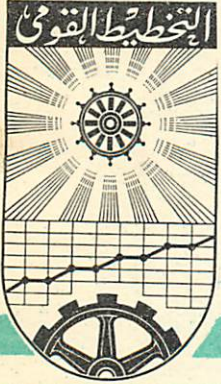


الجمهورية العربية المتحدة



مجمع التخطيط القومي

Memo. No. 597

Planning of Production in Socialist
Industry

Part II

Investigation of demand and market
by

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3. The procedure of production planning:

For the industry represents an important part of national economy, planning of industrial production has to be carried through in line with national economic planning.¹⁾ This so, because only in such a way the necessary proportions of national economy and within the single sectors and branches can effectively be realized.

After determining the at first more or less roughly defined proportions of national economy, the tasks of the single sectors and branches have to be fixed in detail. This has to be done by the respective authorities of the sectors and branches in question starting from the technological development within the planned period and the foreseen degree of implementing new technique within the sectors or branches concerned. This so, because the main task of production planning consists in investigating the demands and meeting their requirements by high-level products or performances. That means, production planning is expected not only to reflect existing demand but also to consider how the markets will be influenced by developing completely new products. In addition to this, the preconditions for introducing the new products into production have to be taken into consideration when drafting the production plan.

1) c.f. Memorandum on: Theoretical problems of industrial planning

Summarising the above-mentioned ideas we can state that the investigation of demand on basis of the scientific and technological development represents a main task of production planning. For the procedure is, in general, the same for prospective and annual planning, the problems are analysed on the whole.

Let us consider now the problems connected with investigating demand and market.

3.1. Investigation of demand and market¹⁾

3.1.1, The contents of the investigation of demand and market.

What means investigation of demand and market?

The investigation of demand and market represents a prognostic estimation of needs arising for certain products or performances at a certain time, at certain places and by certain quantities and qualities, etc. These estimations have to be carried through in connection with the scientific and technological development in these fields. The investigation of demand and market forms, therefore, ^adecisive link between natural science, technique and economy.

1) The following explanations concerning investigation of demand and market are partly based on: H. Model, Bedarf, Produktionsprogramm, Absatz, Verlag Die Wirtschaft, Berlin 1964.
(Demand, production program, sale, printed by publishing house Die Wirtschaft)

Moreover, the investigation of demand has to proceed from the arising requirements caused by the technological development and social custom and behaviour. In other words, when investigating demand for prospective planning, especially, we have to consider the general development trends of new requirements based on a possible materialization of new inventions in production. To give an example :

In the future, it will become possible to utilize thermo-nuclear processes for industrial purposes. Up till now, the specific demands for the respective equipments are unknown.

The demand for certain products, therefore, has to be investigated by starting with analysing the forthcoming requirements. When determining the real objectives of national economy, industry, etc., however, we can only take into consideration those requirements which can already be/defined by quality and quantity.

This holds true for both the demand for producer goods and consumers goods as well.

The investigation of markets is forming a special part of the investigation of demand . It comprises the investigation of markets in one's own and in others countries and of the possibilities to sell products there.

The scope of demand for products on foreign markets especially, is not equal to the scope of products which can be sold by a certain factory. This is so, because there are other firms and countries also intending to sell their products there. It has to be analysed very thoroughly, therefore, which share in the demand on a certain market can be covered by the enterprise or country in question.

This, in turn, depends on such facts as

- the customs policy of the respective country importing the goods,
- the business relations between the firm and the respective market,
- the technological quality of the offered products compared with that delivered by other competitors,
- the necessary service and its implementation,
- price, bonuses, etc.

From this it appears very obviously that the investigation of demand and market forms a decisive precondition for both scientific managerial activity, in general, and planning, in particular. It serves, firstly, for elaborating scientific and technological conceptions for the main branches of industry and reveals the prospective topics of research and development to be solved in future. Secondly, the investigation of demand and market is expected to provide the enterprises

with necessary in-formations on the quantity and quality of products and performances to be produced in the current or in the following planning period. These investigations have to be detailed later on by means of sales agreements between producer and trade organizations or the different kinds of consumer for producer goods, especially.

3.1.2. The procedure of investigating demand and market

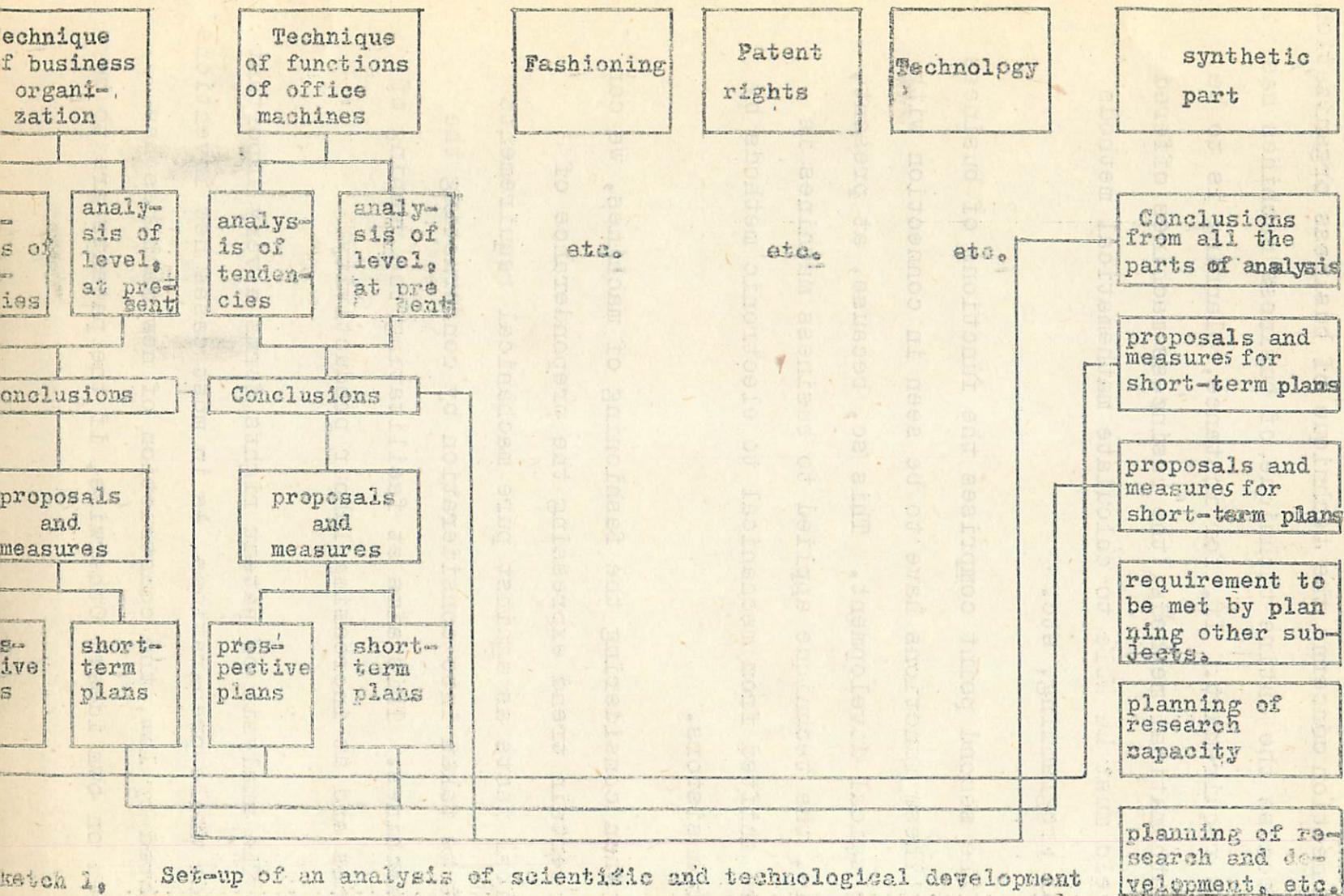
As already mentioned, when speaking about the procedure of investigating demand and market, we have to distinguish two main ingredients;

- a) the analysis of scientific and technological development,
- b) the analysis of demand itself expressed in technico-economic figures.

At a) The analysis of scientific and technological development has to be seen as that instrument mainly connected with investigating forthcoming requirements. It is based, therefore, on studies of available or expected results of natural science and technique. This analysis of science and technique has, however, no end in itself. The investigations must be undertaken from the economic point of view. That means, the available or expected results are to be analysed with regard to their possible introduction into production and their economic effects on requirements and demand, on cost, price, etc.

The main features of such an analysis appropriate, e.g., for the sector of the production of business machines looks like the following :

(c.f. sketch 1, page 6)



Sketch 1, Set-up of an analysis of scientific and technological development

Source: H. Model Bedarf, Produktions-programm, Absatz, Verlag Die Wirtschaft, Berlin 1964.

(appendix 4.)

The sketch shows that the first point to be analysed in this connection concerns the technique of business organization. This so, because the entire technique of business machines has to meet its requirement. If, for instance, planning is to be based on mathematical methods, the business machines offered in this field must be able to calculate mathematical methods like linear programming, etc.

The second point comprises the functions of business machines. These functions have to be seen in connection with the technological development. This so, because, at present, for example, the technique applied to business machines is going to be shifted from mechanical to electronic methods by means of transistors.

When considering the fashioning of machines, we can observe a certain trend expressing the preponderance of physiological facts as against pure mechanical requirements which must be taken into consideration by constructing the business machines. This aims at facilitating the running of the machines and at increasing labour productivity.

The analysis of patent rights forms a very important part of the whole preparations. As in most cases new inventions are protected by law, the construction of new machines has to be based on own ideas. Otherwise, if the patents are to be

used, the firm in question is forced to apply for licences.

Last not least, the development of technologies has to be considered. It should be noted that any changes in constructing new machines are closely connected with alterations of the technology applied and the other way round. The steadily increasing use of plastics, for example, gives rise to a certain kind of revolution in manufacturing all types of machines, in general, and of business machines, in particular. New inventions in this field must be adjusted, therefore, in time and used creatively, when world top level of products produced shall be attained or maintained as well.

The main conclusions gathered from the single ingredients are summarized and compared in the synthetic part of the analysis. This so, because the requirements of the single ingredients, as the trends of technique, technology, etc., are not in conformity with each other from the very beginning. In one field, scientific development has already been pushed ahead and in other fields we are forced to make up the lee-ways. Thus, resulting from the synthetic comparisons, necessary tasks to be solved in research and development, fashioning, etc., are to be fixed and submitted to the authorities in question.

The above-mentioned example shows that the single parts of such an analysis are more or less determined by the characteristics of the respective products. Nevertheless, every analysis of scientific and technological development in connection with the investigation of demand has to contain the following items :

- trends of applying the product in question,
- trends concerning the technological development of the product itself;
- trends concerning the manufacturing of the product,
- trends concerning fashioning;
- the patent rights situation.

If needed, additional topics have to be added.

The explained analyses are to be elaborated by the department for prospective planning of the respective association of nationally-owned enterprises in close collaboration with scientific and technological research institutions subordinated to the association, and of universities, colleges, and academies as well. Like prospective plans, they have to be completed continuously in line with the latest results in research and development of both natural science and technique in one's own or in other countries respectively.

At b) The analysis of the economic and technological development of demand is based on the analysis of scientific and technological progress. This holds true, especially, with regard to the conclusions drawn in the synthetic part. Proceeding from these facts, the analysis of demand has to be led up to an exact definition of the tasks to be tackled in a certain period of planning. In general, such an analysis comprises the following chapters :

- a) analysis of trends of scientific and technological progress and requirements arising from them;
- b) economic-technical and technological analyses of products produced and of the factors affecting the sale of products;
- c) estimation of the position of the product in question on the world market and of possible changes in the forthcoming period;
- d) prognostic estimation of the amount of saleable goods in those countries regarded to be the most important one's for exporting these products (or groups of products);
- e) development of demand on the home market;
- f) synthetic comparison of the conclusions to be drawn from the previous chapters;
determination of the demand by quantity and quality;

necessary measures and general preconditions to meet these requirements.

It goes without saying that such a comprehensive analysis of demand surpasses the possibilities of one enterprise or association. For ensuring a high quality, many other institutions have to be included.

This shall be demonstrated by the following sketch.

(c.f. sketch 2, page 13)

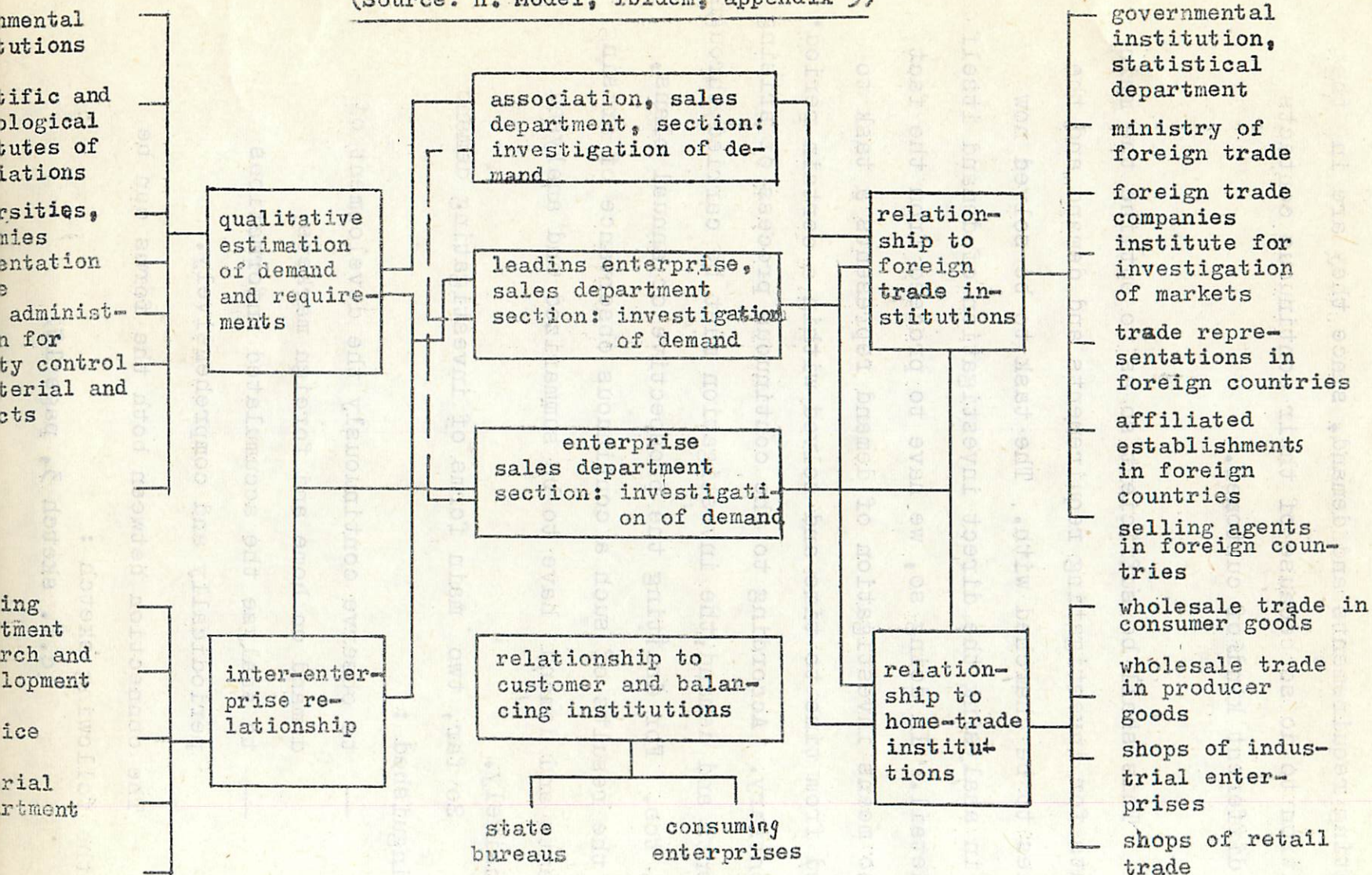
It can be seen that investigation of demand will only be effective if all those institutions of national economy are taking part in this procedure which are able to give definite informations on the development of demand.

For example; The research institutions of universities and academies are expected to explore and to prepare the technique of tomorrow. It is their job, therefore, to support enterprises and associations in this field. The state administration for statistics, on the other hand, disposes of statistical materials expressing the production and consumption of most important goods during different periods of time. This figures are needed for estimating trends of the consumption of consumer goods especially. Furthermore, all the institutions which are selling products have to be charged with

Sketch 2,

Institutions of national economy engaged in investigating demand

(Source: H. Model, ibidem, appendix 3)



investigating requirements and demand, since they are in the best position to do so because of their continuous contacts with the different kinds of customer.

This shall be sufficient so as to outline the main instruments for investigating requirements and demand and the authorities to be charched with. The task to be solved now consists in analysing the direct investigation of demand itself more in detail. In doing so, we have to proceed from the fact that by no means investigation of demand represents a task to be tackled from time to time and solved within a certain period. On the contrary. According to the continuous process of arising requirements and demand, the investigation must be carried through steadily, too. For drafting the prospective or annual plans, however, the results of such a continuous observance of arising requirements and demand have to be summarized and analysed comprehensively.

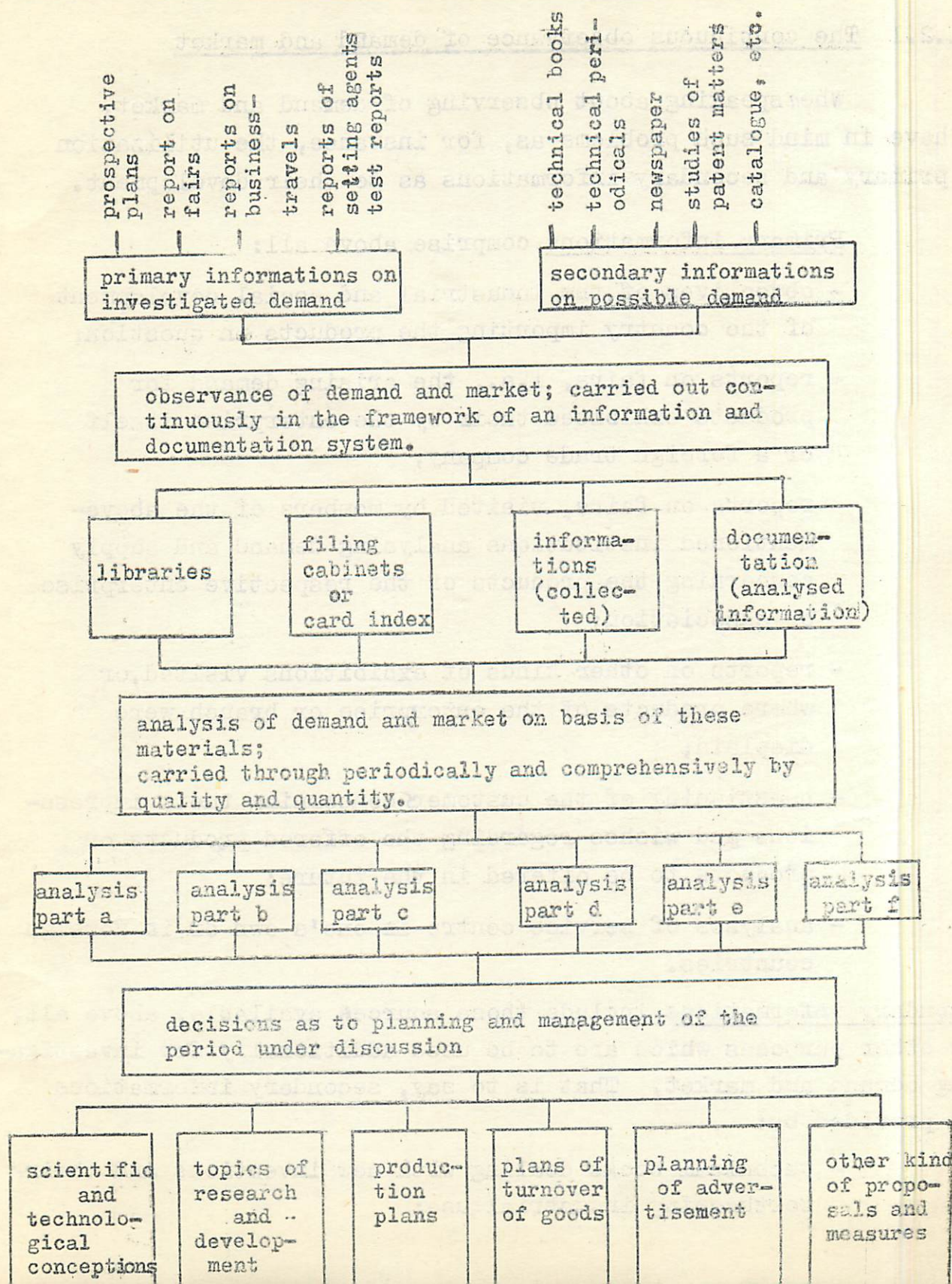
So far, two main forms of investigating demand are distinguished :

- to observe continuously the development of demand on home and foreign markets,
- to analyse the accumulated informations periodically and comprehensively.

The connection between both the forms can be seen by the following sketch :

(c.f. sketch 3, page 15)

Sketch 3: The system of investigating demand and market



3.1.2.1 The continuous observance of demand and market

When speaking about observing of demand and market, we have in mind such problems as, for instance, the utilization of primary and secondary informations as to their development.

Primary informations comprise above all:

- objectives of the industrial and social development of the country importing the products in question;
- reports on fairs, i.e., the arising demand for products exhibited there by the enterprise itself or a foreign trade company;
- reports on fairs, visited by members of the above-mentioned institutions analysing demand and supply concerning the products of the respective enterprise or association;
- reports on other kinds of exhibitions visited, or where products of the enterprise or branch were displayed;
- questioning of the customers concerning their impressions and wishes regarding the offered products or products to be offered in the future;
- analyses of service centre in one's own or in foreign countries.

Secondary informations include those sources available, above all, for other purposes which are to be used additionally for investigating demand and market. That is to say, secondary informations are provided by:

- technical books dealing with new inventions and their forthcoming industrial use;

- technical periodicals expressing, partly, actual needs of certain goods or new possibilities for their application;
- industrial production in other enterprises and countries;
- statistical analyses as to the consumption of goods produced by the enterprise or by the association in question, etc.

When observing demand and market by means of the above-mentioned methods the main problem consists in analysing and making full use of the informations and data available. That means, they have to be analysed as well as classified in such a way being fruitful for all the further needs as,

- the exact determination of required products;
- place and time of expected demands, etc.

Furthermore, the single tasks connected with the comprehensive system of observing demand and market must be distributed among the participating institutions in a way such that nothing is done twice. On the other hand, all the analysed and classified informations have to be prepared and distributed among the enterprises, associations, etc, in consistency with their needs.

We are quite sure, this represents a very difficult task. But, and this must be emphasized again, the entire effects of the observance of demand and market depend decisively up-on these preconditions. If not, a great part of time and money needed for it is going to be wasted.

It hence follows, when observing the development of demand and market is under discussion, every socialist country will be forced to prepare a well-founded system or method for these purposes. This must be done by taking into consideration such important facts as, for instance:

- the division of labour between the different institutions engaged in observing demand or market,
- the working-out of a comprehensive classification system for arranging the analysed informations,
- the necessary system of distributing the collected and analysed informations among those institutions which are in need of them for their daily work.

Implementation of these tasks has to be done by determining.:

- 1) What must be done for ensuring a highly effective system of informations?
- 2) Who is charged with carrying through the tasks in question? And another question will concern
- 3) the know-how.

Concerning the qualitative contents of observing demand and market, we will be forced to start with observing the development of most important products or groups of products. Later on, this system has to be extended in a way such that a high quality of national economic planning as a whole can be ensured.

3.1.2.2. The comprehensive analysis of demand and market

The comprehensive and periodical analysis of demand and market forms the main instrument for investigating demand. The volume of work to be done and the time it takes depends mainly up-on the preparation of informations, mentioned above. The very character of these analyses demands for implementing the tasks by means of team-work including experts of the various fields of specialization. That means, in other words, the working teams have to be composed of technicians, economists and other experts as well.

The analyses themselves are to be carried through by considering such general problems concerning the single objects of the analysis (a certain product or groups of products) as:

1. their position and interrelations on the market;
2. factors affecting their position and development;
3. possible trends of development, their form and contents; etc.

That is to say, we have to start with analysing the dependence of demand for a certain object on such factors as, for example, the technical and technological development in this field now under way or being expected in one's own or other countries¹⁾ dependence of demand on a certain level of prices, on^a certain level of service, etc. By this, it is also shown the connection with the above-mentioned second point. The demand for certain products is not a constant one. It depends, for instance, in case of consumer goods^{x)} average wages of workers or certain customs and behaviour.

1) c.f. Recommendations of Production Conference, Part III, in : The Egyptian Gazette, October 20, 1965

x) on such facts as the

For example, ^{if} the level of average wages surpasses a certain amount, the people will spend more money for so-called durable goods than for foodstuffs. On the other hand, if a television centre has been established and has started with transmitting programs, the people will be affected to buy television sets, etc. To estimate these newly arising demands, however, includes the analysis of certain contradictions as, for example, the contradictions between:

- requirement and demand;
- demand and production;
- demand and saleable products.

The first contradiction comprises such problems as the increasing requirements caused by new technological inventions and the people's possibilities to demand for these new products, that means, financial means must be available immediately or after a certain space of time.

Further-more, the contradiction between requirement^e and demand must be considered by taking into account the present and the foreseen price of the product in question. It is quite clear that the demand for television sets, cars, etc. depends mainly on the price. If the prices are reduced, the demand will be an increasing one^{x)} meeting the general requirements. Then, production has mainly to ~~up~~ cover that demand arising out of the normal wear and tear. (Decisive tech-nological improvements of the product in question are excluded)

This shows very obviously that there is a difference between requirement and demand mainly affected by the fact whether respective financial means are available or can be made available. x) up to such a level

In addition to this, to meet such kinds of demand requires productive capacities. Needless to say that these capacities cannot be established from one day to another. That is why it renders necessary to calculate very thoroughly the efficiency of the foreseen production so as to be able to decide whether it is more favourable to produce or to import respective goods.

In case of producing the same or similar products in different factories, the volume of saleable goods of each factory is determined by such facts as their quality, terms of delivery, service and advertisements, etc. Thus, the share of a certain enterprise in the market depends upon its efforts to meet best customers' requirements.

Moreover, some remarks only on form and contents of demand. If there is a demand for a certain product, then it can be estimated that the product is used to meet specific requirements. It is not quite clear, however, whether this product meets these requirements best. In other words, it renders possible that the demand for this product will be a decreasing one if another product appears on the market. To explain this by a very simple example. The demand for brooms is affected by the production of vacuum-cleaners depending, in turn, on the level of prices.

From this it appears that the analysis of demand is not intended to reflect only the development of certain products but to study comprehensively all the factors affecting existing or forthcoming demands and the problems to meet them.

Additionally, when considering the development of demand we have to look at the different factors influencing either the demand for producer or consumer goods. The demand for producer

goods if mainly affected by such facts as, for example:

- the planned objectives of national economy,
- the planned increase of living standard of population,
- the trends of science and technique,
- the requirements arising for improving technically existing productive capacities,
- the planned investments, etc.

The demand for consumer goods, in turn, has to be estimated by taking into account such factors as :

- the receipts of the different strata of the population, in general, and of the different trades and professions and their share in the population, in particular,
- the number and the composition of the population, e.g., concerning age, sex, etc.,
- the reached level in satisfying demand for products,
- the level of prices,
- traditional and geographic peculiarities of the region in question, etc.

It is quite clear, to repeat this again, that such a comprehensive estimation demands for the highest possible quality of the analyses under discussion. This, in turn, sets a standard for those engaged in investigating requirements and demand.

It should be noted, as a matter of fact, ^{that} until quite recently comprehensive and thorough investigation of requirements and demand was underestimated in all the European socialist countries. This holds true, especially, for the post-war period. Nowadays, however, the basic needs are more than satisfied and industry and population ask for a higher level of meeting

their requirements. This leads, as mentioned earlier,¹⁾ to general changings as to the system of planning and managing the national economy as a whole and the investigation of requirements and demand, in particular. For the needs of entire national economy and population are concerned, investigation of demand can only be mastered successfully by using a basicly uniform system within the different institutions collaborating in this field in the various branches and sectors and, to a certain extent, in national economy as a whole.

That means, in other words, a high level of investigating demand, without doing any work twice, can only be implemented on the basis of social property relations.

After dealing with some general ideas which must be considered when analysing requirement and demand, we have to study the entire procedure more in detail.

As mentioned earlier, the analysis consists, in general, of six main parts. Their composition is illustrated by the following sketch.

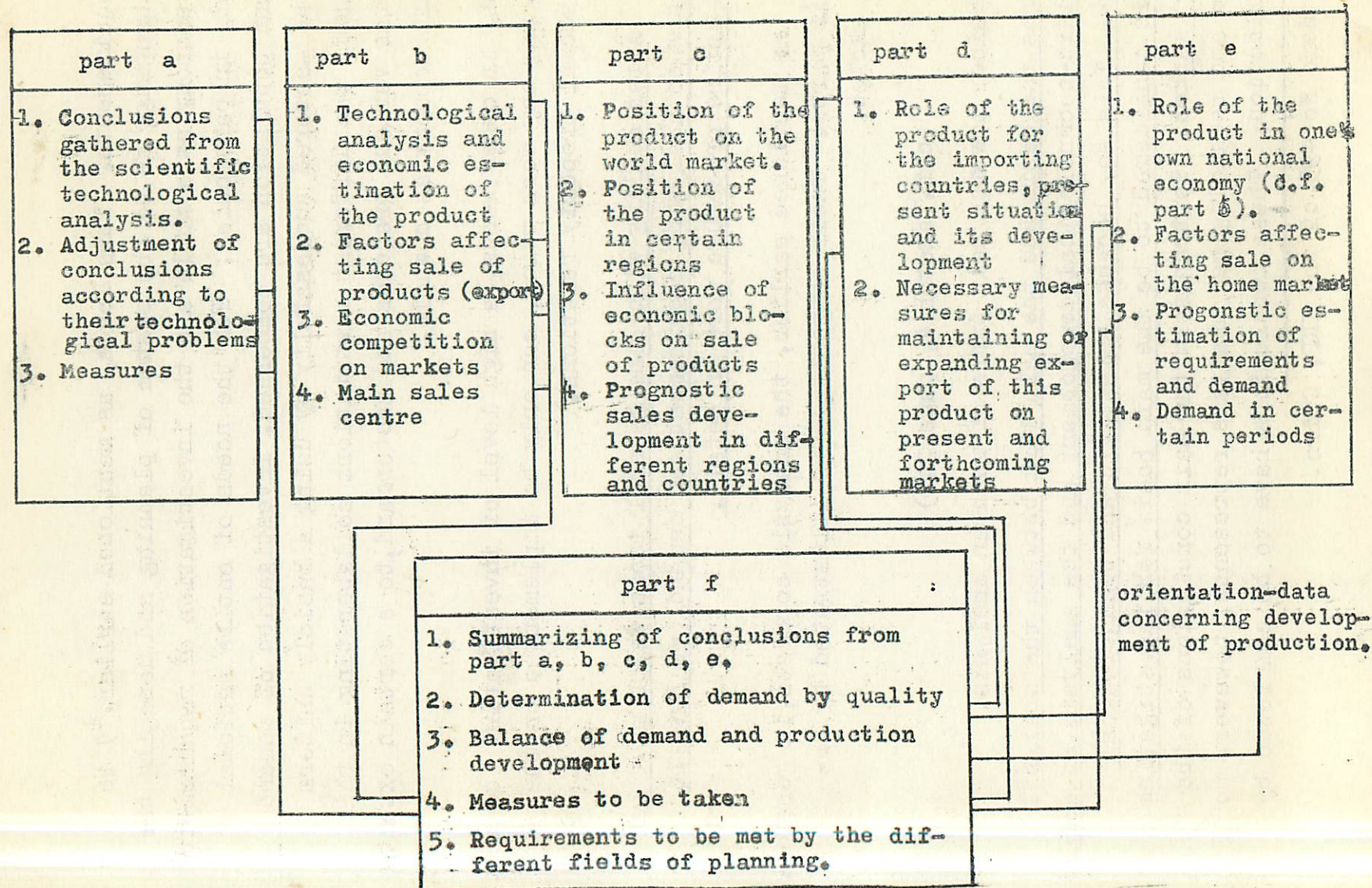
(c.f. sketch 4, page 24)

Let us consider now the main parts of such an analysis.

Part a forms the basis and the main link between the analysis of scientific-technological development and the analysis of demand and market. This so, because scientific and technological progress is considered to be the main basis for investigating demand and market. To transform the main conclusions of the scientific and technological analysis represents, however, no simple reflection. These conclusions have to be completed by

1) c.f. Memo No 495 of the INP, Cairo.

Sketch 4, Set-up of the comprehensive analysis of demand and market



the experiences of those engaged in investigating demand. This concerns, especially, the possible realization of main trends of technique regarding, for example, fashioning, technique of application, etc.

Since competition on world market is a very strong one, enterprises must be flexible enough to meet a short-dated demand at a very high technological level. This so, because the time of delivery forms a decisive precondition for getting a certain order. That requires, on the other hand, that the enterprises have already undertaken preparatory activities according to the scientific and technological development in this field. It thence follows that the investigation of demand is generally expressed in studying and applying the latest scientific and technological knowledge and producing according to it. If an enterprise offers such products determining world-top level to be delivered in a very short time then the main obstacles for investigating demand will be removed since the customers themselves will ask for.

On the other hand, the main tasks of scientific and technological development and their foreseen implementation laid down in the plans of research and development have to be estimated again. This so, because investigation of demand results in detailed figures concerning the technical parameter, economic preconditions, etc., of the products to be developed newly which are more or less unknown when starting research work.

Furthermore, the running of research and development has to be analysed by taking into account the time of demand. That means, technical preparations must be finished up to this time the demand for a certain product will be arising. This affects, in turn, all the single stages of research and development to make sure that they are finished in time. If not, it can happen that the financial means spent for this special research work are useless because of the fact that another firm or country is able to meet the requirements earlier and to dominate, therefore, on the market. In such a case, it is cheaper to desist from continuing an already started research work (if there are no possibilities for shortening the time) according to the saying that the first loss is the smallest one, and to concentrate all the capacities available on such topics supposed to be the most effective ones.

Part b of the analysis comprises all the technological and economic problems connected with manufacturing and selling those products expected to be or already being exported. This includes for example comparisons with the products of those

countries or firms regarded as the most progressive ones in the respective field. This has to be done by means of detailed analyses of the products in question, that means, analyses of price, cost, economic efficiency, etc. and other factors affecting sale.

Thus, when speaking about economic analysis of a product, we have in mind such problems as:

- the analysis of cost, i.e., the structure of cost in one's own country and enterprises compared with their possible composition, amount and development in other factories;
- the analysis of prices. This includes an estimation of the prices granted by competitors and, if necessary, to advance suggestions as to alterations of the hitherto applied price system which must be implemented when continuous export is to be achieved.
- the analysis of efficiency of exports because of the fact that it is subjected to continuous changings. Hence, those measures concerning quality of products, methods of transportation, marketing, etc. are to be developed ensuring the highest possible economic efficiency.

It goes without saying that these factors must be analysed as thoroughly as possible so as to avoid any false conclusions and decisions by the /respective authorities charged with determining foreign trade policy.

The above-mentioned analyses concern, above all, the products themselves. In addition to this, sales methods in particular have to be considered. As stressed earlier, this has to be done in

a comparative manner, too, including such items as:

- the analysis of the service system. This comprises the efficiency of service-centres in foreign countries, supply with spare parts, qualification of service personnel, their participation in investigating new requirements and demand, a.s.o.

- the analysis of the sales-system on the whole, that means, the organization of sale by means of own trade-centres, of the sale on commission, of selling agents etc. Moreover, the analysis of terms and especially of time of delivery granted by the different competitors has to be included.

Other factors to be considered in this connection are quality and role of package, the cost for transporting, packing, storing and supplying the products, the amount of advertising expenditure, etc.

- the role of the trademark or manufacturer's mark.

This so, because trademarks are usually promising a high quality of goods, (on basis of the consumers experiences in using products of the firm in question, of course). They are affecting the sale and the price to be fetched very decisively. It is necessary, therefore, to study the protection of trademarks in the different countries, the unequivocal determination and differentiation as against competitive products, to register trademarks, etc.

All these above -mentioned considerations are aiming at estimating the economic position of exported products on the world market, in general, and in different countries, in particular, compared with the products and sales-methods of the main competitors so as to derive necessary conclusions and alterations.

Part c and d should be elaborated in close connection with each other, since the future planning of sale can only be based on a well - founded estimation of the present and the forth-coming situation on the different markets.

Proceeding from the facts analysed in part b regarding the general position of certain important product or groups of similar products, their role on different markets and in different areas has to be estimated. That's very difficult a problem as very often no exact informations are available concerning the competitors and their efforts to provide the market with their products, the preparation of a similar production in the country in question, etc.

It is one of the decisive advantages of the European socialist countries, however, to overcome this difficulties by a system of coordinated long-term plans. In doing so, the main objectives are brought in line from the very beginning. In other words, this forms the main basis for an exact investigation and, beyond that, mutual information on the arising demand for exactly specified products. As these requirements are fixed in economic agreements, the respective supplier are able to prepare themselves for such a production and to collaborate with the consumer so as to meet his requirements best.

This division of labour caused by the rapid progress of technological development is steadily deepened in the socialist countries. It hence follows, of necessity, a steadily increasing economic collaboration and cooperation concerning the long-term development of all the countries concerned. For ensuring this, permanent mixed commissions or organs have been or are to be formed within the Council of Mutual Economic Aid. Their activity is considered to be a decisive precondition for a highly qualified prognostic estimation of forthcoming requirements and the continuously more exact determination of a specified demand. In doing so, the long-term collaboration enables enterprises to specialize and to concentrate their production and to supply goods representing world-top-level.

Up till now, such a comprehensive system of common investigation of demand has only been developed in the European socialist countries. For these countries are also exporting goods-- in a large scale--to socialist countries in Africa and Asia we have to look for other possibilities in order to investigate their demand. These possibilities are being represented by long-term plans of the economic development or other developing programs. Since, in general, they only contain the main objectives and the main tasks to be tackled, the demand has to be specified in trade agreements between the governments of the countries in question. In our opinion, production of investment goods, especially, is going to be based more and more on such trade agreements. This so, because technological development of these products and the production itself demand for such high outlays that, in the long-run, no enterprise can afford to produce without having a certainty of sale of the products produced.

At present, the demand of capitalist countries is supposed

to be estimated very roughly only. It should be noted, however, that there is a certain trend to conclude long-term trade-agreements between socialist and capitalist countries, too, especially concerning the supply of investment goods and building up of complete factories. This is caused by the above-mentioned phenomena of the development of technological progress. On the whole, however, the prognostic estimation of demand and its development in countries adopting the principle of a so-called free market system will only be a rough idea to be precised continuously.

Proceeding from these considerations, sales programs have to be elaborated for the countries mainly importing the products of one's own country (part d of our analysis). These sales programs-based on products or groups of products-are expected to comprise, for example:

- the significance of the product in question for the respective country,
- the own production and the entire demand in this country, their development,
- the share of different countries (factories) in meeting this demand,
- the economic potentials of the importing country, that means, its abilities to pay for imported goods by means of producer or consumer goods of its own production, raw materials etc., and their importance for the exporting country.

Furthermore, such factors are to be considered as

- the political and economic situation in the country in question,
- its trade policy and technique of trade,

- other commercial conditions, i.e., conditions of customs, especially,
- the economic efficiency of exported goods at present and in the forthcoming period,
- price policy,
- problems of advertisement, transportation, etc.

These information are to be gathered by both the institutions of foreign trade companies and the industry, i.e. associations or organizations and enterprises as well. They have to be analysed by the departments of prospective planning of the organization of factories and of the ministry of foreign trade which takes the lead in shouldering the responsibility for drafting the long-term plans of foreign trade, in general, and the sales programs concerning the main trade partner, in particular.

These sale programs are aiming at concentrating exports on products promising a high economic benefit for both the supplier and consumer. It renders possible, furthermore, to encounter a further splintering of foreign trade on too many markets, especially, in capitalist countries.

At the same time, the sale programs are intended to develop trade relations with those countries, above all, which are able to meet the necessary demand for certain goods, raw materials, etc., of the exporting country.

Part e of the mentioned analysis of demand concerns the home market, that means, the investigation of demand for producer and consumer goods of national economy and population. As stressed earlier, the main factors affecting demand for producer goods are:

- the prospective demand of consumer goods,
- the trends of science and technique, etc.

Thus, the investigation of demand is closely connected with the long-term planning of national economy as a whole. Its main objectives, in turn, are gathered from the foreseen socio-economic development of the country in question. That's very easy to say but very complicate to carry out. In the GDR, for instance, 30,000 economists, engineers, and other specialists from the different managerial levels of national economy were engaged in preparing the orientation -data for our next long-term plan. This so, because in such a preparatory stage, demand and production, in general, as well as internal interlacing of the single sectors of national economy and branches, in particular, have to be studied comprehensively.

To start with, the general procedure is a very simple one. We have to proceed from the objectives and the demand arising out of them :

The general objectives concerning which give rise to a certain demand for producer goods on the home market, we have to consider the following items, for instance;

- 1) establishing of new factories,
- 2) expanding of existing enterprises,
- 3) increasing of labour productivity in existing enterprises,

At 1) When establishing new enterprises the projects are prepared some years or months in advance, i.e., before starting their materialization. These projects contain all the necessary equipment needed to run the factory in question. For the authority : charged with implementing this project will be forced to conclude contracts concerning the supply with these equipments, the producer gets detailed information about arising demand.

The problem, however, consists very often in a delay of projecting work over against the foreseen fixed date effecting seriously the necessary technological preparation of required machines and their production. Hence, we are intending to solve the problems in such a way that after having fixed the general parameter of the necessary equipment, the supplying enterprise shall get the order-by means of a contract- to start preparing these plants technologically.

Another method applied more and more in all the industrialized countries consists in producing machines and equipments according to the unit composed system. This enables us to meet short-dated demand in time. In such a case the necessary machines are not constructed newly but composed only out of available components in line with a specific demand.

At 2) When existing factories are to be expanded, the above - mentioned phenomena will occur likewise. They have to be solved, therefore, in the same manner.

At 3) The planning of demand for equipments needed so as to increase labour productivity in existing enterprises is supposed to be the weakest point in investigating requirements. This so, because the demand depends on such factors as ,e.g.:

- short-dated changings of requirements of the customers or the population asking for a certain kind of good which cannot be produced by the available machines;
- technological inventions effecting products or production process which can only be made effective by means of a few additional machines, accessories or advices.

- innovation suggestions of workers aiming at facilitating production or materials handling, increasing productivity, decreasing cost, etc.

It is very obvious that these demands cannot be foreseen and planned in all details. Industrial enterprises will be forced, therefore, to study the technological development concerning their products and to use statistical calculations so as to get an impression of how the demand will possibly look^{like}. In any case, close contacts should be established between supplier and consumer for enabling both to determine and to meet newly arising requirements in time.

The investigation of demand for consumer goods in the home market represents one of the difficult problems. This so, because the demand of population for different kinds of consumer goods, especially durable ones, cannot be predicted in detail. Besides those factors, already mentioned, as

- receipts of different strata of population,
- number and age of population, etc.

some other factors must be considered. These are, for example:

- the influence of fashion,
- the role of novelties or fancy goods,
- the results of technological development,
- natural conditions,
- customs and behaviour, etc.

These factors, however, are influencing requirements and demand very decisively. If production shall be in consistency with

demand, we shall have to look for additional possibilities enabling us to meet requirements comprehensively. That's very important for satisfying the wishes of population, on the one hand, and, last not least, avoiding production of goods unable to be sold and, therefore, economic losses, on the other.

What can be done so as to solve these tasks?

We are intending to come to grips with them by using three methods.

Firstly, a so-called analytical method is applied, it comprises the following stages, for example:

- to study demand for certain goods and its development in preceding years,
- to analyse the main factors affecting demand, in detail,
- to look for predictable changings within the factors,
- to estimate the development of fashion in other countries and its influence on one's own country.

Secondly, we are trying more and more - to influence the buyer's intention to buy. That, however, isn't done in such a way so as to bring about requirements which are not actual ones. That means, in other words, one is not allowed to advertise for the sale of goods which benefits only the enterprise in question. (In the European socialist countries, for instance, advertisement for cigarettes etc, is forbidden). On the contrary. This influence aims at making the people acquainted with new goods or performances meeting genuine requirements arising at present or in future. In doing so, the following methods are used, for example:

- offer of new products facilitating the work in households or ensuring a more comfortable way of life,
- influence the consumer's taste by means of practical demonstrations and advertisements,
- close collaboration between productive enterprises and fashion-creating institutions,
- organization of fairs and fashion displays, etc.

Thus, the second method proceeds from the effects of a thorough information on those products expected to be or already produced.

Thirdly, a last group of methods is applied so as to be informed on the buyers reaction to the offers of industry and enterprises. This is necessary for quantifying the demand for a certain kind of product as a basis for long-term and short-term production planning as well. This can be done as follows;

- close collaboration between industrial enterprises or associations of industrial enterprises and wholesale and retail trade organizations,
- establishing of retail trade shops run by or under the supervision of productive enterprises,
- representative interviews of customers.

Although, as a matter of fact, investigation of demand for consumer goods must be improved steadily, the economic effects have to be considered simultaneously. That means, there must be certain proportions between economic and other effects arising out of possibly rough estimations only and resulting in a possible excess or shortage in the offered products. In general,

we have to determine such an optimum production avoiding economic losses without shortening a necessary and possible supply with goods asked for.

Beyond that and above all, planning must be flexible enough to be adapted to newly arising demands. Thus, a system of planning applied in textile industry (clothing, for example) should not proceed from the single goods to be produced. Rather such groups of products should rather be used for planning sufficient enough to balance demand for and supply with material, necessary capacity and capacity available, etc. We are able to do so since the production process for producing a coat, for example, is not affected generally by a fashion dominating in a certain space of time. This goes for a lot of other consumer goods, too, because of their short and flexible production process. The so-called durable goods concerning as television sets, refrigerators, etc., demand depends, by and large, on the amount of income and savings. Demand can be estimated, therefore, on the basis of the development of income and savings by considering the level of supply which has been reached up till now.

Part f of the analysis is expected to summarize the main conclusions of the preceding parts. It proceeds from the planned scientific and technological development of and the demand for the products in question on foreign and home markets. The demand has finally to be quantified by taking into account the effects of all the mentioned factors (level of price, quality of products, terms of delivery, etc.) being affective either similary or diametrically opposed. That means, we have to balance the effects of each factor increasing or decreasing demand in a certain space of time. Since there are various interrelations, they are to be estimated by means of calculations of variants.

The calculated demand has to be compared with the foreseen development of these products expressed in orientation-data of the prospective plan which, in turn, is based on a proportional development of the single sectors of national economy by considering its interlacing. As far as deviations occur, that means, the newly investigated ^{demand} is higher or lower than the first estimations, the effects on the whole national economy have to be calculated again so as to avoid

- an excess production of unsalable goods,
- a shortage of products for meeting demand,

The intended general equilibrium of demand and supply effects, therefore, such plans as:

- investment plan,
- manpower plan,
- plan for material demand and supply,
- demand for other means of production, etc.

It goes without saying that the different variants must be calculated very thoroughly. It can only be done in time, however, by using data-processing machines for carrying out the various calculations.

This stresses again the role and importance of a uniform system and procedure of national economic planning in socialist countries being the main basis for mechanizing planning activities.

Although it represents a main part, investigation of demand and market alone cannot be sufficient so as to elaborate a scientifically-based production plan. To meet existing or forthcoming demand, depends, further more, on such factors as, for example:

- capacity and manpower being or possibly to be made available,
- material available or to be provided, etc.

Capacity represents a very important factor since it cannot be changed, in principle, from one day to another. That means; capacity of an enterprise, for instance, is our potential to produce a certain kind of product. This potential must be used as effective as possible not only to meet requirements of products but also to produce at low cost. This so, because the amount of prime cost per unit of product and the part out of it for financially replacing the used machines is mainly determined by the utilization of funds available.

It is necessary, therefore, to analyse the problems of capacity and its utilization in connection with production planning more in detail. This, however, is expected to be the contents of another memorandum.

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