



TOGETHER
for a sustainable future

OCCASION

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Summary Headings

A. Physical Services:

1. Water
2. Sewerage
3. Electrical
4. Fire Protection
5. Steam Supply / Heating
6. Warehousing
7. Maintenance

B. *Social Services :

1. Medical
2. Housing - Town
3. Recreation
4. Canteen

C. General Services :

1. Communications
- Postal, Phones, Telex.
2. Supplies - Professional
Services.
3. Administrative - Government
Services.

* Labour recruitment, training and advisory services will be the subject of a separate session.

Introduction

This title covers many aspects, related to the day-to-day operation of an industrial concern, based in an industrial free zone. As the Estate Management section of the Company, we are in daily contact with our customers - the industrial firms, regarding the various services which we provide directly, or are in a position to advise on. This contact commences at a very early stage - when the industrialist is seeking information and negotiating terms prior to reaching decision on location.

As a Company our involvement with various concerns can be quite comprehensive, depending on the nature of the operation. It is difficult in some cases to relate these directly to particular departments of the Company - a degree of overlap exists, and other S.F.A.D.Co. staff members will be dealing in more detail with specialised aspects, particularly in relation to recruitment and training.

It is, and has been, Company policy to emphasise the personal aspects of relationships with our customers, and the estate at Shannon is still small enough to maintain this approach. Organisations like ours could become impersonal and faceless, and it is therefore desirable to create a friendly working atmosphere, and to establish organisational arrangements which will ensure that an industrialist requiring specific advice, or information can approach a named person in S.F.A.D.Co. who possesses the necessary expertise to deal with the problem.

The aspects of industrial estate services, with which I will deal with can be grouped under the following headings :-

- A. Physical
- B. Social
- C. General Services

The advantages of concentrated industrial location, as compared with the establishment of plants in scattered areas, has already been discussed. In relation to the provision of services, obvious advantages follow from concentration; and concentration is a necessary feature of free zones.

As a rule, larger firms - those employing more than 100 persons - tend to be more self-reliant and independent, while smaller companies tend to look more towards a central authority for the provision of services, as they generally lack the resources and necessary expertise to develop their own services.

A.1. Physical Services - Water Supply

Apart from normal needs related to toilets and personal use, consumption of water will vary considerably depending on the processes in a particular firm. For example, the volume of water used by an electronics firm, would be very much less than consumption by a dye-works.

In some locations, it may be possible to obtain sufficient water for an industrial area, from an existing system or supply source. During the initial years of industrial development at Shannon the existing Airport service was used, but subsequent planned growth called for a new and elaborate system, including treatment and pumping installations, and this has been provided at a cost of £1m. approximately. In designing the system now in use, which serves both the housing and industrial areas, indicators based on experience gained in other centres were applied in order to calculate the required capacity of pipe lines and reservoirs.

The factor used was :-

40 gallons per employee per day, for personal use.

Special additional allowance had to be made in relation to firms using large quantities of water for process purposes. The balance therefore, as between capacity and consumption can be critical and requires continuous examination, in order to provide sufficient capacity for future needs. An industrial zone cannot operate without an adequate water supply, while on the other hand, over provision can prove to be wasteful in the economic sense. All water is potable - filtered, chlorinated, fluoridated - there is no separate untreated supply. It is charged to individual industrial users at a rate of 12½p per 1,000 gallons. The industrial charge is based on charges elsewhere, and is considered to be the maximum cost acceptable. The conditions of supply ensure that the Development Company cannot be held responsible in the event of any break in supply, or deterioration in the quality of water. The provision of ring-mains has made it possible to provide alternative supplies in the event of pipe bursts, and has made it much easier to locate any such breaks. (See Appendix One for Conditions of Supply)

A.2. Sewerage and Effluent Disposal

The quantity of sewerage handled can be taken as equivalent to approximately 80% of the quantity of water supplied.

The system at Shannon, which also serves the housing area, involves the pumping of sewerage to two septic tanks, which discharge into the Shannon Estuary. Effluent control standards and regulations were established at the planning stage of the industrial estate, and have been revised at intervals in the light of operating experience. (See Appendix Two for current regulations)

At an early stage in negotiation, industrialists are informed regarding our effluent regulations, and where necessary, neutralising equipment has been installed. Industrial wastes, such as oil and chemicals

of various kinds, can seriously damage pipework and pumping equipment, in addition to creating a pollution hazard, if the point of eventual discharge leads into the sea, river or lake. In the case of the Shannon estate, special care had to be taken as it is located on the Shannon Estuary, which is linked to salmon and other fisheries. Untreated effluent could damage, or completely destroy these fisheries, and hence the necessity for control. With the assistance of the Irish Institute for Industrial Research and Standards, conditions controlling the types of effluent which can be discharged into the system have been operated for some years. Control is maintained by regularly taking samples of the liquid discharged by various firms. These samples are analysed, at a laboratory established at Shannon by the Institute. The industrialist concerned is advised of the result of the tests and requested, where necessary, to take corrective action.

No direct charge is made, for sewage disposal, the cost being recovered in the water charge, although charges for this service are usual in other industrial areas in the United Kingdom, and to a lesser extent in Ireland.

A.3. Electrical

In Shannon this service is drawn from the national grid of the Electricity Supply Board. The separate generation of power at Shannon would not have been justified, in terms of cost and dependability, but it could be that, in other areas, depending on local conditions, it might be feasible to establish a power generating facility, providing both electricity and steam, to serve a large industrial estate specifically.

The total electrical power consumption at Shannon Industrial Estate during the year ending 31st March last, was 31 million units and this can be stated in terms of 6,998 units per employee on the Shannon Estate or 24.4 units per square foot of space occupied.

The Company has been required by the Electrical Supply Board to pay a capital contribution towards the cost of providing sub-stations and main cables. These payments are refunded in part, over a period of years, depending on consumption level.

A.4. Fire Protection.

It is in the landlords interest to ensure that Industrial firms carry sufficient fire insurance, and the lease terms applied at Shannon require tenants to insure jointly with the Development Company. The Company Insurance Brokers regularly review these policies, and advise on the risks associated with particular processes, and on the reduction of risks by the use of suitable building materials.

By installing sprinkler systems, firms can obtain substantial concessions on the level of premiums payable. In certain types of industry (for example, plastics) it is virtually impossible to secure cover on any reasonable terms unless a sprinkler system has been installed.

In most areas the County Council or City Corporation, will have statutory responsibilities for advising on various aspects of fire protection, as well as ensuring that fire fighting facilities are available in times of emergency. At Shannon there are two fire crews each consisting of six men who work part-time. Their equipment consists of two fire tenders, and the unit is equipped to deal with all types of fires.

A.5. Steam Supply - Heating

The majority of Shannon factories generate their steam requirements by means of individual oil-fired package boilers. Initially a large scale central boiler house was established, using peat, a fuel produced in Ireland.

The central boiler house will be closed down in the near future

and this decision has been made by the Company for a number of reasons :-

- (a) The distribution of steam through pipes over a distance resulted in steam loss, and consequent uneconomic operation.
- (b) The consumption load was uneven, and one firm, the largest consumer, had a surging load.
- (c) Factories could produce steam for individual use by means of oil-fired packaged boilers at a cheaper cost.
- (d) Maintenance of the boiler house, and distribution mains could not be undertaken on a regular basis, as all users did not close for holidays during the same period and some firms worked on a three shift basis.
- (e) Another factor was that if a breakdown occurred in supply, a large number of factories would be affected.

There may be exceptional conditions in some areas, as in cases where electricity is generated locally, with waste steam available which would justify a central supply, but our experience has been against it.

A.6. Warehousing

A development agency has the choice of either providing this service on a direct basis, or alternatively encouraging an outside agency or agencies to establish such a service.

This latter course has been adopted at Shannon, and a number of companies provide warehousing services in conjunction with other associated services, such as transportation, cargo consolidation and bulk breaking and customs clearance. We favoured this course because of the high level of specialised commercial know-how required in such work.

The proportion of warehousing space necessary will depend on the types of industrial firms being catered for. Of the total area of floor space provided at Shannon 3% has been allocated to centralised warehouse facilities - this provision does not include warehousing space provided within individual firms.

A.7. Maintenance Services

The standard lease document defines the responsibilities of both parties in relation to the maintenance of factory buildings and associated services.

The practice at Shannon has been for the Company as landlords, to undertake the maintenance of all services, used in common by a number of tenants, including roads, landscaping, public lighting and water supply. In addition we carryout maintenance work including roof repairs, repainting, and structural repairs. The tenant is responsible for all interior maintenance.

In the case of industrial buildings in well established urban centres, the practice of full repairing leases, making a tenant responsible for all repairs to a building, both inside and outside, is being adopted generally.

Maintenance services can be provided by direct labour staff or on a contract basis. The Company has experience of both types of arrangement. A direct labour arrangement is more desirable in situations where the work load is considerable and largely predictable. A contracting arrangement will generally be more costly per individual job, but provides more flexibility in relation to the work load which may occur at a particular time. This is important relative to outdoor maintenance work, which can, for example, be delayed by adverse weather conditions.

In order to maintain good relationships with tenants, it is essential that the responsibilities of landlords and tenant should be clearly defined.

The handling of maintenance work on a tenants behalf on a recharge basis can be a cause of frequent difficulty, as tenants will, in some cases find reasons for not paying in addition to questioning the levels of charge. For this reason, once an estate has become firmly established, it is desirable that firms should be encouraged to make individual arrangements directly with the contractors or tradesmen concerned. The issue of information sheets and directories can prove helpful in this respect.

B.1. Medical

Good medical services in an industrial zone can be of positive advantage in improving productivity and relationships between employees and employers. Consideration should be given to the provision of a comprehensive medical centre at the planning stage of an industrial estate, and the cost recovered by means of a small addition on the rents of participating factories, and also by means of a per capita charge related to the numbers employed by each firm.

The range of services which might be covered include :-

- (a) Medical examination at time of recruitment.
- (b) Annual medical checks of all employees.
- (c) Attention in the event of sickness of employees - and, if possible, the inclusion of employees' families in the arrangements.
- (d) Dental services
- (e) Emergency medical services, including ambulance facilities.

Efforts were made to promote the development of these services at Shannon, by the arranging of discussions between local Doctors, Dentists and Factory Managers. Unfortunately at that time all of the larger firms had committed themselves to individual arrangements, and the proposal did not meet with a positive response.

It is probable that the proposal would have been accepted, had it been introduced at an earlier stage of development - when the larger employers were establishing their plants.

In some countries, depending on the type of services provided by the State, it may be possible to avail of services already existing, and related to adjoining urban centres.

B.2. Housing

Experience at Shannon confirms the necessity of planning for the provision of housing, parallel with the development of industry. It is imperative that housing needs should be assessed at an early stage of development. Eventhough ample labour may be available locally, some skills will certainly have to be brought in. The available options are, either to provide housing as an integrated part of the industrial zone, as has happened at Shannon, or alternatively to ensure that adjoining towns are expanded sufficiently to take account of the increased housing demands.

The provision of houses for renting, particularly during the earlier stages of development, can be a considerable promotional asset, as it helps to facilitate key workers with specialist skills, particularly those who come to work in an industrial firm during the setting-up period.

Special conditions at Shannon, and the distance from existing towns, made it necessary for S.F.A.D.Co. to become deeply involved in the provision of housing - to the extent of building a new town. It has been possible to achieve a high degree of

co-ordination between industrial and housing development. Common services, such as water and sewerage systems, are developed for both areas ; the rate of house-building can be closely related to industrial growth; and proximity in any case calls for common over-all planning.

B.3. Recreation

This activity must be the responsibility primarily of individual Managements within a zone or industrial estate. However, a central agency can assist by providing playing fields for competitive purposes, as well as for recreation during lunch breaks. Leagues and interfirm competitions can be organised and encouraged. Such facilities can assist in developing a sense of identity and a good working atmosphere within a particular estate.

Apart from this, many employees will participate in recreational facilities such as sporting clubs, which are in no way related to their places of employment, and the need for ^{this type of} involvement will vary considerably, depending on local conditions.

B.4. Canteen Facilities

Each employee should be able to get one full meal during his working day. This^{is} particularly important in the case of persons who may have to commute over long distances to their places of work. The ideal arrangement exists when staff live close enough to their places of employment, so that it is possible for them to go home for a meal during the lunch period. However, this is seldom feasible and the alternatives are

(a) The establishment of industrial canteens for each plant - the minimum economic number tends to be approximately 50 staff members.

(b) The use of a central kitchen, from which pre-cooked meals can be delivered to individual factories.

(c) A central canteen shared by a number of firms.

A central canteen was in operation at Shannon for a five year period up to August 1971, when it was closed down by mutual agreement between the users. It was established in 1966 by a consortium of firms, in premises provided rent-free by this Company on the understanding that it would be available also to newcomers. The participating firms (i.e. those sharing overhead costs) subsidised meal costs to the extent of 50% approximately of the economic cost per meal; employees of non-participating firms were required to pay the full economic cost. The operation was successful initially but support for the canteen did not increase correspondingly as employment expanded on the industrial estate. Management of the facility on a committee basis made it difficult to maintain standards and firms grew to a size where they could provide individual canteens. These factors, as well as the introduction of new techniques using frozen foods, which led to the eventual closure of the canteen.

Vending machines providing frozen foods are now in general use, and have eliminated the necessity of employing cooking and serving staff on the premises. It is now possible for large and small firms to have staff meals readily and economically available for all shifts.

C.1. Communications

The main grouping in this category includes postal services, telephone and telex. In Ireland, as in most countries, these services are provided by a Government Department.

Unless a high degree of co-ordination exists between this Government Department and the agency responsible for industrial development services may not be planned ^{for} far enough in advance, and consequently

fail to keep pace with demand. This point applies particularly to telephone systems, which can become seriously overloaded, within a very short period. It is essential that firms based in a duty free zone, all of whom are servicing overseas markets, should have adequate facilities for easy communication by means of telephone, telex and postal services.

Regular meetings are held with the Department of Posts and Telegraphs at which Development plans for Shannon are discussed, this action proved to be mutually helpful.

During the early years of development at Shannon, a series of surveys on the quality of these services was undertaken by the Company, and the data collected was of considerable help in making representations seeking improvements in services.

C.2. Supplies/Professional Services - Legal, Accounting, Insurance and Estate Agents, and Architects.

Companies trading over long periods in well established areas will tend to take many of the supply, and professional services for granted. However, in a newly developed area, with no existing pattern of economic activity, special difficulties can exist for industrial firms. The absence of some of these services can create major difficulties for industrialists - particularly regarding the supply of raw materials, sub-contracting and professional services.

A development agency can assist considerably in this area, mainly by having comprehensive information readily available at the time firms are being first established. Liaison with local firms - already established either inside or outside the industrial free zone - in relation to supplies and sub-contracting work can also be very useful. A series of directories published by the Development Company which are regularly updated, have been greatly welcomed by industrial firms.

The same position applies in relation to professional services of various kinds including Solicitors, Accountants, Architects, Engineers, Insurance Brokers and Estate Agents. Many industrial firms requiring these services will look to the Development Agency in order to advise in relation to the level of expertise and capacity of particular firms.

C.3. Administrative/Government - Government Agencies, Chamber of Commerce Education, Police Security

Unnecessary problems can arise for newly established foreign firms if there is a lack of familiarity with the requirements of central and Local Government Agencies. For example the Development Company was successful in obtaining major reductions in local taxation on factory buildings by organising a group appeal of all firms at Shannon, the tenants themselves being unaware of this possibility. Factory executives should be encouraged to make regular courtesy calls on local officials and also to identify themselves with local communities by becoming members of organisations such as sports clubs, Chamber of Commerces and Rotary.

In this way industrialists can benefit considerably through informal contacts with persons who are in a position to assist them.

The range of agencies in this general category includes those responsible for customs control, housing, security, education, transport, planning and Local Government generally.

The issue of information sheets can be of assistance in this general area. However, it is important to ensure that they are read and understood by those concerned, and this can only be achieved by means of personal calls and by the arranging of special meetings..

Other speakers will be dealing with customs arrangements and bus services.