	68,115,145.06		24,789,402.63	475,132.29	(4,188,450.90)	89,191,229.08
Grand Total (1) + (2) + (3)	11,680,638,253.21		726,251,436.67	23,925,441.54	(125,970,041.12))	12,304,845,090.30



- i) The capitalised foreign-exchange differences are included in the different categories of fixed assets to which they relate.
- ii) In the case of fixed assets belonging to the Group, basic equipment includes all the plant, equipment and machinery associated with the generation and distribution of electricity, together with the respective land, buildings and installations.
- iii) DL 344-B/82-regime fixed assets represent the plant, machinery, equipment, etc. deployed in the distribution of low-voltage electricity, and which have been transferred by the Local Authorities under concession agreements. These fixed assets which, although used by the Group, remain the property of the respective Local Authorities, had the following carrying values at December 31 2001:

Fixed assets	259,915,575.48
Accumulated depreciation	238,981,252.37
Net book value	20,934,323.11

The ownership of some of these fixed assets could be transferred to the Group under agreements whereby the value thereof would be set off against outstanding debts still owing by the respective municipalities (Note 50.a.ii).

iv) The assets deployed in Bandeirante's activities, whose demerger was only concluded in October 2001, as well as those of Grapes Espanha (acquired at the end of the 1st half of 2001), are still dependent upon the final attribution of the respective fair values.

# 28. CAPITALISATION OF FINANCE CHARGES

In conformity with the accounting policy described in Note 23.b, the following interest charges on borrowings were capitalised during the year to works under construction:

4,988,690.14 2,183,185.37
4,988,690.14
297,548.06
1,967,659.35
4,913,284.54
7,178,491.94
14,350,367.45
14,350,367.45
125,648.75
1,527.08

# 33. MEDIUM AND LONG-TERM ACCOUNTS PAYABLE AND RECEIVABLE

Comprise at 31 December:

#### a) Creditors

		2001			
	1 to 5 years	more than 5 years	Total		
Bond loans	151,703,146.06	2,209,651,383.50	2,361,354,529.56		
Bank loans	1,448,905,140.04	230,338,367.76	1,679,243,507.80		
Other loans	14,181,280.94		14,181,280.94		
Other creditors	43,101,996.30		43,101,996.30		
State participation in multi-					
-purpose projects		19,739,517.76	19,739,517.76		
Adjustment account (DL 344-B/82)	20,934,323.11		20,934,323.11		
	1,678,825,886.45	2,459,729,269.02	4,138,555,155.47		

		2000			
	1 to 5 years	more than 5 years	Total		
Bond loans	336,520,382.91	1,471,289,605.29	1,807,809,988.20		
Bank loans	1,009,087,697.36	371,436,287.03	1,380,523,984.39		
Other loans	16,946,659.87		16,946,659.87		
Other creditors	39,916,802.84		39,916,802.84		
State participation in multi-purpose					
projects		19,739,517.76	19,739,517.76		
Fundação CESP (Bandeirante)		69,200,145.86	69,200,145.86		
Concession-linked liabilities					
(Bandeirante)		64,014,371.76	64,014,371.76		
Adjustment account (DL 344-B/82)	22,245,744.24		22,245,744.24		
	1,424,717,287.22	1,995,679,927.70	3,420,397,214.92		

# b) Debtors

		2001		
	1 to 5 years	more than 5 years	Total	
Debtors - Local Authorities - debt at 31.12.88	25,517,778.66	162,907,149.22	188,424,927.88	
Provision for Local Authorities - debt at 31.12.88		(109,221,327.11)	(109,221,327.11)	
Shareholders and affiliated companies		15,789,246.11	15,789,246.11	
Fixed assets in course of integration - debt set-off	19,246,239.07		19,246,239.07	
Provision for fixed assets in course of integration - debt set-off	(11,387,107.60)		(11,387,107.60)	
	33,376,910.13	69,475,068.22	102,851,978.35	

		2000		
	1 to 5 years	more than 5 years	Total	
Debtors - Local Authorities - debt at 31.12.88	31,478,641.47	165,966,675.76	197,445,317.23	
Provision for Local Authorities - debt at 31.12.88		(108,018,566.57)	(108,018,566.57)	
Shareholders and affiliated companies		8,802,195.75	8,802,195.75	
Fixed assets in course of integration - debt set-off	13,318,477.11		13,318,477.11	
Provision for fixed assets in course of integration - debt set-off	(7,528,054.54)		(7,528,054.54)	
	37,269,064.04	66,750,304.94	104,019,368.98	

## **36. SALES AND SERVICES**

Breakdown of the amounts disclosed in the income statement by activities and markets (domestic and foreign):

## a) Sales

# a.1) Electric energy

	20	D1	200	0
Domestic market				
National Transmission Grid	1,214,072,593.08		598,150,021.32	
Final customers				
Very high voltage	36,837,394.76		35,313,537.56	
High voltage	175,099,745.15		168,551,490.23	
Medium voltage	782,980,341.41		750,259,026.49	
Low voltage (>39,6 KVA)	261,226,784.85		245,690,821.24	
Low voltage	1,965,300,829.15		1,833,211,789.58	
Low voltage (public lightning)	83,918,057.77		80,279,104.02	
Embedded generation	11,859.44		0	
Interrruptibility discounts	-25,554,995.13		-15,132,586.70	
Tariff correction discounts	-25,344,703.44		-28,935,702.27	
Tariff difference – REN	0		46,901,966.26	
Tariff diffEDP Distribuição – 1999	35,509,422.29		-35,509,422.29	
Tariff diffEDP Distribuição – 2000	0		-20,485,629.63	
Tariff diffEDP Distribuição - 2001	6,708,831.72	4,510,766,161.05	0	3,658,294,415.81
External market				
To final customers				
Very high voltage	19,923,589.13		17,573,209.19	
High voltage	208,258,683.18		0	
Medium voltage	186,253,798.96		0	
Low voltage	268,372,747.43		0	
Low voltage (public lighting)	12,514,307.69		0	
Discounts	-4,814,083.54	690,509,042.85	0	17,573,209.19
		5,201,275,203.90		3,675,867,625.00

Note: The 2000 figures shown for the external market refer to exports made by REN: in 2001, the figures refer to Bandeirante.

# a.2) Other sales

	20	001	2000	
Domestic market				
Steam	8,625,219.11		2,304,825.12	
Ash	3,735,599.15		4,197,985.16	
IT products	29,799,550.95		16,437,482.62	
Telecommunications	20,430,726.53		2,106,472.69	
Fixed properties	8,008,200.23		20,585,389.21	
Sundry materials	17,673,411.25	88,272,707.22	15,259,005.32	60,891,160.12
External market				
Telecommunications		9,693,825.72		0
		97,966,532.94		60,891,160.12

#### b) Services

Domestic market				
Electricity	9,235,240.57		7,272,624.91	
Engineering	9,346,843.23		12,378,848.96	
Laboratories	3,109,883.81		2,014,164.16	
Training	1,281,802.55		691,241.81	
Medical assistance	2,675,349.33		2,241,366.71	
IT products	93,899,146.70		12,507,371.22	
Consultancy	20,963,454.47		1,905,913.25	
Telecommunications	101,254,088.87		31,984,351.66	
Other	44,001,719.99	285,767,529.52	25,260,078.42	96,255,961.10
External market				
Consultancy	0		13,478,516.22	
IT products	14,779,899.77		0	
Telecommunications	50,584,922.77	351,132,352.06	0	109,734,477.32
		5,650,374,088.90		3,846,493,262.44

# 38. CORPORATE INCOME TAX

According to an authorisation obtained from the Minister of Finance, the EDP Group is subject to corporate income tax (Portuguese initials IRC) on a consolidated (group relief) basis for a period of five years commencing in 2000.



In terms of prevailing legislation, income tax returns are subject to review and correction by the fiscal authorities during a period spanning 5 years. Accordingly, the last tax year that can be considered as definitively assessed by the income tax authorities is 1996.

However, no additional tax assessment is expected to be raised in respect of the 1997 to 2000 financial (and tax) years.

The tax charge recorded in the period basically corresponds to:

	Tax base	Income tax
Profit before tax	594,188,577.66	
Permanent differences	87,919,380.78	
Equity-accounted attributable earnings	(11,619,505.56)	_
	670,488,452.88	
Normal tax charge		234,670,958.51
Tax overprovided in 2000		(32,271,376.68)
Rate and other adjustments		553,003.78
		202,952,585.61

# 39. GOVERNING BODIES' EMOLUMENTS

Remuneration paid to members of EDP-Electricidade of Portugal, S.A.'s governing bodies was as follows:

Board of Directors	2,814,583.65
Sole supervisors / Statutory auditors	82,551.06
General Meeting Committee	1,621.09

# 41. REVALUATION OF TANGIBLE FIXED ASSETS AND INVESTMENT PROPERTIES

Tangible fixed assets and investment properties have in prior years been revalued in accordance with the following enactments:

Decree-Law 430/78	Decree-Law 111/88
Decree-Law 219/82	Decree-Law 7/91
Decree-Law 399-G/81	Decree-Law 49/91
Decreto-Lei n 171/85	Decree-Law 264/92
Decree-Law 118-B/86	

Decree-Law 7/91 of January 8, which provided for the formation of new public limited companies through the simple demerger of EDP, stipulated in its Article 8 that EDP's assets and liabilities be duly valued, this valuation to be carried out by entities selected from amongst those deemed by the Ministry of Finance to be qualified for this purpose, and subject to the Minister of Finance's approval.

This valuation, which was carried out in terms of Decree-Law 22/92 of February 14, has been accepted for tax purposes, namely, insofar as the calculation of depreciation for the year is concerned.

# 42. HISTORICAL COST OF TANGIBLE FIXED ASSETS AND FINANCIAL INVESTMENTS

The following schedule presents a comparison between the book value of tangible fixed assets and investment properties and their respective historical costs:

	Historical	Cost increases arising from revaluations	Revalued book value
Gross fixed assets	10,816,461,948.13	10,454,013,347.83	21,270,475,295.96
Depreciation	2,953,834,084.53	9,121,720,434.48	12,075,554,519.01
Net fixed assets	7,862,627,863.60	1,332,292,913.35	9,194,920,776.95

The tangible fixed assets taken into account in the above schedule include both those belonging to the Group and those held under the DL 344-B/82 Regime, as more fully detailed in the subtotals (2.1) and (2.2) of the tables appearing in Note 27.

# 44. NET FINANCIAL ITEMS (EXPENSE)

	Financia	l Year	·	Financial	Year
	2001	2000		2001	2000
Costs and losses			Income and gains		
Interest payable	419,733,375.14	333,824,442.47	Interest receivable	184,475,897.19	135,555,753.06
Losses in group and associated companies	13,485,344.99	51,495.76,	Gains in group and associated companies	25,104,850.55	41,839,641.84
Depreciation of investment			Fixed property income	958,152.84	687,428.88
properties	106,297.10	106,379.51	Investment income	16,831,122.72	23,076,646.89
Unfavourable foreign-exchange differences	63,666,000.06	6,740,993.10	Favourable foreign-exchange differences	62,321,222.59	4,846,885.64
Losses of sale of investments	92,134.05	0	Prompt settlement discounts	2,212,178.04	1,946,515.07
Other financial costs and losses	92,267,588.97	63,231,796.91	Gains on the sale of investments	684,800.84	0
			Other financial income		
Net financial items (expense)	(205,333,289.93)	(174,828,268.70)	and gains	91,429,225.61	21,173,967.67
	384,017,450.38	229,126,839.05		384,017,450.38	229,126,839.05

a) «Interest payable» includes, inter alia, the following amounts:

	2001	2000
Interest on derivatives Interest on the Hydraulicity Correction (*)	109,499,855.12 20,559,693.56	88,536,732.67 15,215,398.78

<sup>(\*)</sup> In the income statement included in the item «Other financial costs and losses»



b) «Other financial expenses and costs» include, inter alia, the following amounts:

	2001	2000	
Bond-issue charges	5,112,563.06	1,186,795.38	
Commissions on loans	12,205,266.80	1,595,370.85	
Amortisation of CERJ rights	0	9,519,965.50	
Amortisation of EBE rights	12,839,352.17	11,085,064.69	
Amortisation of IVEN rights	18,413,824.63	18,413,824.62	
Amortisation of OPTEP rights	8,509,087.60	10,589,544.28	
Amortisation of ACE HOLDING rights	4,407,195.20	0	
Amortisation of Comunitel rights	5,521,882.47	0	

c) «Interest receivable» includes, inter alia, the following amounts:

	2001	2000
Interest on derivatives	132,595,908.55	112,058,032.97
Interest charged to HV/MV/SLV customers due to late payment of bills	12,441,962.47	2,551,092.98

d) «Other financial income and gains» include, inter alia, the following amount:

	2001	2000
Gain derived from the restructuring of Bandeirante's debt	86,196,124.62	0
Interest charged to HV/MV/SLV customers due to late payment of bills	0	7,404,400.39

e) The change in the captions «Unfavourable and favourable foreign exchange differences» refers essentially to the foreign exchange situation in Brazil during 2001.

# 45. NET EXTRAORDINARY ITEMS (INCOME)

_	Financia	l Year		Financial	l Year
	2001	2000		2001	2000
Costs and losses			Income and gains		
Donations	1,296,437.56	895,713.11	Taxation recovered	37.25	5,211.25
Bad debts	1,384,997.50	24,041.05	Bad debts recovered	398,044.15	68,842.93
Inventory losses	2,935,002.47	631,075.66	Inventory gains	168,558.97	323,466.85
Fixed assets losses	2,635,377.39	997,251.47	Fixed assets gains	27,681,504.13	206,469,343.94
Fines and penalties	74,135.71	14,799.71	Contractual penalty		
Increase in depreciation,			awards	20,947.10	28,534.71
amortisation and provisions	3,068,836.86	2,830,069.53	Decreases in depreciation,		
			amortisation and provisions	18,680,924.73	11,053,883.37
Prior-year adjustments	7,467,438.07	5,514,470.65			
			Prior-year adjustments	13,304,933.79	4,270,571.92
Other extraordinary costs and	42,043,962.23	2,777,865.22			
losses			Other extraordinary income		
			and gains	126,341,106.50	80,257,946.87
Net extraordinary items (income)	125,989,418.83	288,792,515.43			
	186,595,606.62	302,477,801.83		186,595,606.62	302,477,801.83

a) «Other extraordinary costs and losses» include, inter alia, the following amounts:

	2001	2000
Additional assessment of IRC relating to 1996	10,835,832.96	0
Negotiated retrenchment indemnities	8,826,195.19	0

b) «Decreases in depreciation, amortisation and provisions» include, inter alia, the following amounts:

	2001	2000
Provision for doubtful debts	17,732,913.16	11,016,382.81



c) «Other extraordinary income and gains» include, inter alia, the following amounts:

	2001	2000
Taxation overprovided	278,546.92	500,977.52
Set-off of depreciation charge on subsidised fixed assets	63,887,442.70	61,050,097.41
Set-off of depreciation charge on concession-held fixed assets	4,881,945.78	5,049,095.63
Hydraulicity Correction – surplus	47,465,629.76	0

## **46. MOVEMENT ON PROVISIONS**

	Opening balance	Increases	Decreases	Change in consolidation universe	Closing balance
For doubtful debtors	246,160,398.27	20,464,381.76	13,295,702.03	933,669.54	254,262,747.54
Trade debtors	234,230,072.58	13,468,336.62	12,092,039.17	933,669.54	236,540,039.57
Other receivables	11,930,325.69	6,996,045.14	1,203,662.86		17,722,707.97
For risks and contingencies	707,583,956.32	165,726,483.03	42,074,275.58	253,033.33	831,489,197.10
Retirement benefits	627,170,663.88	159,562,953.38	39,918,849.50		746,814,767.76
Current lawsuits	3,897,794.78	891,750.88	361,905.58		4,427 640.08
Other	76,515,497.66	5,271,778.77	1,793,520.50	253,033.33	80,246,789.26
For financial investments	698,317.06	3,113,970.50		3,125,668.83	6,937,956.39
	954,442,671.65	189,304,835.29	55,369,977.61	4,312,371.70	1,092,689,901.03

Note: The decrease in the provision for employee retirement benefits was effected by the direct method in the captions «Outside supplies and services» and «Personnel costs».

## **50. OTHER INFORMATION**

## a) Medium and long-term accounts receivable

i) Trade debtors - local authorities - debt at 31.12.88

The balance on this account is shown net, after setting off outstanding debts relating to integrated fixed assets to be transferred to the Group (paragraph ii) of this note), and rentals owing by the Group at that date.

ii) Debt-settlement fixed assets

Debt-settlement fixed assets represent the net amounts, at the date of integration, of Local Authorities' debts outstanding at December 31 1988, after setting off these arrears with the respective fixed assets in the process of being integrated (Tangible fixed assets - DL 344-B/82 Regime). The transfer of this property to the Group's tangible fixed assets is dependent upon the formalisation of concession contracts or debt-settlement protocols to be concluded between EDP and the relevant local authorities.

## b) Short-term accounts receivable

Comprise at 31 December:

	2001	2000
Trade debtors		
National		
State and official entities	33,423,591.64	27,992,284.46
Local authorities	21,323,361.12	20,619,288.49
Business sector and individuals	711,331,840.18	446,007,442.75
Foreign	21,347,486.06	5,356,304.59
	787,426,279.00	499,975,320.29
Trade notes receivable		
Business sector and individuals	1,238,089.57	1,157.21
	1,238,089.57	1,157.21
Debtors - doubtful recovery		,
National		
Local authorities	39,127,627.19	42,315,985.75
Business sector and individuals	93,566,503.69	92,566,846.84
Foreign	1,923,248.05	557,514.53
	134,621,576.21	135,440,347.12
Provision	(127,318,712.46)	(126,211,506.01)
	7,302,863.75	9,228,841.11



# c) Other short-term debtors and creditors

The following is a breakdown of the Balances appearing in the Balance Sheet at December 31:

Other debtors	2001	2000
Debtors for the supply of other goods and services	104,215,091.95	79,951,044.01
Deposits with third parties	1,117,144.16	417,846.52
Payments on behalf of the pension fund	7,776,930.41	32,510,269.94
Amounts owed by concessionaires - Bandeirante	33,558,885.00	0
Advance payments on behalf of the State to Auto-producers	18,491,294.53	0
Sundry debtors (net)	68,762,859.34	36,832,460.98
	233,922,205.39	149,711,621.45

Other creditors	2001	2000
Trade and other creditors' deposits and retentions	582,958.70	620,256.85
Creditors for the supply of other goods and services	8,217,785.82	76,967.19
Concession rentals	627,155.40	4,857,582.40
Creditor entities for collections by Group companies	4,350,511.61	7,521,054.81
Creditors for capital subscribed not yet paid up	14,851,070.34	0
Fundação CESP (Bandeirante)	5,557,067.95	6,352,736.80
Liabilities payable – CASE shareholders	0	19,453,202.78
Sundry creditors (Bandeirante)	23,793,457.21	16,631,523.25
Sundry creditors	39,857,811.44	18,978,277.15
	97,837,818.47	74,491,601.23

# d) Accruals and deferrals

Comprise at 31 December:

Accrued income	2001	2000
Unbilled energy for consumption up to balance sheet	110,511,019.44	81,144,851.48
Interest receivable	15,905,053.50	3,752,104.43
Other	14,173,492.78	8,401,756.27
	140,589,565.72	93,298,712.18

Deferred costs	2001	2000
Fixed asset repairs and improvements	4,419,026.30	5,499,347.13
Bond-issue costs	801,296.21	1,693,591.59
Cartographic surveys	727.08	828,308.04
Concession charges	12,207,875.52	3,051,469.44
Deferred taxation	406,273,711.04	322,060,831.42
Advertising and publicity expenditure	9,943,645.49	17,190,083.70
Renegotiation of EIB financing	33,420,432.91	37,862,074.61
Fuel consumption account (Bandeirante)	3,506,152.17	21,122,470.94
Supplementary Benefits Plan (Bandeirante)	61,341,781.51	74,061,551.66
Increase in provisions for employee welfare benefits	62,329,785.22	0
Other	6,040,014.81	13,586,404.29
	600,284,448.26	496,956,132.82

Accrued costs	2001	2000
Loan interest payable	68,754,698.01	43,562,828.49
Holiday pay and related subsidy	60,374,362.80	55,805,956.32
Amounts payable to the pension fund	0	18,699,933.16
Tariff difference	13,776,797.92	55,995,051.92
Purchase of energy from REN	0	16,959,128.50
Other	70,349,718.68	15,859,908.92
	213,255,577.41	206,882,807.31

Deferred income	2001	2000
Investment subsidies	1,325,537,169.57	1,185,058,123.19
Deferred taxation	182,245,068.58	269,586,825.17
Other	15,761,197.31	5,144,187.48
	1,523,543,435.46	1,459,789,135.84

The caption «Investment subsidies» represents the accumulated net balance of the funds received after deducting the annual write-off.

Subsidies received during the year totalled EUR 206,302,928, of which EUR 3,927,196.77 was paid out from EC community funds.



# e) State and other public entities

Comprise at 31 December:

Amounts receivable (Assets)	2001	2000
Income tex	0	7,837,748.02
Value added tax	59,736,296.64	44,203,253.15
	59,736,296.64	52,041,001.17

Amounts payable (Liability)	2001	2000
Income tax	136,116,583.25	0
Income tax retentions	8,790,417.02	7,831,249.45
Value added tax	7,071,919.05	3,563,856.25
Social Security contributions	10,640,693.16	8,139,586.94
Other	34,065,975.79	28,146,404.65
	196,685,588.27	47,681,097.29

## f) Inventories of raw and consumable materials

# i) Comprise at 31 December:

	2001	2000
Fuel for thermal generation		
In storage		
Coal	28,651,352.58	31,988,822.90
Fuel-oil	21,252,820.31	48,657,084.52
Diesel	2,860,787.33	1,124,242.29
In transit	11,571,244.65	1,327,500.90
Sundry materials	44,700,334.55	30,777,568.94
	109,036,539.42	113,875,219.55

## ii) Cost of inventories sold and consumed

	Fuel for electricity generation	Sundry materials	Goods for sale
Opening inventories	83,097,650.61	18,445,634.01	12,331,934.95
Purchases	358,494,762.22	127,320,645.37	67,795,598.18
Inventories adjustments	(63,710.91)	3,558,027.50	(5,153,363.80)
Closing inventories	64,336,204.87	32,702,730.88	13,374,682.50
Cost of goods sold and consumed	377,192,497.05	116,621,576.00	61,599,486.83

## g) Rentals for concessions and power-generating centres

Breakdown of the amounts shown in the income statement:

	2001	2000
Concession rentals paid to local authorities	145,641,942.73	128,376,951.65
Rentals for power-generating centres paid to local		
authorities	3,472,213.14	4,259,705.44
	149,114,155.87	132,636,657.09

# h) Own work capitalised

Breakdown of the amounts shown in the income statement:

	2001	2000
Consumption of materials	84,020,308.44	75,701,960.97
Direct internal charges	40,778,349.41	52,792,440.66
Administrative charges	42,305,120.65	46,802,940.76
Finance charges	14,477,543.22	8,588,401.63
Other own work for the company	50,937,427.26	45,186,063.61
	232.518.748.98	229.071.807.63

## i) Operating subsidies

Operating subsidies relate primarily to amounts received for alterations effected to the routing of electricity-distribution networks.



# j) Hydraulicity Correction

The movements occurred during the year:

Opening balance	365,520,715.26
Difference	48,891,644.90
Surplus	(47,465,629.76)
Finance charges	20,559,693.56
Closing balance	387,506,423.96

## k) Bond loans

The bonds are issued in euros and bear different rates of interest. The other principal details are:

	21st issue	22nd issue	23rd issue
Face value:	EUR 20,006,935.88	EUR 41,609,095.85	EUR 10,331,743.77
31 December 2000	5.1250%	5.1250%	4.9375%
31 December 2001	3.3750%	3.3125%	3.2500%
Interest payable:	June 23 and December 23	June 2 and December 2	June 20 and December 20
Redemption:	3 equal annual instalments 23.06.2000	4 equal annual instalments 2.06.2000	4 equal annual instalments 20.12.2008

	24th issue	25th issue	
Face value:	EUR 13,513,271.92	EUR 299,278,738.33	
Interest rate:			
31 December 2000	4.93750%	5.3250%	
31 December 2001	4.53125%	3.5030%	
Interest payable:	January 5 and July 5	May 23 and ovember 23	
Redemption:	4 equal annual instalments 5.01.2002	6 equal half-yearly instalments 23.05.2006	
Other conditions:	respectively, on 2 Jun.2002, on 20 Dec.2006, on 5	The 22nd, 23rd and 24th issues can be totally or partially redeemed before maturity date, that is, respectively, on 2 Jun.2002, on 20 Dec.2006, on 5 Jan. 2003 at the Group's or bondholders' option. The 25th issue can be fully redeemed on 23 Nov. 2003 at the Group's option.	

	1st International issue	2nd International issue
Face value: Interest rate:	EUR 1,000,000,000	EUR 1,000,000,000
31 December 1999 31 December 2000	6.000% 6.400%	- 5.875%
Interest payable:	October 29	March 28
Redemption:	Once only on October 29, 2009	Once only on March 28, 2011

#### I) Bank loans

Short, medium and long-term bank loans had the following profile according to currency after taking into account the effect of currency swap contracts (all figures are shown in thousands of the respective currencies):

	2001			2000
	Loan currency	EUR	Loan currency	EUR
PTE	-	-	109,717,576.567	547,268,964.51
EUR	3,255,472,253.83	3,255,472,253.83	2,336,745.468	2,336,745,468.00
OFM	-	-	21,429.000	10,956,255.42
BRL	325,197,478.66	158,911,755.62	14,785.579	8,146,737.36
USD	-	-	152,788.280	167,280,972.85
		3,414,384,009.45		3,070,398,398.14

Variable interest rates are generally based on the deferred interbank rate. The borrowings in EUR are primarily based on LISBOR for six months. The variable interest rate on loans denominated in foreign currency and in euros is mainly based on the three- and sixmonth LIBOR and EURIBOR rates.

The Group has access to long-term credit facilities amounting to EUR 187,049,211.40 at rates of interest tied to LISBOR, to be negotiated at the time these facilities are utilised, and to facilities totalling EUR 600,000,000 at rates indexed to EURIBOR. Of these facilities, EUR 290,000,000 had been used at December 31 2001. It also has another facility of EUR 750,000,000.00 that has not yet been used.



The swap contracts in force at the end of the year were as follows:

	2001			2000
	Assets Liabilities		Assets	Liabilities
Interest rate swaps:				
DEM	21,204,000.00	_	28,122,000.00	-
EUR	2,949,579,263.97	2,949,579,263.97	1,449,579,263.97	1,449,579,263.97
PTE	-	2,189,525,045.00	-	2,702,393,695.00

#### m) Movement on Shareholders' Funds

Account	Opening balance	Increases	Decreases	Closing balance
Share capital	3,000,000,000.00			3,000,000,000.00
Treasury stock (NV)	(2,400,000.00)	(9,326,209.00)		(11,726,209.00)
Treasury stock (PD)	(5,638,472.57)	(15,730,520.77)		(21,368,993.34)
Equity-accounting				
adjustments	(6,478,321.10)	(30,487,249.98)		(36,965,571.08)
Currency adjustments	(30,621,232.61)	(48,818,754.98)		(79,439,987.59)
Revaluation reserves	2,020,902,537.49			2,020,902,537.49
Reserves:				
Legal reserves	193,738,592.47	27,448,848.28		221,187,440.75
Reserves - DL 46031 and DL 46917	65,902,490.69			65,902,490.69
Free reserves	12,830,494.77			12,830,494.77
Retained earnings - parent company	257,922,829.76	548,973,774.10	463,267,602.00	343,629,001.86
Retained earnings - consolidation of subsidiaries	149,597,089.23		18,585,285.69	131,011,803.54
Net income for the year	548,973,774.10	450,794,716.53	548,973,774.10	450,794,716.53
TOTAL	6,204,729,782.23	922,854,604.18	1,030,826,661.79	6,096,757,724.62

- a) The Currency Conversion Reserve reflects the amount resulting from the currency conversion into local currency of subsidiary and associated companies' Shareholders' Funds expressed in foreign currency.
- b) The revaluation reserves reflect the net adjustments made to tangible fixed assets and investment properties at the time the various revaluations were carried out (Note 41), and after deducting the amounts incorporated into share capital increases or used to absorb accumulated losses, as well as the corresponding deferred tax component.

These reserves can only be used for incorporation into share capital increases or for absorbing losses, should these exist.

- c) In terms of EDP's statutes, a minimum amount equal to 5% of annual net income must be transferred to the legal reserve. This reserve may only be used to absorb losses or be incorporated into share capital increases.
- d) The «DL 46031 and DL 46917 reserves for Financial Autonomy and Debt Repayment» were created in terms of the provisions contained in the loan contracts entered into with the International Bank for Reconstruction and Development (the World Bank). These loans were repaid in full during 1991.
- e) «Retained earnings consolidated subsidiaries» corresponds to the retained profits and other variations in the shareholders' funds (or net assets) of the subsidiary companies included in the consolidation.
- f) The following movement occurred during the year on the holding (parent) company's «Retained earnings»:

Opening balance	257,922,829,76
Transfer of 2000 net income	548,973,774,10
Appropriated as follows:	
Legal Rese <mark>r</mark> ve	27,448,848,28
Dividends	418,990,233,54
Governing bodies' share of profits	640,556,26
Employees' share of profits	16,764,846,72
Equity-accounting reserve	-
Retained earnings - Consolidation of subsidiaries	(576,882,80)
Closing balance	343,629,001,86

## m) Segment information

	2001	2000
) Sales		
Sales to third parties	4 050 405 040 50	C40 E00 744 E
Generation Transmission	<u>1,256,495,040.52</u>	610,536,711.5 65,176,778.9
Distribution		
Portugal	3,273,424,363.37	3,025,459,791.90
Brazil	690,509,042.85 3,963,933,406.22	3,025,459,791.90
Telecommunications		3,323, 133,731.3
Portugal	125,569,484.32	16,717,710.3
Spain	61,544,827.80 187,114,312.11	16,717,710.3
Information technologies	150,255,848.32	
Other ub-total of non-Group sales (Note 36)	92,575,481.73 5,650,374,088.90	128,602,268.5 3,846,493,261.2
iroup companies	3,030,374,066.30	3,040,453,201.20
Generation	58,402,278.30	588,826,343.5
Transmission Distribution	-	889,409,198.8
Portugal	6,575,664.36	8,548,478.1
Brazil	<u> </u>	
Telecommunications	6,575,664.36	8,548,478.1
Portugal	763,209.24	9,270,892.1
Spain	46,755.15	
Information to be also in a	809,964.38 116,776,822.42	9,270,892.1
Information technologies Other	67,745,291.59	156,570,535.0
Sub-total of intragroup sales	250,310,021.06	1,652,625,447.6
otal sales	5,900,684,109.96	5,499,118,708.9
Depreciation and amortisation for the year		
Seneration	227,474,081.43	222,764,377.8
Transmission	<u> </u>	33,693,668.2
Distribution Portugal	324,576,466.66	313,955,088.2
Brazil	35,826,643.19	010,000,000.2
	360,403,109.85	313,955,088.2
Telecommunications Portugal	41,527,339.99	20,672,399.5
Spain	7,343,522.91	20,072,033.0
·	48,870,862.90	20,672,399.5
Information technologies Other	18,456,114.83 9,487,243.74	22,515,163.4
otal	664,691,412.75	613,600,697.3
i) Operating income		
Generation Transmission	<u>514,952,466.00</u>	508,155,495.26 48,233,756.65
Distribution		46,233,730.0
Portugal	191,238,926.53	215,975,918.0
Brazil	64,609,291.61 255,848,218.14	045 075 040 0
Telecommunications	255,848,218.14	215,975,918.0
Portugal	(100,648,286.00)	(80,176,773.97
Spain	(16,954,540.00)	(00.470.770.07
Information technologies	(117,602,826.00) 15,575,458.18	(80,176,773.97
Other	(9,016,513.41)	19,086,077.5
ub-total	659,756,802.91	711,274,473.5
Intragroup otal	13,775,645.85 673,532,448.76	13,090,471.90 <b>724,364,945.4</b> 0
/) Assets	670,002,440.70	724,004,040.4
Generation	6,559,202,808.00	4,794,390,678.4
Transmission Distribution	-	
Portugal	4,968,090,322.26	4,871,158,084.0
Brazil	862,531,026.47	
Telecommunication	5,830,621,348.73	4,871,158,084.0
Portugal	887,057,380.00	1,032,561,526.7
Spain	141,446,817.00	
Information to be also in a	1,028,504,197.00 256,409,556.78	1,032,561,526.7
Information technologies Other	2,530,949,983.37	1,206,648,517.0
ub-total	16,205,687,893.87	11,904,758,806.2
Intragroup	27,454,893.36 46,000,440,787.00	2,982,171,925.6
otal   Capital expenditure during the year:	16,233,142,787.23	14,886,930,731.9
Generation	138,769,067.58	69,727,940.6
Transmission	-	14,975,783.30
Distribution Portugal	335,363,007.39	297,377,834.4
Brazil	49,914,901.73	
	385,277,909.12	297,377,834.4
Telecommunications	EQ 700 700 0F	74.000.004.00
Portugal Spain	59,728,760.85 50,436,560.67	71,399,961.0
·	110,165,321.52	71,399,961.0
Information technologies	62,064,070.61	115,228,115.2
Other		116 110 116 1.
Other  Total capital expenditure during the year	87,771,405.74 784,047,774.57	568,709,634.7

# Accounting Consolidation Office

Manager: Dr. Carlos Manuel Fernandes de Almeida Carvalho Registered Accountant No. 26000

#### Board of Directors

Eng. Francisco de la Fuente Sánchez – Chairman Eng. Jorge Fernando Alves Ferreira Guimarães – Vice-Chairman Dr. Manuel de Jesus Martins Eng. Jorge Manuel Jardim Gonçalves Dr. Rui Miguel de Oliveira Horta e Costa Dr. Fernando Noronha Leal Prof. Engenheiro João Afonso Ramalho Pereira Bento Prof. Doutor Ernâni Rodrigues Lopes Prof. Doutor António José Fernandes de Sousa Eng. António Manuel Barreto Pita de Abreu

# CONSOLIDATED CASH FLOW STATEMENT FOR THE YEAR ENDED 31st DECEMBER 2001

	2001	
Operating activities:		
Received from customers	5,350,306,083.06	
Payments to suppliers	-3, 336,852,476.63	
Payments to personnel	-632,240,549.61	
Concession rental payments	-149,114,155.87	
Cash flow generated by operations	1,232,098,900.95	
Payment of corporate income tax	-111,607,278.95	
Other receipts relating to operating activities	363,329,549.31	
Other payments relating to operating activities	-242,153,060.97	
Cash flow before extraordinary items	1,241,668,110.34	
Receipts relating to extraordinary items	16,779,757.67	
Payments relating to extraordinary items	-37,274,123.49	
Net cash flow generated by operations (1)		1,221,173,744.52
Investing activities:		
Receipts arising from:		
Financial investments	175,839,494.49	
Tangible fixed assets	5,710,241.81	
Intangible assets	0	
Investment subsidies	132,106,172.38	
Interest and similar income	0	
Dividends	16,831,122.72	330,487,031.40
Payments relating to:		
Financial investments	734,090,747.01	
Tangible fixed assets	709,201,206.31	
Intangible assets	130,178,571.71	1,573,470,525.03
Net cash utilised in investing activities (2)		-1,242,983,493.63
Financing activities:		
Receipts arising from:		
Loans raised	4,639,262,229.47	4,639,262,229.47
Payments relating to:		
Loans	4,040,265,378.93	
Interest and similar cost	254,104,229.57	
Dividends	415,921,535.36	
Acquisition of treasury stock  Net cash utilised in financing activities (3)	25,056,729.76	4,735,347,873.62 -96,085,644.15
recordant delised in initiationing decentations (C)		
Change in cash and cash equivalents (4)=(1)+(2)+(3)		-117,895,393.26
Effect of foreign-exchange differences		9,681,088.01
Cash and cash equivalents at beginning of the period		-340,950,683.41
Cash and cash equivalents at the end of the year		-468,527,164.68
BREAKDOWN OF CASH AND CASH EQUIVALENTS	2001	2000
Cash	441,515.04	86,873.91
Sight deposits and cash equivalents	-472,759,373.95	-341,059,601.45
Bank overdrafts	-502,912,945.16	-376,513,292.38
Other treasury assets	30,153,571.21	35,416,464.93
Other liquid assets	3,790,694.23	22,044.12
Bank deposits and cash as per balance sheet	-468,527,164.68	-340,950,683.42

### **Accounting Consolidation Office**

Manager: Dr. Carlos Manuel Fernandes de Almeida Carvalho Registered Accountant No. 26000

### **Board of Directors**

Eng. Francisco de la Fuente Sánchez – Chairman
Eng. Jorge Fernando Alves Ferreira Guimarães – Vice-Chairman
Dr. Rui Miguel de Oliveira Horta e Costa
Dr. Fernando Noronha Leal
Eng. António Manuel Barreto Pita de Abreu
Dr. Manuel de Jesus Martins
Eng. Jorge Manuel Jardim Gonçalves
Prof. Engenheiro João Afonso Ramalho Pereira Bento
Prof. Doutor Ernâni Rodrigues Lopes
Prof. Doutor António José Fernandes de Sousa





# CONSOLIDATED INCOME STATEMENT (COST OF SALES FORMAT)

	2001	2000
Sales and services provided	5,650,374,088.90	3,846,493,261.24
Cost of sales and services provided	-	-
Cost of electric energy generated	-	-
Cost of fuel for power generation	377,192,497.05	306,942,992.39
Operating and maintenance costs of power-generating centres	345,065,356.23	337,025,149.39
Electric power transmission costs	0.00	118,973,104.82
Distribution and commercialisation costs of electric energy	-	-
Acquisition of electric power	2,524,293,349.17	1,278,626,664.74
Concession rentals	145,641,942.73	128,894,529.18
Operating and maintenance costs of the distribution network		
Commercialisation cost of electric power	1,012,213,748.70	807,929,664.51
Cost of telecommunications services provided	124,654,000.00	32,001,152.22
Cost of other sales and services provided	321,099,712.66	137,300,351.15
Gross Profit	800,213,482.36	698,799,652.84
Other operating income and gains	463,715,712.92	384,351,557.75
Administrative costs	307,948,097.68	196,832,249.28
Other operating costs and losses	177,175,124.32	70,534,651.49
Operating income	778,805,973.28	815,784,309.82
Net financing cost	338,198,254.81	245,719,196.74
Gains in subsidiary and associated companies	11,619,505.56	41,788,145.57
Gains in other investments	35,049,334.70	29,102,777.31
Non-recurring income and gains (net)	106,912,018.93	197,373,155.69
Income before taxation	594,188,577.66	838,329,191.65
Corporate income tax	202,952,585.61	312,641,274.53
Income after taxation	391,235,992.05	525,687,917.12
Minority shareholders' interest	59,558,724.48	23,285,856.09
Net income	450,794,716.53	548,973,773.21
Earnings per share (euros)	0.150	0.183

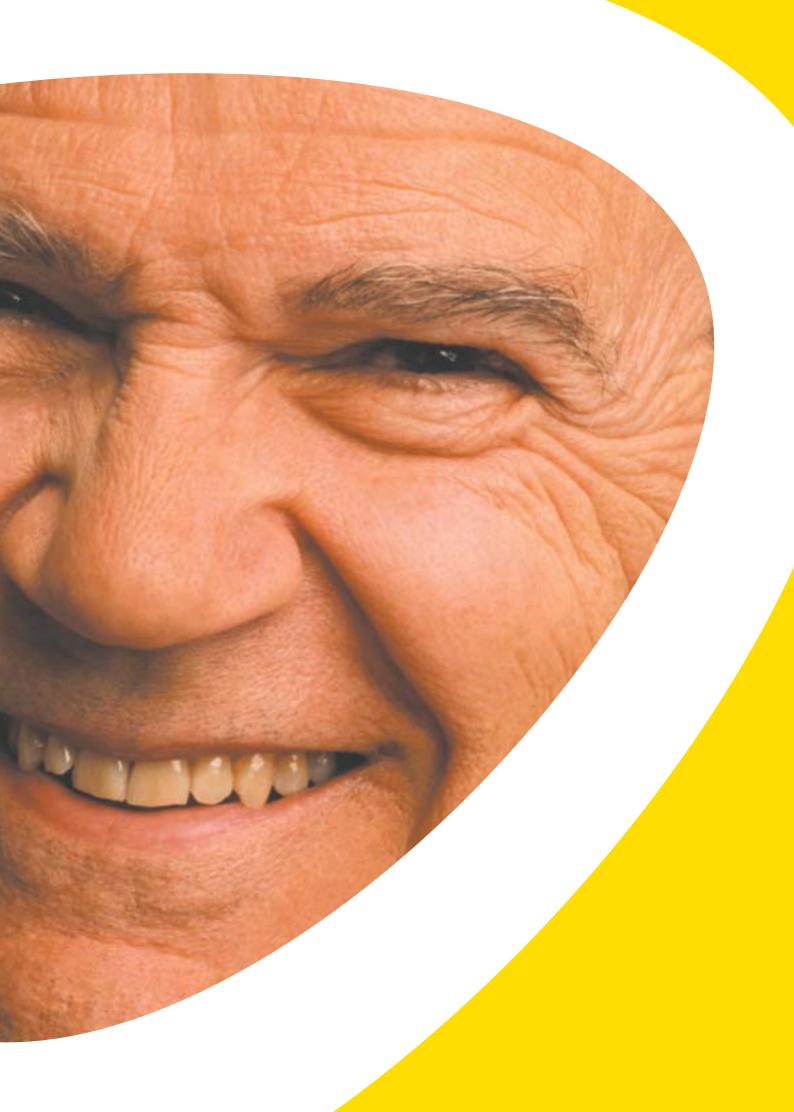
## Accounting Consolidation Office

Manager: Dr. Carlos Manuel Fernandes de Almeida Carvalho Registered Accountant No. 26000

## Board of Directors

Chairman: Eng. Francisco de la Fuente Sánchez
Vice-Chairman: Eng. Jorge Fernando Alves Ferreira Guimarães
Dr. Rui Miguel de Oliveira Horta e Costa
Dr. Fernando Noronha Leal
Eng. António Manuel Barreto Pita de Abreu
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Prof. Engenheiro João Afonso Ramalho Pereira Bento
Prof. Doutor Ernâni Rodrigues Lopes
Prof. Doutor António José Fernandes de Sousa

Audit and Supervisory Reports on the Consolidated Accounts



### AUDIT AND SUPERVISORY REPORTS ON THE CONSOLIDATED ACCOUNTS

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## STATUTORY AUDIT CERTIFICATION AND AUDIT REPORT ON THE CONSOLIDATED FINANCIAL INFORMATION

#### INTRODUCTION

1. Pursuant to applicable legislation, we present herewith the Statutory Audit Certification and Audit Report on the financial information contained in the accompanying Directors' Report and group financial statements of EDP - Electricidade de Portugal, SA, comprising the consolidated balance sheet at December 31, 2001, (which reflects a balance sheet total of EUR 16,233,143 thousand, total minority shareholders' interests of EUR 240,717 thousand and total shareholders' funds of EUR 6,096,758 thousand, including consolidated net income for the year of EUR 450,795 thousand), the consolidated income statement, by nature and by functions, and the consolidated cash flow statement for the year then ended, and the respective notes thereto.

#### **RESPONSIBILITIES**

- 2. The Company's Board of Directors is responsible for (i) the preparation of the Directors' Report and the group financial statements which present a true and fair view of the financial position of the group of companies included in the consolidation, the consolidated results of their operations and their consolidated cash flows; (ii) ensuring that the historical financial information is prepared in conformity with generally accepted accounting policies in Portugal, and that such information is complete, accurate, up-to-date, clear, objective and legitimate, as required in terms of the Negotiable Securities Code; (iii) the adoption of appropriate accounting policies and criteria; (iv) the maintenance of proper systems of internal control; and (v) the disclosure of any material fact that has had an impact on the group of companies included in the consolidation, their financial position or results.
- **3.** Our responsibility is to verify the financial information contained in the above-mentioned Directors' Report and

group financial statements, namely, to satisfy ourselves that it is complete, accurate, up-to-date, clear, objective and legitimate, as required in terms of the Negotiable Securities Code, with a view to issuing a professional and independent opinion based on our examination.

#### **SCOPE**

- 4. Our examination was conducted in accordance with the Technical Standards and Auditing Directives issued by the Ordem dos Revisores Oficiais de Contas (Portuguese Institute of Statutory Auditors), which require that we plan and perform the audit in such a manner so as to obtain an acceptable level of assurance that the consolidated financial statements do not contain material misstatements. To this end, our audit included: (i) verification that the financial statements of the companies included in the consolidation have been properly audited and, in those significant cases where this was not done, verification on a test basis of the evidence supporting the amounts and disclosures included in the financial statements, and an assessment of the reasonableness of estimates, based on judgments and criteria defined by the Board of Directors, used in the preparation of the financial statements; (ii) verification of correct consolidation procedures; (iii) an evaluation of the appropriateness of the accounting policies adopted and their disclosure, taking into account the circumstances; (iv) verification of the applicability of the going concern principle; (v) a consideration of the appropriateness of the overall presentation of the consolidated financial statements; and (vi) evaluation as to whether the consolidated financial information is complete, accurate, up-to-date, clear, objective and legitimate.
- **5.** Our examination also included verification that the consolidated financial information appearing in the Directors'

Report is in agreement with the group annual financial statements.

**6.** We believe that our audit provides an acceptable basis for expressing our opinion.

accordance with generally accepted accounting principles in Portugal, and that the financial information is complete, accurate, up-to-date, clear, objective and legitimate.

#### **OPINION**

7. In our opinion, the above-mentioned group annual financial statements present in all material respects a true and fair view of the consolidated financial position of EDP - Electricidade de Portugal, S.A. at December 31 2001, as well as the consolidated results of its operations and its consolidated cash flows for the year then ended, in

Lisbon, 23 April 2002

Bernardes, Sismeiro & Associados, Statutory auditors Represented by:

Carlos Marques Bernardes, Statutory auditor



#### SOLE SUPERVISORS' REPORT AND OPINION

To the Shareholders.

- 1. In accordance with the law and our mandate, we submit herewith the report on our supervisory activity and we express an opinion on the Directors' Report and group annual financial statements presented by the Board of Directors of EDP-Electricidade de Portugal, SA, for the year ended 31 December, 2001.
- 2. During the course of the year we monitored, with the frequency and to the extent we deemed appropriate, the activity of the company and its more significant subsidiary and associated companies. We verified the accuracy of the accounting records and the adequacy of the respective supporting documents. Our supervisory work also covered compliance with the law and the company's statutes.
- 3. As a consequence of the statutory audit work carried out, we issued the respective Statutory Audit Certification (annexed hereto) as well as the Supervisory Report addressed to the Board of Directors, as required under Art. 451 of the Companies Code.
- 4. Within the scope of our work, we verified that:
  - i) the consolidated balance sheet, the consolidated income statement by nature and by functions, the consolidated cash flow statement and the respective notes to the financial statements, permit an adequate understanding of the financial position of the company and the group of companies included in the consolidation and their results;
  - ii) the accounting policies and valuation criteria adopted are appropriate;

- iii) the Directors' Report is sufficiently detailed so as to give a proper account of the business affairs and situation of the company and the group of subsidiaries included in the consolidation, recounting the most salient aspects.
- 5. Accordingly, taking into consideration the information received from the Board of Directors and relevant Departments, as well as the conclusions contained in the Statutory Audit Certification, it is our opinion that:
- i) the Directors' Report be approved;
- ii) the group annual financial statements be approved

Lisbon, 23 April 2002

Bernardes, Sismeiro & Associados, Statutory auditors Represented by:

Carlos Marques Bernardes, Statutory auditor

#### **AUDIT REPORT**

To the Shareholders of EDP - Electricidade de Portugal, S.A.

- 1. We have audited EDP Electricidade de Portugal, S.A.'s consolidated Balance Sheet at December 31 2001, as well as the consolidated Income Statement, by nature and by functions, and the Cash Flow Statement for the year then ended, and the respective Notes thereto. These consolidated financial statements are the responsibility of the Company's Board of Directors. Our responsibility as auditors is to express an opinion on these financial statements based upon our audit.
- 2. Our audit was conducted in accordance with International Auditing Standards. These standards require that we plan and perform the audit in such a manner as to obtain reasonable assurance that the said consolidated financial statements do not contain material misstatements. An audit includes verification on a test basis of evidence supporting the amounts and disclosures included in the consolidated financial statements. It also includes an evaluation of the appropriateness of the accounting policies adopted and an assessment of significant estimates made by the Board of Directors, as well as consideration of the overall presentation of the consolidated financial statements. We believe that the audit performed by us provides a reasonable basis for our opinion.

3. In our opinion, the consolidated financial statements fairly present in all material respects the financial position of the group of companies included in EDP - Electricidade de Portugal, SA's consolidation at 31 December 2001, as well as the results of their operations and their cash flows for the year then ended, in accordance with accounting principles generally accepted in Portugal.

Lisbon, 23 April 2002

PricewaterhouseCoopers - Auditores e Consultores, Lda.



# EXCERPT OF THE MINUTES OF THE SHAREHOLDERS' GENERAL MEETING

EXCERPT OF MINUTE NO. 1/2002 OF THE GENERAL MEETING OF EDP - ELECTRICIDADE DE PORTUGAL, S.A HELD ON 10 OF MAY 2002, AND WHICH RELATES TO THIS LEGAL PUBLICATION.

[...]

The Board of Directors having concluded their clarification and with no other shareholder wishing to address the meeting, the Committee Chairman closed the discussion on Points One and Two on the Order of Business, having, next, put to the vote the first point on the Order of Business, with the Directors' Report and the annual financial statements for the year ended December thirty first two thousand and one being approved by a majority, with the following results: fourteen million six hundred and eighty two thousand, three hundred and sixty nine votes in favour, no votes against, and seventy nine thousand eight hundred and twenty five abstentions.

Having completed this voting, point number two on the Order of Business was put to the vote, with the Group Directors' Report and the group annual financial statements for the year ended December thirty first two thousand and one being approved by a majority, with the following results: fourteen million six hundred and eighty two thousand, three hundred and sixty nine votes in favour, no votes against, and seventy nine thousand and twenty five abstentions.

The meeting then turned its attention to Point Three on the Order of Business, with the Committee Chairman informing that the Table had received a complementary proposal to the one presented by the Board of Directors relating to this third Point, undersigned by the following shareholders: the State, Brisa and BCP, with the following content: "With regard to point 3 and in addition to the approval of the proposed appropriation of net income presented by the Board of Directors, it is proposed to the Meeting that the Remuneration Committee be mandated to decide, in the exercise of its powers to fix remuneration and additional payments, on the criteria for attributing variable remuneration and determining, in this context, the amount of the management bonus to attribute to the Directors in respect of the 2001 financial year".

Since this constitutes a complementary proposal, but different to that of the Board of Directors referring to the third Point on the Order of Business ("Consideration of the proposed appropriation of net income for the two thousand and one financial year") and with that of the Board of Directors reading as follows "In terms of article

27 of the Company's Memorandum and Articles of Association, the Board of Directors proposes that the net income of EUR 450,794,716.53 be appropriated as follows: Legal Reserve EUR 22,540,000.00; Dividends EUR 339,000,000.00; Retained Earnings EUR 89,254,716.53", the proposals will have to be voted on separately.

Discussion on the above-mentioned proposals then ensued, with certain shareholders duly identified taking the opportunity of expressing their opposition to the proposal presented by the shareholders the State, Brisa and BCP, on the grounds that this is not the usual way of rewarding the Directors, as in fact has been the custom at previous General Meetings, with one shareholder having pointed out that the proposal actually contravenes the CMVM regulations, in that it does not expressly indicate the actual amount to be attributed to the Directors as a management bonus.

After a brief exchange of views, the Chairman decided to put to the vote the proposals just as they had been presented by the respective signatories, having obtained the following results: The proposal presented by the Board of Directors was approved by a majority with fourteen million, seven hundred and sixty one thousand, three hundred and thirty seven votes in favour, none against, and eight hundred and fifty seven abstentions: the proposal presented by the shareholders the State, Brisa and BCP was also approved by a majority, with thirteen million, nine hundred and thirteen thousand, seven hundred and eighty eight votes in favour, two hundred and fifty seven votes against, and eight hundred and fifty eight thousand, one hundred and forty nine abstentions.

The Chairman then informed that, in connection with this vote, a ballot paper had been received by the Table, presented by shareholder number four hundred and seventy seven, Reinaldo Vasconcelos Gonçalves, with the following content "I vote against the proposal presented by the State, not for the purpose of contesting the bonus to be paid to the Directors (because they can only do what the said shareholder allows), but because I consider the proposal to be badly formulated and not quantified as it should be ". [...]

Lisbon, 14 May 2002

Company Secretary

Manuel Jorge Pombo Cruchinho

# EXEMPTION FROM THE REQUIREMENT TO PUBLISH INDIVIDUAL ACCOUNTS

"Pursuant to the provisions of article 250(3) of the Negotiable Securities Code, the Securities Market Commission has exempted the company from the requirement to publish sindividual accounts.

The annual report and accounts exempted are available for consultation, together with other relevant documents, at this company's head office, as required under the Companies Code."



#### REPORT ON CORPORATE GOVERNANCE

EDP's management and governance are conducted in accordance with the provisions and rules embodied in its statutes and prevailing company law, as well as with the internal regulations approved by the Board of Directors. With regard to the Securities Market Commission's recommendations (Comissão do Mercado de Valores Mobiliários - CMVM) dealing with Corporate Governance, EDP falls within the parameters defined therein, and complies fully with the applicable requirements.

This set of recommendations seeks to define a system of rules and procedures relating to the control of listed companies, as well as the exercise by the members of these companies' management bodies of their functions in a responsible manner oriented towards the creation of value.

#### **DISCLOSURE OF INFORMATION**

## **Functional organisation charts**

EDP's management and supervisory bodies are the Board of Directors and the Sole Supervisor. In the case of the latter, at least member must be a Portuguese statutory auditor (Revisor Oficial de Contas- ROC).

In terms of the Company's Statutes (i.e. Memorandum and Articles of Association), the Board of Directors is responsible for:

- setting the company's and the group's objectives and management policies;
- acquiring, selling or in any other way disposing of or encumbering rights or immovable property;
- constituting companies and subscribing, acquiring, encumbering or disposing of equity interests;
- deciding on the issue of bonds and other negotiable securities in terms of the law and the company's statutes.

The Company's Statutes also provide for the constitution of an Environment Board, whose mandate is to advise the Board of Directors.

EDP conducts its business in the form of a business group, as outlined schematically in the organisation chart included in the Directors' Report. It also has a central decision-support structure with transversal responsibilities and which functions from the EDP platform in its role as the EDP Group's holding company, in accordance with the organisation, functions and responsibilities laid down by the Board of Directors.

This central support structure is composed of a group of assistants and advisors to the Board of Directors and a number of offices, as depicted in the following organisation structure:

#### **Board of Directors Executive Comittee**

Chairman	Eng. Francisco de la Fuente Sánchez
Vice-Chairman	Eng. Jorge Fernando Alves Ferreira Guimarães
Member	Dr. Rui Miguel de Oliveira Horta e Costa
Member	Dr. Fernando Noronha Leal
Member	Eng. António Manuel Barrero Pita de Abreu
Member	Dr. Manuel de Jesus Martins
Member	Dr. Luís Fiipe da Conceição Pereira
Member	Eng. Jorge Manuel Jardim Gonçalves
Member	Prof. Engenheiro João Afonso Ramalho Pereira Bento
Member	Prof. Doutor Ernâni Rodrigues Lopes
Member	Prof. Doutor António José Fernandes de Sousa

#### Advisors

to the Board of Directors

#### Assistants

to the Board of Directors

SG	General Secretariat
GAB	Environment Office
GAI	Internal Audit Office
GAN	Business Analysis Office
GCI	Communication and Image Office
GCT	Accounting Consolidation Office
GFN	Financial Management Office
GJR	Legal Affairs Office
GPE	Strategic Planning Office
GRH	Human Resources Office
GRI	Investor Relations Office
GRT	Regulations and Tariffs Office
GSI	Information Systems Office
GSIAG	Integrated System for Management Support Office
DS0	Operating Systems Division

EDP Foundation Electricity Museum

#### Share price behaviour

EDP is listed on the Lisbon and Oporto Stock Exchange (Bolsa de Valores de Lisboa e Porto - BVLP) and on the New York Stock Exchange, while its shares are also traded in London. Moreover, EDP's shares form the asset base for futures contracts traded on the BVLP.

In 2001, a total of 1,179 million EDP shares were traded, corresponding to a daily average of 4.7 million shares, thus making EDP one of the most liquid stocks on the national market. EDP currently represents roughly 17% of the PSI 20, Portugal's principal stock market index, while at the same time being a benchmark stock in any European index of electricity companies.

2001 saw a steep drop in the world's leading stock market indices provoked by the uncertainty associated with the deceleration in the world's main economies, the lack of confidence in the technological sector, and the political instability triggered by the horrific attacks of September 11 in the United States.

With respect to EDP's share performance, the local market's subdued liquidity associated with the progressive desertion of a large number of investors from our financial markets had an adverse impact on the share's behaviour.

However, this fact alone does not fully explain the 31% erosion in the share price during 2001; in fact, certain exogenous factors unrelated to the Group's ordinary activities created a climate of uncertainty that influenced the share price.

In the first place, 2001 was marked by the entry into force of the new regulations which govern the electricity sector's activity and by the ERSE's publication of the 2002 tariffs, as well as the parameters for the second tariff-regulation period covering the three-year period 2002 – 2004. The expectations surrounding this document's contents and the potential impact on the profitability of the EDP Group's distribution business led potential EDP investors to wait for clarification of the regulatory scene to apply in the next three years. As subsequently proved to be the case, this prudent posture was fully justified in the light of the new regulations that make provision for a substantial reduction in EDP Distribuição's regulated revenues.

In second place, the Argentinian crisis and fears of a contagion effect spreading to the other countries of Latin America, in particular Brazil, constituted the principal catalyst behind the Brazilian currency's expressive depreciation; a factor that had as a consequence the added perceived risk associated with companies (like EDP) that have assets in this region. However, at the end of 2001, Brazil's macroeconomic situation evidenced a certain amount of immunity from the Argentinian risk, with the Brazilian currency showing clear signs of recovery.

Thirdly, the rationing of electric power imposed as from March 2001 by the Brazilian government heralded a difficult year for our Brazilian distribution companies. The delay in the implementation of the measures aimed at compensating for the losses resulting from the above-mentioned power rationing meant that EDP was severely penalised.

Finally, the long and complex process involving the acquisition of Hidrocantábrico, as well as the speculation generated by the Spanish government's decision to suspend EDP's voting rights in the company, reinforced the sense of uncertainty which shrouded EDP shares during the greater part of 2001.





#### **Dividend policy**

Since the start of the process involving EDP's reprivatisation and the stock market listing of its shares, EDP distributed dividends annually to its shareholders in a responsible and properly substantiated manner. The portion of net income set aside to pay dividends has been in excess of 65% ever since the shares were listed, in harmony with the desire to share with our shareholders an important part of the value created every year whenever the company's circumstances and prevailing market conditions so permit.

		Dividend distributions		
Year	Payment date	Ex-Dividend	Gross (EUR)	Net (EUR)
1997	18-05-1998	12-05-1998	0.648	0.534
1998	28-05-1999	24-05-1999	0.698	0.620
1999	31-05-2000	26-05-2000	0.698	0.611
2000	31-05-2001	28-05-2001	0.140*	0.119*

<sup>\*</sup> After the stock split, whereby each share was substituted by 5 shares with a nominal value equal to 1/5 of the pre-stock split value.

A portion of the profits of the EDP Group companies, and pursuant to the respective statutes, is attributed to employees under the profit-sharing scheme formulated by the Board of Directors.

In terms of the company's statutes and following a resolution passed at the Shareholders' General Meeting, a portion of annual net income has been paid to members of the Board of Directors as part of their profit-sharing scheme.

#### Treasury stock

In conformity with the general regime governing the acquisition and disposal by companies of treasury stock (own shares), the company was authorised by the General Meeting held on 12 May 2000, to acquire its own shares up to a limit of 10% of share capital.

During the course of 2001, EDP acquired 9,326,209 own shares at an average price of EUR 2.69. In December 2001, the number of own shares on hand was 11,726,209, with an average acquisition price of EUR 2.84. The shares on hand are intended to serve as support for the stock options programme available to the EDP Group's management and senior staff.

#### Stock option incentive scheme

The EDP Group recently implemented a stock options programme which has been duly approved by the General Meeting. It applies to managerial and senior personnel and the directors, and is aimed at encouraging the creation of value, in line with the practice adopted by similar public companies.

The Plan, which was approved in 1999, has as its goal attributing over a period of five years, options to buy EDP shares, subject to a limit of 3.250.000 options (each option represents the right to buy one share).

In the case of a change in EDP's share capital, the forementioned limit (as well as the number of options already attributed) can be adjusted in such a manner that the size of the Plan and/or the position of the beneficiaries of the options awarded remain identical to the size and/or position that existed prior to the share capital change.

The provisions of the preceding paragraph may be applied to other cases which, in the opinion of EDP's Board of Directors, warrant such identical treatment.

The consideration payable for the stock options (exercise price) is equal to the weighted average closing price of EDP shares during the period before the date laid down as the date for the attribution of such options, as may be determined by the Board of Directors.

The exercise price may be corrected in the following situations: (a) changes in the share capital; (b) distribution of dividends and other reserves to shareholders which has a significant effect on the price of EDP shares; and (c) the occurrence of other facts of a similar nature which, in the unfettered judgement of the Board of Directors, justify such corrections.

Any change to the exercise price is aimed at ensuring that the position of beneficiaries remains unaltered from that which existed before the occurrence of the facts referred to in the preceding paragraph. Any such change must be fixed by recourse to a technical ruling which takes into account the theoretical effect of such facts on the value of EDP shares.

The exercise price cannot be less than the nominal value of EDP shares.

# Use of new technologies in the dissemination of information

EDP has stepped up its recourse to IT support in all its information disclosure procedures, which go far beyond EDP's home page ion the internet - www.edp.pt - which is



constantly being enriched by progressively more interactive functionalities.

Accordingly, there exists a consistent policy of investment in information technologies with the object of facilitating both access and the exchange of information between the EDP Group companies and the different stakeholders, in particular customers, shareholders, analysts and mass media professionals. EDP has employed Conference Call and Videoconference modes in its interaction with agents and institutional investors.

EDP's home page on the internet discloses all important information, including mandatory announcements and publications, quarterly, half-yearly and annual results, key facts, detailed financial information and a significant part of the documentation relating to the holding of General Meetings.

#### **Investor Relations Office**

EDP complies with all legal and statutory obligations concerning information disclosure. After the first privatisation phase, EDP strengthened its information release capability through the creation of the Investor Relations Office. This unit's mission is to ensure an adequate channel of communication with the universe of shareholders, analysts and potential investors, as well as with the supervisory entities of the stock markets where EDP's shares are quoted, namely, the local Securities Market Commission (CMVM) and the SEC (Securities and Exchange Commission) in the US.

The Investor Relations Office has as its primary function serving as a spokesman between the EDP Group's management and the financial markets in general. Within the scope of its normal activity, it is responsible for all the information made available by the EDP Group referring to the publication of the periodic financial statements, as well as that relating to any important facts that occur. The Investor Relations Office maintains a constant stream of information with institutional investors and financial analysts,

putting at their disposal all the required information so as to facilitate these institutions' compliance with their accountability and diligence duties.

The investor Relations Office is located at EDP's head office at Av. José Malhoa, Lote A 13, 6th floor, in Lisboa, and has the following contact details: telephone +351 21 001 2834, telefax +351 21 720 3040 or electronically at ir@edp.pt.

The EDP Group also provides through its internet site comprehensive information about the company. This includes important press releases, EDP share price history, the Group's shareholder structure, and other information of potential interest regarding the EDP Group. EDP's site on the internet allows interested parties to consult or request the expedition of annual reports dating back to 1997.

The EDP Group believes its communication policy is governed by the adoption, in accordance with the best market practice amongst quoted companies, of the CMVM's recommendations with the aim of promoting and boosting the confidence and trust of shareholders, employees, customers, strategic partners, creditors and the public in general.

# EXERCISE OF VOTING RIGHTS AND SHAREHOLDER REPRESENTATION

#### Statutory rules

In terms of the company's statutes, only shareholders entitled to vote (every one hundred shares correspond to one vote) may attend General Meetings.

No shareholder, with the exception of the State or entities deemed by law to be equivalent for this purpose, may cast votes, either in their own name or as the representative of another, which exceed 5% of the total votes corresponding to the share capital. Shareholders who become the holders of shares corresponding to or in excess of 5% of voting

rights or the share capital, must communicate this fact to the Board of Directors within five business days from the date of such occurrence, and shall not be entitled to exercise the respective voting rights until this communication is made. For this purpose, the voting rights which in terms of the Securities Market Code are deemed to form part of an important shareholding shall be deemed to be issued by the same shareholder; in this case, the shareholders are bound to furnish the Board of Directors in writing all the information requested from them concerning facts pertaining to them in a complete, objective, clear, accurate and satisfactory manner.

Shareholders can only attend General Meetings if they are the holders of shares at least fifteen days before the meeting date and maintain this status up the date the meeting is held.

Proof of the ownership of shares is effected by way of dispatch to the Chairman of the General Meeting at least eight days prior to the date of such meeting of a declaration issued and authenticated by the financial intermediary entrusted with the job of registering such shares. This declaration must state that the shares in question have been registered in the respective account for at least fifteen days before the date set for the meeting, and that such shares have been blocked up until the date on which the General Meeting takes place.

Shareholders can cast their votes on each one of the points on the order of business by means of a letter, the signature on which must be identical to that appearing on the shareholder's identity card, addressed to the Chairman of the General Meeting Committee, by registered letter with acknowledgement of receipt, and sent to the company's head office at least eight days before the meeting date, sent together with a legible copy of the identity card of the person who signed the letter.

The holders of rights representing shares under ADR programmes can give instructions to the respective depositary

bank for the exercise of voting rights or conferring a proxy to a representative appointed for this purpose by the EDP, in compliance with applicable legal and statutory provisions; the deposit contract should regulate the periods and manner of exercising voting instructions, as well as the cases of absence of instructions.

EDP complies with all the provisions recommended by the CMVM as regards voting rights and shareholder representation. EDP embodied posting voting procedures in its statutes immediately after their inclusion in the Securities Market. Code.

The qualified representatives who, in their own name, as EDP shareholder or when representing another shareholder or group of shareholders, possessing voting rights are eligible to attend General Meetings. Each 100 shares correspond to one vote, without prejudice to grouping and representation rights:

- shareholders owning less than 100 shares can group together with other such shareholders so that together they can attain the minimum required for exercising the right to vote, nominating one of their number to represent them;
- shareholders can be represented at General Meetings, provided that the representative is a spouse, ascendant or descendent of the shareholder, or by another shareholder or by a member of the Board of Directors. A proxy document in the form of a signed letter addressed to the Chairman of the General Meeting Committee is sufficient.

Identical rights as those of ordinary shareholders are attributed to the holders of ADRs. The voting rights of ADR holders are determined taking into account that one ADR represents 10 ordinary EDP Shares. The proposals for submission by the Board of Directors to the General Meeting, as well as the reports which by law must accompany those proposals and other preparatory



information, are made available to all shareholders at EDP's head office – Avenida José Malhoa, Lote A13, Lisbon – fifteen days before the date set for the holding of the General Meeting. In order to facilitate shareholders' access to this information, especially in the case of foreign shareholders or those residing outside the Lisbon metropolitan area, this information is sent by mail, fax or e-mail upon request by EDP shareholders.

#### Mode for postal voting

EDP makes available on its internet home page - www.edp.pt - or to whom personally so requests in writing or by telephone, draft proxy forms and ballot papers for the exercise of postal voting. Of course, it is imperative that the shareholder must be properly identified in order to participate at the General Meeting.

# Possibility of exercising voting rights by electronic means

The company's statutes do not exclude the possibility of voting by way of electronic mail, provided that the legal and statutory formalities for attending General Meetings are strictly complied with. There must also be a guarantee as to the correct identification of the shareholder by means of the appropriate certification methods.

#### **CORPORATE RULES**

EDP's corporate or statutory rules are documents available for public consultation or to those applying to EDP's Investor Relations Office.

EDP's statutes contain rules relating to the information obligations regarding shareholder control and the holding of qualified shareholdings, preventing the exercise of voting rights in the case of non-compliance.

There are no classes of shares conferring special voting rights to shareholders, although the statutes and the

enactment relating to the fourth reprivatisation phase contain specific provisions relating to the State or similar entities.

#### **CONTROL OF RISK IN ACTIVITY**

#### Insurance policy

The EDP Group's obligations to society, the market and its stakeholders in general have led to the direct involvement of the holding company's top management in monitoring the different risks and accident record.

Taking into consideration an appropriate management of costs and risk sharing, an international captive reinsurance company was formed at the heart of the Group in 1994 - Energia RE – with headquarters in Luxembourg (European financial centre specialising in this area of activity), enabling the EDP Group to derive, amongst others, the following benefits:

- uniformisation of the insurance programme;
- direct access to the international reinsurance market;
- retention of part of the risk by way of primary policies covering material damages, equipment breakdown and public liability;
- Control and stability of insurance cost.

The EDP Group's insurance package covers the risks inherent in all the business areas: generation, distribution, services, information technologies and telecommunications.

# Management of financial risks

At the present moment, EDP, S.A.'s debt portfolio is composed 64% of bond loans, with the remainder comprising loans from banks and from the European Investment Bank.

We continued to adhere to the policy initiated two years ago of extending the average maturity of EDP's portfolio of borrowings.

As concerns the management of interest rate risk associated with EDP, S.A.'s debt portfolio and in order to benefit from the decline in interest rates observed in the second half of the year, EDP entered into certain interest rate swap operations, paying fixed rate and receiving fixed rate. This enabled EDP to reduce the financing cost of certain liabilities, namely the international bond coupon of 5.875%. With these derivative operations and the descent in interest rates, the average rate of interest on EDP, S.A.'s medium and long-term borrowings at the end of 2001 was 3.70% (4.65% at the end of 2000), with no major change in the relationship between fixed and variable rates.

The EDP Group's debt is denominated in euros, with the exception of the debt contracted by the Brazilian companies, which is denominated in US dollars and reais.

With the object of reducing the foreign-exchange risk on the EDP Group's debt associated with Bandeirante, an operation was entered into involving the repurchase of Brady Bonds, denominated in dollars which mirrored this company's debt to the Brazilian Treasury. These securities were subsequently handed over to the Secretary of Brazil's National Treasury for the purpose of repaying this debt. In this fashion, it was possible to eliminate around 93% of Bandeirante's dollar-denominated debt.

The EDP Group maintains a strong level of liquidity and a balance sheet structure that is reflected in the financial ratios which place EDP amongst Europe's best credit-risk electricity utilities.

## **Environmental policy**

The Company implemented a number of environmental protection and promotion initiatives which give expression to the

principles enshrined in its Environmental Policy, also from the perspective of environmental risk management and minimisation.

Within the scope of one of EDP's fundamental strategic pillars – the gradual implementation of Environmental Management Systems throughout the Group – the Sines thermoelectric power station was issued its certification in accordance with Standard ISO 14001. This concludes the environmental certification of EDP's large thermal generating centres.

The Ministry for the Environment and Territorial Planning issued a favourable opinion with respect to the Environmental Impact Assessment process for the new Ribatejo thermoelectric power station. Meanwhile, work continued on the preparation of the Comparative Environmental Impact Study covering the Baixo Sabor and Alto Côa hydroelectric schemes.

Pursuant to its statutes, EDP submits all large-scale projects to the Environment Board. The Environment Board is also charged with permanently overseeing EDP's major programmes for sustainable development.

#### The EDP Group's organic structure

The EDP Group is organised into sub-holdings, according to type of business, which group the companies carrying out different specialised activities:

- EDP Produção
- EDP Distribuição
- EDP Valor
- EDP Internacional, SGPS



- FDP Brasil
- ONI, SGPS
- Edinfor
- EDP Participações, SGPS

The management boards of each one of the above sub-holding companies' management bodies include and are presided over by members of EDP, S.A.'s Board of Directors, who appoint the respective supervisory bodies and meet regularly with the respective senior personnel for purposes of reviewing internal controls and verification of the degree of fulfilment of centrally-defined objectives incorporated in the annual and long-range operating budgets and plans.

As the Group's holding company, EDP has implemented an Internal Control System, which is monitored by the Internal Audit Office (GAI) working closely with the Board of Directors. GAI is also responsible for the management, analysis and control of business risk and, in cooperation with the boards of directors of the Group companies, in the systematic approach to the identification and evaluation of risks associated with the respective activities.

## **MANAGEMENT BODY**

#### Characterisation of the management body

EDP's Board of Directors, which includes persons who are independent from the key shareholders, is presently composed of eleven directors, elected by the majority of votes cast. Directors' mandates are for three years, while there is no restriction as regards re-election.

EDP's Board of Directors is responsible for the management of the company's affairs and, as a rule, meets every month

with the participation of all the directors. The Board of Directors cannot pass resolutions without the presence of the majority of its members, while the representation of more than one director at each meeting is not permitted. All the directors have the same voting rights, while the chairman has the casting vote. The Board of Directors' functioning is governed by an internal regulation which also disciplines the workings of the Executive Committee, establishing rules governing information and the monitoring of activities by the management body.

#### Effective control of corporate life

Pursuant to Board of Directors' resolutions, and in harmony with the provisions of the forementioned internal regulations and the statutes, the company's day-to-day management is entrusted to an Executive Committee composed of seven members, which is chaired by the Chairman of the Board of Directors. The approval of Executive Committee decisions requires a majority of votes, with all its members enjoying the same voting rights. In the event of a tie, the Chairman has the casting vote.

The Executive Committee's powers are fixed by the Board of Directors, to which it delegates whenever necessary all the powers legally permitted. However, notwithstanding this delegation of powers, the Board of Directors responsible for the Company's overall management.

#### Remuneration of governing bodies

In terms of the company's statutes, the General Meeting elects the Remuneration Committee which fixes the remuneration of members of the Board of Directors. The General Meeting can also decide about the attribution of part of annual profits to Directors as part of the profit-sharing scheme, as well as the implementation of the stock options incentive plan. The remuneration paid to members of EDP –

Electricidade de Portugal, S.A.'s governing bodies was as follows (in euros):

- Board of Directors	(Total)	2,814,583.65
• Executive Directors		2,700,857.73
Non-executive directors	6	113,725.92
- Sole supervisors/Statutor	ry auditors	82,551.06
- General Meeting Committ	ee	1,621.09



# Annexes





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ANNEXES



## EDP'S SHAREHOLDER STRUCTURE

#### **QUALIFIED SHAREHOLDERS**

In terms of article 6(1)(e) of the CMVM's Regulation 11 / 2000 (as amended by CMVM Regulation 24 / 2000 da CMVM), we present the following information relating to qualified shareholdings:

EDP's Shareholder Structure

Qualified shareholdings and voting rights

Shareholder	No. of shares	% of capital	% vote
Direcção Geral do Tesouro	568,853,506	18.96%	19.04%
Parpública	214,220,570	7.14%	7.17%
Banco Comercial Português	151,731,308	5.06%	5.00%
Caixa Geral de Depósitos	142,516,830	4.75%	4.77%
Iberdrola	120,000,000	4.00%	4.02%
Brisa (*)	60,002,298	2.00%	2.01%
Other private shareholders	1,730,949,279	57.70%	57.92%
EDP - treasury stock	11,726,209	0.39%	
Total	3,000,000,000	100.00%	

<sup>(\*)</sup> Shareholding acquired on 27/08/2001.

# EDP SHARES HELD BY MEMBERS OF EDP'S BOARD OF DIRECTORS

Wife         Maria Berta Pi B.R. de la Fuente Sánchez         25/10/01         (*)         65         2.5           Jorge Fernando Alves Ferreira Guimarães         25/10/01         (*)         277         7.2           Wife         Emilia M. Morgado         25/10/01         (*)         65         1.5           Rui Miguel de Oliveira Horta e Costa         25/10/01         (*)         65         3.0           Wife         Susana Maria G. P. D. M. Horta e Costa         25/10/01         (*)         65         7           Fernando Noronha Leal         28/90/01         2,988,90         1,031         1,000         1,600         23/10/01         1,339,80         462         24/10/01         1,586,30         547         25/10/01         1,586,30         547         25/10/01         25/10/01         (*)         27         20/11/01         161,20         62         20/11/01         161,20         62         5/12/01         189,60         79         7         7         7         20/11/01         161,20         62         5/12/01         65         7         7         7         7         7         7         7         7         7         7         7         7         7         7         7         7         7	Annex referred to in Art. 447(5) of the CSC		200			
Date   Free Buro's   Bought   Sold   2001-12-31		Opera	tions realised in 200			
Prancisco de la Fuente Sánchez   25/10/01   (*) 278   7.7	Board of Directors	Date				-
### Wife Maria Berta Pi B.R. de la Fuente Sánchez    25/10/01					Joiu	
Jorge Fernando Alves Ferreira Guimarães  ### Emilia M. Morgado  ### Emilia M. Morgado  #### Emilia M. Morgado  #### Emilia M. Morgado  ###################################						7,793
Wife         Emilia M. Morgado         25/10/01         (*)         65         1,5           Rui Miguel de Oliveira Horta e Costa         25/10/01         (*)         277         3,0           Wife         Susana Maria G. P. D. M. Horta e Costa         25/10/01         (*)         257         3,0           Fernando Noronha Leal         28/9/01         2,989,90         1,031         1,031         10/10/01         4,640,00         1,600         23/10/01         1,339,80         462         462         462         44/10/01         1,586,30         547         25/10/01         1,586,30         547         25/10/01         277         20/11/01         161,20         62         27         20/11/01         161,20         62         27         20/11/01         161,20         62         27         20/11/01         161,20         62         27         20/11/01         161,20         62         27         20/11/01         161,20         62         27         20/11/01         161,20         62         27         20/11/01         161,20         62         20/11/01         27         20/11/01         20/11/01         20/11/01         20/11/01         20/11/01         20/11/01         20/11/01         20/11/01         20/11/01         20/11/01 <th>Wife Maria Berta Pi B.H. de la Fuente Sanchez</th> <th>25/10/01</th> <th>(*)</th> <th>65</th> <th></th> <th>2,580</th>	Wife Maria Berta Pi B.H. de la Fuente Sanchez	25/10/01	(*)	65		2,580
Rui Miguel de Oliveira Horta e Costa   25/10/01   (*) 277   3.0   25/10/01   (*) 65   7   7   7   7   7   7   7   7   7	Jorge Fernando Alves Ferreira Guimarães	25/10/01	(*)	277		7,267
Wife         Susana Maria G. P. D. M. Horta e Costa         25/10/01         (*)         65         7           Fernando Noronha Leal         28/9/01         2,989.90         1,031         10/10/01         4,640.00         1,600         23/10/01         1,339.80         462         462         44/10/01         1,586.30         547         547         462         44/10/01         1,586.30         547         462         462         462         462         462         462         462         462         47         462         47         462         47         48         48         47         47         48         48         47         47         48         48         48         48         48         48         48         48         48         48         48         48         48         48	Wife Emília M. Morgado	25/10/01	(*)	65		1,960
Wife         Susana Maria G. P. D. M. Horta e Costa         25/10/01         (*)         65         7           Fernando Noronha Leal         28/9/01         2,989.90         1,031         10/10/01         4,640.00         1,600         23/10/01         1,339.80         462         462         44/10/01         1,586.30         547         25/10/01         (*)         277         26/11/01         1,586.30         547         27/11/01         70.20         27         27/11/01         70.20         27         20/11/01         181.20         62         62         62         67/12/01         189.60         79         7	B.M. III O III	05 (40 (04	(+)	077		0.047
Pernando Noronha Leal   28/9/01   2,989,90   1,031   10/10/01   4,640,00   1,600   23/10/01   1,339,80   462   24/10/01   1,586,30   547   25/10/01   (*) 277   27/10/01   70,20   27   20/11/01   161,20   62   5/12/01   189,60   79   77   79/10/01   189,60   79   79   79   79   79   79   79   7	-					3,047 715
10/10/01	vviie Susana Maria G. P. D. M. Horta e Costa	25/10/01	(^)	00		/15
23/10/01	Fernando Noronha Leal	28/9/01	2,989.90		1,031	
24/10/01		10/10/01	4,640.00		1,600	
25/10/01		23/10/01	1,339.80		462	
2/11/01   70.20   27   20/11/01   161.20   62   5/12/01   189.60   79   7   7   7   7   7   7   7   7		24/10/01	1,586.30		547	
20/11/01 161.20 62 5/12/01 189.60 79  Wife Maria da Luz C. R. Noronha Leal 25/10/01 (*) 65  António Manuel Barreto Pita de Abreu 25/10/01 (*) 100  Manuel de Jesus Martins 21/06/01 7,980.00 3,000  Wife Julieta Rosa Nunes da Costa Martins 25/10/01 (*) 277  Jorge Manuel Jardim Gonçalves 25/10/01 (*) 277  Jorge Manuel Jardim Gonçalves 25/10/01 (*) 277  João Afonso Ramalho S. Pereira Bento 25/10/01 (*) 277  João Afonso Ramalho S. Pereira Bento 25/10/01 (*) 277  Ermâni Rodrigues Lopes		25/10/01	[*]	277		
5/12/01   189.60   79   79   79   79   79   79   79   7		2/11/01	70.20	27		
Wife       Maria da Luz C. R. Noronha Leal       25/10/01       (*)       65       7         António Manuel Barreto Pita de Abreu       25/10/01       (*)       100       4,5         Wife       Gilda Maria L. B. Pita de Abreu       21/06/01       7,980.00       3,000         Manuel de Jesus Martins       21/06/01       7,980.00       3,000         Wife       Julieta Rosa Nunes da Costa Martins       25/10/01       (*)       277       5         Jorge Manuel Jardim Gonçalves       25/10/01       (*)       277       28,5         Wife       Maria D'Assunção A.O.V. Jardim Gonçalves       25/10/01       (*)       65       2,1         João Afonso Ramalho S. Pereira Bento       25/10/01       (*)       277       3,0         Wife       Rita M. do Pranto N. L. Pereira Bento       25/10/01       (*)       66       7         Ernâni Rodrigues Lopes		20/11/01	161.20	62		
Wife         Maria da Luz C. R. Noronha Leal         25/10/01         (*)         65         7           António Manuel Barreto Pita de Abreu         25/10/01         (*)         100         4,9           Wife         Gilda Maria L. B. Pita de Abreu         21/06/01         7,980.00         3,000           Manuel de Jesus Martins         21/06/01         7,980.00         3,000           Wife         Julieta Rosa Nunes da Costa Martins         25/10/01         (*)         277         5           Jorge Manuel Jardim Gonçalves         25/10/01         (*)         277         28,5           Wife         Maria D'Assunção A.O.V. Jardim Gonçalves         25/10/01         (*)         65         2,1           João Afonso Ramalho S. Pereira Bento         25/10/01         (*)         277         3,0           Wife         Rita M. do Pranto N. L. Pereira Bento         25/10/01         (*)         66         7           Ernâni Rodrigues Lopes		5/12/01	189.60	79		
Wife         Gilda Maria L. B. Pita de Abreu           Manuel de Jesus Martins         21/06/01         7,980.00         3,000           Wife         Julieta Rosa Nunes da Costa Martins         25/10/01         (*) 277         5           Jorge Manuel Jardim Gonçalves         25/10/01         (*) 277         28,5           Wife         Maria D'Assunção A.O.V. Jardim Gonçalves         25/10/01         (*) 65         2,1           João Afonso Ramalho S. Pereira Bento         25/10/01         (*) 277         3,0           Wife         Rita M. do Pranto N. L. Pereira Bento         25/10/01         (*) 66         7           Ernâni Rodrigues Lopes	Wife Maria da Luz C. R. Noronha Leal	25/10/01	(*)	65		731 715
Manuel de Jesus Martins       21/06/01       7,980.00       3,000         Wife       Julieta Rosa Nunes da Costa Martins       25/10/01       (*) 277       5         Jorge Manuel Jardim Gonçalves       25/10/01       (*) 277       28,5         Wife       Maria D'Assunção A.O.V. Jardim Gonçalves       25/10/01       (*) 65       2,1         João Afonso Ramalho S. Pereira Bento       25/10/01       (*) 277       3,0         Wife       Rita M. do Pranto N. L. Pereira Bento       25/10/01       (*) 66       7         Ernâni Rodrigues Lopes	António Manuel Barreto Pita de Abreu	25/10/01	[*]	100		4,980
Wife       Julieta Rosa Nunes da Costa Martins       25/10/01       (*) 277       28.5         Jorge Manuel Jardim Gonçalves       25/10/01       (*) 277       28.5         Wife       Maria D'Assunção A.O.V. Jardim Gonçalves       25/10/01       (*) 65       2.1         João Afonso Ramalho S. Pereira Bento       25/10/01       (*) 277       3.0         Wife       Rita M. do Pranto N. L. Pereira Bento       25/10/01       (*) 66       7         Ernâni Rodrigues Lopes	Wife Gilda Maria L. B. Pita de Abreu					-
Wife       Julieta Rosa Nunes da Costa Martins       25/10/01       (*) 277       28.5         Jorge Manuel Jardim Gonçalves       25/10/01       (*) 277       28.5         Wife       Maria D'Assunção A.O.V. Jardim Gonçalves       25/10/01       (*) 65       2.1         João Afonso Ramalho S. Pereira Bento       25/10/01       (*) 277       3.0         Wife       Rita M. do Pranto N. L. Pereira Bento       25/10/01       (*) 66       7         Ernâni Rodrigues Lopes	Manuel de Jesus Martins	21 /06 /01	7 980 00	3 000		
Wife         Julieta Rosa Nunes da Costa Martins         25/10/01         (*)         277         5           Jorge Manuel Jardim Gonçalves         25/10/01         (*)         277         28.5           Wife         Maria D'Assunção A.O.V. Jardim Gonçalves         25/10/01         (*)         65         2,1           João Afonso Ramalho S. Pereira Bento         25/10/01         (*)         277         3,0           Wife         Rita M. do Pranto N. L. Pereira Bento         25/10/01         (*)         66         7           Ernâni Rodrigues Lopes	Wartach de Oesas War uns	21700701	7,000.00	0,000		12,617
Wife         Maria D'Assunção A.O.V. Jardim Gonçalves         25/10/01         (*)         65         2,1           João Afonso Ramalho S. Pereira Bento         25/10/01         (*)         277         3,0           Wife         Rita M. do Pranto N. L. Pereira Bento         25/10/01         (*)         66         7           Ernâni Rodrigues Lopes	Wife Julieta Rosa Nunes da Costa Martins	25/10/01	(*)	277		500
Wife         Maria D'Assunção A.O.V. Jardim Gonçalves         25/10/01         (*)         65         2,1           João Afonso Ramalho S. Pereira Bento         25/10/01         (*)         277         3,0           Wife         Rita M. do Pranto N. L. Pereira Bento         25/10/01         (*)         66         7           Ernâni Rodrigues Lopes	Jorge Manuel Jandim Concelus	05 /40 /04	(+)	077		00 507
João Afonso Ramalho S. Pereira Bento         25/10/01         (*) 277         3,0           Wife         Rita M. do Pranto N. L. Pereira Bento         25/10/01         (*) 66         7           Ernâni Rodrigues Lopes						28,507 2,185
Wife Rita M. do Pranto N. L. Pereira Bento 25/10/01 (*) 66 7  Ernâni Rodrigues Lopes	vviie iviana d'Assunção A.O. V. Jaruim Gonçaives	25/10/01	(")	65		2,100
Ernâni Rodrigues Lopes	João Afonso Ramalho S. Pereira Bento	25/10/01	[*]	277		3,047
	Wife Rita M. do Pranto N. L. Pereira Bento	25/10/01	(*)	66		726
						-
António José Fernandes de Sousa 25/10/01 (*) 65 1,8 Wife Maria de Fátima Halbritter de Sousa		25/10/01	(*)	65		1,865
31/12/01	31/12/01					

<sup>(\*) -</sup> Loyalty Award



# SENIOR POSITIONS HELD BY MEMBERS OF EDP'S BOARD OF DIRECTORS

#### Eng. Francisco de la Fuente Sánchez - Chairman

- Chairman of EDP Valor, S.A.'s Board of Directors
- Chairman of EDP Energia, S.A.'s Board of Directors
- Chairman of EDP Águas, S.A.'s Board of Directors
- Chairman of ONI, S.G.P.S., S.A.'s Board of Directors
- Director of GALP Energia, S.G.P.S., S.A.

# Eng. Jorge Fernando Alves Ferreira Guimarães - Vice-Chairman

- Chairman of EDP Distribuição Energia, S.A.'s Board of Directors
- Chairman of EDINFOR -Sistemas Informáticos, S.A.'s Board of Directors
- Chairman of EDP Investimento, Gestão de Participações e Assistência Técnica, Limitada's Board of Directors
- Director of EDP Gestão da Produção de Energia, S.A.
- Director of SOGESTE, S.A.
- Director of Tejo Energia, S.A.
- Director of GALP Energia, S.G.P.S., S.A.

#### Dr. Rui Miguel de Oliveira Horta e Costa - Director

- Director of Electricidade de Portugal Internacional, S.G.P.S., S.A.
- Director of EDP Investimento, Gestão de Participações e Assistência Técnica. Limitada
- Director of IBERENERGIA, S.A.
- Director of Energia RE
- Director of ONI, S.G.P.S., S.A.
- Director of EDP Valor, S.A.
- Director of EDP Brasil, S.A.
- Chairman of CENTRAL-e Informação e Comércio Electrónico,
   S.A.'s Board of Directors

#### Dr. Fernando Noronha Leal - Director

- Chairman of Electricidade de Portugal Internacional, S.G.P.S.,
   S.A.'s Board of Directors
- Director of EDP Gestão da Produção of Energia, S.A.
- Director of EDP Participações, S.G.P.S., S.A.
- Director of EDP Investimento, Gestão de Participações e Assistência Técnica, Limitada
- Director of EDP Águas, S.A.

- Chairman of ENERPAULO
- Chairman of ENERGEN's Board of Directors
- Chairman of EDP Brasil, S.A.'s Board of Directors
- Chairman of IVEN's Board of Directors
- Chairman of ENERSUL's Board of Directors
- Chairman of ESCELSA's Board of Directors

#### Eng. António Manuel Barreto Pita de Abreu - Director

- Chairman of EDP Gestão da Produção de Energia, S.A.'s
   Board of Directors
- Chairman of CPPE Companhia Portuguesa de Produção of Electricidade, S.A.'s Board of Directors
- Chairman of TER Termoeléctrica do Ribatejo, S.A.'s Board of Directors
- Chairman of EDP Cogeração Produção de Electricidade e Calor, S.A.'s Board of Directors

- Director of EDP Distribuição Energia, S.A.
- Director of EDINFOR Sistemas Informáticos, S.A.
- Director of TURBOGÁS, S.A.

#### Dr. Manuel de Jesus Martins - Director

- Chairman of EDP Participações, S.G.P.S., S.A.'s Board of Directors
- Chairman of Energia RE's Board of Directors
- Director of EDP VALOR Gestão Integrada de Serviços, S.A.
- Director of EDP Gestão da Produção de Energia, S.A.
- Director of SÃVIDA Medicina Apoiada, S.A.
- Director of MRH Mudança e Recursos Humanos, S.A.
- Director of SCS Serviços Complementares de Saúde, S.A.



# SUMMARY OF DATA RELATING TO EDP GROUP COMPANIES

Company and head office	Principal business activity	Key figures (Euros) (non consolidated figures)
EDP - Electricidade de Portugal, S.A.  Av. José Malhoa, Lote A 13 1070-157 Lisboa Telef. 21 001 30 13 Fax 21 726 50 29 Taxpayer registration no. 500 697 256	Promotion, evolvement and management, directly or indirectly, of capital projects and activities in in the electricity sector at both national and international level, for the purpose of enhancing and streamlining the performance of the universe of companies making up the EDP Group.	Assets 12,259,184,978 Shareholders' funds 6,096,757,725 Turnover 39,876,717 Operating profit -76,415,578 Net income 450,794,717
EDP Distribuição - Energia, S.A. Rua Camilo Castelo Branco, 43 1050-040 Lisboa Telef. 21 353 88 33 Fax 21 353 40 94 Taxpayer registration no. 504 394 029	Electric power distribution and sale and the provision of allied or complementary services.	Assets 4,968,090,322 Shareholders' funds 1,578,935,941 Turnover 3,280,000,028 Operating profit 191,238,927 Net income 185,254,503
EDP - Gestão da Produção de Energia, S.A.  Av. Barbosa du Bocage, 45  1064-002 Lisboa  Telef. 21 352 53 53  Fax 217 993 420  Taxpayer registration no. 505 432 811	Promotion, evolvement and management, directly or indirectly, of installation, capital projects and activities in the area of power generation and sales, namely in the form of electricity, the conduct of studies and the drafting of projects in the same domain, as well as the provision of other related services	Assets 4,174,082,073 Shareholders' funds 1,783,096,888 Turnover 9,573,890 Operating profit -187,227 Net income 288,106,890
CPPE - Companhia Portuguesa de Produção de Electricidade, S.A. Av. Barbosa du Bocage, 45 Apartado 14125 1064-002 Lisboa Telef. 21 352 53 53 Fax 21 799 24 20 Taxpayer registration no. 503 293 695	Generation and sale of energy in the form of of electricity and others, resulting from the operation of its own and/or third parties' installations, under the obligation to guarantee in the final instance, the sustained development of the national power-generating system.	Assets 4,445,506,646 Shareholders' funds 2,361,383,714 Turnover 1,219,278,247 Operating profit 498,910,639 Net income 295,448,652
EDP Energia, S.A.  Praça Marquês de Pombal, 13 1250-162 Lisboa Telef. 21 353 88 33 Fax 21 353 40 94 Taxpayer registration no. 503 504 564	Generation, purchase and sale of energy, in the form of electricity and others, resulting from the operation of its own and/or third parties' installations, as well as any other forms of energy selling activities.	Assets 88,366,712 Shareholders' funds 73,808,897 Turnover 24,059,568 Operating profit 4,158,017 Net income 2,196,545
HDN - Energia do Norte, S.A. Rua do Caires, 292, 1º 4704-516 Braga Telef. 253 60 30 50 Fax 253 61 88 36 Taxpayer registration no. 503 367 257	Generation and sale of energy in the form of electricity and others resulting from the operation of its own and/or third parties' installations.	Assets 67,903,273 Shareholders' funds 30,090,407 Turnover 12,906,261 Operating profit 3,986,240 Net income 2,224,632

# Summary of Data Relating to EDP Group Companies

Company and head office	Principal business activity	Key figures (Euros) (non consolidated figures)
HIDROCENEL – Energia do Centro, S.A. Apartado 182, Guintela 6270-909 Seia Telef. 238 320 000 Fax 238 320 027 Taxpayer registration no. 503 326 887	Generation and sale of energy in the form of electricity and others resulting from the operation of its own and/or third parties' installations.	Assets 106,358,229 Shareholders' funds 55,516,513 Turnover 12,584,950 Operating profit 5,713,589 Net income 3,475,465
HIDRORUMO - Projecto e Gestão, S.A. Rua do Bolhão, 36 4000-111 PORTO Telef: 22 200 82 01 Fax: 22 208 31 09 Taxpayer registration no. 503 293 547	To conduct studies and execute projects, the management of capital projects and supervision of works in any engineering field, principally in the hydraulics area, in the total or partial realisation of these capital projects, and complementary activities, namely hydrological, geotechnical, topographical, socio-economic and environmental studies, as well as general quality management at works under construction.	Assets 15,928,468 Shareholders' funds 6,404,039 Turnover 17,718,253 Operating profit 1,266,945 Net income 1,069,635
PROET - Projectos, Engenharia e Tecnologias, S.A.  Av. Estados Unidos da América, 55, 2º 1749-061 LISBOA Telef: 21 847 01 80 Fax: 21 840 94 19 Taxpayer registration no. 503 293 504	The provision of general, multidisciplinary and specialist engineering services, involving consultancy, execution and management of capital projects, supporting and participating at national and international level in Research, Development and Testing work with special relevance for the electricity sector, in particular in the domain of thermoelectric generation, integrating also the prospecting, analysis and appraisal of activities, projects or undertakings in the energy and industrial fields. The company's objects also include the general quality management of works under construction.	Assets 11,501,805 Shareholders' funds 5,339,695 Turnover 12,614,485 Operating profit 1,446,341 Net income 1,118,493
ENERNOVA - Novas Energias,S.A.  Av. Estados Unidos da América, 55, 11º 1749-061 Lisboa Telef. 21 841 21 00 Fax 21 841 27 10 Taxpayer registration no. 503 161 314	To project, build and operate electric-energy plants in the sector of alternative renewable energies.	Assets 46,526,400 Shareholders' funds 10,234,690 Turnover 5,542,235 Operating profit 3,423,701 Net income 1,758,280
EDP Cogeração - Produção de Electricidade e Calor, S.A.  Av. José Malhoa, Lote A13, 3º 1070-157 LISB0A Telef: 21 001 30 13 Fax: 21 720 29 60 Taxpayer registration no. 504 410 385	Carrying out studies and the promotion, execution, operation and sale of projects involving the combined production of electric and thermal energy by means of cogeneration.	Assets 34,322,601 Shareholders' funds 3,574,785 Turnover 308,082 Operating profit -361,222 Net income -1,303,371



# Summary of Data Relating to EDP Group Companies

Company and head office	Principal business activity	Key figures (Euros) (non consolidated figures)
TER - Termoeléctrica do Ribatejo, S.A.  Av. Estados Unidos da América, 55, 12º 1749-061 LISBOA Telef: 21 001 34 02 Fax: 21 001 32 02 Taxpayer registration no. 504 718 347	Establishment and operation of a combined-cycle thermoelectric power station and the sale of the resulting energy produced.	Assets 65,332,340 Shareholders' funds 487,803 Turnover 0 Operating profit 50,654 Net income -8,838
EDINFOR - Sistemas Informáticos, S.A.  Av. Sidónio Pais, 28, R/C esq.  1050-215 Lisboa  Telef: 21 001 83 00  Fax: 21 352 24 75  Taxpayer registration no. 502 605 731	Operation of its own or others' information systems, the design, implementation and operation of data networks, the development of computer programmes and systems with recourse to data-processing equipment, management and organisation consultancy, vocational training and the sale and importation of IT products and equipment and related activities.	Assets 256,409,557 Shareholders' funds 66,293,259 Turnover 117,889,469 Operating profit 15,575,458 Net income 9,847,349
Ace Holding, S.G.P.S., S.A  Av. Dr. Mário Moutinho, Lote 1732 A 1400-136 Lisboa Telef. 21 001 40 00 Fax 21 001 40 01 Taxpayer registration no. 505 187 981	Management of participating interests in other companies as a indirect manner of being engaged in economic activities	Assets 43,726,024 Shareholders' funds 18,135,856 Turnover 0 Operating profit -1,527,892 Result Líquidos 7,718,677
EDP Internacional – Electricidade de Portugal Internacional, S.G.P.S., S.A. Av. José Malhoa, Lote A13, 3º 1070-157 LISBOA Telef: 21 001 30 13 Fax: 21 720 29 99 Taxpayer registration no. 502 539 984	Promotion, evolvement and management, directly or indirectly, of capital projects and activities in the world-wide energy sector, in particular, feasibility studies covering new businesses, the acquisition and management of equity investments, consultancy	Assets 1,079,119,812 Shareholders' funds 18,877,071 Turnover 0 Operating profit -3,328,881 Net income -23,390,905
EDP PARTICIPAÇÕES S.G.P.S., S.A.  Av. José Malhoa, Lote A 13 1070-157 Lisboa Telef. 21 001 30 13 Fax 21 726 50 29 Taxpayer registration no. 504 930 087	Management of participating interests in other companies as an indirect way of carrying out economic activities	Assets 1,339,156,443 Shareholders' funds 102,729,930 Turnover 0 Operating profit -155,848 Net income -23,081,155
EDP Águas - Gestão de Águas e Saneamento, S.A. Av. José Malhoa, Lote A 13 1070-157 Lisboa Telef. 21 001 30 13 Fax 21 726 50 29 Taxpayer registration no. 504 657 992	Promotion, development and management, directly or indirectly, of business interests in the water and sewage sectors.	Assets 11,473,672 Shareholders' funds 1,291,814 Turnover 0 Operating profit -2,215,251 Net income 5,738,745

# Summary of Data Relating to EDP Group Companies

Company and head office	Principal business activity	Key figures (Euros) (non consolidated figures)
Operadora Nacional de Interactivos S.G.P.S., S.A.  Av. José Malhoa, Lote A 13 1070-157 Lisboa Telef. 21 001 30 13 Fax 21 726 50 29 Taxpayer registration no. 504 968 386	Management of participating interests in other companies as an indirect way of carrying out economic activities.	Assets 615,702,786 Shareholders' funds 256,719,687 Turnover 0 Operating profit -10,470,776 Net income -141,589,487
LABELEC - Estudos, Desenvolvimento e Actividades Laboratoriais, S.A. Rua Cidade de Goa, 4 2686-997 SACAVÉM Telef: 21 941 12 62 Fax: 21 941 92 54 Taxpayer registration no. 503 326 755	Undertaking engineering works, namely, laboratory-related with a view to assisting in the conception and operation in installations and quality control of equipment and systems, within the ambit of the generation, transmission and distribution of electricity.	Assets 9,476,119 Shareholders' funds 5,856,203 Turnover 9,886,203 Operating profit 2,481,842 Net income 1,812,414
<b>SÃVIDA - Medicina Apoiada, S.A.</b> Av. Casal Ribeiro, 15, 6º 1000-090 LISB0A  Telef: 21 313 89 00  Fax: 21 001 74 10  Taxpayer registration no. 503 293 512	Provision of health-care services, management and operation of its own or others' hospital, medical assistance and similar establishments.	Assets 15,744,087 Shareholders' funds 801,230 Turnover 34,928,123 Operating profit -215,388 Net income -367,464
MRH - Mudança e Recursos Humanos, S.A.  Rua D. Luís I, 12, 2 <sup>a</sup> 1200-151 LISBOA  Telef: 21 322 22 00  Fax: 21 322 22 05  Taxpayer registration no. 503 293 520	Consultancy and the provision of services in the field of vocational training and human resources management.	Assets 4,453,216 Shareholders' funds 1,143,217 Turnover 4,673,347 Operating profit 297,304 Net income 110,793
EDP Serviços de Gestão de Frotas, Instalações e Logística, S.A. Av. Estados Unidos da América, 55, 9º 1749-061 LISBOA Telef: 21 841 25 44 Fax: 21 841 25 80 Taxpayer registration no. 504 645 064	Management and broking of fleets and transport means, management and provision of property services and the acquisition, contracting, management and broking of goods and services aimed at giving logistical support to companies.	Assets 6,445,366 Shareholders' funds 847,249 Turnover 4,818,673 Operating profit 170,473 Net income 20,201
EDP Imobiliária, S.A.  Av. Estados Unidos da América, 55, 11º 1749-061 LISBOA  Telef: 21 841 24 58  Fax: 21 841 22 15  Taxpayer registration no. 503 529 524	Study, conception, development and marketing, for its own or others' account, of real estate and tourist projects, property promotion, administration of its own fixed properties or for the account of others, including the letting, purchase and sale of properties and resale of those acquired for this purpose.	Assets 17,392,522 Shareholders' funds 8,535,964 Turnover 8,008,200 Operating profit 3,798,279 Net income 3,078,043



# ELECTRICITY: GENERAL OPERATING DATA

# **INSTALLED CAPACITY AND NET GENERATION**

INSTALLED CAPACITY AT POWER STATIONS (a)						
at 31 Dec (MW)	1996	1997	1998	1999	2000	2001
(1) SEP - Public Electricity System (SEP / Binding System)	7,860	7,860	8,144	8,804	8,758	8,758
EDP Group power stations:	7,276	7,276	7,230	7,230	7,184	7,184
EDP Group hydroelectric power stations	3,903	3,903	3,903	3,903	3,903	3,903
EDP Group thermoelectric power stations	3,373	3,373	3,327	3,327	3,281	3,281
Other SEP producers- thermoelectric power stations:	584	584	914	1,574	1,574	1,574
Pego	584	584	584	584	584	584
Tapada do Outeiro	-	-	330	990	990	990
(2) EDP Group in the SEI - Independent Electricity System	280	280	290	299	376	427
Mini-hydro plants	270	270	270	270	270	310
Wind farms	10	10	20	20	30	41
Biomass	-	-	-	9	9	9
Cogeneration	-	-	-	-	67	67
Total EDP Group + Other SEP Producers = (1) + (2)	8,140	8,140	8,434	9,103	9,134	9,184
Total EDP Group	7,556	7,556	7,520	7,529	7,560	7,610

<sup>(</sup>a) Contracted power in terms of the PPA's (Power Purchase Agreements)

# Net Generation by Power Stations

NET GENERATION BY POWER STATIONS						
at 31 Dec (GWh)	1996	1997	1998	1999	2000	2001
(1) SEP - Public Electricity System (Binding System)	27,611	26,639	30,955	34,409	34,493	36,920
EDP Group power stations:	24,350	23,034	26,898	23,458	24,000	26,947
EDP Group hydroelectric power stations	13,138	11,523	11,506	6,456	10,229	12,607
EDP Group thermoelectric power stations	11,212	11,511	15,392	17,002	13,771	14,340
Other SEP producers thermoelectric power stations:	3,261	3,605	4,057	10,951	10,493	9,973
Pego	3,261	3,605	2,796	4,822	4,599	4,022
Tapada do Outeiro	-	-	1,261	6,129	5,894	5,951
(2) EDP Group in the SEI - Independent Electricity System	788	755	764	503	844	1,336
Mini-hydro plants	782	733	718	447	623	785
Wind farms	6	22	46	53	70	91
Biomass	-	-	-	3	6	19
Cogeneration	-	-	-	-	145	441
Total EDP Group + Other SEP Producers = (1) + (2)	28,399	27,394	31,719	34,912	35,337	38,256
Total EDP Group	25,138	23,789	27,662	23,961	24,844	28,283

# **EDP Group's Fuel Consumption**

EDP GROUP'S FUEL							
CONSUMPTION	Units	1996	1997	1998	1999	2000	2001
<u>Quantities</u>							
Fuel-oil	1,000 ton	738	784	1,565	1,536	1,052	1,373
Diesel	1,000 litres	584	584	3,966	1,732	14,359	20,873
National coal	1,000 ton	43	99	-	-	-	
Imported coal	1,000 ton	3,073	3,084	3,102	3,491	3,456	3,263
Natural gas (a)	1,000 m³	-	26,313	163,761	376,278	182,300	168,900
Amounts		178,154	204,537	246,830	268,580	306,942	377,192
Fuel-oil	1,000 Euros	58,583	67,654	109,164	109,374	146,720	193,867
Diesel	1,000 Euros	71	65	551	219	1,895	4,618
National coal	1,000 Euros	1.838	4,378	_	-	-	
Imported coal	1,000 Euros	117,662	128,462	120,446	116,825	128,901	142,810
Natural gas (a)	1,000 Euros	-	3,978	16,668	42,162	29,426	35,897
Average prices							
Fuel-oil	Euro/kton	79,412	86,279	69,749	71,187	139,521	141,220
Diesel	Euro/klitre	122	112	139	126	132	221
National coal	Euro/kton	42,753	44,194	-	-	-	
Imported coal	Euro/kton	38,284	41,649	38,835	33,465	37,300	43,764
Natural gas (a)	Euro/hm³	-	151	102	112	161	213

(a) Includes fuel consumed by the Carregado (CPPE) and Soporgen (EDP Cogeração) power stations.



## **ENERGY BALANCE AND HYDROELECTRIC CAPABILITY FACTOR**

	1996	1997	1998	1999	2000	2001****
Hydroelectric Capability Factor	1,30	1,22	1,04	0,68	1,08	1,19
ENERGY BALANCE						GWh
EDP Generation	26,179	24,817	28,899	25,112	25,754	29,043
Hydroelectric power stations	14,169	12,472	12,425	7,010	10,991	13,553
Winds farms and biomass plants	6	22	47	57	79	113
Thermoelectric power stations	12,004	12,323	16,427	18,046	14,685	15,377
Power station consumption and losses	1,041	1,028	1,237	1,152	1,056	1,202
Hydroelectric pumping	137	100	101	491	558	485
Energy sent out to SEP's grid						
(net production)	30,887	31,945	33,807	35,803	37,951	40,021
EDP	25,001	23,689	27,561	23,469	24,139	27,356
Other SEP producers (balance)*	3,261	3,605	4,057	10,951	10,493	9,973
Auto-producers and other deliveries (balance)**	1,514	1,752	1,917	2,241	2,388	2,453
Imports / Exports (balance)*	1,111	2,899	272	(858)	931	239
Synchronous compensation	29	32	30	41	39	34
Own consumption for generation and transmission						
+ transmission losses***	724	612	615	679	708	742
Energy sent out to SEP's grid	30,134	31,301	33,162	35,083	37,204	39,245
1- EDP Group own consumption and Distribution losses	2,682	2,614	2,800	2,803	2,897	3,220
2- Sale of energy	27,451	28,686	30,364	32,280	34,091	35,505
Distributors	151	103	111	121	129	133
- Local authorities	0	0	0	0	0	0
- Other distributors	151	103	111	121	129	133
Direct supply to consumers	27,300	28,583	30,253	32,159	33,962	35,372
- Very high, high and medium voltage	12,513	13,130	13,909	14,373	15,068	15,480
- Low voltage	14,787	15,453	16,344	17,786	18,894	19,892
3 - Sales to non-binding customers	-	-	-	-	216	520
EDP Group	-	-	-	-	85	241
Network usage (outside EDP)	-	-	-	-	131	279

<sup>\*</sup> Source: REN

<sup>\*\*</sup> Does not include 2,7 billing relative to 1999 energy and includes an estimate of energy not yet billed of 12,9.

<sup>\*\*\*</sup> Source: EDP + REN

<sup>\*\*\*\*</sup> Previsional figures

#### NUMBER OF EDP GROUP CUSTOMERS AND ELECTRICITY CONSUMPTION ACCORDING TO FINAL USAGE

						•	variation	00/01
TOTAL EDP (SEP+SENV)	1996	1997	1998	1999	2000	2001	Amount	%
Number of customers	4,914,966	5,033,837	5,161,391	5,291,520	5,415,313	5,541,418	126,105	2.3%
High voltage (*) (**)	93	94	96	102	102	111	9	8.8%
Medium voltage (**)	16,197	16,868	17,424	18,140	18,842	19,556	714	3.8%
Low voltage	4,898,676	5,016,875	5,143,871	5,273,278	5,396,369	5,521,751	125,382	2.3%
Electricity consumption (GWh) (**) (***)	27,356	28,638	30,308	32,220	34,085	35,654	1,569	4.6%
Lighting and other uses	13,540	14,217	15,216	16,555	17,656	18,658	1,002	5.7%
Residential	7,841	8,065	8,317	9,094	9,678	10,188	510	5.3%
Non residential	5,699	6,152	6,899	7,461	7,978	8,470	506	6.2%
Lighting of state buildings,								
administrative corpos, etc.	1,187	1,243	1,366	1,527	1,632	1,722	90	5.5%
Cooking and heating	12	12	14	8	8	8	0	-4.8%
Industrial uses	10,983	11,424	11,904	12,150	12,740	13,103	363	2.8%
Agricultural uses	514	546	607	667	679	737	58	8.6%
Traction	320	336	316	364	360	358	-2	-0.6%
Public illumination	800	860	884	948	1,010	1,068	58	5.8%

<sup>(\*)</sup> Includes Very High Voltage customers

<sup>(\*\*)</sup> As from 2000, includes SENV consumption and customers who continue to be supplied by the EDP Group.

(\*\*\*) Includes EDP Distribuição's own consumption and supplies for the consumption of other Group companies.

			Variatio	n 00/01
SENV (EDP)	2000	2001	Amount	%
Number of customers	9	22	13	144.4%
HV /	1	2	1	100.0%
MV	8	20	12	150.0%
Electricity consumption (GWh)	85	241	156	181.9%
Lighting and other uses (non residential)	14	42	28	192.9%
Industrial uses	71	199	128	179.8%



#### **SUMMARY OF POWER GENERATING CENTRES**

A - HYDRO POWER STATIONS (SEP)	River	Entered into service	Type of hydro scheme	No. of generat. units	Max. Installed capacity (MW)
Alto Lindoso	Lima	1992	reservoir	2	630
Touvedo	Lima	1993	reservoir	1	22
Alto Rabagão	Rabagão	1964	reservoir	2	68
Vila Nova / Venda Nova	Rabagão	1951	reservoir	3	90
Vila Nova / Paradela	Cávado	1956	reservoir	1	5
Salamonde	Cávado	1953	reservoir	2	4
Vilarinho das Furnas	Homem	1972/1987	reservoir	2	12
Caniçada	Cávado	1954	reservoir	2	68
Cávado-Lima				15	1,090
Miranda	Douro	1960/1995	run-of river	4	369
Picote	Douro	1958	run-of river	3	19
Bemposta	Douro	1964	run-of river	3	24
Pocinho	Douro	1983	run-of river	3	18
Valeira	Douro	1976	run-of river	3	24
Vilar-Tabuaço	Távora	1965	reservoir	2	5
Régua	Douro	1973	run-of river	3	18
Carrapatelo	Douro	1971	run-of river	3	20
Torrão	Tâmega	1988	reservoir	2	14
Crestuma-Lever	Douro	1985	run-of river	3	11
Douro				29	1,92
Caldeirão	Caldeirão	1994	reservoir	1	4
Aguieira	Mondego	1981	reservoir	3	33
Raiva	Mondego	1982	reservoir	2	2
Cabril	Zêzere	1954	reservoir	2	10
Bouçã	Zêzere	1955	reservoir	2	4
Castelo do Bode	Zêzere	1951	reservoir	3	15
Pracana	Ocreza	1993	reservoir	3	4
Fratel	Tejo	1974	run-of river	3	13
Tejo-Mondego				19	88
Reservoir				35	2,04
Run-of river				28	1,86
Total Hydro Power Stations				63	3,90

# SUMMARY OF POWER GENERATING CENTRES

B - THERMAL POWER PLANTS (SEP)	Location	Entered into service	Fuel used	No. of generat.units	Max.Installed capacity (MW)
Tapada do Outeiro	Gondomar	1959	Fuel-oil	1	47
Carregado	Alenquer	1968	Fuel/Natural gas	6	710
Barreiro	Barreiro	1978	Fuel-oil	2	56
Setúbal	Setúbal	1979	Fuel-oil	4	946
Sines	Sines	1985	Coal	4	1,192
Conventional power stations				17	2,952
Alto de Mira	Amadora	1975	Diesel	6	132
Tunes	Silves	1973/1982	Diesel	4	197
Gas turbine power stations				10	329
Total Thermal Power Plants				27	3,281

C - WIND FARMS (PRE)	Location	Entered into service	Fuel used	No. of generat. units	Max.Installed capacity (MW)
Fonte da Mesa	Resende / Lamego	1997	N.A.	17	10.2
Pena Suar	Amarante / Vila Real	1998	N.A.	20	10.0
Cabeço da Rainha	Oleiros / Sertã	2000	N.A.	17	10.2
Cadafaz	Góis	2001	N.A.	17	10.2
Total Wind Farm				71	40.6



D - BIOMASS POWER PLANTS (PRE)	Location	Entered into service	Fuel used	No. of generat.units	Max.Installed capacity (MW)
Mortágua forest Waste	Mortágua	1999	Forest Waste	1	9
Total Biomass Plants				1	9

E - COGENERATION POWER PLANTS (PRE)	Location	Entered into service	Fuel used	No. of generat.units	Max.Installed capacity (MW)
Soporgen	Lavos - Figueira da Foz	2000	Natural Gas	2	67
Energin Azóia	Póvoa de Sta. Iria V. F. Xira	2002	Natural Gas	1	45
Carriço Cogeração	Carriço - Pombal	2002	Natural Gas	1	30
Total Cogeneration Plants				41	142

F - EMBEDDED (SEI)	River	Entered into service	Type of hydro scheme	No. of generat.units	Max.Installed capacity (MW)
Lindoso	Lima	1922	run-of river	4	44.1
Ermal	Ave	1937	reservoir	2	11.2
Varosa / Chocalho	Varosa	1934	reservoir	3	25.0
Total HDN power stations > 10 MW				9	80.3
France	Coura	1974	run-of river	1	7.0
Penide I and II	Cávado	1949	run-of river	2	4.9
Guilhofrei	Ave	1939	reservoir	2	4.0
Ponte da Esperança	Ave	1942	reservoir	1	2.8
Senhora do Porto	Ave	1945	reservoir	2	8.8
Cefra	Ouro	1995	run-of river	2	1.1
- -reigil	Ribeira Cabrum	1988	run-of river	1	4.6
Aregos	Ribeira Cabrum	1958	run-of river	2	3.1
- Caniços (ETE)	Ave	1946	run-of river	2	0.9
Total HDN power stations <= 10 MW				15	37.2
Total HDN Power Stations				24	117.5
Sabugueiro I	Ribeira da Lagoa	1947	reservoir	3	12.8
Desterro	Alva	1959	run-of river	2	13.2
Ponte de Jugais	Alva	1923	run-of river	2	20.3
/ila Cova	Alva	2001	run-of river	2	23.4
Santa Luzia	Ribeira de Unhais	1943	reservoir	4	24.4
Total Hidrocenel power stations > 10 MW	Tibelia de Officia	1040	1 COCI VOII	13	94.1
Sabuqueiro II	Ribeira Covão Urso	1993	reservoir	1	10.0
Riba-Côa	Côa	1906	run-of river	1	0.1
Pateiro	Mondego	1938	run-of river	2	0.3
Ribafeita	Vouga	1907	run-of river	2	0.9
Drizes	Vouga	1917	run-of river	1	0.2
Pisões	Dinha	1927	run-of river	2	0.1
Figueiral	Carvalhinho	1932	run-of river	1	0.1
igueil al Rei de Moinhos	Alva	1927	run-of river	1	0.8
Ermida	Ribeira de S. João	1943	run-of river	2	0.4
Total Hidrocenel power stations <= 10 MW	Albeira de 5. Juau	1343	run-or river	13	12.9
Total Hidrocenel Power Stations				26	107.0
Belver	Tejo	1951	run-of river	6	80.7
Total EDP Energia power stations > 10 MW	10/0	1001	10110111101	6	80.7
Póvoa	Rib. Nisa	1927	reservoir	1	0.7
Bruceira	Rib. Nisa	1928	reservoir	1	1.6
/elada	Rib. Nisa	1935	reservoir	1	1.9
Velaua Caldeirão	Almonda	1927	run-of river	2	0.2
Total EDP Energia power stations <= 10 MW	Amorida	101/	Turi or Tiver	5	4.4
Total EDP Energia power stations				11	85.1
Total Power Stations > 10 MW				28	255.1
Total Power Stations <= 10 MW				33	54.5
Total Power Stations				61	309.6



## **SUMMARY OF DISTRIBUTION GRID**

Distribution grid Summary of installation and equipment						
in service at 31 December	1996	1997	1998	1999	2000	2001*
Substations						
No. of substations	339	348	359	365	368	368
No. of transformers	618	631	642	645	654	651
Installed capacity (MVA)	12,074	12,405	12,690	12,752	12,902	12,971
Lines (including branch lines in km)  Overhead						
HV (60/130 kV)	6.413	6,528	6,613	6,717	6.885	6,925
MV (<6/10/15/30/40 kV)	47,520	48,267	48,738	49,516	50,140	50,712
Underground cables						
HV (60/130 kV)	307	325	358	357	356	352
MV (<6/10/15/30/40 kV)	8,539	8,895	9,325	9,778	10,058	10,542
Transforming stations						
Units	41,871	43,266	44,620	46,134	47,695	49,165
Installed capacity (MVA)	10,677	11,155	11,664	12,169	12,776	13,432
LV grid (kms)						
Overhead	86,905	88,408	90,344	92,020	93,507	95,059
Underground	19,483	20,534	21,731	22,894	23,532	23,044
Meters (units)	4,943,652	5,078,750	5,214,777	5,366,479	5,635,492	5,779,459
HV+MV	18,382	19,383	20,695	21,778	22,460	23,170
LV+SLV	4,925,270	5,059,367	5,194,082	5,344,701	5,613,032	5,756,289

<sup>\*</sup> Previsional figures

# INTERNATIONAL INVESTMENTS

# **OPERATING AND FINANCIAL INDICATORS**

		INITEDNIATION	AL IND/ECTM	ENTS ODED	ATING AND	FINIANICIAL	INDICATORS	(2004 data)	
		INTERNATION		ting indicator		FINANCIAL		icial indicato	rs
		Sales	No.	No.	Installed	Generation	(EUR	thousand)	
	Energy (GWh)	Water (Milhões m³)	Customers	Employees	capacity (MW)	(GWh)	Assets	Oper. Inc.	Net Inc.
Brazil									
Electricity distribution									
Bandeir ante	18,180	-	1,142,034	1,471	-		923,758	64,609	69,847
Escelsa	6,112	-	922,579	1,411	-	837	1,248,843	59,249	-12,717
Enersul	2,672	-	572,323	978	-	-	578,876	58,821	22,854
Electricity generation									
Lajeado (Investco)	97		_	_	850	97			
Peixe Angical	-	_	-	_	450	2,400*	-	-	
Couto Magalhães	_	-	-	-	150	790*	-	-	
		-							
Total Brazil	27,061		2,636,936	3,860	1,450	4,124	2,751,477	182,679	79,984
Macau									
Generation and distribution									
Electricity									
CEM	1,599		187,236	750	352	1,457	463,363	64,026	61,297
<del></del>	.,	-	,			.,	,	,	- 1,1
Guatemala									
Electricity distribution									
ÉEGSA	3,202		633,124	486	-	-	717,376	57,227	-3,985
		-							
Cape Verde									
Generation and distribution									
Electricity, water and sewage	96	2	54.485	725	52	164	80.843	-9,890	-8,955
Electra	30	ے	J4,40J	/ 23	JE	104	60,643	-3,030	-0,333
Total other markets	4,897	2	874,845	1,961	404	1,621	1,261,582	111,363	48,356
Total international group									
and associated companies	31,958	2	3,511,781	5,821	1,854	5,745	4,013,059	294,043	128,340
	,		_,,	-,	.,		,=,- 20	,	

Note: all the data take into consideration the total amount for each one of the companies, irrespective of EDP's % shareholding

<sup>\*</sup> Guaranteed annual generation



#### **ACCUMULATED FINANCIAL INVESTMENT**

INTERNATIONALISATION – Accumulated Financial Investment BRAZIL						
Company	EDP % in capital	Date	EUR thousand			
Lajeado	10.57%	From 1998 to 2001	59,100			
Peixe Angical	95.00%	2001	11,374			
FAFEN	80.00%	2000	13,691			
Enerpro	100.00%	2001	246			
Subtotal - electricity generation			84,410			
Escelsa	52.00% (a)	1999 and 2001	930,123			
Bandeirante	96.48%	1998 and 2000	624,515			
CERJ	19.15% (ь)	1996	133,179			
Subtotal - electricity distribution			1,687,817			
Total Brazil			1,772,227			

OTHER MARKETS							
Company	EDP % in capital	Country	Date	Activity	EUR thousand		
EEGSA	16.96%	Guatemala	since 1998	Electricity distribution	65,183		
Redal	29.00%	Morocco	1998	Distribution of electricity, water and sewage	11,127		
CEM	22.00%	Macau	1990 and 1999	Electricity generation and distribution	77,583		
Electra	30.60%	Cape Verde	1999	Generation and distribution of electricity, water and sewage	27,214		
Total other markets					181,107		
Total Internationalisation					1,953,335		

<sup>(</sup>a) Escelsa controls 65.2% of Enersul's capital, also an electricity distribution company in Brazil.

<sup>(</sup>b) CERJ owns 20.61% of the capital of another Brazilian electricity distributor - COELCE.

EDP has, therefore, an indirect shareholding (via CERJ) of 3.95% in the equity capital of COELCE.

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