CENTRAL ELECTRICITY BOARD
MAURITIUS

The Corporatisation of the Central Electricity Board of Mauritius: Lessons Learnt

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1. INTRODUCTION

The Corporatisation of a public service in any country is fraught with issues arising from Government's obligations to the taxpayers. Electricity distribution is no exception and in spite of it being a tradeable commodity, it is perceived to be an "acquired right" and considered to be an essential service for modern living conditions.

Electricity is, furthermore, essential to the commercial and industrial development of a country and the macro-economic effect of a continuous, reliable electricity supply of good quality has far reaching significance.

Consequently, irrespective of the most noble intentions of the Corporate Plan, the needs of the various shareholders must be very carefully balanced.

This paper is intended to give an overview of the Corporatisation of the CEB and summarises the risks, advantages and disadvantages of major reforms.

This paper provides:

(i) an assessment of the key issues facing CEB in light of the power sector reform initiative;
(ii) the strategic direction envisioned for successful business restructuring on commercial principles; and
(iii) a look at the financial status of the organisation as well as strategies to improve financial results for the years ahead.
(iv) an overview of problems encountered and lessons learnt during the process.

2. OVERVIEW

2.1 Electricity Sector Reform

In meeting its social obligations as electricity provider to a rapidly growing island nation, the Central Electricity Board has not always been able to operate on commercial principles. This has contributed to a weak financial position for the utility over the years. Given that the country is now completely electrified and the standard of living has risen for the majority of the population, CEB can now begin to balance its social obligations with the need to operate as a commercial entity.

To realise its plans, the Government of Mauritius committed to improve the financial condition of the sector through improvements in efficiency, reductions in system expansion costs, and injection of fresh capital through private participation by taking the following distinct steps:

- Corporatise the CEB as a vertically-integrated utility;
- Set up an independent, multi-sectoral regulator; and
- Invite a strategic partner to assist in the management of CEB.

2.2 Organisational

The Central Electricity Board is a parastatal body wholly owned by the Government of Mauritius and reporting to the Ministry of Public Utilities. Established on 8th December 1952 and empowered by the *Central Electricity Board Act* of 25 January 1964, CEB's business is to "prepare and carry out development schemes with the general object of promoting, coordinating and improving the

generation, transmission, distribution and sale of electricity" in Mauritius.

From a humble sales figure of 98 million kWh and a maximum demand of 31 MW at the time of the country's independence in 1968, the Central Electricity Board has focused its efforts on the supply of electricity to all sectors of our society, thereby contributing to the social and economic development of the country over the years. At the same time as we were completing the national rural electrification programme in 1981, we were also extending our networks to supply new industries following the setting up of the export processing zones and the needs of a growing tourism sector and textile industry.

Conscious of the country's heavy dependence on an uninterrupted and stable electricity supply, CEB has invested massively in building up generation capacity, mainly in heavy fuel oil-fired power stations. All hydro potential had been exploited as of 1983 when the Diamamouve Dam was completed, supplying water to the Champagne hydroelectric power station.

In 2002, electricity sales totalled 1 492 million kWh. CEB itself produced about 968 million kWh of energy – some 57 percent of the country's requirements – from its four thermal power stations and eight hydroelectric plants, which have a combined capacity of 367 MW. The remaining 43 percent of energy requirements was purchased from independent power producers, which have a total firm capacity of 111 MW and produce electricity from coal and bagasse. With a workforce of approximately 1,800 employees, CEB safely and dependably delivers electricity to more than 330,000 customers

3. OUR VISION, MISSION AND CORPORATE VALUES

3.1 Vision

We see ourselves as **"a world class, commercial electricity utility enabling the social and economic development of the region"**

3.2 Mission

We understand that the future of our business depends on delivering value and quality service to our customers and stakeholders, and that our business is to provide our customers, not with simply electricity, but with the benefits they want; in other words, comfort, security, entertainment, and the ability to carry on business and industry.

Our Mission:

We meet the expectations of our customers and stakeholders by:

- Delivering prompt and efficient customer services
- Developing our employees and providing them with incentives
- Providing an affordable, safe, and reliable electricity supply
- Undertaking our business in an environmentally responsible manner
- Being the preferred employer in the region

3.3 Values

As we move forward with our Corporate Plan we will endeavour to have our people exhibit these values in their day-to-day work:-

- **Respect, honesty, and loyalty:**

We deal with our colleagues, customers and stakeholders on the basis of trust, honesty and respect for differing views and interests. `We shall remain loyal to the ideals, ethics and values of the company.

- **Pride and Ownership:**

We shall act responsibly and participate actively in building pride and ownership of our corporate values.

- **Courteous, excellent service:**

The nation is our client. We shall always endeavour to provide a courteous and excellent service in satisfying the electricity service needs of the Mauritian public.

- **Superior Performance:**

We perform our tasks in a professional manner and produce our outputs to the best of our ability, with optimum utilisation of resources and with a focus on continuously improving the quality and reliability of the electricity supply.

- **Team culture:**

We involve our people in the success of our organization. We value initiative, cooperation, innovation, communication and flexibility in our work. We encourage, support, and involve staff in the mechanisms and processes through which we make decisions in our organization.

4. CORPORATE GOALS

4.1 Financial Soundness and Efficiency

Our strategies to achieve the goal of financial soundness and efficiency include making improvements to a number of existing internal processes as well as introducing new procedures and staff functions. These strategies embody:

- Improving internal financial processes;
- Modernising billing and revenue collection processes;
- Ensuring capital authorisation requests are business-case driven.
- Actively manage financial risks; and
- Implementing a path to profitability by:
  - Minimising capital borrowings;
  - Reducing bank overdraft;
  - Reducing production and other costs; and
  - Sustaining and growing our revenue base.

4.2 Integrated Planning

To ensure a secure and cost-effective supply of electricity for customers in Mauritius, CEB created a Corporate Planning & Research Department with responsibility for long-term planning including demand forecasting, generation planning, transmission and distribution planning, and strategic projects. The strategies of this planning group embody:

- Implementing integrated planning processes to improve business preparedness, reduce overall system expansion costs, and reduce risks;
- Identifying and developing initiatives to meet and manage current and future electricity demand;
- Reviewing power purchase agreements and identifying areas where future agreements can be refined; and
- Maximising the profitability of existing and new assets.

4.3 Desirable Employer

The path to becoming a world class electricity utility depends on our ability to attract, retain, and motivate people. With an ageing work force and an external environment of evolving social, lifestyle, and demographic trends, CEB recognises that it must not only build up a more diverse base of in-house skills, it must also establish a more modern employer-employee relationship. Strategies to assist in the achievement of this goal include:

- Completing an employee profile;
- Preparing a comprehensive Human Resources Plan to:
  - Attract and retain individuals with critical skills;
  - Foster knowledge transfer from retiring employees;
  - Provide succession plans; and
  - Introduce a performance appraisal and remuneration system, which includes performance-based compensation and incentives for employees to achieve corporate and personal development goals.
- Implementing a change management program; and
- Designing and implementing staff training programmes on both technical and business subjects.

4.4 Information Systems

Advances in information and communications technology (ICT) have increased the power of the consumer and given companies the ability to redefine their relationships with their customers and stakeholders. CEB must invest in ICT infrastructure, tools, training, and support not only to provide its customers with a high level of service, but also to improve internal processes and efficiency. CEB has already made progress toward this goal by preparing a comprehensive Information System Plan in late 2002.

4.5 Service Delivery

Improving the quality of our service delivery will improve our customer relationships at the same time as it contributes to revenue growth and cost reduction. Both the electricity delivery backbone and staff will be developed and strengthened. Strategies to address these areas include:

- Restructuring the Distribution Department and creating three Customer Service Areas—Area North, Area Centre, and Area West—with responsibility for providing "one-stop" customer service needs in each Area;
- Developing and implementing a comprehensive, integrated protection plan to minimise the frequency and severity of power outages; and
- Introducing a customer service orientation among field staff and highlighting areas where performance improvement is necessary.

5. CORPORATISATION

5.1 Overview

One of the mechanisms Government intends to use to achieve the objectives of power sector reform is to corporatise the Central Electricity Board into a new company. A series of legal framework, corporate governance, financial, technical, market, tariff and human resource issues require immediate attention as part of the process of corporatisation and CEB—along with Government—has begun to systematically address these issues through a series of steps and plans as described in the following sections.

5.1.1 Communications Plan

In order to be as open as possible and thereby gain the cooperation of all stakeholders, communication plans are being developed to address the information needs of the public, employee unions, and donor/lender institutions.

5.1.2 Legislation

As a new, corporatised entity, CEB would be vested with the powers and responsibilities of an electricity undertaking and entrusted with assets and staff to operate in a regulated market as a vertically integrated electricity company. Accordingly, the following legal steps are being undertaken:

- Amendment of the *Electricity Act* of 1939.
- Establishment of the *CEB Transfer Act* to transfer assets, rights, and obligations of the existing company to the new corporatised company.
- Enactment of the Utility Regulatory Bill for the establishment of the independent regulatory body.

5.2 Regulatory Body

An independent regulator will have a pivotal role in the restructured electricity sector. Not only will it provide a forum for the regulation of utility undertakings and the regulation of the utilities' operating environment, it will ensure that utilities under its jurisdiction operate in a manner consistent with consumers' interests. Government, in conjunction with its legal advisers, is currently drafting the conditions under which the regulatory body will be set up and operate.

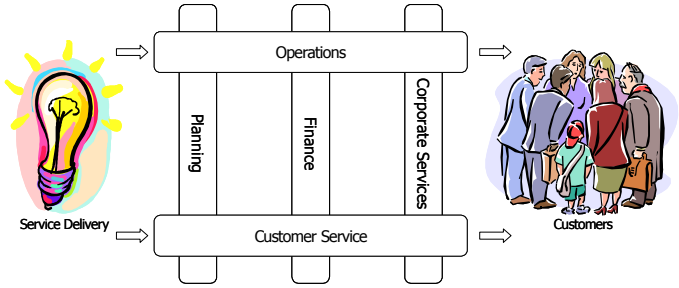
5.3 CEB Successor Company

The steps and terms under which the successor company to CEB will be established are as follows:

- Drawing up a Memorandum and Articles of Association.
- Registering the new company.
- Issuing a licence to take over and carry on CEB's business.
- Confirming the financial conditions of the successor company on Day One; i.e., after transfer from CEB.
- Confirming the conditions under which existing CEB staff and pensioners will be transferred to the new company.

5.4 CEB Business Transformation

Our business—today and tomorrow—is all about service delivery to our customers. The following diagram illustrates the concept using the analogy of a railway.



Service is what we are delivering by means of the two railway tracks; i.e., through excellent Operations and Customer Service. These tracks are supported by corporate functions and shared business services, namely, Planning, Finance, and other Corporate Services. The tracks and their support illustrate the interactions of the various organisational units as we go about our business of electricity service delivery

CEB is not, however, currently well structured to fit this picture nor to operate on commercial principles. For the successful restructuring of its business, CEB embraced the new strategic direction outlined in this Corporate Plan in 2002 and has already begun to implement several business enhancement measures to transform operational and business processes in different departments, as discussed next.

6 RESTRUCTURING

6.1 Corporate Planning & Research

This Department is developing a comprehensive forecasting process, not only to secure adequate supplies of electricity but also to provide an outlook for CEB's revenues. Volatility in the energy sector globally—whether from oil prices or other economic trends—and in the Mauritius economy affect both demand for electricity services and the price volatility CEB must manage. Preparing and tracking demand and sales forecasts will give CEB the ability to recognise risks and take mitigative action.

Another key area of activity for the Department is the development of a revised tariff structure and five-year tariff strategy. Working with demand forecasts, system expansion needs, and financial projections, the Department is using a newly developed model to assist in the setting of tariffs that provide CEB with reasonable revenues to cover its costs of supplying electricity services and, at the same time, are fair to all classes of electricity consumers both in terms of pricing and equity among the various customer classes.

6.2 Information Technology & Management Information Systems

An Information Technology and Management Information System (IT/MIS) Department was set up in 2002 with the objective to integrate the activities of our various administrative, commercial, financial and engineering sections and to meet the information needs of our customer service, operations, and strategic management processes. The Department also prepared an Information Systems Plan whereby CEB would obtain an adequate level of information technology and systems in a phased approach over the next three to five years.

6.3 Transmission & Distribution Department

The Transmission and Distribution Department is structured around three, decentralised Customer Service Areas with the objective of improving operational efficiency and at the same time instilling better responsiveness to customer needs. The Areas are set up on a geographic basis covering the island of Mauritius in terms of Area North, Area Centre, and Area West, with an Area Manager heading up each Area. The Areas are responsible for providing "one-stop" customer service; that is, responsibility for both the operational and financial performance of each Area is entrusted to each Area Manager.

6.4 Finance Department

In late 2002 CEB carried out a business process review of the Finance Department, encompassing all areas of activity within the current Department as well as the organisation and structure of the Department. The review included procurement procedures, billing and collection processes, and business case formulation for capital authorization requests. At the same time, a financial forecast model—a critical strategic tool for decision-making which will also assist in long-term financial planning and budgeting—was developed. Also included in the review was an assessment of the need for dedicated staff to handle foreign exchange and risk management.

As a result of the review, CEB will be making a number of structural and procedural changes in the Department. Some external recruiting is now taking place, in accordance with identified needs; a new format for budget reporting to monthly Board meetings is being introduced; an accounting exercise is being carried out to update the asset register and restate the value of our assets; and a new charter for the Finance Committee of the Board is being developed.

6.5 Production

Several enhancements in spare parts holdings and the inventory management system are being investigated, in light of improved global communication and transportation facilities as well as supplier-buyer networks. A strategic generation availability plan is currently being developed, as is a least cost generation dispatch model, in collaboration with the Corporate Planning & Research Department.

Fuel costs are one of the key contributors to CEB's financial position. A strategic fuel holding plan is under study to optimise fuel ordering and holding and to safeguard against any force majeure such as shortage of fuel

supply-line availability. Reward incentives at the level of power stations are under review in an effort to increase operational effectiveness.

The operating conditions and constraints at our older power stations are under review, as is the impact of recent water resource developments on our existing hydroelectric resources. These constraints may lead to a downrating of the capacity and energy potential from existing generation sources. The long-term outlook for replacement of aging plant by new and additional generation plant is under study by the Corporate Planning & Research Department.

6.6 Internal Audit

The business process review of the Finance Department also included the audit function. As a result of this review, an audit charter is being drawn up for the Board's Audit Committee, audit objectives are being prioritized, and a company risk profile is being prepared.

6.7 Corporate Administration

The Corporate Administration Department was formed in 2002, taking in functions of the previous Administration Department as well as functions of the Company Secretary.

This Department is managing the legal, communications, and administrative aspects involved in sector reforms, such as setting up of a CEB successor company, the legal framework for the corporatisation process, and registration of the new company under the Companies Act, and transfer of all existing assets as well as contracts binding CEB to third parties.

6.8 Human Resources

The Human Resources Department is challenged with providing the strategic fit; that is, having the required skills to support the business strategies and realize the goals and objectives of the organization. A human resource audit will be carried out to identify skills and staff capability, and a staff planning system will be devised to have the right skills in the right place. The HR department is currently working on several levers of change, which will encompass the following:

- Job evaluation and training.
- Conditions of service and industrial relations.
- Change management programme
- Communication programme to welcome change
- Man power planning
- Training and development
- Overcoming resistance to change
- Managing culture and Commitment
- Reward and performance management.

7. FINANCIAL OUTLOOK

7.1 Sales and Revenues

After many years of double-digit growth, energy sales increased in 2002 over 2001 by about 3 percent to reach 1,492 GWh. Lower sales could be attributed to a slightly lower GDP growth rate caused by a slowdown in the economy, deferment of certain projects coupled with the closure for renovation of several major hotels. Sales decreased slightly with the passage of Cyclone Dina in early 2002. Total revenue from sales of electricity in 2002 increased to Rs 4,538 million, representing an increase of Rs 607 million, or 15% percent, over the previous year. This increase arose, mainly as a consequence of the 10 percent increase in electricity tariffs and the revision of meter rents from Rs 2 to Rs 5.

7.2 Costs

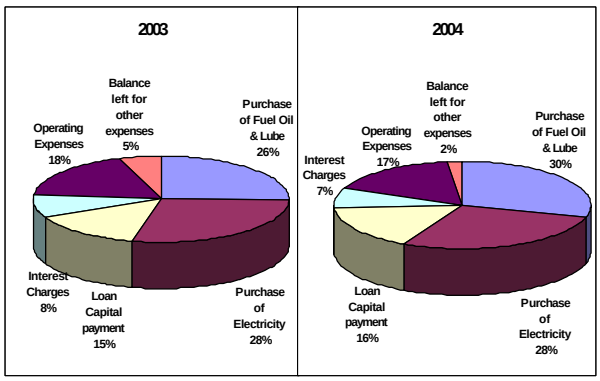
The major sources of costs for CEB are shown in the figure below for Fiscal Years 2003 and 2004, and comprise the following four elements:

- Purchase of electricity from Independent Power Producers and Continuous Power Producers, accounting for about 30 percent of annual turnover;
- Interest charges and servicing of loans and overdraft, accounting for about 24 percent of annual turnover;
- Purchase of fuel and lube oil, accounting for about 23 percent;
- Operations, maintenance, and salaries and general administrative expenses for the organization as a whole accounted for about 18 percent of annual turnover.

Only the remaining 5 percent could be used to meet other costs and/or make allowance for minor but essential capital expenditures.

8. FINANCIAL PLANS, YEARS 2003 AND 2004

CEB's fiscal year runs from January 1 to December 31 each year. The current financial plan and 2003 Budget were developed in late 2002 based on current levels of business activity and a business-as-usual approach. The budgeting process will be revamped in 2003, in line with the goals and objectives of this Corporate Plan. A longer-term outlook with key performance indicators and targets identified will be presented as part of CEB's financial outlook in future Business Service Plans.



The outlook for Fiscal Years 2003 and 2004 was based on the key assumptions outlined below:

Assumptions	Year 2003	Year 2004
Demand Growth	7.6 %	11.3 %
Customer growth	3.0 %	3.0 %
Price for Electricity Purchases	2002 prices	3.0 % increase
Heavy Fuel Oil Price	8 % increase	8 % increase
Hydro Availability	Normal Rainfall	Normal Rainfall
Foreign Exchange Rates	5% decline in MUR	5% decline in MUR
Inflation Rates on local costs	3 % increase	3 % increase
Electricity Tariffs	Same as at 01.01.2002	Increase of 6%

Based on a forecast of electricity sales of 1,606 GWh in 2003, and 1,784 GWh in 2004, and assuming no upward revision in tariffs, we forecast the corresponding turnover to be Rs 4,855 million and Rs 5,394 million, respectively. Major expenditures as a fraction of those revenues are shown in the diagrams above.

In 2003, the business-as-usual budget requirement for investing in capital projects is estimated at Rs 1,168 million, or about 24 percent of expected turnover. From the preceding diagrams we see that only about 5 percent of expected turnover would be available for other expenses, including capital expenditure. In other words, in order for CEB to finance the refurbishment and renewal of its capital assets, either expected loan repayments are rescheduled or more funds are borrowed from external funding sources.

In 2004, notwithstanding the forecast 11 percent increase in turnover, which in itself is subject to uncertainty, the balance for other expenses is projected to drop to 2 percent of turnover. Moreover, we project an amount of about Rs 455 million, i.e., over 8 percent of forecast turnover, will be required for financing capital projects. Clearly CEB will be looking for the participation of private capital in key infrastructure investments in the coming years at the same time as we seek to balance our own financial outlook.

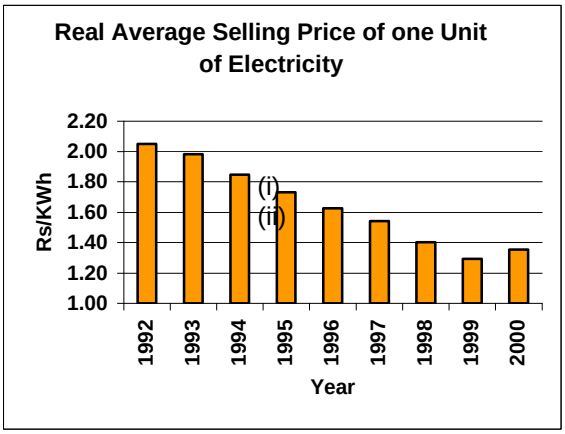
9. STRATEGIES TO MANAGE KEY PARAMETERS

Fluctuations in the global price of fossil fuels and currency exchange rates are dominant determinants of both the purchase price of fuel oil and of electricity purchased from independent power producers in Mauritius. For instance, the price of fuel oil used for the Fort George generating station—which produces about 40 percent of the energy generated in Mauritius--has varied from USD 129 to USD 178 per metric tonne during the course of 2002 alone. The IPP purchase price is indexed on the exchange rates of both the Euro and U.S. Dollar. Over the last three years, the Mauritian rupee has lost approximately 20 percent and 15 percent of its value against each of these currencies, respectively. In addition, most of our loans and procurement expenses are denominated in foreign currencies yet all our revenues are in Mauritian rupees. This leaves CEB with the management of foreign exchange risk.

The business process re-engineering planned for the CEB Finance Department aims to address this challenge using a two-pronged approach. First, the financial forecast model will enable us to forecast our costs and thus our revenue requirements. Second, risk management policies to be adopted in the near future will permit us to assess the impacts of these key parameters on our financial position. In the light of these evaluations, decisions can be taken on whether to actively manage the risks—which has its own costs—take other actions to attenuate any adverse impacts, or simply bear the risks.

10. ELECTRICITY TARIFFS

One of the root causes of CEB's unfavourable financial situation can be traced back to an eight-year period between 1992 and 2000 where electricity rates were held constant during a period of massive capital investment to meet rapidly growing electricity demands in Mauritius and where the average annual inflation rate was 6.6 percent. As a joint UNDP/World Bank energy sector review in 1994 concluded, CEB's tariff structure and price levels were not appropriately set in such a way that electricity consumers would be charged the real costs they impose upon the electricity system. While this policy of subsidizing electricity prices has been beneficial to the annual growth rate of our national gross domestic product and to socially vulnerable groups in the population, it has dramatically worsened the financial situation of the organisation. In real terms, that is net of inflation, the average selling price of one unit of electricity has decreased steadily from just over Rs 2 per kWh in 1992 to approximately Rs 1.30 per kWh in 1999, as depicted in the following graph below.



In 2001, about 633 million KWh representing 43 percent of the total electricity sales in Mauritius were sold below the actual cost price. Clearly, if CEB, is to meet its financial obligations today and in the future, rates must be aligned with our true costs of production, transmission, distribution and operation. A five-year tariff strategy is under preparation. Changes will be phased in over a period of several years in order to avoid imposing rate shocks on our customers. The 5-year tariff strategy will also enable the organisation to more systematically forecast its revenues and thereby plan its resource allocation programme for the various business units in a more rational manner.

11. MAJOR ISSUES

11.1 Shareholder's Requirements

The shareholders/owners should be very clear in it's ultimate objectives for the utility.

11.2 Political Ideology

The shareholders should be very clear regarding the financial objectives of the utility. It is not possible for example to provide social services from a commercialised company.

11.3 Change Management

To ensure that stakeholders are fully aware of the effects of corporatisation on vested interests, It is essential to launch an effective communication and change management campaign.

11.4 Organised Labour

Trade unions inevitably see the process of corporatisation as being detrimental to job security.

11.5 Macro-Economics

Invariably the utility will still rely on Government guarantees to acquire loans for major capital investment.

12. CONCLUSIONS

(i) Start the process of Corporatisation with a clear vision of the end state. Have a clearly defined set of concise objectives that have been agreed to by all stakeholders, e.g, should the final outcome be a vertical integrated, single buyer company or provide for a measure of horizontal disagregation.

(ii) Establish a planning program which should include the following:

- A corporate plan
- An Integrated Electricity Plan
- A Communication Plan
- A Business Plan
- A Staff Transfer Plan

(iii) Make sure that all activities are effectively ring-fenced.

- Draw up an accurate asset Register
- Asset Valuation
- Clearly identify current staff obligations in terms of:-

  - o Actuarial Valuation of the Pension Fund
  - o Sick Leave Staff Obligations

(v) Communication

Set up a communication strategy very early in the process, in order to obtain buy-in and acceptance of the ultimate goals.
The communication strategy must include:

- ***Owner/Shareholders***

Although initial agreement has been obtained, Electricity sector reform is a very complication process and consequently the shareholders have to be continually reminded of the ultimate objectives.

- ***Staff & Unions***

The primary stakeholders in the process are the members of staff who will be directly affected by the establishment of a new company.

The trade unions could participate and assist in the process of change management, but could also be a showstopper if not properly managed.

- ***Customers***

In order to maintain shareholders' confidence, customers must be kept fully informed of the process. It is advisable to establish customer forums and appoint key customer executives early in the process.

The media can assist in the communication plan, and should be kept informed.

GOOD LUCK