We have, so far, looked at the operation of stores and stockyards, transport operation, and the various samples of legislation with which the stores manager must comply. We need now to consider the methods of achieving effective planning and control of the distribution of goods, to customers, stores and warehouses. Without effective distribution, the supply chain is doomed.

**Distribution**

The development of distribution facilities and techniques is increasingly evident in the attention given to this area of company activities, taking into account the need to coordinate:

- *transport* — vehicles and routes;
- *warehousing* — central and local;
- *production* — batch size and lead time;
- *customer service* — appropriate level; and
- *finance* — capital investment.
In practice, the optimum distribution system may result from “trade-off” agreements within the organisation, combining individual cost advantages and disadvantages to obtain an overall cost benefit to the organisation and a satisfactory customer-service level. Distribution can be a source of competitive advantage.

It is interesting to note that organisationally, the concept of a totally coordinated distribution system at senior management or director level, is complementary to the development of a “linked” system of procurement of supplies, storage and inventory control, production control to obtain the benefits of a total supplies system and access to the early stages of design and development in choice of materials.

**Distribution Planning**

A number of factors must be considered in planning a distribution system, the first and most important being the needs of the customer. However, it would clearly be impossible to send a vehicle every time a customer required an item, and we have therefore to balance the customers needs against the cost of providing that service. There are a number of distribution channels by which a product or service reaches a customer, and these are illustrated in Figure 44. Customers’ needs are varied, and we must decide the type of transport organisation and distribution system best suited for a particular customer. In many trades, a weekly delivery is required; this is not difficult to plan but it is as well to remember that people expect a delivery of a particular day, and this should be taken not of and adhered to if possible. In many cases weekly deliveries must be on specified days. There are trades where daily deliveries are required. Suppliers of drugs and medical supplies are such a case; fresh foods such as bread and cakes are another.

In some cases, goods are sent out when a full load is made up, but this is unusual because most businesses are based upon a regular delivery service. This is true of deliveries made from central stores to substores and depots. Special loads of the type we see taking machinery to a plant with police escort are, of course, “one-offs” and need very careful planning.

**Loads**

The type of load and the quantity and/or volume are important factors that must be taken into account when planning the distribution system. The nature of the