# Guide No. 5: INFORMATION FOR BETTER IMPORT MANAGEMENT Abstract for trade information services

1990

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INTERNATIONAL TRADE CENTRE UNCTAD/GATT Information for better import management
Geneva, 1990. iii, 83p. (Guide No. 5)
Original published 1985

Textbook on market <u>information</u> and intelligence (in a series on <u>import management</u> and <u>purchasing</u> techniques, prepared for developing country importers) - discusses role of market information and intelligence in import procurement; sources of information; acquisition, processing storage and dissemination of information: analysis of information and intelligence; organizing a market information and intelligence unit/staff training/appendices give check-list of information requirements and sources; and a selected bibliography.

English	(Free to developing countries)

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The preparation and publication of the original version of this guide was financed by the Swedish International Development Authority (SIDA)as part of the ITC programme on Import Operations and Techniques. This revision has been financed by the Government of Switzerland.

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# INFORMATION FOR BETTER IMPORT MANAGEMENT

(**Guide No. 5**)

# ITC

# INTERNATIONAL TRADE CENTRE UNCTAD/GATT

Revised 1990

### Chapter 1

#### INTRODUCTION

#### A. <u>Current limitations</u>

In recent years managers in public and private sector importing enterprises in developing countries have shown some awareness of the importance of timely market information and commercial intelligence to efficiency in import procurement. However, in most cases, this general appreciation has not often been followed up with concrete measures demonstrating management recognition of the vital role which commercial information has in arriving at good import procurement decisions. This ambivalence in management attitudes is evidenced by the fact that import management information systems do not as yet find a place as a distinct functional activity in the organizational structure of most importing organizations/enterprises.

There are several reasons which account for this. Some - often cited as the main reasons - are related to constraints which characterize developing economies, namely:

- Lack of financial resources;
- Non-availability of technically qualified staff.

Other reasons, which are not so often mentioned but are nevertheless major contributory factors, are:

- -Lack of conceptual clarity on the need for an institutionalized as against a personalized approach to information management; and
- -Lack of a model framework for setting up and operating a commercial information unit in an importing organization.

#### 1. Lack of resources

A feature characterizing most developing countries is the general lack of resources of all types including financial, skilled manpower and equipment resources - in relation to needs. However, these are constraints which are not unique to importing enterprises. Other businesses in developing countries have to contend with these as well. Moreover, lack of adequate resources should affect all functional activities in an organization more or less equally. Lack of resources is not usually cited as an excuse for inadequate implementation when it is a question of providing for the needs of line functions in an enterprise, as well as of some support functions such as general and personnel administration.

As against this, lack of financial and skilled manpower resources is invariably cited as the reason for not making a provision, in the organizational structure for commercial information management as an import support function. It is possible to conclude from this that although there is a general awareness of the role which market information and

commercial intelligence have in procurement efficiency, the specific contribution that it can make to reducing costs and (in enterprises) increasing profits is not perceived by all. Part of the reason for this is that - as a support function - its contribution is not easily perceived as distinct from line functions directly responsible for decisions concerning import procurement.

# 2. <u>Lack of conceptual clarity</u>

There is a certain lack of clarity in regard to the concept of information in the context of import procurement decision making. Its scope and role are often confused with the concept of management information system (MIS) which is more current in business administration. MIS has evolved as management aid to plan, review, control, monitor and direct business operations as well as to design and monitor business policies, strategies and tactics to advance business objectives concerning market share, production, sales turnover, project implementation, etc. The scope of MIS is thus fairly wide and covers a wide spectrum of business activities.

As against this, the scope of market information and commercial intelligence in imports is limited and confined to procurement. Its objective is efficiency in purchase operations and connected supply management activities. It is concerned with international market conditions for products of interest to the importer, and for those services which he/she will need to use to move the goods from the supplier's country to his home country. It thus has to do with products and their specifications, prices, availabilities, sources of supplies, supplier reliability, freight rates, insurance premiums, etc. Its scope extends to gathering, collating and analyzing the relevant information and providing it to procurement decision makers in a usable form.

#### 3. Lack of organizational framework

There is yet another reason why many importing organizations and enterprises, in developing countries, do not make a provision for a commercial information unit in their organizational structures. Managers often do not have a clear idea of what structure such a specialized information unit should have: what precise functions it should perform, what expertise it should have, what linkages it should have with line functions, etc.

Professional literature on supply management has touched on the importance and the role of market information and commercial intelligence in procurement efficiency but has rarely gone into the organizational aspects of information management. A consequence of this has been either a total neglect of this important area by importing organizations in developing countries, or its being tagged on to other functional areas without defining its precise structure.

# **B.** The importance of import information

The strategic value of market information and commercial intelligence in import procurement is not always obvious, unless it is viewed in the context of the different elements of the procurement process.

Import procurement involves a complex chain of activities and decision areas, beginning with perceiving the need for a product, and ending with this product being made available to the user. In each of these decision areas, market information and intelligence has a vital role in ensuring that procurement operations are carried out efficiently.

The questions which a procurement manager has to resolve are: what quality of the product to look for and, above all, settle for; how much of a particular product to buy; which is the best prevailing price; when are the goods actually needed and when should these be in his possession; where these can be obtained and from whom should they be purchased.

An optimal buy decision thus has to seek to achieve at least five interrelated and sometimes conflicting objectives. These objectives, often referred to as the five Rs of a good buy decision, are:

- Right product
- Right quantity
- Right price
- Right time
- Right source

An import procurement manager has to make an objective assessment of the tradeoffs that are involved in each of the conflicting choices and select the one which is the most appropriate. Each situation offers more than one option and there has to be a solid basis for making the right choice.

For example, a lowest price may not be the best offer. There are the questions of quality, delivery terms and schedule which, among other things, may reflect on prices. Resolving the question of what quantity of a product should be purchased at any one time may involve, depending on the product in question, the application of all the elements of supply management analysis such as:

-Identifying the product which will best meet the need;

- Estimation of quantity required;
- Phasing of the requirements;

-Market structure of the product and commercial marketing practices characterizing it;

- Assessment of the current and prospective general economic environment;
- State of global demand and supply of the product in question;
- Current prices and expected trends;
- Desired and likely delivery schedules, terms and conditions;
- Shipping situation and freight rates;
- Foreign exchange rates and prospects;
- Re-ordering costs;
- Assessment of cash flow position;
- Domestic and foreign rates of interest;
- Storage costs.

It is not difficult to see that in forming an assessment on each of the above elements a fairly large volume of information will be needed. Some of this will be quantitative and some descriptive in character. More often, the information by itself will not enable a decision to be made. It will have to be processed and/or analyzed further before it will become usable to decision-makers in resolving uncertainty and in arriving at appropriate answers to the issues being addressed.

In short, it is only after a manager has all the necessary information on all the different elements required to evaluate alternative options that he/she can select the optimal course for action.

#### C. Human inertia

While, information is essential to effective procurement decision making, experience suggests that, unless it is easily available, it will not be used. Most of a manager's day is taken up by dealing with a large number of problems, from the trivial to the complicated. Normal human inertia compounds this situation. The result is that to avoid the effort of hunting for

information most people delude themselves into the belief that the information they have will suffice. Much as he/she may pretend to base his commercial decisions on adequate information, an important manager is likely to rely on rules of thumb or on hunches, unless information is at hand in a form which he/she can use without having to spend time searching for it or analyzing it for trends or inferences.

This suggests that importing organizations should set up in-house market information and intelligence units which can cater to their specific needs.

# D. Purpose and scope of this guide

The purpose of this guide is to present a framework for establishing in-house market information and intelligence units at importing organizations, whether public or private. These guidelines seek to cover the whole range of issues - from the technical to the institutional - which should assist in both setting up such a unit and in operating it to meet the specific needs of the organization.

It should be noted that developing countries import an enormous variety of products, from consumer goods to industrial and agricultural imports to capital goods. However, in the context of procurement it is important to bear in mind that each product has distinctive characteristics and features which bear on its ability to satisfy stated or implied needs. Indeed, a product to be imported must be defined completely and precisely so that the buyer actually gets what he/she needs.

The information needed to define the product, to assess the market environment and structure, to evaluate sources of supplies, prices, etc., will vary with each product. The tools, techniques and methods of information analysis for decision making will also vary, if not with each product at least over product groups. Given the large number and variety of products imported by developing countries, it is difficult, within the limited space of this guide to enunciate and elucidate all the tools and techniques of analysis as would cover the whole range of products imported by developing countries.

In view of this, the scope of the guide is limited to a discussion of the importance and role of information in different decision areas of import management. Examples of methods and techniques of analysis have been restricted to certain products or product groups. In the case of other products not dealt with specifically by this guide, references to other practical guides issued by ITC have been given for further guidance.

#### Chapter 2

# MARKET INFORMATION AND INTELLIGENCE: ROLE IN IMPORT PROCUREMENT

# **A.** <u>Market information and</u> intelligence

In everyday language, data, information, intelligence and even knowledge are used interchangeably. However, in the literature on management information systems, these terms have been given specific connotations. Data is raw information described in isolation. It is usually considered as raw material for a particular information system. <sup>1</sup> On the other hand, information is the aggregate of data or facts, systematically collated, structured or arranged to keep management posted with relevant developments in a manner as will facilitate decision-making in any one or more activities, in our case, import procurement. Thus, information is necessarily meaningful data, whereas data may have no intrinsic meaning or significance in itself.<sup>2</sup> Information may be based on quantitative data or descriptive communications.

Market intelligence combines all the factors that enable a decision-maker to remain current and informed about changing conditions in the macro-economic environment and task environment. <sup>3</sup> It thus includes information as well as quantitative and/or qualitative assessments of market sentiment - judgmental and conceptual in character - formed on the basis of less formal or structured flows of information. It comprises, for example, news, views, data, etc., gathered or transmitted by operating managers in the course of their work from contacts with agents, sellers and buyers of the same or similar goods or even those of other goods. It also includes feedback from end-users of the goods being imported and being distributed by the importing agency, on their fitness for intended use, quality and price as well as the efficiency with which these are distributed or made available to the end-users.

Fine, I.V., "The Processing of Data" in Guide to Purchasing edited by Marshall G. Edwards and Herbert A. Hamilton Jr., The National Association of Purchasing Agents, New York, 1976, p. 111.

O'Brien, James J., Management Information Systems, Concepts, Techniques and Applications, Van Nostran Reinhold Co., New York 1970, p. 3.

<sup>&</sup>lt;sup>3</sup> Kotler, Philip, Marketing Management Analysis, Planning and Control, Prentice Hall of India, Private Ltd., New Delhi, 1976, p. 422.

#### B. Decision areas

In each of the decision areas, activities and associated commercial services connected with the import of a product, information and intelligence play an important role in satisfying the import need in an optimal manner within the constraints imposed by demand considerations, on the one hand, and the international commercial and market environment, on the other.

Information and intelligence are required in at least seven decision-making areas related to the planning and execution of procurement operations. These are as follows:

- What to buy
- How much to buy
- When to buy
- Where to buy
- Whom to buy from
- At what price to buy
- How to buy

Apart from these basic procurement decision areas, information also has an equally important role in some of the associated services connected with the physical handling and movement of goods such as transportation, insurance, storage, commercial rules and regulations in the home country and/or in the potential supplying countries, etc.

#### 1. What to buy

In procurement planning the decision on what to buy is a basic one. In the case of a consumer product, for example, the procurement agency must buy from the international market what would meet consumers' needs, providing maximum satisfaction at a given price. In other words, the goods procured should yield the maximum consumer surplus. In the case of other products (non-consumer goods), the guiding principle remains the same, namely, that the product should be fit for the intended use.

To achieve this, the importing organization must first understand clearly what are the basic

requirements of consumers/users which the product being purchased must satisfy. This may include particular consumer preferences and tastes, acceptable qualities at certain price levels, the uses for which the product is expected to be applied, the conditions in which it will be operated, etc. This requires obtaining the necessary information from actual or potential consumers/users (e.g. as feedback on products previously imported, through market/product surveys, through testing of samples with

users, etc.). Most of the time, this will also mean remaining fully informed on the developments taking place in new products, materials, technologies, processes and capital equipment industries. However, both before and after it reaches the consumer/user, the imported product must pass through several hands. Each of these may require or determine certain characteristics in the specifications of the product - or its packaging. Such stages include international transportation, port handling, internal transportation, local storage, manufacturing or transformation processes, maintenance systems, etc. Incompatibility of the imported product with regard to any of these stages - in addition to unacceptability by users or consumers - will diminish (or may even destroy) the usefulness of the product. For example, a machine that cannot be maintained will not remain long in operation; equipment that cannot function in the climatic conditions of the importing country is hardly worth buying; raw materials that cannot be processed by existing machinery will accumulate uselessly; a machine too heavy to transport over the bridges it must cross to get to its point of utilization may waste away at a port, and so on.

Making the best choice, of course, is possible only if one knows the range of products that is actually available. This is possible if the procurement agency is posted with information and intelligence on new product developments in the international market. Similarly, quite often, there are varied qualities (grades) of a product which are available at varying prices. At times there are close substitutes which may be available with substantial price differences. Unless the agency has information on what is available at what prices, it cannot make a good decision as would lead to maximization of consumer/user satisfaction.

In the case of certain import procurement agencies, the question of what to buy in a formal sense may not arise if the agency is specifically told by the user that he/she wants only a particular product and specifies the brand regardless of what it costs and with what delivery schedule it may be available. Under these circumstances it may seem that the procurement function will simply be one of placing an order and arranging for the movement of the goods into the country. However, even under these inflexible conditions information has a role to play. Firstly, information can enable the importing agency to effectively negotiate the price and other connected terms. <sup>4</sup>For example, information on the current price, net of maximum discounts and financing and other terms, will be useful in procuring the goods at the "going market price", i.e.

<sup>&</sup>lt;sup>4</sup> On the role of information in negotiations, see Heinritz, Stuart F., and Farrell, Paul V. Purchasing, Principles and Applications, Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1971, pp. 208 and 320-322.

the price at which the suppliers have, around that time, been supplying the product in question to other buyers.

It is not enough that the importing agency knows what it wants to buy. It should be able to convey to the potential suppliers in precise terms the technical and/or performance standards that the product should have. In fact, it is important that the suppliers in the international market should correctly and completely understand what the buyer wants. This is possible if, apart from a simple product description, the importing agency also indicates the specifications of the required product in a manner which allows these to be sufficiently broad-based (i.e., non-restrictive) and detailed.

Specifications should correspond, wherever possible, to accepted standards. Standardization increases competition and is advantageous to the buyer, who thus has the option of purchasing from the largest possible number of alternative sources. This makes the supply easier and hence reduces the need for holding unduly large inventories. Application of standards to procurement also guarantees the buyer broadly recognized levels of quality. To ensure that these specifications are maintained by the supplier, it may be necessary to make use of specialized inspection agencies, on which information must also be obtained.

Most developed countries have established national standards, as have many developing countries. The International Organization for Standardization (ISO) has developed international standards for a number of products. In the absence of national standards, it will be useful, in fact necessary, for the importing agency to have information on these standards to precisely describe the requirements so that suppliers know exactly what is wanted. <sup>5</sup>

# 2. <u>How much to buy</u>

The second decision area in which information has a vital role is in determining what quantity of the required product should be imported. <sup>6</sup> In most cases, this implies determining the import

There are different ways of defining a product. When appropriately selected, the importer will be able to communicate to potential suppliers precisely what he wants. For more on this, see: International Trade Centre, Guide No. 7, Supplier Quality Conformance in Import Management, Geneva, (Rev. Ed.) 1990, pp. 8-12.

<sup>&</sup>lt;sup>6</sup> Quantity here has been used in its broadest sense to include all units of measurement including operating capacity (e.g., 220 megawatt electricity generation), performance standards

gap. If no domestic production of the product in question is expected during the procurement cycle, the entire estimated demand will have to be met through imports. If, however, domestic production capacity exists, then the import gap will depend on the level of domestic output expected during the year. In either case domestic demand will have to be estimated. Besides this, in the second case, domestic production will also need to be projected. Obviously, this can be done only if information of a fairly diverse and extensive nature is collected, collated and analyzed. To take the demand side first, information requirements (and its analysis) will differ depending on whether the item is a consumer good, an industrial raw material or an investment good. For example, for a durable consumer good, the information needs will be fairly extensive. Apart from data on past (5-10 years) actual consumption, information will be required on past, present and expected availability of any substitutes, recent tax measures which may have an impact on disposable incomes or on relative prices, prevailing or contemplated rationing or other measures distorting the actual demand etc. It is also important to note that demand trends may differ from one market segment to another, and that these must be analyzed individually.

Similarly, it will be necessary to estimate domestic production data on the basis of past levels and trends in production, additions to or deletions from existing capacity, etc. In addition, information on any special measures which may have an impact on demand or production will have to be gathered. These measures may be in the nature of exhortations or campaigns directed at increased productivity, investment incentives, duty reductions on imports of production machinery, etc. These may also take the form of ensuring increased supply of essential inputs - for example an increase in irrigation facilities and/or increased fertilizer supply for an agricultural supply.

If the item is an industrial raw material, the estimation of demand will have to be based on information on the existing capacity of the industry (or industries) for which the particular item is an input. Besides a judgment will have to be made on the rate at which this capacity is likely to be utilized, which again needs, at least, information on past trends in the capacity utilization rate.

Information needs for estimating the requirements of capital goods will depend on the type of goods to be imported. Some machinery is specific for a certain use and scale of output. Such machinery will normally be imported by an actual user himself. In such a situation the import of the machinery is an integral part of the selection of technology and of the production process to be used. The plant size, machinery and other requirements are derived from a detailed techno-economic feasibility study of the entire project. The information needs in this case tend to be vast and varied. As against this the category of general purpose machinery (e.g., passenger or commercial vehicles, hand tools, machine tools, office equipment, etc.) is required by many users across different sectors of the economy. Standard techniques of demand estimation like regression analysis will have to be used to estimate the country's overall requirements. The quantity to be purchased by an importing organization will be determined by the market share which it can realistically aim at.

<sup>(</sup>e.g., deadweight of a ship), etc.

Estimates of the quantities to be purchased should also take into account expected losses along the various stages of transportation, storage, handling and processing of the imported goods due to damages, theft, losses, waste (e.g., in the production process), etc.

Apart from determining how much quantity of a product would need to be imported during the entire procurement cycle (usually a year), the importing agency will have to decide on how much would be required during different periods within the overall cycle. This will necessitate estimating economic order quantities, taking into account inventory holding costs, the likely trend of supplies and prices in the international market and the duration and uncertainty of lead times. Seasonal demand variations should also be considered. Without information, however, the needed analysis cannot be carried out to resolve the problem.

### 3. When to buy

An important decision area in import operations is that of planning the most opportune time for market entry. This is particularly so in case of commodities. Prices of some commodities, particularly those which are traded at recognized exchanges or terminal markets, are extremely volatile and characterized by rapid and sharp price fluctuations. A variety of factors influence the market sentiment with destabilizing effects on supplies and prices.

Apart from the basic fundamentals of supply and demand, a major destabilizing factor responsible for such volatile variation in prices of commodities traded at exchanges is that of changes in expectations of buyers, sellers and, more particularly, speculators. These expectations are built up around almost anything that happens in the world - for example, prospects of tension in any part of the globe, the mere threat of a strike and/or political disturbances in a significant supply base, rumours of impending changes in exchange rates, interest rates, weather forecasts, farmers' intentions and so on. The one thing certain about expectations is that these can change as swiftly as they are formed. A close analysis of relevant factors and events is necessary to establish how sound or durable are the factors on which these expectations are based. It is only through close monitoring of the events and relevant information that one can decide on whether the expectations are well founded or of a transient nature.

Apart from fluctuations based largely on expectations, and these other short-terms factors, there are quite often more fundamental factors of relevance to the likely changes in demand or supply of a commodity. For agricultural commodities and agro-based products, information on climatic conditions, area under cultivation and production forecasts can help to show the direction which the market is likely to take. Similarly, movement in economic indicators such as activity levels in construction and in automobile production and sales, investment intentions, etc., monitored for important demand centres (e.g., developed countries), will help to discern the state of global demand for minerals, metals and capital goods, transport equipment, basic chemicals and so on.

Prices of manufactured products do not fluctuate in the same manner as do those of commodities. They do however, witness periods of high and low demand and hardening or softening of prices and other terms of sale. For some of these, demand is derived from other factors. For example, the demand for cement depends on the level of activity in the construction industry. If the global construction industry is passing through a slack period, the demand for cement will be low. Supply availability will be easier and prices will be soft. The same will be true of most equipment industries. For example, if world demand for coal is low, investment in coal mining will in general be low. As a consequence, the demand for coal mining equipment will be low. It will thus be available on easier terms during this phase of the coal mining investment cycle.

Ideally the importer should seek to take advantage of such booms and busts in the market for capital goods. In practice, he/she may or may not be able to do so. For example, he/she may be witnessing a surge in the demand for his product and may, therefore, be under great pressure to expand his production capacity requiring import

of equipment on an urgent basis. The point simply is that an importer should seek to remain well informed on market conditions and take these into account, along with other relevant factors, in deciding on the right time for market entry.

In general, close monitoring of information on a wide range of relevant events, properly analyzed and synthesized, can help in deciding on the appropriate timing for entering the market for imports. The nature of the information and the factors to be taken into account will vary for different products. For example, information on impending technological changes in more sophisticated goods (e.g., computers) may also justify postponing a procurement decision.

#### 4. Where to buy

Information has also a basic role in locating supply sources. In deciding from which country to buy, it is important to know where goods are produced and are available for export to other countries. Quite often a commodity or product may be produced in a country but may not be available to a particular importer. It may be that the domestic demand itself is very high, that exports are already committed to other large buyers, or that the government may have restricted trade for any one of many reasons - conserving natural resources for future use, ensuring adequate supplies to maintain domestic price stability, imposing embargoes on trade with a particular country, etc.

At times bilateral agreements between two countries orient direction of trade towards certain markets. Likewise, any existing or potential tax or quantitative restriction on exports in a prospective supply source would be a negative factor relative to buying from suppliers in another country which may have no such export restrictions. The importer will also have to take into consideration his own country's treatment of imports from alternative supply markets (e.g. quotas, tariff preferences, etc.).

Often, developing countries purchase goods under tied aid, and must import such goods only from certain sources. Adequate research, prior to negotiating tied aid arrangements, would allow developing countries to tie their purchases to sources which in any case would be the most advantageous, rather than using a line of credit to purchase goods with inappropriate specifications or otherwise more expensive. To undertake this research, information is needed.

The extent to which regular and efficient transportation facilities exist between two countries, and the cost of transportation, can also determine whether imports can be effected profitably between these.

Answers to all these questions can be had only if pertinent information is collected and properly analyzed.

#### 5. From whom to buy

Once the need is established, together with identification of specifications or quality parameters, it is necessary to carry out a survey of what is available in the international market and who makes or trades in what products and what are all the possible sources from which the required product is likely to be available. From diverse sources of information a preliminary list of potential suppliers will be drawn up. This list can then be narrowed down to a smaller and more compact one based on an evaluation of the relative qualifications and advantages of potential suppliers. This is done by evaluating, for example, a vendor's technical capability, plant or manufacturing facilities, financial standing, export performance or experience, marketing services, etc. Apart from published information, this evaluation may involve intelligence gathering from other buyers on the performance of different vendors concerning their adherence to delivery schedules, discharge of after sales services, supply of spare parts, etc. Establishing a vendor's technical capability in its wider sense is especially important while buying plants, machinery and equipment, particularly custom-built and/or on a turn-key basis. <sup>7</sup>

While there are advantages in establishing long-term trading relationships with suppliers abroad, a constant search is required for diversifying supply options and as a means for periodically reviewing the conditions of procurement offered by such partners. Information on new trade contacts is thus often very valuable to importing agencies.

In short, a procurement agency will need to gather information and intelligence for purposes of:

#### - Locating suppliers

<sup>&</sup>lt;sup>7</sup> For a fuller discussion of this topic see: International Trade Centre: Practical Guide No. 16, Supplier Sourcing, Evaluation and Appraisal in Import Procurement, Geneva, 1988.

- Evaluating potential vendors
- Finally selecting the right one

### 6. At what price to buy

One of the tenets of procurement management is that the buyer should pay the "right" price. An intriguing problem for a buyer is to determine which is that "right" price. To know this is not always easy.

For a large number of products traded on the international market, there is no single point of reference or standard price. There are reference prices for commodities traded on commodity exchanges, but actual purchase prices tend to deviate from these appreciably on account of transportation and other handling costs. There are also premia/discounts which may apply, reflecting the state of the market and/or the bargaining strength of the two parties to the transaction.

For many manufactures there are no organized markets where such goods are sold and bought. The reason is that these products are not produced to a single standard specification. Thus a product intended to meet the same end-use will be produced by different manufacturers in different varieties and marketed as if they are qualitatively different products. Prices, therefore, vary usually around a narrow range unless quality differences are markedly different. Although, there is consequently no single representative price for such a product, an importer can get some idea of the extent to which a price quotation is reasonable from different sources of information such as manufacturers' list prices and those quoted in commercial journals for the product of a brand market leader. In addition, there are commercial intelligence agencies who specialize in reporting on worldwide transactions, prices, discounts, etc., pertaining to products of selected industries.

In the case of specialized machinery and custom-fabricated equipment - for industry, transportation, construction, etc. - there are no standard prices. Yet, the importing agency has to have some basis on which to assess whether the price which is demanded is the "right" price. In such cases, comparing alternative bids may be the only way. Indirect methods, at times, may also be used. Material costing is one such approach. However, this can be used only if there is information, firstly, on material and labour usage or input norms and, secondly, on the cost of these inputs.

It is relevant to note that the importing agency's decision cannot simply rest on the lowest price. Price must be in relation to a number of other factors, such as quality and delivery schedule, availability of substitutes and their relative costs, etc. A buyer may accept higher prices in exchange for greater supplier reliability, long-term assurance of supplies, better supplier marketing and technical services, urgent deliveries, compensation trade

arrangements, special financing provisions, or to avoid dependence on a sole source of supply, amongst other factors. Hence, information is necessary to help evaluate prices in the context of a number of alternative considerations.

Agencies importing machinery and equipment must also attempt to undertake life cycle costing of their various purchase alternatives, taking into consideration operating costs, maintenance costs and the durability of the equipment in which an investment is to be made. In such cases, information on test results and on previous experiences of others with such equipment can be very useful. <sup>8</sup>

# 7. <u>How to buy</u>

Trading practices for various products differ in the international market. Tradition, market structure and product or production

process characteristics are some of the factors which influence these practices. Depending on the features which characterize a market, it may be usual - and hence a

feasible strategy - to buy through negotiations rather than through inviting bids. For certain products it may be advantageous to enter into long-term contracts to obtain better terms, besides assuring steady supplies.

Information on relevant international market features and characteristics in relation to a product can be of great importance in deciding correctly on how to buy.

# C. <u>Checklist of Information</u> Requirements

Annex I provides a checklist of the types of information which will be required by an importing agency taking into account the decision which management will have to take in the process of import procurement planning and implementation.

For an elucidation of this concept and applications methodology see: International Trade Centre, Practical Guide No. 9, Bid Evaluation in Import Procurement, Geneva, 1985, pp. 21-29.

#### Chapter 3

#### SOURCES OF INFORMATION

A wide variety of sources of information are available to an importing agency which it will have to tap selectively to keep itself posted with all relevant information at a reasonable cost. The more important ones are:

- Sources of published information;
  - -Commercially oriented market information and intelligence services;
- On-line and compact-disk ROM (CD ROM) databases;
  - -Trade representatives of the country abroad, and foreign trade representatives at home;
  - -Chambers of commerce as well as associations of trade and industry within and outside the country;
- Local agents of foreign suppliers;
- Other importers of the same or similar products;
- Trade fairs and exhibitions;
- Service organizations (banks, freight forwarders, etc.).

A trade information unit should gradually acquire the knowledge as to what information can be obtained from which source speedily and economically. Apart from this, it will need to decide on which sources of information may have to be acquired for more frequent use and which can be tapped or used without having to acquire publications, taking advantage of services available on a reference basis.

The following sections describe the major sources of information corresponding to broad management decision areas in import procurement and the environment within which these have to be taken. It should be noted that, in addition, Annex I gives a detailed listing of the typical information needs of importers with accompanying reference to usual sources of information.

#### A. Information for assessing of the global economic environment

General global economic conditions have a profound influence on international markets for various commodities, products and services. During economic boom periods most markets usually tend to be tight, with supplies becoming difficult and prices maintaining a rising trend. Similarly, when the global economy is in low gear, supply markets tend to be easier; prices of most commodities and products soften and/or payment and other terms become easier. It is, therefore, necessary for designing or reshaping import procurement strategies to be aware of changes in the global economic environment. The sources of information for this purpose are many, including:

- -Publications (statistics, reports, surveys, periodicals, etc.) of international institutions such as the UN, IBRD, IMF, UNCTAD, GATT, UN regional economic commissions, OECD, etc.;
- -Publications from well-known commercial publishers such as the Economist Intelligence Unit, the Financial Times, the Wall Street Journal, etc., and
- -Economic surveys published by central banks, commercial banks, research institutions, etc.

Apart from being directly available from these institutions, the major findings of research studies or surveys are well reported in some of the leading economic and commercial periodicals/newspapers. Quite often, the summaries and conclusions are reported even by national newspapers of most countries. Some of these sources can, selectively, provide all the information inputs required for remaining current on what is happening and what is likely to be the outlook for the global economy.

#### B. Information on the domestic economic environment

It is also important for an importing agency to remain abreast of developments in the domestic economic environment. The number of sources of information will vary from country to country, depending on the extent of government intervention in the economy and/or how developed the economic system may be. The following is a representative sample of sources of such information;

- Development plan documents;
  - -Economic surveys by government departments, research institutions, commercial banks,

business associations, publishers of specialized periodicals, etc.;

- Public sector budget documents;
- Government import/export policy statements/notices;
- Government publications on economic and trade statistics;
- Censuses and surveys of industry.

#### C. Sector related information

Apart from information on the overall economic environment, it is necessary for an importing agency to acquire sources which will contain worldwide information on those sectors of industry related to its areas of import activity.

The sources of information which can help in remaining abreast of such developments are generally specialized periodicals which not only report on current developments, but also quite often contain worldwide surveys of the particular industry to which the journal is devoted.

A large number of research organizations (many of which are commercially oriented) also regularly prepare surveys on industries and markets worldwide. These are usually reported in the specialized press, in summary form. If the full information is required, the original documents may be acquired.

# D. Task related information

Information will be required, as has been seen previously, to help resolve questions related to decisions on what, how much, when, where, from whom, at what price and how to buy in the international marketplace. The sources of information in this connection are many, and no single source will contain all the information needed to resolve the decision dilemmas which procurement agencies face day in and day out. Many of the most useful sources are given below. Some of these will also be helpful in providing the sector-related information described previously.

#### 1. Published sources

Amongst the published sources of task-related information are the following:

-Commercial wire services (e.g., Reuter's teleprinter service now also available as an online and continuously updated database);

- -Specialized trade and technical journals covering a specific product or group of related products;
- Commodity brokers' newsletters;
- Supply/market surveys carried out by research organizations;
  - -Reports of the country's commercial representatives abroad and of foreign missions stationed in the country;
- Trade and industry directories and buyers' guides;
  - -Publications giving national standards or specifications, standards of other countries and those evolved by the International Organization for Standardization;
  - -Guides and handbooks on trade regulations, tariff structures, customs clearance procedures, etc., with arrangements for updates;
- Online and CD ROM databases; and
- Price lists and catalogues of manufacturers/traders.

#### 2. Commercial intelligence

Apart from these general sources of task-oriented information, there are other specialized sources which are available on a client-subscription basis with the understanding that the material will not be copied for distribution to others. These contain what is called commercial intelligence, e.g., prices on actual transactions and discounts (overt and covert) negotiated by different parties, stock positions with suppliers, etc. Such details are often treated as commercially sensitive, are difficult to obtain and therefore are not usually reported in the regular press. Yet these are important for products which are not traded on institutional markets.

Equally important is to obtain commercial intelligence directly from a variety of other sources such as suppliers, agents, other buyers, trade and industry meetings, exhibitions and trade fairs, consultancy firms, banks and others.

#### 3. Information on services to trade

In addition, when buying in international markets, goods frequently have to be transported over long

distances by land, air and/or sea. Quite often, transportation costs tend to be a substantial element in the total delivered cost of a product.

Information on freight market rates and trends is mostly available through publications of well-established private institutions in this area. Some of these, for illustrative purposes, are: <u>The Public Ledger</u> (incorporating a daily freight register), <u>Lloyd's List</u> (a daily shipping paper), <u>Fairplay International Shipping Weekly</u>, <u>Freight News Weekly</u>, etc.

### E. Guides to sources of information

It is beyond the scope of these guidelines to present a comprehensive list as would help users to locate all sources of information and intelligence or, having located one source, would find all his information needs met in regard to any one of the diverse commodities/products being imported.

Annex II includes a fairly wide range of sources for commodities/products more commonly being imported by developing countries. The annex has two sections. Section A itself has three parts. Part 1 gives keys to sources of information; a reference to one or more of the publications listed therein should help locate an available source of information for the purpose in view. Part 2 lists reference material containing information sources which could be useful for resolving various trade related issues. Part 3 of the section gives sources of information relevant to an assessment of the general economic environment. Sec tion B lists sources of information and intelligence for a selected number of commodities/products for illustrative purposes.

# F. International databases <sup>9</sup>

While international databases have been referred to earlier, it would be useful to highlight some of their main features. To begin with, these databases are becoming more and more important, and are encompassing a growing number of information sources.

International database "host" organizations (e.g., Dialog, IP Sharp, DataStar, etc.) generally offer online access (i.e., through the telephone network) to large numbers of databases. While many of these databases are technical, it should be noted that increasingly they cover commercial information of direct concern to importers. Such databases include:

- Company registers (e.g., Kompass, Dun & Bradstreet, etc.);

<sup>&</sup>lt;sup>9</sup> See: Ancel, Bernard "How to Use On-Line Data Bases for Trade Promotion", in International Trade Forum, International Trade Centre, Geneva, February 1987.

- References to standards and specifications;
- Econometric and statistical data (trade, production, etc.);
- Informative abstracts of articles in the specialized press, market and industry studies, etc.;
- Bibliographies;
- News;
- Legal data;
- Patents, trademark, etc.

In many cases, sources previously available to developing countries only in published form can now also be accessed through international databases. This is convenient in the sense that an information unit can cut down on the cost of acquiring and processing published sources directly. Using international databases, you only "pay for what you get". However, online access to international databases is costly (telecommunications plus database access time charges must be covered as well as specialized training of staff), and can thus only be used selectively.

An information unit at an importing organization should therefore review very carefully which sources it should acquire in published form (generally those used frequently) and which it can afford to access through online databases (generally those used only from time to time). Of course, this assumes that online access is <u>technically</u> possible through the

national telephone system. This should be checked with the local telephone authority. Certain databases are also becoming available in so-called CD-ROM format. These are disks similar to the compact audio disks now commonly found worldwide. However, special optical (laser) readers are required, and these must be connected to a microcomputer. The cost of the data disks themselves is generally quite high (updates are usually provided every 3-6 months), so the investment must be carefully weighed in relation to its advantages. Generally CD-ROM databases are convenient when their use is highly intensive, when data searches are complex or lengthy, when very up-to-date data is not essential, and/or when the output data is to be processed further on the microcomputer.

The following guides would be of help to an importing organization in determining which sources are available through online and CD-ROM databases:

- <u>Selected On-Line Data Bases for Trade Promotion Activities</u>, International Trade Centre UNCTAD/GATT, Geneva, Switzerland, August 1990.
- <u>Directory of Online Databases</u>, Cuadra/Elsevier, 655 Avenue of the Americas, New York, NY 10010, USA

- <u>CD-ROMS in Print, an international Guide</u>, Meckler Corporation, 11 Ferry Lane West, Westport, CT 06880, USA.

## Chapter 4

# ACQUISITION, PROCESSING, STORAGE AND DISSEMINATION OF INFORMATION

#### A. Acquisition

# 1. <u>Acquisition policy</u>

An importing agency must acquire a stock of information so that in due course of time it meets its present as well as prospective information needs. As has been mentioned before, however, the sources of trade information are vast, varied and expanding at a very high rate, and it is neither feasible nor desirable to seek to acquire all and sundry publications. The cost of acquiring, processing and storing this information can be prohibitive. Apart

from this, it is not even technically necessary as quite often many different publications have overlapping information coverages.

The importing agency, therefore, will have to make a judicious choice so that the collection is as appropriate as possible in relation to its trade objectives. Sources which satisfy the following criteria should be selected:

- -Those whose comprehensiveness and depth of coverage most closely resemble the coverage requirements of the importing agency (e.g., do not have either insufficient or too much unnecessary information);
- -Those which provide information in a timely manner, being published with sufficient speed and regularity;
- -Those which are known to be reliable, in the light of the success of their publishing history and the appraisal of users from time to time;
- -Those which, experience shows, present information clearly and in such a way to make it easy to use; and
- -Those which justify the cost, taking into account the value of the information provided.

#### 2. Acquisition process

The task of regularly acquiring and updating source material for an importing agency looks simple but is quite complex, since the emphasis is on obtaining the maximum information material through a minimum outlay. It involves sifting through various specialized bibliographical materials - "sources of sources of information" - to first identify what seemingly qualifies for acquisition from the point of view of the organization's import responsibilities. Once a preliminary list has been drawn up it will have to be examined further for shortlisting with the help of users (managers, procurement officers, etc.). Some

publications may be available for demonstration or loan at specialised libraries or information services in the country. In other cases (e.g. periodicals), sample copies may be requested from the publisher.

# 3. Placing an order

After selection, an order will have to be placed with the publisher. It is time-saving to design and have ready a standard order letter with blanks for the name and address of the publisher as well as for the exact title of the publication being ordered. All that is required once the decision to subscribe has been taken is to fill in the blanks appropriately, get the letter signed by the competent authority and mail it. A sample of such a letter is given on the next page.

#### 4. <u>Pre-order checks</u>

Before an order is placed, it is necessary to make several checks to avoid duplication of orders and other mistakes. These include:

#### (a) Catalogue and file check

If a book or a periodical has already been procured, it should find a place in the catalogue (i.e., a card file organized alphabetically by author/title), particularly when the collection becomes fairly large. A search through the catalogue will confirm whether or not the book or journal is already with the service. It is possible that the order may have been placed earlier and is still under execution. To seek a confirmation of this, a search through the order file (normally organized by country/publisher) is also necessary.

#### (b) Bibliographic check

Suggestions for additions to the documentation collection of the importing agency will come from various sources. However, these may not give the title of the publication or the name of its author and/or publisher correctly. It is a useful procedure to consult bibliographic reference books to check this data before placing the order so as to avoid later delays.

#### (c) Publishers' policy check

Publishers at times follow certain procedures for the sale of their publications. Some wish orders to be accompanied by advance payment covering cost plus postage or freight. In such cases, it may be

necessary to ask for a proforma invoice. Sometimes discounts are offered by publishers on direct orders. A record of publishers' policies, built up over time, should be referred to before placing an order.

# 5. <u>Periodicals control</u>

Having placed the order for subscription to a periodical, the next task connected with acquisition is that of monitoring the flow and the receipt of the material. This monitoring assumes particular importance for periodicals in which case subscriptions are paid for in advance. This is usually done through what are

Sample Standard Ordering Letter

(Name and address of the publisher)	(Date)
Gentlemen:	
Please enter the	e following subscription for us for the period indicated:
Name of the Jo	ournal:
Period: <u>January</u> 1 Sub	y-December 19 per year
This is a new su should be mailed to the	bscription/renewal*. Please submit your invoice to us in triplicate. All issues e following address:
	Sincerely,
	(Signature)
	(Name)
	(Designation)

\* Cancel that which is not relevant.

referred to as <u>periodicals control cards</u>. One card is generally allotted to each periodical, including those expected to be received free of charge or on a complimentary basis. These cards are arranged alphabetically. Each card contains the title of the periodical, name and address of the publisher or the agent, periodicity, and rows and columns for periodic entries. It may also indicate the subscription renewal date.

The more common device used for filing such cards is the Kardex file. However, when these are not available a simple card tray system can be a good substitute. Where even this is difficult, a register can be used with one leaf (or more) of the register serving as a card for each periodical. The formats for these cards are given below and on page 26.

### I. A sample control card for a daily,

#### weekly, or fortnightly

# periodical subscription

```
)))))))),
* Title
       No. Copies
          Expires
* Periodicity
       Year
          Classification code:
))/))/)
9*10*11*12*13*14*15*16*17*18*19*20*21*22*23*24*25*26*27*28*29*30*31*
))/))/)
* Jan.
))/))/)
* Feb.
))/))/)1
* Mar.
))/))/)
* Apr.
))/))/)
* May
```

```
))/))/)1
* June
))/))/)
* July
))/))/)
* Aug.
))/))/)
* Sept.
))/))/)
* Oct.
))/))/)
* Nov.
))/))/))1
* Dec.
))/))/)
 * 1* 2* 3* 4* 5* 6* 7* 8*
9*10*11*12*13*14*15*16*17*18*19*20*21*22*23*24*25*26*27*28*29*30*31*
))2))2))-
```

# II. A sample control card for a monthly,

## bi-monthly or quarterly periodical

It is important to note that, today, numerous microcomputer software packages exist that can be used for managing all technical and administrative operations of an information/documentation unit, including the acquisition process as described above. An example of such a package is MICRO-ISIS, developed by UNESCO and available in all major world languages. UNESCO offers special training to organizations using MICRO-ISIS.

# B. <u>Processing, storage and</u> retrieval

Quite often, but not always, what is collected by an importing agency is actually only data. This data, even when refined, cannot be immediately used. It may have to be gathered in anticipation of its use in the future. It may have to be used together with other information which is still being generated or gathered. In the meantime, the data must be stored. Required statistical data may come in already collated form in one source or, on the contrary, may have to be culled from different sources. Likewise, descriptive information may be available in one source or be spread through a mass of documentation, each containing only bits and pieces of possibly usable information. Quite often, the same documents will contain

information on several areas of interest to an importing entity. Unless useful information is stored systematically, it will not be located when required and may be lost for ever. All the effort and the cost of collection will prove a waste unless information is properly stored for quick retrieval.

Some information may have to be disseminated without loss of time if it is to have value to decision-makers. For example, Reuter's teleprinter service is of value only if the information is passed

on to the import operations manager as soon as it is received. Similarly, other telex messages on market conditions will need to be disseminated quickly. Usually these are stored by the corresponding commodity operating divisions themselves for a short period and are then discarded.

However, most information (but not all), whether it is scanned and disseminated on receipt or not, will need to be stored for future retrieval and use. Effective processing of information facilitates storage and retrieval.

The collection of material at an importing entity will normally be quite heterogeneous, ranging from technical handbooks, directories and guides on import procedures and practices to articles in specialized periodicals, brochures, telexes and correspondence, suppliers' bids, price lists and catalogues of specifications, etc. Clearly, this documentation must be well organized if it is to be used properly.

### 1. Books

#### (a) Classification

Books and similar materials must be stored appropriately on shelves. To facilitate organizing the collection, and finding the books later when required, these must be classified. While there are some well-known classification systems (e.g., Dewey decimal classification, Universal decimal classification, Library of Congress classification), these are generally far too broad in scope - and consequently too unwieldy - to be used by an importing organization with very specific requirements and specialized materials.

Many specialized information units develop their own classification systems to meet their particular needs. The International Trade Centre has developed a classification scheme which is designed to be applicable to both the regular documentation collection and to the information files of organizations involved in international trade. This system, which is described in detail in ITC's <u>Trade Information Classification</u> (and in its <u>Thesaurus of International Trade Terms</u>), is based on the principle of applying a code or, if necessary, subsidiary codes to a document, from among one or more of the following:

-A <u>reference</u> and <u>functions</u> code, taken from a classification scheme specifically designed for this purpose by ITC;

- A <u>product</u> code, which may be taken either from the SITC (Standard International Trade Classification) or the CCCN (Customs Co-operation Council Nomenclature, formerly the Brussels Tariff Nomenclature BTN);
- A <u>country</u> code, usually taken from the five-digit United Nations country classification.

Thus, classifying a book on the international market situation of sugar would involve simply placing the SITC (061) or CCCN (17.01) code for this product on the back of the book, and placing it next to others on the same subject. A book on international transportation would be given the corresponding functional code (10.01), and one providing economic information on Japan would receive the code for this country (45 392). To avoid confusions amongst these codes, the product code may be preceded by the letters SITC or CCCN, and the country code may be placed in parenthesis. Thus, if a book should deal with the question of transportation of sugar in Japan, it may be classified and subclassified in the following manner, and placed on the shelf accordingly:

SITC 061	Sugar
(45 392)	Japan
10.01	Transportation

Priority in classification is normally given to the product, followed by the country (or market) and finally the functional area, although this may be modified depending on the importing organization's priorities.

#### (b) Indexing

Indexing should normally be reserved only for publications covering several subjects and likely to be kept in the file for a reasonable period of time. This process involves checking the contents of a document and listing the main subjects it contains. The subject list is best prepared by using a controlled vocabulary (keywords or descriptors) to avoid confusion at the retrieval stage. The descriptors may be placed within an abstract (or summary of the contents), as long as they are clearly identified (e.g. by underlining), or may be listed separately. For this purpose, ITC has published the <u>Thesaurus of International Trade Terms</u>, the structure of which is consistent with the ITC classification system described earlier. The introduction to the <u>Thesaurus</u> describes the indexing process in detail.

### (c) <u>Catalogue card file</u>

Cataloguing involves the preparation of a general description of a given document (e.g. author, title, publisher, year and place of publication, etc.). This is usually done are a standard 12.5 cm x 7.5 cm and which also gives a summer of the document's

done on a standard 12.5 cm x 7.5 cm card, which also gives a summary of the document's contents and/or the list of descriptors. Multiple copies of such cards are made, and filed by author, title and subject (one for each descriptor as described above under "Indexing"). The cards can be duplicated on a small printer (Minigraph), or on regular printing or copying equipment and then trimmed to size. The catalogue file can be used to check whether a document is already in stock before an order is placed and to locate documents through a subject search when the use of the main codes under the classification system is insufficient.

Following, is an example of a catalogue card:

## Catalogue card

	Item accession number Author Title	Periodicity Classor or date of publication Key wased for	
Place publ (bibli catio	lica- FAO iog	Monthly raphies)	00.01 FAO
of	FAO documentation - current bibliogra Rome    )))))))))))))))))))))))))))))))))))	forestry and related activities developing countries; main overs marketing and related seroducts, wood and related seroducts, wood and related seroducts.	s, with parti- prientation is pects of agricul- ectors. (Monthly
	English, French, Spanish (trilingual)	Free	

Publisher	Language (s) of pu	ıblication	Price (when	Bibliographical
Description				

Via delle Terme di Caracalla, 00100 Rome, Italy

(when different from corporative author) and address applicable details of the of contents in US\$) edition analyzed and additional notes

Alternatives to the catalogue card file are available which eliminate the need to duplicate the cards. The simplest method requires the use of a "uniterm card" (see sample hereafter). Under this method only one catalogue card is made for each document; the catalogue cards are filed consecutively by number and are located with the help of the uniterm cards. Each subject (descriptor) is assigned a uniterm card, and on it are placed the numbers of the catalogue cards that represent documents dealing with the subject in question.

Take, for example, the catalogue card on the previous page and compare it with the uniterm card given below, which carries the descriptor "Fishery products". The uniterm card shows, among others, the number 24, which corresponds to the item number on the top left corner of the catalogue card. Similarly, the descriptor "FAO", taken from the same catalogue card, would be used as a heading for another uniterm card which would then carry the same item number, i.e. 24.

By pulling out uniterm cards with different descriptors but bearing the same numbers, a researcher can locate documents dealing with corresponding combination of subjects (e.g. "fishery products" and "FAO"). Numbers are entered into each uniterm card in the columns corresponding to their last digits (e.g. number 24 would appear under column 4), thus simplifying the search process.

#### **Uniterm card**

```
FISHERY PRODUCTS
* 0 * 1 * 2 * 3 * 4 * 5 * 6 * 7 * 8 * 9 *
* 10 * 31 * 22 * 53 * 24 * 5 * 36 * 27 * 18 * 29 *
* 70 * 81 * 62 * 83 * 104 * 35 * 86 * 97 * 58 * 69 *
* 120 * 101 * 152 * 163 * 214 * 95 * 166 * 117 * 118 * 99 *
* 180 * 231 * 292 * 183 * 324 * 185 * 206 * 227 * 168 * 139 *
* 350 * 371 * 412 * 353 * * 285 * 346 *
                       * 348 * 289 *
  * 391 *
        * 403 *
             * 305 * 416 * * 398 * 369 *
             * 365 * * * 408 *
  * 431 * * *
  * 451 * * * * 425 *
            * 445 *
```

Recent advances in microcomputer technology (including a wide range of commercially available

software such as MICRO-ISIS referred to on page 26) now make it possible to store this information on computer, rather than on catalogue or uniterm cards. However, despite the diminishing costs of microcomputers, it is still far too expensive to use them solely for this purpose. Rather, storage and retrieval of bibliographic information should be seen as a supplementary application for a microcomputer purchased for other reasons. Other applications at an importing organization's information unit could include storing suppliers' files, technical specifications of imported goods, price trend, monitoring, etc.

#### (d) Filing of documents

Finally, documents must be filed. Labels with the corresponding classification codes are glued to the spines of books, and these are then placed in their correct locations on the shelves. The classification system divides the collection into various broad groups: reference materials, functions, products and countries.

In addition to books, however, other monographic materials, such as booklets, brochures and supplier's catalogues will be collected, which do not lend themselves to being placed directly on the shelves. It is possible either to put such materials in cardboard boxes which are classified and filed next to the books, or to place them in separately classified suspended files. Materials sent by suppliers (e.g., catalogues), may also be filed by supplier name, if convenient, as long as an index exists which can allow locating the suppliers based on a product or country search.

## 2. Periodicals

Periodicals are distinguished from monographs in that issues under the same title appear at regular intervals and the contents (articles, reports, advertisements, etc.) vary with each issue. They also carry up-to-date-information which is vital to import managers. All this calls for special treatment.

#### (a) **Processing articles**

After arrival, periodicals must be carefully scanned for contents of particular relevance to the importing organization. Some periodicals (e.g. newspapers) will not generally be kept as such. All that may be of interest are a few articles or regular sections (e.g. price lists of commodities in the <u>Financial Times</u>). These articles must be cut out, classified and placed in suspended files. The rest is discarded.

If, however, in addition to extracting some articles a particular journal is to be preserved for a longer period (say, a year or two), clipping out articles or sections will not be possible. In such cases, the most practical approach is to photocopy the article for insertion into the suspended files, and to put the journal itself next to its companion issues on the shelf. If cross-referencing is desired (because the article deals with various subjects), then multiple photocopies can be made. If, on the other hand, the article is too long to justify multiple

photocopying, the full article can be classified and filed under its main subject and copies of the first page placed in the cross-reference files. The cross-reference copies would have to give the file code of the full article - or the name and issue of the journal from which it came - so that the full text can be located when required.

If the importing organization does not have a photocopier (which should be extremely rare, as such equipment is indispensable to its work), then either the articles must be cut out or a cross-referencing system established using catalogue and/or uniterm cards. This is, however, very costly in time and effort.

## (b) <u>Filing the periodicals</u>

There are two alternative ways of filing a complete set of issues that the importing organization may wish to keep of a given periodical. One is to classify the periodical broadly, i.e. by the function, country or region, or product group with which it deals principally, and to place it on the shelf next to the books on the same subject. The other - generally less satisfactory - is to set up a separate collection of periodicals, filed alphabetically by title. In either case, the issues of one periodical are arranged chronologically in boxes. The boxes are usually labelled with the code (if the periodical has been classified) and the title of the periodical. If the number of issues exceeds the capacity of one box, then the year(s) or month(s) corresponding to the issues contained in a given box are also given on the outside label.

## (c) Other materials

In addition to monographs and periodicals, importing organizations will receive a wide variety of materials such as pamphlets, brochures, catalogues, letters, telexes, press releases, and items from teleprinter news services. The normal practice is to place these materials in suspended files, classified by function, product or country together with articles and other materials taken from periodicals. However, separate files can be set up for letters and telexes covering trade opportunities and company catalogues and/or reports which may be classified by product or country and then filed alphabetically by company name.

While each suspended file will have an index tab giving its identifying code (and descriptor), the material it contains may be subclassified and placed in separate folders. In this manner, product files may be subclassified by country and country files subclassified by function. This would contribute to better organization and easier retrieval of the material.

#### 3. Data files

So far, this practical guide has dealt only with the processing of documents for storage and retrieval. However, an importing organization may wish regularly to extract selected data from these documents for special handling. This is usually done only when the information concerned is particularly important or useful, when it is required frequently, and when obtaining

it from the original sources is cumbersome for one reason or another.

One type of data files has already been discussed: the suppliers'; files, with information obtained from several sources (including the companies themselves). Other types are data files on international prices and other market indicators for priority imported products, technical specifications and product/market profiles (giving summaries of information on exports, export regulations and financing possibilities, major suppliers, etc.).

The advantages of using standardized formats for organizing data are many. If an inquiry is answered by using a standard form, for example, similar inquiries can thenceforth be handled by simply photocopying the original reply. The form itself would help the user (i.e. the import manager) to know what else to ask for. In addition, it can be sent out to information sources (e.g. companies, official trade representatives, chambers of commerce in other countries, etc.) with a request for information.

## 4. <u>Beyond storage</u>

It is necessary to point out, however, that storage is hardly enough when the information in an article or any other material is of immediate concern to a decision-maker in the importing organization. In fact, storage might be completely worthless if the information is of the type that becomes rapidly obsolete. It is particularly important to give absolute priority to the dissemination of such information. This matter is discussed in detail further below. It should be stressed that, faced with a pile of documents to process, the officer(s) responsible for the processing function at the importing organization must usually attend to the periodicals before concentrating on the books.

## C. Weeding out obsolete material

After a while, an importing organization can find itself submerged in a sea of documents, many no longer of value as information on international trade rapidly becomes obsolete. Such material makes the location of useful documents more difficult and fills up the space required for new documentation.

To avoid this, the importing organization must establish a system for weeding out documents that are no longer required. Such a system should provide for the following:

- -Periodicals should usually be kept only for one year, and certainly not for more than two years, particularly if articles are being extracted and filed.
- -Directories, yearbooks and other such documents should be immediately discarded when updated editions are received.

- -Statistical data should generally go no further back than the last five years. Supply market surveys are also obsolete beyond this period.
- -The entire collection should be reviewed at least once a year, and documents that are no longer useful should be disposed of. This is particularly true of suspended files, which should contain only recent information and which can build up fairly rapidly. It may be possible to estimate at the time of receipt when the documents to be placed on the shelf should be discarded. A coloured sticker on the spine of such documents could be used to indicate the year they should be considered for removal from the collection (e.g. green stickers would mean review two years hence, blue three years, etc.).

The importing organization should consider with great seriousness the matter of keeping its collection up-to-date and relevant. Few things can lead an import manager to disparage an information service more than coming across a hopelessly outdated publication. Quality usually impresses more than quantity, as it should.

#### Chapter 5

## ANALYSIS OF INFORMATION AND INTELLIGENCE

## A. Importance of analysis and inference in import decision- making

Collecting information is a necessary first step in any systematic and professional approach to buying from the international market place. However, this by itself is not sufficient.

Descriptive information may be directly relevant from the point of view of imparting awareness of market conditions for a particular product. Quite often, however, different bits of information have to be synthesized so as to obtain a more transparent view of emerging market conditions. "It is the synergetic approach to information handling that yields results greater than the parts". <sup>10</sup>

In this sense, synthesis and analysis assume a special significance, <sup>11</sup> embodying the art of bringing together seemingly unrelated and yet relevant pieces of information so as to deduce logical inferences through cause and effect relationships. It is, thus, not a mere reporting of news in an abstract form nor is it a summary description of a piece of information in one's own words. It goes beyond that and involves identifying the result of expected changes due to an array of diverse but relevant factors having a bearing on the market for a product.

As far as statistical information is concerned, it has to be appreciated that numbers do not always speak for themselves. They have to be manipulated and "made to speak". Sometimes this manipulation is simple, so that by mere rearrangement the numbers begin to make sense. However, buying decisions more often involve a systematic approach to the evaluation of the alternative courses of action that may be available. Data is necessary for such an evaluation, but this data has to be refined and used with appropriate tools and techniques applied in the fields of economics, statistics, business

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See Meltzer, Morton F, The Information Imperative, the American Management Association, 1971, p. 13.

Information science generally has a somewhat different meaning for analysis than the more substantive connotation given here (i.e., analysis from a market perspective, rather than from an information perspective). See ibid p. 9.

management, operations research, etc.

## B. Descriptive information and its analysis

Quite a large part of the required information is reported in various newspapers, journals, technical periodicals, books, etc. As was mentioned before, sometimes what is reported may be directly relevant to a commodity or a product. For example, the producer's price of rock phosphate may have increased and, if it is reported as such - including by how much and the reasons for this increase - the information is direct and no further analysis may be required.

Quite often, however, the reporting may be incomplete. It may not have been mentioned whether producers everywhere have put up their prices or whether only the market "leader" has done so. It may, therefore, be necessary to probe further or look for additional information on the reaction of other producers and those of consumers. It may also be necessary to determine what led to the price increase, i.e., the demand or supply factors. It may be useful to examine whether the price increase is likely to be temporary or permanent. This will mean a watch or a search for causes. If an increase in demand had led to the price hike, it may be necessary to discern whether there was growth in the output of user industries or a speculative nervous buying due to a fear that a shortage may develop in the near future.

Alternatively, supply factors may have been responsible. This will mean looking, among other things, for information on strikes and production facility closures. If the supply shortage is attributable to a strike in major supply area, the inference is that the supply difficulties should be short-term. If, on the other hand, the shortage is due to a permanent major closure of a production facility, for example, it may mean that the supply will be short for a longer period of time. Such a cause and effect analysis may suggest two different courses of action. In the first case, it might be worthwhile to wait, if inventory levels permit, and enter the market when the strike ends. In the second case, any plan of market entry drawn up earlier would probably stand unchanged; however, the procurement programme may be advanced if there is additional evidence to suggest that the price increase is not only durable but there is a likelihood that the supplies may become even more difficult in the near future.

So long as information is of direct relevance to a particular product, the analysis involves only putting together different news items and collating these in a logical manner for drawing meaningful conclusions. However, quite often reported events may not seem relevant to a product or may not appear at first sight to be of significance from the point of view of the contemplated procurement programme.

For example, the reported fall in world demand for stainless steel leading to production cuts may

appear to be of no consequence to a procurement agency not concerned with imports of this item. However, this news may be of great value to it if it imports nickel, as stainless steel accounts for a major part of the demand for nickel. Similarly, the announcement of a trade embargo by one country on shipments of grain to another major importing country may not seem to be relevant to an agency not responsible for imports of food grains. This should be of interest to it, though, if it imports fertilizers, since this could possibly lead to a fall in fertilizer application by farmers in the exporting country. From this, it can be seen that a careful analysis can help procurement managers to become conscious of the importance of a particular news item which otherwise may be missed.

For resolving questions of procurement strategy, the information base must be wider and the analysis deeper. For example, in deciding on how much of the estimated annual requirement of a particular industrial raw material should be covered through contracts within the first half of the year and how much in the second half, the diverse information needed includes the likely growth of the industrial economies, the expected monetary and fiscal policy of the governments in these countries, the structure of leading and lagging sectors in these economies, the place in this structure of the particular industry for which the raw material in question may be a major input, and any particular trend discernible in the expectations of speculators and traders. In addition, it will of course need information on the world market for the specific product in question.

# C. Quantitative methods and techniques of information analysis

## 1. <u>Influencing factors</u>

Quantitative techniques and methods of information analysis in the context of decision making in import procurement are vast and varied. The appropriateness of any one of these is determined by a number of considerations. Apart from the nature of the decision, one or more of the following factors apply: product characteristics, international market structure for the product in question, volume and frequency of transactions involved, etc.

Developing countries import a wide variety of products which are often broadly grouped as consumer goods, industrial and agricultural inputs and capital goods. Each one of these groups include a whole range of products with widely differing product and market characteristics. For example, consumer goods may range from primary products such as food grains to electronic music systems. Likewise, capital goods may include a small general purpose lathe or a large turbine for a hydroelectric power plant.

Product characteristics usually have a reflection on the international market structure. Thus, markets for primary products and highly standardized manufactures (such as soaps, detergents, kitchen ware, garments, etc.), including general purpose machinery are more competitive than for most non-standardized products such as special purpose machinery, plant and equipment. The number of manufacturers and suppliers of standardized products in general tends to be high for several reasons.

The products being of a relatively non-durable nature, the volume of demand is usually high and the manufacturing process is technically less complex. Moreover, optimal plant size ranges widely when distribution and selling costs are allowed for. All these factors thus make it possible to set up a viable manufacturing facility with a relatively smaller investment outlay permitting easier entry into manufacturing. Distribution is handled by a chain of specialized or multi-product trading houses.

In addition, the basic technical specifications of consumer products, meant to meet a given need, tend to be similar across different brands or varieties. The differences are usually more of a cosmetic nature designed to cater to different income groups. Elasticities of substitutes are high between different brands. All these factors re-enforce one another in creating a competitive market for such products. As a consequence, a market price level tends to be established. Demand and price analysis in import procurement, therefore, is an important decision

established. Demand and price analysis in import procurement, therefore, is an important decision variable for commodities and simple manufactures.

As against this, assessment of suppliers and prices is a real problem for products which are not traded on organized markets and/or for which the markets are imperfect. In particular for non-standardized products involving complex designing and manufacturing processes, the degree of competition tends to be reduced. Such products, even when manufactured to meet the same need, may differ on account of different design features, representing or embodying a specific production process, performance standard, operating features, productivity rates, extent of durability, maintenance complexity, etc. The essential characteristics for a competitive market and a market price do not prevail. Price comparison, therefore, does not often suffice to decide on which offer is the best.

In these cases product specifications, technical features and characteristics, supplier capability and reliability, etc., are the more important variables on which information may have to be collected and analyzed. The initial acquisition cost is likely to be only one element (and sometimes a smaller proportion) of the total cost of owning and operating a piece of equipment. Two machines designed to meet the same need may have the same initial price (cost to the purchaser) but the operating costs (over their respective usable lives) may differ substantially. The buyer has to take both the initial cost as well as their operating costs into account to evaluate which one is more competitive.

The quantitative methods and techniques of information analysis to be used will thus differ and will depend on the decision alternatives to be evaluated and the nature of the product concerned. The techniques and methods of analysis will naturally have to be selected carefully to suit the specific area of investigation and evaluation. <sup>12</sup> In general, the approach is that of operations research, relying on scientific methods and using tools of analysis drawn from economics, statistics, management, finance and other related disciplines, as appropriate.

For a discussion of some of these issues and the techniques of analysis, see International Trade Centre, Practical Guide No. 9 - Bid Evaluation in Import Procurement, Geneva, 1985, and Practical Guide No. 16 - Supplier Sourcing, Appraisal and Evaluation, Geneva 1988

Some of these quantitative methods will be discussed in the following paragraphs, which are necessarily only illustrative.

## 2. Approaches and methods

For a large number of commodities and products, importing operations by a purchasing entity may have to be carried out in anticipation of needs. An enterprise engaged in the business of importing a consumer good for sale to the general public, or an intermediate product for a large number of industrial users, will have to decide how much it will need to import during the year, from where it is most likely to import, and in what quantity schedule (lot size and re-order points) imports are to be made.

Demand for imported items does not often remain constant. It may vary from year to year for many reasons. For example, where part of the demand is met through domestic supplies, a change in local production will result in a variation of the import gap. With rising population and per capita incomes, demand for consumer goods may itself increase over the years, with or without a corresponding increase in domestic supplies. Domestic production may go up because of additions to capacity or better utilization of existing capacity, or may go down for various reasons, including strikes, lockouts, raw material shortages, infrastructure bottlenecks, etc. One important element in the import operation is, therefore, the forecasting of import demand for items being handled by an importing agency. <sup>13</sup> There are several quantitative methods which are used in estimating import demand. Some of these are:

- Time series and trend analysis;
- Regression models;
- Material balances;
- Input-output models.

The theory and use of these methods can be seen in standard books on business statistics or econometrics. However, using any one of these (or other) methods to estimate demand and the import gap can only be done if the relevant information can be obtained.

Quite often, in addition, quantitative methods are not able to cope with the diverse structural and short term distorting factors which are a feature of most developing country economies. The results of quantitative methods should, therefore, be taken only as indicators to be evaluated in the context of other information.

Even when the yearly demand for a product has been estimated, the procurement planning problem

Unless it is a monopoly buyer, the importing organization will have also to estimate its market share of the total import demand.

is not completely resolved. The next question to be decided is the lot size into which the estimated annual demand should be broken, that is, whether the yearly requirement should be procured in one lot, two lots or any other number of lots. The answer to this will depend on the expected time-shape of demand during the year and on procurement planning techniques for determining the economic order quantity (EOQ). These take into account reordering costs, holding costs, minimum lead-time, safety level of stocks, and so on. <sup>14</sup>

#### (a) Trend analysis

It is not uncommon for importers to either adopt a rough and ready approach to the estimation of the import gap of a commodity or a product, or else to rely routinely on the estimates of others. This, however, must be avoided, since an error here, apart from possibly inflicting damage to the economy, can be highly destabilizing for the commercial viability of the importing organization. It is important that the organization makes its own estimates and uses those made by others only as cross checks. The minimum required information for most items, will be time series data for 5-10 years on:

- total consumption
- domestic production
- the import gap

The trend analysis technique can be used to interpret this information. However, caution will have to be exercized in applying this technique in a purely mechanical way. For example, capacity utilization in an energy intensive industry may have been affected during some years of the time series by inadequate availability of power. In working out a short-term production forecast, this factor will have to be taken into account. Thus, information on the past trend in availability of power and its effect on that particular industry will need to be examined. In addition, an assessment will have to be made of the likely power availability in the year for which the production estimate is being worked out. This will again need information on generation capacity and the likely output.

Several other factors may have an influence on the import gap. For example, foreign exchange in most developing countries is often a constraint so that past imports are not a true reflection of actual import needs. Similarly, rationing may have affected past consumption of a consumer good. If there is reason to expect a relaxation on this control in the near future, it is natural to expect that the total consumption may go up even if domestic production does not. This would mean a higher import gap which, again, would not emerge through a simple extrapolation of the past trend. Hence, mechanical extensions of past import trends to project future requirements will often not give realistic estimates as constraints may vary substantially in nature and intensity.

See, International Trade Centre: Practical Guide No. 2 - Basic Guidelines on Materials Management for Imported Supplies and Equipment, Geneva, 1982, pps. 32-37 and also, International Trade Centre and Programme for Development Cooperation at the Helsinki School of Economics: Guide to Import Management, Helsinki 1990, pps. 84-91.

The time trend analysis technique, may be useful, but dummy variables will have to be introduced if there is reason to believe that some abnormal factors have intervened during some of the past years, distorting the trend. This may be seen by an illustrative example which shows a series of data on sugar consumption for a period of ten years in a hypothetical developing country.

	<u>Year</u>	Sugar Consumption
		(10,000 tons)
Y1	1981	30
Y2	1982	31
Y3	1983	32
Y4	1984	15
Y5	1985	16
Y6	1986	15
Y7	1887	30
Y8	1988	32
Y9	1989	32
Y10	1990	34

An inspection of this series will indicate that there is something abnormal about the years Y4, Y5 and Y6. This calls for further information. Investigations may show that there was a sharp decline in world production of sugar in these years and that this had led to a quadrupling of the international price of sugar. This, in turn, had led to a drastic reduction in imports and consumption in the country in question. Or it could be that there was a serious foreign exchange crisis in the importing country, which forced it to drastically cut down on imports of sugar and, hence, restrict consumption.

A straight-forward extrapolation, with the help of a simple linear trend equation, may be a faulty technique here if the year Y11 (for which the projection is to be made) is a normal year. Without any adjustment for the three abnormal years, the trend would yield a projection of 30,000 tons for the year Y11. As against this, if the series is smoothened to take account of the abnormal years, the estimate will be of over 33,000 tons.

## (b) Seasonal variation index

If one looks at the monthly (average of daily) London Metal Exchange zinc prices for the simulated eleven year period, a rising trend may be observed. This itself is interesting. However, a more revealing feature will not be discernible unless the figures are manipulated using some statistical techniques. One such method is that of developing a seasonal variation index. This method relies on taking the average of each month's prices for the last 11 years - or whatever the period for which the data has been collected (ideally the period should neither be too short nor too long) - and using these averages to develop the index of the seasonal variation in zinc prices, as given below:

## Seasonal Variation Index for Zinc Prices

(Price: £/Ton)

<u>Month</u>	Average Price (simulated)	<u>Seasonal Index</u>
	Year - Year 1981 - 1991	<u>Year - Year</u> <u>1981 - 1991</u>
January	309.35 320.62	
February March	328.70	99.48
April	338.41	102.42
May	338.50	
June	324.81	
July	321.23	97.22
August	330.14	99.92
September	330.14	99.92
October	331.24	100.25
November	345.44	104.55
December	346.34	104.82
	))))))	))))))
Grand Average	e 330.41	100.00
	=====	=====

From the table shown, it will be seen that the zinc prices have a seasonal pattern and tend to be the lowest in January. This provides a decision rule that, if inventory holding costs are not too high to counter this advantage, a procurement agency may consider the purchase of at least its first six month's requirements in January itself.

It must be emphasized, however, that seasonal variation is only one element in time series data. The other elements are the trend and cyclical and random fluctuations. In any decision-making process all these will have to be taken into account, in addition to descriptive information on the international economic environment, on whatever demand pull or cost push factors may be in operation, on any impending mining or smelter strikes and so on, as well as data on the cost of holding stocks in relation to the likely savings in procurement costs by buying at a seasonally low price.

#### (c) Cost analysis

Price analysis is useful for products for which market prices exist. As was mentioned earlier, this is true of products which are traded on organized markets and for which markets are highly competitive. For some products with a limited number of suppliers - and particularly for proprietary items with only one supplier - price analysis is not feasible. It may be advisable in such cases to use the technique of cost analysis to assess the reasonableness of the price quoted by a supplier. This analysis will require two things: a listing of all the inputs (material and non-material) required by the supplier to produce the product in question, the costs of these, and an appropriate technique to compute the cost per unit of the product in question.

The buyer will have to collect the necessary cost information. One obvious thing to do is to ask the supplier to provide a complete input cost breakdown. However, this by itself will not suffice. The buyer will need to verify whether the cost estimates for each of the elements are reasonable. The buyer will, therefore, need to collect information on the prevailing market prices of all the inputs for which the supplier has submitted his costs.

The second important requirement is that the buyer should use appropriate cost accounting methods to compute an estimate of reasonable cost for the product in question. The different manufacturing cost components are usually grouped as follows:

- Direct labour
- Direct material
- Overhead
- Sales and administrative expenses
- Profit

It is worth noting that, in practice, there can be many difficulties in making an accurate cost estimate. The problem is two-fold. Firstly, the cost of direct labour (and/or material) may be high because of the inefficiency of the particular producer. And, secondly, it is often difficult to allocate costs to different products in a multi-product manufacturing enterprise. While it may be possible to trace some costs to a particular product, other costs may be difficult to trace and are allocated on a rough basis amongst all the products being manufactured. This is particularly the case with allocation of overheads.

Difficult though unit cost estimation may be, a buyer may have no other alternative. With a little effort, he/she should be able to obtain a reasonable estimate of the cost level which will provide a basis for evaluating offers and the reasonableness of the price being demanded by suppliers. <sup>15</sup>

For other relevant cost evaluation methods and techniques (such as total costing and life cycle costing) see International Trade Centre, Practical Guide No. 9 - Bid Evaluation in Import Procurement, Geneva, 1985

#### D. Dissemination

Information collection and its analysis is of value only if it is put to use by purchasing managers in commercial decision making. For this it is necessary that the information be available to decision makers in a readily usable form and on time. Dissemination is a process, which, if established properly, should ensure that this objective is achieved effectively.

The appropriateness of the dissemination technique to be used will depend on the nature of the information and, in particular, the need for its analysis before it becomes meaningful. Some information may be specific to a product and its market and reported with precision. Such information will often require no further analysis. Other information will appear more in the nature of data requiring further analysis before it can be of use to a procurement decision maker. There are thus various ways in which the dissemination of information is possible:

- Direct dissemination
- Daily reports of abstracts
- Market reviews
- Commodity, product and industry surveys

#### 1. Direct dissemination

Information which is specific, precise and directly relevant to a product of interest to an importing organization will not require any analysis. Such information should be disseminated directly to the concerned procurement managers. Reports of recent transactions on a product in the international market could be one such example. Moreover, managers do sometimes prefer to glance through some selected commercial periodicals as soon as there are received. Such periodicals can also be circulated and, of course, retrieved for preparing daily reports, market reviews and commodity/product surveys.

## 2. <u>Daily reports of abstracts</u>

A simple method of keeping different levels of management current is a system of daily reporting of abstracts of relevant items from commercial periodicals, special trade services, wire and/or telex news services, etc. The news, views, comments and data are simply reported in summary form, on the principle of "as is, where is", both in terms of substance and, to the extent possible, language as well. At the end, the source of the abstract is given for readers who might be interested in obtaining more detailed information or in ensuring that what has been reported is what is contained in the original.

Quite often, what is referred to as daily reporting may not have the periodicity or the frequency which is implied. This will vary if, for example, wire or telex messages are circulated as such on receipt to appropriate levels of management. In such a case, the need, or even the possibility, of sustaining a report of abstracts on a daily basis may not be there. However, the simple guide here is to adopt a frequency which is feasible in the context of the flow of information to the system on a particular item or a group of items.

An example of one such abstract is given below:

The person responsible for making the abstracts should have adequate knowledge of the trading activities of the enterprise and should be qualified and trained to pick up those items with implications for its import trade activity. To illustrate this art in abstracting a news item, as it appeared some time back in the Metal Bulletin, it would suffice to take the following portion of a longer text, in the case of an iron ore importing entity:

This abstract focuses on information in the article concerning steel production, for which iron ore is the major input, a matter naturally of great concern to an iron ore importer. However, for a steel importing entity the same item would be abstracted in the following way, aiming at information on steel consumption contained in the article, more relevant to its particular needs:

#### 3. Market reviews

Apart from a daily report of abstracts, managers of importing enterprises should be provided with a monthly review of the market situation for each imported product based on a synthesis of all the information available during the month. Experience suggests that such a synthesis should not be too long and should lead to a concise summary providing a short-term forecast of the market situation. As an illustration, a sample of a market review for nickel is given below:

```
"Nickel Review September. Nickel prices at the London Metal exchange followed a
   downward trend during the month of September. The price came down from £ 2780 per
   tonne at the beginning of the month to £ 2370 per tonne by the end of the month. At
   this level, the price was the lowest at LME ever since the metal began to be traded
    at the exchange in 1979. As compared to the monthly average of £ 2778 per tonne in
   the previous month, the September price of £ 2519 showed a fall of over 14 percent.
   The European free market price range of melting grade nickel also came down from
   $ 2.17 - $ 2.30 per 1b. at the beginning of the month to $ 1.82 - $ 1.90 per 1b at
   the end of the month. The monthly average range showed a fall of approximately 10
   percent.
   In USA, the free market prices of nickel broke through the $ 2 per 1b. barrier.
   Even producers, while holding onto the official prices, have reduced their unofficial
   offer prices. In particular, two of the largest producers, INCO and FALCONBRIDGE are
   reported to have offered charge nickel and ferro-nickel at between $ 2.30 and $ 2.38
   per 1b.
   The main factor for the depressed market conditions is identified as the recession in
   the stainless steel industry which accounts for a major portion or the total demand
   for nickel.
    The major producers of nickel have responded to this market situation by further
   cutbacks in production. INCO's Sudbury plant was closed down on June 1 and was
*
   originally scheduled to re-open on October 4. Now it has decided to extend its
   shutdown until January next. INCO's output is expected to fall to 100 million lbs.
    this year as compared to 220 million lbs. in the previous year. In the meantime,
   FALCONBRIDGE has prolonged its 13 week shutdown at its Sudbury plant for another
    14 weeks.
   Outlook
   The world wide general recession has hit the alloy and steel industry severely.
```

- \* Demand has fallen and production has been cut. This has had its repercussions on the
- \* demand for nickel which has dropped sharply. Producers of nickel have responded to
- \* this situation by production cutbacks. However, the drop in demand has been greater
- \* than that of production of nickel with the result that producers' inventories have kept \*
- \* on increasing. The two major nickel producers, INCO and FALCONBRIDGE are reported to
- \* have inventories of about 157 million lbs. and 144 million lbs. respectively.

- \* Given this background, nickel prices are expected to remain depressed for quite some
- \* time. Current estimates by most market analysts are that it may take up to one year \*
- \* before producers are able to firmly re-establish their upper level list price of
- \* £ 3.20 per lb."

It may be pointed out that it is not imperative that such market reviews be made on a monthly basis. In fact, in a large number of cases, such as bulk minerals, machinery, transport equipment and other capital goods, the market conditions do not change that rapidly. In these cases, periodicity of such reports need not be monthly. They may be prepared quarterly or even semi-annually. Similarly, the nature of the synthesis and the contents or reporting style will have to be in line with the information that is available and with the type of analysis that is undertaken.

In some instances, it may be possible or necessary to prepare only occasional notes highlighting recent developments.

## 4. <u>Commodity, product, and industry surveys</u>

Apart from the daily reports of abstracts and the periodical market reviews, it would be useful to prepare commodity, product and industry surveys from time to time.

## (a) <u>Commodities and manufactured products</u>

These surveys may cover, for example, global trends in production, consumption, imports and exports in the last decade or so. They may describe the structure of the industry (monopolistic, oligopolistic, fairly competitive, etc.,) the major producers, major consumers, volume and direction of trade flows and so on. The normal pattern characterizing trade - spot deals, short/long term contracts, etc. - price trends, pricing systems and practices, usual payment and other terms are other areas which the surveys could cover. The surveys could also highlight any recent development which may have an influence on demand and supply of the product in question and give a list of major world suppliers - in each case giving the name of the firm, address, telephone, telex, capacity, production levels and specifications, wherever relevant.

There is a vast and growing volume of literature on agricultural and non-agricultural commodities and industries. UNCTAD, the World Bank, FAO, UNIDO and a number of inter-governmental commit-

tees, associations and councils produce background papers and handbooks on most commodities and industries of significance. Depending on their coverage, these can be used directly as commodity/industry surveys for reference purposes. Usually, these do not cover the names and addresses of major suppliers/manufacturers of the world. These handbooks will need up-dating from time to time unless this is done by the issuing organizations themselves.

## (b) <u>Machinery, plant and equipment</u>

The range of products comprising the category of machinery, plant and equipment is vast. No procurement organization should embark on the task of carrying out an industry survey of most of the products in this group on its own. It is usually beyond the resources of most importing organizations particularly in the developing countries. Nor is it necessary. There are a number of commercial intelligence and/or publishing agencies, in industrially advanced countries, that specialize in covering a selected number of products of closely related industries. Apart from reporting on short-term market trends, their periodicals do carry, from time to time, a detailed survey on one of the product area(s) from the category in which they may be specializing. Sometimes these may be issued as special supplements, or else may be issued as separate special publications. Their periodicals do, however, carry announcements of such special features/ publications.

These periodicals and specialized surveys may be circulated as such or they may be abridged suitably, omitting those portions which are not of relevance to a given procurement organization but ensuring that no substantive findings are left out.

## 5. **Special analytical studies**

Research and analysis is an intimate and continuing part of purchasing and of import procurement in particular. In a changing economic environment, the search for new developments concerning demand, supplies, technologies and so on is bound to affect import performance. Threats to purchasing performance can be reduced by taking remedial action at the right time. Similarly, opportunities offered by new developments can be exploited if the signals are picked up and timely plans are initiated. Preparation for an impending negotiation can also be an area of research. The scope for research to be carried out by an importing organization's information unit is wide. The following is an illustrative list of possible fields for such studies.

<u>Product surveys:</u> Assessment of import needs for 1-5-10 years; long and short-term supply demand trends; price trends, technological and other developments; outlook for possible substitutes; new developments on standards and specifications; new sources of supplies.

<u>Economic analysis</u>: Outlook on the economic environment and effect on availabilities; in-depth price analysis.

<u>Vendor analysis</u>: Qualifications of active and potential suppliers; study of supplier facilities;

evaluation of supplier performance.

<u>Freight and foreign exchange markets</u>: Trends in freight rates and outlook, any new developments on shipping and their implications; foreign exchange market trends and outlook.

Cost Price Analysis: Any changes in production input costs affecting suppliers' supply prices.

Experience suggests that an importing agency will need, from time to time, studies on diverse topics, to design new import strategies and to prepare for negotiations. The above, therefore, is only a sample list of such topics.

#### Chapter 6

## ORGANIZING A MARKET INFORMATION AND INTELLIGENCE UNIT

## A. The reason

Purchasing research is defined by Fearson as "a systematic investigation and fact-finding to improve purchasing performance". Given the complex nature of the environment in which procurement operations have to be performed there is an increasing tendency for the larger purchasing companies in the industrialized countries to have besides the buying staff, people who are employed full time on such investigations and fact-finding, located in a separate division in the organization. Essentially, the division is expected to assist the decision making process and contribute to purchase performance improvement. It is in this very sense that an information and intelligence unit in an importing organization in a developing country, whether public or private, has to be viewed as a vital part of a decision making support system. Such a unit has to be located within the organizational structure of the importing agency so as to ensure its effectiveness.

There are other reasons which suggest that importing organizations should establish information systems as an integral part of their structures, rather than relying on outside services. Research by information specialists has shown that an information system should be located as closely as possible to where it will be used. Rosenberg's research on the preferred sources of information by users gives the following ranking:<sup>18</sup>

- Search personal library;
- Search material in a library where you work;
- Visit a knowledgeable person nearby;
- Telephone a knowledgeable person;
- Use a library that is not within your organization;
- Consult a reference librarian:

Fearson, H.E. Purchasing Research in American Business, Ph. D. Thesis, 1961, Michigan State University, as quoted by Baily, P.J.H. in his Purchasing and supply Management (4th ed), Chapman and Hall, London 1978 p. 235

<sup>&</sup>lt;sup>17</sup> Ibid. p. 235.

See Rowley, J.E., 2 Turner, C.D. The Dissemination of Information, Andre/Agrafton Book 1978, pp. 109-110.

- Write a letter:
- Visit a knowledgeable person twenty miles away.

Based on these findings, Rowley and Turner conclude that, "convenience appears to be more important than anything else in determining the use of information channels". The pre-eminence of convenience has been borne out by other research which suggests its precedence over the extent of information resources in libraries. The most significant finding has been that, compared to convenience, even the quality of the channel has no bearing on the frequency with which it is used.

In view of these findings it is obvious that importing agencies should endeavour to set up their own market information and intelligence units, and that such units should be housed as closely as possible to the operating line managers responsible for import procurement. In other words, the system has to be an "in-house" one if it is to perform its supportive role effectively.

## B. Size and structure of the unit

The size of an information and intelligence unit in a public or private importing agency will depend on its procurement responsibilities. It will depend, on the one hand, on the number of commodities or products it imports and, on the other, the range and types of such products. The wider the range, the more diverse will be the information coverage and more extensive the analysis to be undertaken. The size will also depend on the specific import procurement functions of the organization. It will be smaller, for example, if a particular agency is responsible only for the import of a good and not for its internal handling, storage, and distribution. If the agency's functions include all of the activities right up to the final distribution point, the information unit will have to be somewhat larger. Clearly, also the volume of international business will condition the extent of the investment an importing organization would wish, or be able, to make in setting up a market information and intelligence unit. Some very small organizations may, in fact, have to rely on outside services (chambers of commerce, etc.) for a fairly substantial part of their needs. For those organizations which do wish to set up such a unit, through, and have the minimum required resources, as a general rule a small, compact and highly motivated team should suffice, at least in the formative stages.

As far as the structure is concerned, this would have to accord closely with the two high ranking user attributes referred to earlier, namely:

- "Search material in a library where you work" and
- "Visit a knowledgeable person nearby".

These two attributes suggest that the unit should consist of:

A reference section, and

- A research and analysis section.

The provision of a convenient in-house collection of reference material would ensure its use by operating managers. The existence of a research and analysis section would ensure that a "knowledgeable person" would be "close by". The net result would be a much higher usage rate of information essential to effective decision-making, than would be realized if the facilities were not at hand. The functions of these two sections are given below. While these have already been described in some detail earlier on in this guide, it is important to know how the functions are to be distributed between these two sections.

## 1. Reference section

The functions of the reference section would be similar to those of a specialized library. An important task would be the acquisition of the required reference material, based on knowledge of user needs. <sup>19</sup> The approach to acquisition need not be a passive one. Users can be invited to make suggestions, but they can also be assisted by bringing new publications to their notice. The reference unit can bring to the attention of appropriate levels of management the books and periodicals which may be acquired by making use of publications such as: <u>Books in Print</u>, Bowker, New York; <u>Ulrich's International Periodicals Directory</u>, Bowker, New York; <u>Irregular Serials and Annuals</u>, Bowker, New York; <u>Guide to Reference Material</u>, Library Associations, London; and <u>Guide to Reference Books</u>, American Library Association. Publishing organizations also publish lists of their own materials, and new books and periodicals are often reported in the specialized press. Many enterprises may find it useful to set up a selection committee for adding new material with a representation of different user groups.

Besides books and technical and commercial journals, the reference unit will need to acquire manufacturers' catalogues, advertising material and trade and industry directories. If the management decides that it would be useful to subscribe to some specialized services in areas where normal published material may be inadequate - particularly providing intelligence otherwise unavailable - the acquisition task can also be assigned to the reference unit.

There are several methods of finding user needs which have been discussed in Handbook for Information System and Services, by Atherton, P., UNESCO 1977, pp. 126-127.

The acquisition functions are set out below in a flow chart which is self-explanatory.<sup>20</sup>

```
+))))))))))))))))))))),
                             +))))))))))))))))))),
                                                        +)))))))))))))))))),
* Determine acquisition *
                             * Initiate purchase *
                                                      * Check incoming
                                                   *)))))>* material against *
* needs; check for
                     *)))))))>* orders, documents
                                                   * requested material*
* duplications
                         * requests, execute *
.))))))))))))))))))-
                             * all paper work for *
                                                       .))))))))))))))-
                     * acquisition
                                             +))))))))))))))))),
                     .))))))))))))))))-
                                                 * Take action to re-*
                                         * cover undelivered *
                                         * items
                                         .))))))))))))))-
                                         +))))))))))))))))),
                                         * Generate accession*
                                         * lists announcing *
                                         * material received *
                                         .))))))))))))))-
                                         +)))))))))))))))))),
                                         * Route material for*
                                         * input into system *
                                         .))))))))))))))-
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The functions of the reference unit would include cataloguing, classification, indexing and the preparation and distribution to users of an accession list of books and similar materials received during a given period. It would also include dissemination of other information through:

-Circulation of periodicals, photocopies of articles, booklets, etc.;

- Announcements of newly arrived material;
  - -Reproduction of certain source materials of general interest received from time to time.

## 2. Research and analysis section

Decision-making levels in importing agencies usually keep abreast of market developments through newspapers, journals and other technical publications of a diverse nature. They also gather

See Atherton, P. Ibid p. 131.

intelligence from contacts with sellers's agents, other buyers and other informal channels. However, on the one hand, the volume and the sources of information have grown very much in almost all areas of business activity and, on the other hand, day-to-day decisions and actions take up most of the operating manager's working day, so that "the demands on the decision-maker's time always exceed his capacity". A major task of the research and analysis unit would be to keep management abreast of the relevant developments in the international market for commodities/products of interest. Thus, the preparation of daily reports of abstracts and monthly reviews or commodity notes would be some of the basic tasks of the research and analysis section. Other tasks could include the preparation of occasional papers on long-term trends in supply-demand of relevant commodities/products, structural changes in a market, any innovative buying or selling techniques being adopted in the international trading environment, major trade policy shifts taking place in any country, and so on. It would also provide analytical support to operating divisions with studies in other areas, to assist in optimal decision-making.

## C. <u>Staff Qualifications</u>

The expertise required for manning the reference section and the research and analysis section of the market information and intelligence unit in an importing organization would be different and would have to be appropriate to their designated functions.

## 1. Reference section

The professional expertise for the reference section would have to be the same as is required for running a small technical library. Thus, the person in charge of the section would, preferably, be a person with some training background in library or information sciences. He/she should be acquainted with the practices, procedures and techniques of information management. Depending on the size of the section, this person could be assisted by one or two additional staff, who may not have formal training in library sciences but should have an aptitude for the type of work involved.

#### 2. Research and analysis section

The types of expertise required for this section will also relate to the nature of its primary and secondary tasks. Expertise in economics would be useful for the analysis of information and its presentation in the form of daily reports of abstracts, market reviews and commodity notes. However, to be able to also cope with secondary tasks and at the same time to keep the staff contingent small, it would be desirable to constitute an inter-disciplinary group, or "all purpose team". The group may include persons with background in economics, statistics, business management and operations research. In highly specialized and specific procurement organizations (like say, medical

See Igoransoff, H., Corporate Strategy, Pelican Library of Business Management, McGraw Hill Inc. 1965, p. 15.

supplies) a discipline appropriate to the nature of import activity would be of advantage (e.g. a pharmacist). Similarly, in such organizations as may be responsible for imports of machinery (e.g. mining or transport equipment), the group should include a professional engineer with an appropriate background in the area concerned.

## D. Equipment and facilities

The efficient operations of a market information and intelligence unit will require proper facilities and equipment. The aim should be to make do with what is readily available locally and being used by other library and information services in the country. Being part of a commercial entity, it is likely that some of the facilities may already be available to other units in the organization, for example, a telephone. It can be presumed that the information and intelligence unit will be provided with one. It is also possible that the organization will already have a telex and/or a telefax facilities. The unit should be in a position to make use of these for its work. The following is a somewhat detailed list of the facilities and equipment that the unit will ideally need and should have access to. However, it is recognized that in many developing countries, where the procurement turnover of many importing agencies may be somewhat limited, the equipment that the entity would be in a position to acquire will also be limited. The list given below, should, therefore, be treated as exhaustive.

- A telephone;
- A telex machine;
- A telefax machine (or fax card in the microcomputer referred to below);
- A teleprinter machine (wherever feasible and appropriate, to link up to specialized commodity and other information services);
- A photocopying machine;
- A duplicating machine (if materials must be reproduced in large numbers);
- A microfiche reader-printer (if microfiche-based materials are to be acquired, or if documents are microfiched by the organization itself);
- Special library accessories, fixtures and furniture (book-shelves, catalogue card files, filing cabinets, reading tables, etc.);
- Standard office equipment (desks, calculators, typewriters, etc.);
- A microcomputer, if feasible (this would replace the addressing machine, catalogue card files, calculators, typewriters and possibly as mentioned above the telefax machine, and would

facilitate access to important information available through international data bases. Many of the organization's own files, accounting system, etc. could also be placed on the microcomputer). The microcomputer (IBM PC compatible) should include any of the following accessories:

- (i) printer;
- (ii) modem (for access to international databases by direct telephone line);

(iii)fax card (to replace the telefax machine, if convenient). In selecting the equipment, the question of costs versus benefits will have to be carefully evaluated. The endeavour should be that office equipment sought is of more or less the same standard as may generally be in use in other institutions in the country with

similar activities or needs. Maintenance and servicing should be prime considerations in selecting the equipment.

E. Relationship with other divisions within the agency and with outside institutions

The information and intelligence unit of an importing agency has a supportive role. This is the basic fact which should underlie its relationship with other operating and service divisions of the importing entity. Essentially, the edifice of this relationship has to be the provision of an excellent service without appearing to be dogmatic or domineering. The reference section should realize that the kinds of information sources that will be sought by users will tend to be those easy to use and known personally, often regardless of the quality of the information. A good reference information person, however, can gain the confidence of the user if, along with the specific source sought, he/she produces other sources on the same subject containing better quality information or information of a supportive and a supplementary nature. It must be remembered that, unless someone who wants information is fairly sure of getting it without too much trouble or loss of time, that person is more likely to do without it if it is not essential. It is the confidence in the credibility of an information service which is a main condition for its full use.

Apart from establishing pleasant and cordial relationships with other divisions within the agency, the reference section will have to do likewise with outside agencies. As was mentioned before, no special reference unit or library can or should seek to achieve self-sufficiency in the matter of information acquisition. An important task of the unit is to acquire knowledge of outside sources of information and then develop relationships with outside agencies on a reciprocal basis to mutual benefit. These sources of information should generally include public trade information services, chambers of commerce, embassies, trade and/or industry associations, international agencies, the publishers of trade journals, academic and research

# institutes, public enterprises, etc.<sup>22</sup>

Most of these will have information/publications units. The person in charge of the reference unit should make an effort to build up a close working relationship with counterparts in these organizations.

The research and analysis section should also aim to win over and influence line managers within the organization, not on the basis of pretensions of superior knowledge but through quality of analysis and research in a spirit of co-operation.

Line managers tend to base their decisions on personal hunches or opinions, trade gossip and the like. This attitude can be gradually changed to more seasoned decisions through high quality research and analysis and through effective presentations as aids to decision-making. The research and analysis staff has to realize, however, that there are no crystal balls or magic formulas, no panacea for managements' problems. There is no substitute for sound judgment or for the orderly mental process.

Thus, the relationship with other divisions must be close and cordial unless the information section is to be left in isolation.

Another good reason for developing a close link is that a large volume of useful information is often accumulated in the division that directly handles procurement. This information, stored in the memory of individuals, is generally lost to others. A close co-operation with other divisions is a way of ensuring that this data is used and that the output of the research and analysis section contains all the necessary elements to effectively support improved decision making.

Likewise, the research and analysis section should develop the same close relationship with a number of outside organizations as mentioned earlier in the case of the reference section. A large volume of research and analysis is carried out by government departments, academic institutions, associations of trade and industry, international institutions, etc. Close contact and co-operation with them would help this section to discharge its functions effectively while reducing the strain on its own manpower resources.

Management, for its part, should ensure that the research and analysis section is involved in the decision-making process on an advisory basis, and for this make the required administrative provisions. To be effective, the section will need to be invested with appropriate status. For example,

Armstrong, Alan, A Company Information Centre/Library, in Handbook of Industrial Marketing and Research. Chief Editor Maclean, Ian. Kluwer-Harrap Handbooks, London 1975, pp. 3.1 - 203.

Maclean, Ian in Handbook of Industrial Marketing and Research, Ibid., pp. 3.2 - 101

management should ensure that, where possible, staff from the information unit participates in decision-making meetings and in negotiations with suppliers from abroad. In this way, the unit's staff will be in a better position to understand the information requirements of the organization and to develop a close working relationship with other departments.

#### STAFF TRAINING

#### A. Reference Section

The training needs of the staff of the Reference Section are in line with its functions, as referred to earlier. The section should develop a systematic approach to its various areas of activity: collection, processing, storage, retrieval and dissemination.<sup>24</sup>

Accordingly, the areas in which training may be required are, in very broad terms, as follows:

- -The role and purpose of the reference section in an import procurement agency; introduction to library and documentation techniques; their role in the context of the functions of the reference section;
- Sources of information;
- Acquisition policy and procedures;
- Processing

Classification and filing of documentation

Cataloguing: purpose and different approaches

Indexing and subject access procedures;

- Storage considerations;
- Retrieval and dissemination of information;
- Microcomputer applications in the above areas.

## B. Research and Analysis Section

#### The staff of the Research and Analysis Section should have academic training in the various

Atherton, Pauline, op. cit. p. 86

disciplines mentioned previously. However, by itself, this would be inadequate. For one thing, import management has only received attention relatively recently. Even in the industrialized countries, procurement from international markets is merely touched upon as one more supply source. In the developing countries, supply

management of imported goods is as yet much neglected. It would appear, therefore, that the training needs would centre around this area. The staff would also need orientation on the specific issues involved in other aspects of import operations and techniques. Finally, depending on the responsibilities of the importing organization, the staff would have to study in detail and in depth the international market structure of specific commodities or products, sources of supply, patterns of trade, price trends, etc..., as well as sources and uses of information. The training needs may, therefore, be listed as follows:

- Supply management, principles and applications;
- International procurement;
- Import operations and techniques;

-International market structure of specific commodities/products;

- Sources and uses of information;
- Microcomputer applications in information work.

The emphasis on procurement management and international buying is important inasmuch as without such an exposure the staff may not collect relevant information and analyze it in a way as would be useful to different management levels. It is only when they are exposed to the various facets of decision-making in import management that they can bring to bear the expertise of their respective disciplines on the problems and issues in a relevant manner.

#### C. Procurement Divisions

The most important element in an information and intelligence system is the user. The sole justification of information and intelligence collection, analysis and dissemination is to increase the awareness of decision makers concerning the current situation and prospective trends of a large number of variables which enter the decision making process. Information received through formal and informal channels is an ingredient which enters every phase of import procurement, from the stage of planning to the final distribution of a commodity to the users. However, there is an important difference in the two ways in which information is generally put to use. One approach, the more common, is the use of informal and/or formal information

implicitly and intuitively. The other is to use it more explicitly. The latter approach is discipline-oriented and forces the use of information in a logical framework so that the basis of a decision is clear not only to the one who takes the decision but also to others who may not be directly involved. Later, evaluation also becomes easier as it can be seen on what went wrong and why. This is useful for future decision making, so that mistakes made and incorrect inferences drawn can be rectified.

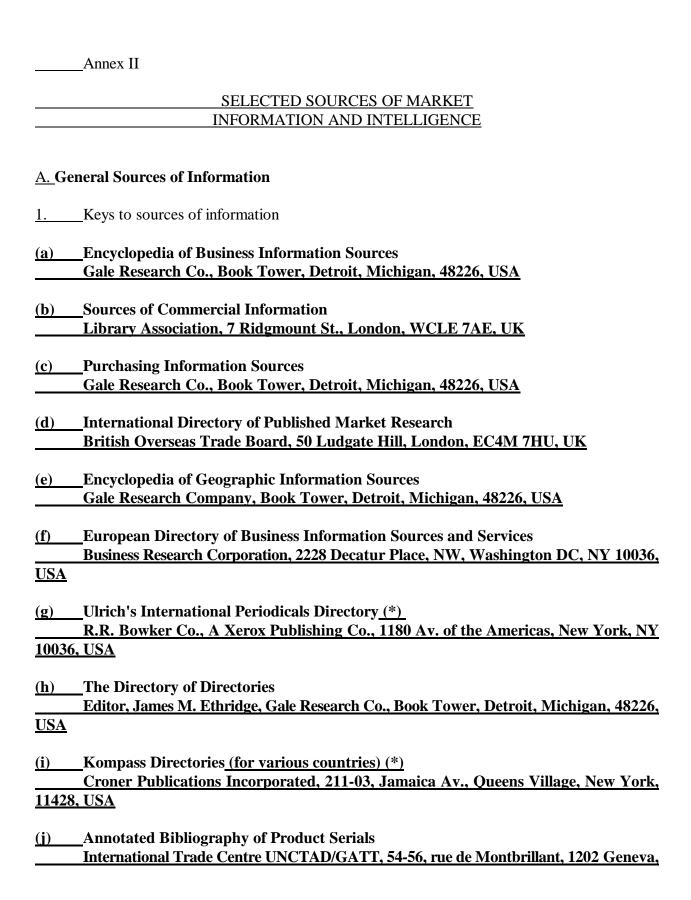
There is no simple way in which operating levels can be exposed to the explicit methods and uses of information in decision making. The role of information is pervasive. Just as mathematics is the basis of all physical sciences, information is the basis for all the decision making that is involved in import procurement. Most procurement officers/managers in importing agencies have learnt procurement techniques through a process of learning by doing. It would be useful, therefore, to have the same type of orientation training for procurement officers as has been suggested for the staff of the Research and Analysis Section. For the latter, training should enable them to look for pertinent data, information and intelligence, as well as appropriate analytical tools relevant to the various areas of procurement decision making. For the operating level, training should - apart from providing a formal exposure to special problems in import procurement and techniques - also enable them to appreciate the value and use of information in the different facets of the process of procurement planning and implementation. It would also make them appreciate the use of explicit decision rules as against implicit subjective and intuitive approaches to decision making.

-	Annex I
	CHECK-LIST OF INFORMATION
	REQUIREMENTS AND SOURCES

page 1 annexe 1

# page 2 annexe 1

## page 3 annexe 1 - à reprendre de l'original



## **Annotated Bibliography of Country Serials** International Trade Centre UNCTAD/GATT, 54-56, rue de Montbrillant, 1202 Geneva, Switzerland -----Also available through international online and/or CD.ROM databases (l) PROMT, Predicasts Overview of Markets and Technology(\*) Predicasts Incorporated, 1101, Cedar Ave. Cleveland, Ohio, USA (m) Irregular Serials and Annuals (\*) R.R. Bowker Co., A Xerox Publishing Co., 1180 Av. of the Americas, New York, NY 10036, USA (n) Books in Print (\*) R.R. Bowker Co., A Xerox Publishing Co., 1180 Av. of the Americas, New York, NY 10036, USA 2. Reference material **Yearbook of International Trade Statistics** United Nations, New York, USA **Commodity Trade Statistics (\*) (b) United Nations, New York, USA Price Prospects for Major Primary Commodities** World Bank, 1818 H. Street, NW, Washington DC, 20433, USA **Sources of Commodity and Product Price Information** International Trade Centre UNCTAD/GATT, 54-56, rue de Montbrillant, 1203 Geneva, **Switzerland Growth of World Industry United Nations, New Yrok, USA (f) Commodity Review and Outlook** FAO, Via delle Terme di Caracalla, 00100 Rome, Italy (g) Commodity Year Book

**Switzerland** 

	Commodity Research Bureau, One liberty Plaza, New York, NY 10006, USA
(h) Switz	A Guide to World's Foreign Trade Statistics <u>International Trade Centre UNCTAD/GATT, 54-56, rue de Montbrillant, 1202 Geneva, zerland</u>
(i) Mon	Bibliography of Publications in English on Import Operations and Techniques International Trade Centre UNCTAD/GATT (ITC/DIP/INF/23), 54-56, rue de tbrillant, 1202 Geneva, Switzerland
(j) Switz	Annotated Bibliography of Country SerialsInternational Trade Centre UNCTAD/GATT, 54-56, rue de Montbrillant, 1202 Geneva, zerland (1978)
	Annotated Bibliography of Product Serials <u>International Trade Centre UNCTAD/GATT, 54-56, rue de Montbrillant, 1202 Geneva, zerland (1977)</u>
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	Also available through international online and/or CD-ROM databases (l) I T C RE List International Trade Centre UNCTAD/GATT, 54-56, rue de Montbrillant, 1202 Geneva,
Switz	<u>zerland</u>
<u>(m)</u>	Transguide: A Guide to Sources of Freight Transportation Information Reeble Associates, Greenwich, CT 06830, USA
3.	Sources relevant to assessment of the general economic environment
(a)	World Development Report World Bank, 1818 H. Street, NW, Washington DC, 20433, USA
(b)	OECD Economic Outlook OECD, 2, rue André-Pascal, 75775, Paris, France
(c)	World Economic Survey United Nations, New York, USA
<u>(d)</u>	World Outlook Economic Intelligence Unit, The Economist Publications, 40 Duke Street, London, W1A

## <u>1DW, UK</u> Financial Times (daily newspaper) Bracken House, 10 Cannon Street, London, EC4P 4BY, UK Wall Street Journal (5/week) **(f)** Dow Jones and Company, Inc. 22 Cortlandt St., New York, NY 10007, USA \_Sources of Information for Specific Commodities/Products 1. Minerals \_Daily: **Tax Report** (a) Tax Report Ltd. Knio Baba, 1-4 Sotokanda, 2 Cheme, Chiyoda, Tokyo, Japan **(b) Japan Commerce** Tanaka-yaesu Building, 1-5-15 Yaesu, Chuo-ku, Tokyo, Japan \_Bi-weekly: (a) Metal Bulletin \_Weekly: **Mining Journal** 15, Wilson Street, Mooregate, London, EC2 MTR, UK **(b) Skillings Mining Review** Suite 700, 202 West Superior St. Duluth, Minnesota, USA Monthly: \_Metal Bulletin (a)

	(d) Industrial Minerals
	Metal Bulletin Book Ltd. Worcester Park, Surrey, KTY 7HY, UK
	(e) Mines, Metals and Fuels
	US Bureau of Mines, Washington DC, USA
	A 1
	Annual <u>:</u>
	(a) Mining Journal
	15, Wilson Street, Mooregate, London, EC3 MTR, UK
	13, Wilson Street, Woorlegate, London, ECS WITK, CK
	(b) Metal Bulletin Handbook
	Metal Bulletin Book Ltd., Worcester Park, Surrey, KYY 7HY, UK
	(c) Tax Report
	Tax Report Ltd., Knio Baba, 1-4 Sotokanda, 2 Cheme, Chibyoda, Tokyo, Japan
1	(d) Mineral Yearbook
	US Bureau of Mines, 2401 E St., NW, Washington, Dc, 20241, USA
	(e) Mineral Facts and Problems
1	US Bureau of Mines, 2401 E St., NW, Washington DC, 20241, USA
	(f) Mineral Commodity Summaries
	US Bureau of Mines, 2401 E St. NW, Washington DC, 20241, USA
	(a) Mining Intermetional Vessilians
	(g) Mining International Yearbook  Einongial Times, Presken House, 10 Connen Street, London, EC4D 4DV, UK
	Financial Times, Bracken House, 10 Cannon Street, London, EC4P 4BY, UK
_	Irregular publications
	(a) Reports on Metal and Mineral Economics
	Roskill Information Service, 14 Great College St., London, WC1N 2LF, UK
2.	Metals - Ferrous and non-ferrous
	Daily <u>:</u>
	(a) Reuter's Teleprinter Service on Commodity Information
	85, Fleet St., London, EC4 P4AJ, UK

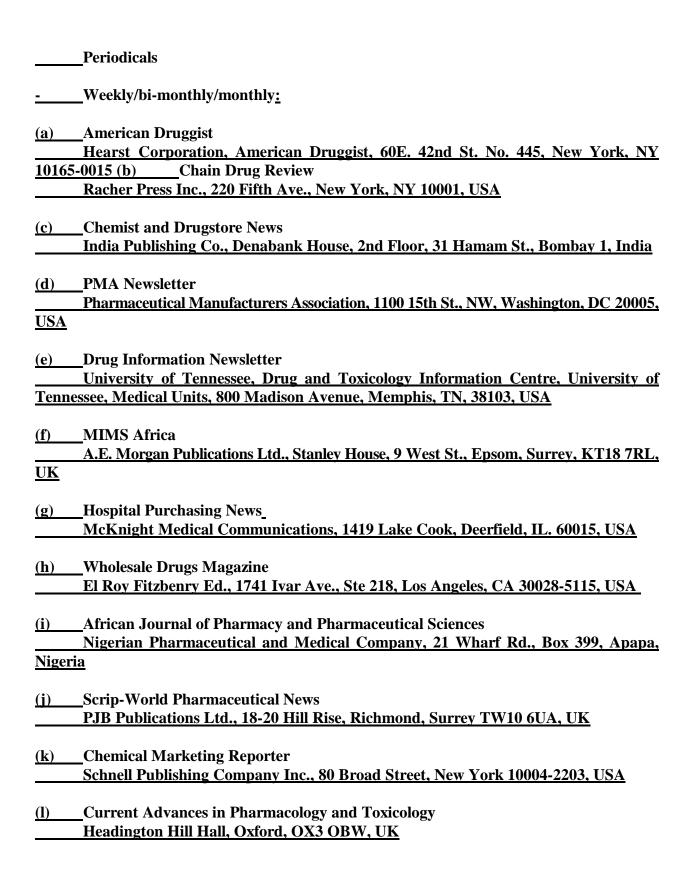
<b>(b)</b>	Daily Commodity Quotations
	O.K. Printing Press Ltd., 92 Queen's Road, Wanchai, Hong Kong
(a)	The Financial Times
<u>(c)</u>	Bracken House, 10 Cannon Street, London EC4P 4BY U.K.
	Bracken House, 10 Camion Street, London EC41 4B1 U.K.
	Bi-weekly <u>:</u>
-	DI-weekiy <u>.</u>
	(a) Metal Bulletin
	Metal Bulletin Book Ltd., Worcester Park, Surrey KTY 7HY, UK
	Weekly <u>:</u>
	(a) Metals Week
	McGraw Hill Publications, 1221 Av. of the Americas, New York, NY 10020, USA
<u>(b)</u>	Mining Journal
	15, Wilson St., Mooregate, London, EC2 MTR, UK
(.)	To a sea No. A sel Transaction
<u>(c)</u>	Japan Metal Journal Honda Building, 10-10 Temma, 4 Chome Kita-ku, Osaka 530, Tokyo, Japan
(d)	Metal Market Report (private circulation to clients
<u>(u)</u>	Rudolf Wolf and Co. Ltd., Plantation House 10-15, Mincing Lane, London, EC3M
3DB.	
_	Fortnightly:
	rorungnuy <u>.</u>
	(a) Continental Iron And Steel Trade Report
	Den Haag, Post Bus 168, Netherlands
-	Monthly:
	(a) Metal Monitor
	Commodities Research Unit, 31 Mount Pleasant, London WC1, UK
<b>(b)</b>	Metal Bulletin
	Metal Bulletin Book Ltd., Worcester Park, Surrey, KTY 7HY, UK - Annual:
	(a) Metal Bulletin Handbook
	Metal Bulletin Books Ltd., Worcester Park, Surrey, KT4 7HY, UK
<i>(</i> L.)	
<b>(b)</b>	Metal Statistics

	Fair Child Publications, 7 East 12th St., New York, NY 10003, USA
(c)	_Metal Statistics Metallgesellschaft, 6000 Frankfurt-am-Main, Federal Republic of Germany
(d)	_Metal Week's Price Book McGraw Hill Publications, 1221 Av. of the Americas, New York, NY 10020, USA
(e)	_Iron and Steel Works of the World Metal Bulletin Books Ltd, Worcester Park, Surrey, KT4 7HY, U.K.
<u>(f)</u>	_Non-Ferrous Metal Works of the World Metal Bulletin Ltd., Worcester Park, Surrey KT4 7HY, U.K.
3.	_Chemicals and allied products
	_Daily <u>:</u>
Ko	_Daily Commodity Quotations O.K. Printing Press Ltd., 92 Queen's Road, Wanchai, Hong ong
	_Weekly <u>:</u>
	(a) Chemical Marketing Reporter 100 Church St., New York, NY 10007, USA (b) European Chemical News IPC Business Press, Dorset House, Stamford St., London, SE1 9LU, UK
(c)	_Japan Chemical Week Chenical Daily Co. Ltd., 19-16, Shibaura, 3 Chome, Minatu-ku, Tokyo, Japan
(d)	_Chemical Week Miller Freeman Publications, 290 Fillmore St., Denver, Colorado, 80206, USA
<u>(e)</u>	_Chemical and Engineering News American Chemical Society, 1155, 16th St., Northwest, Washington DC, USA
	_Monthly <u>:</u>
	(a) Chemical Purchasing

	Myers Publishing Co., Inc., 381 Park Ave., South, New York, NY 10016, USA
<u>(b)</u>	Chemical Producer Prices and Price Indexes US Bureau of Labor Statistics, Washington DC, USA
	Annuals/irregulars
(a) <u>UK</u>	Chemical Industry Yearbook IPC Industries Press Ltd., Quandrant House, the Quadrant, Sutton, Surrey, SM2 SAS,
<u>(b)</u>	Chemical Company Profiles: Western Europe Chemical Data Services, Room 905, Quadrant House, The Quadrant, Surron, Surrey, SAS, UK
(c)	Annual Review of the Chemical Industry UN Economic Commission for Europe, Palais des Nations, Geneva, Switzerland
(d) Mina	Japan Chemical Directory <u>The Chemical Daily Company Ltd., Yoskizawa Bldg., 31-7, Shinhashi 4, Chome, tto-ku, Tokyo, 105, Japan</u>
<u>(e)</u>	Buyers' Guide: Chemicals Society of Chemical Industry, 14 Belgrave Square London, SWIX 8FS, U.K.
<u>4.</u> -	Fertilizers and raw materials for fertilizers_ <sup>25</sup> Daily:
	(a) Fertilizer Edition c/o Room No. C-1106, Casa de Aioi No. 22-6, 2 Chome, Tsukuda, Chuo-ku, Tokyo, Japan
(b)	Fertecon Telex Service Fertilizer Economic Studies Ltd., 150 Buckingham Palace Road, London, SW1W 9TR, UK
	Weekly:
(a)	Green Market Report  McGraw Hill Publications, 457, National Press Building, Washington DC, 200454, USA

<sup>&</sup>lt;sup>25</sup> 25/ Sources of information mentioned for chemical and allied products are also relevant, at times, for fertilizers and raw materials for fertilizers.

<u>(b)</u>	Fertilizer Market Bulletin
	FMB Consultants, 12/14 Hill Rise, Richmond, Surrey TW10 6UA, UK - Monthly:
<u>(a)</u>	Fertilizer International
-	British Sulphur Corporation Ltd., 23, Upper Block St., London, W1Y 2BB, UK
<u>(b)</u>	World Fertilizer Review
	International Super-phosphate Manufacturer's Association, Paris, France
(c)	Farm Chemicals
	Meister Publishing Co., 37841, Enclid Ave., Willoughby, Ohio, 44094, USA
	Every two months:
<u>(a)</u>	Nitrogen
ī	British Sulphur Corp. Ltd., 23, Upper Block St., London, W1Y 2BB, UK
<u>(b)</u>	Phosphorous and Potassium
	British Sulphur Corp. Ltd., 23, Upper Block St., London, W1Y 2BB, UK
(c)	Sulphur
	British Sulphur Corp. Ltd., 23, Upper Block St., London, W1Y 2BB, UK
	Annual <u>:</u>
<u>(a)</u>	Fertilizer Review
ī	FAO, Via delle Terme di Caracalla 00100, Rome, Italy
(b)	Prices of Agricultural Products and Fertilizers in Europe
	FAO, Via delle Terme di Caracalla, 00100 Rome, Italy
(c)	World Fertilizer Atlas
	British Sulphur Corp. Ltd., 23, Upper Block St., London, W1Y 2BB, UK
(d)	Fertilizer Yearbook
	FAO, Via delle Terme di Caracalla, 00100 Rome, Italy
(e)	International Fertilizer Review
	McGraw Hill Publications, 457, National Press Building, Washington DC, 200454, USA
<u>5.</u>	Drugs and pharmaceuticals



-	_Irregulars/annuals <u>:</u>
<u>(a)</u>	_Indian Pharmaceutical Guide Pomposh Publications, 506, Ashok Bhawan, 93, Nehru Place, New Delhi-110019, India
(b) some l	_Directory of Sources of Supply of Pharmaceutical Chemicals, their Intermediates and Raw Materials <u>- Included in the UNIDO list (limited distribution)</u> <u>UNIDO, Vienna, Austria</u>
<u>(c)</u>	_Health Service Buyers Guide Sell's House, 55 High Street, EPSOM, Surrey, KT19 8DW, England (d) Essential
Drugs	Price List UNICEF Procurement Centre, 2100 Copenhagen, Denmark
(e)	_Keithwood Directory of Medical Supply Dealers Keithwood Company, 6835, Greenway Av. Phil, PA 19142, USA
<u>(f)</u>	_World Trade Index Eagle Publishing Company, 63b Lansdowne Place, Hove, BN3 1FL, East Sussex, UK
(g)	Scrip Directory of World Wide Pharmaceutical Companies PJB Publications Ltd., 18-20 Hill Rise, Richmond Surrey TW10 6UA, UK
(h)	_Martindale: The Extra Pharmacopeia Pharmaceutical Press, 1 Lambeth Meh Street, London SE1 7JN, UK
6.	_Pulp and paper
	_Weekly <u>:</u>
<u>(a)</u>	_Paper Trade Journal
(b)	Lockwood Trade Journal Co. Inc., 551 Fifth Ave., New York, NY 10017, USA  Pulp and Paper Week  Miller Freeman Publications Inc. 500 Horward St., San Francisco, Cal. 94105, USA
	_Monthly:
(a) 94105	_Pulp and Paper International <u>Miller and Freeman Publications Inc., 500 Howard Street, San Francisco, California,</u> USA
(b)	

	MG Gobert, 9 rue Lagrange, 75005 Paris, France
(c)	_Paper Age Walden-Moth Corp., 466, Kinderkamack Road, Oradel, New Jersey, 07649, USA
(d)	_Pulp and Paper Twin Coast Newspapers, Incor., 99 Wall St., New York, NY 10005, USA
(e) USA	_Paper and Twine Journal Paper and Twine Journal Publishing Co. Inc., 1860 Broadway, New York, N.Y. 10023
	_Annuals <u>:</u>
(a) USA TN9	International Pulp and Paper Directory  Miller Freeman Publications Inc., 500 Howard Street, San Francisco, California, 94105  (b)International Paper Directory  Ben Business Information Services Ltd., P.O. Box 20, Sovereign Way, Tonbridge, Kental RG, UK
<u>7.</u>	_Forestry products
	_Monthly:
<u>(a)</u>	_Plywood and Panel World Plywood and Panel Inc., McDobough St., Montgomery, Al. 36197, USA
<u>(b)</u>	Industria del Legno e del Mobile Societa Edizioni Techniche Arredamento, Corso Magenta, 96, 20123 Milan, Italy
(c)	_Malaysian Timber Industry Board Jalan Ampang, P.O. Box 887, Kuala Lumpur, Malaysia
(d)	Timber Bulletin for Europe FAO, Via delle Terme di Caracalla, 00100 Rome, Italy
<u>-</u> (a)	_Annual <u>:</u> _Yearbook of Forestry Products _FAO, Via delle Terme di Caracalla, 00100 Rome, Italy
8.	Agricultural commodities/products

	(i) Tea and coffee
	Daily <u>:</u>
(a)	Daily Market Report New York Coffee and Sugar Exchange, 79 Pine St., New York, NY 1005, USA
	Weekly <u>:</u>
<u>(a)</u>	Weekly Review of the Market New York Coffee and Sugar Exchange, 79 Pine St., New York, NY 10005, USA
(b) EC4	Tea Market ReportTea Brokers' Association of London, Sir John Lyon House, 5 High Timber St., London, 3LA, UK
	Monthly <u>:</u>
(a) 3LA,	International Tea Committee (statistical summary) International Tea Committee, Sir John Lyon House, 5 High Timber St., London, EC4V UK
(b) (c)	Tea and Coffee Trade Journal 18-15 Francis Lewis Boulevard, Whitestone, New York, NY 11357, USA Assam Review and Tea News Assam Review Publishing Co., 29, Waterloo St., Calcutta, 700069, India
	(ii) Sugar
	Every two weeks <u>:</u>
(a)	International Sugar Report FO Licht GMbH, P.O. Box 1220, 2418 Ratzelung, Federal Republic of Germany
	Monthly <u>:</u>
(a)	Statistical Bulletin International Sugar Organization, 28 Haymarket, London, UK
(b) -	Press Summary International Sugar Organization, 28 Haymarket, London, UK Quarterly:

(a)	Sugar & Sweetner (outlook and situation) US Department of Commerce, Washington DC, USA
	(iii) Cereals
	Daily <u>:</u>
(a)	Financial Times Bracken House, 10, Cannon Street, London, EC4P 4BY, UK
	Weekly <u>:</u>
(a) <u>5LF</u> ,	The London Corn CircularDittonfern Limited, 54 Wentworth Crescent, Ash Vale, Nr. Aldershot Hants, GU12UK
	Monthly <u>:</u>
(a) of Ag	World Grain Situation (16 issues) Foreign Agricultural Service, Information Service (Room No. 4644-5), US Department griculture, Washington D.C., 20250, USA
<u>(b)</u>	International Financial Statistics The International Monetary Fund, Washington D.C, 20433, USA
(c)	Monthly Commodity Price Bulletin UNCTAD, Palais des Nations 1211, Geneva 10, Switzerland
(d) Wash	Wheat Situation <u>Economics, Statistics and Cooperative Service, US Department of Agriculture, nington D.C. 20250, USA</u>
(e) Wash	Rice SituationEconomics, Statistics and Cooperative Service, US Department of Agriculture, nington D.C. 20250, USA
<u>(f)</u>	Agribusiness Worldwide SOSLAND PUBLISHING Co., 9000 West 67th Street, Merriam, Kansans 66202, USA
-	_Annual <u>:</u>

<u>(a)</u>	_World Commodity Outlook
(b)	The Economist Intelligence Unit, 40 Duke Street, London W1A 1DW, UK Commodity Yearbook
	COMMODITY Research Bureau, 1 Liberty Plaza, New York, NY 10006, USA
	(iv) Edible oils and fats
	_Daily <u>:</u>
	_Daily Commodity Quotations
	O.K. Printing Press Ltd., 92 Queen's Road, Wanchai, Hong Kong
	_Weekly <u>:</u>
(a)	_Oil World Digest
	ISTA Muelke & Co., P.O. Box 900803, 2100 Hamburg 90, Federal Republic of
Germ	<u>aany</u>
<u>(b)</u>	_Market Report
	Matthes and Porton B.V. 75, Coolsingel, Rotterdam, Netherlands
	_Monthly <u>:</u>
(a)	Fats and Oils Situation
	US Department of Agriculture, Washington DC, USA
<u>(b)</u>	_Monthly Bulletin of Statistics
	United Nations, New York, USA
	_Semi-monthly:
(a)	Oils and Fats International
	International Trade Publications Ltd., Queensway House, 2 Queensway, Redhill,
Surre	vy RH1 1QS, UK
<u>(b)</u>	_Feuille d'information du COI
	Conseil Oleicole International, Juan Bravo 10-2, Madrid, Spain
_	_Annual:

(a)	_FAO TRADE YEARBOOD Food and Agricultural Organization, Via Delle Terme di Caracalla, 00100 Rome, Italy
	_Oils and Fats - International Directory International Trade Publications Ltd., Queensway House, 2 Queensway Redhill, Surrey  10S, UK
9.	_Manufactured products for final consumption
	(i) Food products & beverages
	_Weekly <u>:</u>
(a)	_The Grocer Williams Reed Ltd., 5 South-Wark St. London SE1 1RO, UK
<u>(b)</u>	_Foodnews The Foodnews Co., 35 Montpelier Vale, Blackheath Village, London SE3 OTJ, UK
(c)	Report on Food Markets American Institute of Food Distribution Inc. 28-06 Broadway, Fair Law, NJ 07410,
<u>USA</u>	
(d)	The Public Ledger_(commodity week)UK Publications Ltd. Pennhouse, Penn Place, Pickmansworth Herts, WD3 INS, UK
<u>(e)</u>	_Weekly Digest American Institute of Food Distribution Inc. 28-06 Broadway, Fair Law, NJ 07410,
<u>USA</u>	
<u>(f)</u>	Washington Food Report American Institute of Food Distribution Inc. 28-06 Broadway, Fair Law, NJ 07410,
<u>USA</u>	Tamerican Individue of a dod Distribution med 20 00 Dictar in 17 and David 110 07 120
	_Monthly <u>:</u>
(a)	Beverage World Keller Publishing Corp., 747, Third Av. New York, USA
<u>(b)</u>	_World Drinks Report Foods & Drinks Reports Ltd., P.O. Box 1, Orston, Nothingham, NG 13 9QP, UK
<u>(c)</u>	_Marché International des Vins et Spiritueux

	Direction des produits agro-alimentaires du Centre français du commerce extérieur, 10
Aver	nue d'Iena, 75783, Paris Cedex 16, France
-	Bimonthly:
<u>(a)</u>	Beverage Industry
	Magazines for Industry, 747 Third Av. New York, USA.
	Quarterly <u>:</u>
<u>(a)</u>	Selling Prices of Crop Products Statistical Office of the European Community, rue de la Loi 200, B-1040, Brussels
Belg	
<u>(b)</u>	National Food Review United States Department of Agriculture, Washington DC, USA
	Annual <u>:</u>
<u>(a)</u>	Wine-Current Situation FAO. Via delle Terme di Caracalla, 00100 Rome, Italy
	(ii) Textiles
	Daily <u>:</u>
(a)	Daily News Record Fairchild Publications Inc., 1E 12th St., New York, NY 10003, USA
(b)	Daily Commodity Quotations O.K. Printing Press Ltd., 92, Queen's Road, Wanchai, Hong Kong
<u>-</u>	Bi-weekly <u>:</u>
(a)	Inside Textiles Point Publishing Co., P.O. Box 1309, Point Pleasant New Jersey, NJ 18742, USA
	Monthly:
<u>(a)</u>	Textile Month  World Textile Publications 76 Kirkgate W Vork RD1 1TR UK

<u>(b)</u>	Apparel International Clothing and Footwear Institute - 71, Brushfield Street, London E1611, England
(c)	Textile Asia
	Business Press Ltd., California Tower, 11-F, 30-32 d'Aguillar St., Hong Kong
(d)	Chemiefasern Textilindustrie
	Deutscher, Fachverlag GMbH, Schumannstrasse 27, Postfach 100606, 6000
<u>Fran</u>	kfurt-am-Mein, Federal Republic of Germany
(e)	Textile World
	McGraw Hill Inc., 1175, Peachtree Road, Atlanta, Georgia, 30361, USA
	Quarterly <u>:</u>
(a)	International Textile Bulletin
	International Textile Service, Kesslerstrasse 5, 8952 Schlieren/Zurich, Switzerland
	Annual <u>:</u>
(a)	International Textile Manufacturing
	International Textile Manufacturers Federation, Am Schanzengraben 29, Postfach
<u>8039</u>	, Zürich, Switzerland
<u>10.</u>	Industrial machinery <sup>26</sup>
-	Daily <u>:</u>
(a)	Chemical Age
<u>(u)</u>	Morgan-Grampian (Publishers) Ltd., 30 Calderwood St., Woolwich, London, SE18 6QR, UK
( <b>b</b> )	Business Week
<u>(b)</u>	McGraw Hill Publications, 1221 Ave. of the Americas, New York, NY 10020, USA
	Wicoraw Tim Fuolications, 1221 Avc. of the Americas, New Tork, IVI 10020, USA
(c)	Japan Economic Journal
	International Weekly Edition of Nihon Keizai Shimbun, 1-9-5 Otemachi, Chiyoda-ku, Tokyo
100,	<u>Japan</u>
26	A number of product periodicals previously mentioned cover also information on

A number of product periodicals previously mentioned cover also information on production equipment and machinery and components and parts for the corresponding industry/sector.

(d)	Electronic News McGraw Hill Publications, 1221 Ave. of the Americas, New York, NY 10020, USA
(e)	Allgemeine Papier - Rundshan P. Keppler Verlag GMbH and COKG, Industriestra Be2, 5056 Hensetamm, Germany
<u>(f)</u>	Iron Age Chilton Co., P.O. Box 2040, Radnor, PA 19089, USA
	Fortnightly <u>:</u>
(a)	Chemical Engineering McGraw Hill Publications, 1221 Ave. of the Americas, New York, NY 10020, USA
(b) Germ	Woshensblatt für Paper Fabrikation Verlag Gunter Spaib, Bismarkring 4, P.O. Box 180, D/79 Biberac 1, Federal Republic of tany
(c)	Implement and Tractor Intertec Publishing Corp., 9221 Quivira Road, Overland Park, Kansas 66212, USA
(d) of Ge	Electronic Zietung Konradin Verlag Robert, Kohlhammer GMbH, Postfach 625, Stuttgart 1, Federal Republic rmany
	Monthly <u>:</u>
(a) <u>UK</u>	Textile Month Textile Business Press Ltd. Satatham House, Talbot Road, Straford, Manchester, M32 OEP,
(b)	Industrial Marketing Grain Communications Inc., 740 Rush St., Chicago III, 60611, USA
(c)	Modern Plastics McGraw Hill Publications, 1211 Ave. of the Americas, New York, NY 10020, USA
<u>(d)</u>	Plastic Industry News Institute of Polymer Industry, Central P.O. Box 1176, Tokyo, 100-91, Japan

(e)	_American Machinist McGraw Hill Publications, 1221 Ave. of the Americas, New York, NY 10020, USA
<u>(f)</u>	_Agricultural Supply Industry Veratbrite Ltd., Royal Works, Royal Parade Chislehurst Kent, BR7 6NR, UK
	_Annual <u>:</u>
<u>(a)</u>	_Survey of Electrical Power Equipment OECD, 2, rue André-Pascal, 75775 Paris, France
<u>11.</u>	_Transport Equipment
	_Weekly:
(a) USA (b)	Wards Automotive Reports Wards Communications Incorporated, 28 West Adams St., Detroit, Michigan, 48226,  Automotive News Crain Communications Inc., 1400 Woodbridge Ave., Detroit, Michigan, 48207, USA
-	Monthly:
(a)	Motor Report International Circlemartin Ltd. Box 87, Dorking, Surrey, RH4 2YS, UK
(b) UK	Railway Gazette International Reed Publishing Ltd., Transport Division, Quadrant House, Sutton, Surrey, SM2 5AS,
(c)	Automotive Engineering 400, Commonwealth, Dr. Warrendale, PA 15090, USA
( <b>d</b> )	<u>Automotive Products Report</u> Irving-Cloud Publishing Co., 7300 N. Circero Av. Lincolnwood, IL 60646, USA
11.	Services

(i) Shipping and freight rates

- Daily:
- (a) <u>The Public Ledger</u> (a daily freight register) Rickmansworth, Herts., WD3 1SN, UK
- (b) <u>Lloyds List</u> (a daily shipping paper)
  The Corporation of Lloyds, Lloyds Building, Lime St., London EC3, UK
- Weekly:
- (a) <u>Fairplay International Shipping Weekly</u> Fairplay Publications Ltd., 52-54 Southwark St., London EC3, UK
- (b) <u>Maritime Research Charter Newsletter</u>
  Maritime Research Inc., Box 805, Parlin, NJ 08859, USA
- <u>Monthly</u>:
- (a) <u>Shipping Statistics and Economics</u> H.P. Drewry, Shipping Consultants Ltd., London, UK
- (b) <u>Lloyds Shipping Economist</u> Lloyds of London Press Ltd., Sheepen Place, Colchester, Essex, CO3 3LP, UK
- (c) <u>BIMCO Bulletin</u>
  The Baltic and International Maritime Conference, 19 Kristianiagada, 210
  Copenhagen, Denmark
- Annual:
- (a) <u>Review of Maritime Transport</u> UNCTAD, Palais des Nations, Geneva, Switzerland
- (b) <u>Lloyds Register of Shipping</u> Lloyds Register of Shipping Trust Corp. Ltd., 71 Fenchurch St., London, EC3M 4BS, UK
- (c) <u>Maritime Transport</u> OECD, 2, rue André-Pascal, 75775 Paris, France
  - (ii) Foreign Exchange

-	<u>Daily:</u>
(a)	Reuter's Economic Service
	85 Fleet St., London, EC40 4AJ, UK
	Semi-monthly:
(a)	IMF Survey
	International Monetary Fund, Washington DC, USA
	Monthly <u>:</u>
(a)	Pick's World Currency
	Pick Publishing Corp. 21 West St., New York, NY 10006, USA
<u>(b)</u>	Citibank Money International Citibank, Foreign Information Service, Economic Department, 399 Park Ave., New
York	x, NY 10022, USA
(c)	Euromoney (the Journal of World's Capital Money Markets)
	Nestor House, Playhouse Yard, London, EC4V 5EX, UK
	Bi-monthly <u>:</u>
<u>(a)</u>	International Currency Review (Journal of the World Financial Community)
	World Reports (UK) Ltd., 108 Horseferry Road, London SW1P 2EF, UK