

PHYSICAL PLANNING IN CZECHOSLOVAKIA

- a comparative study -

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I. BACKGROUND

INTRODUCTION TO CZECHOSLOVAKIA

Czechoslovakia covers an area of almost 128,000 square kilometers and has a population of about 14 million. The density of population is relatively high-109 persons per 1 square kilometer (that is about 290 persons per square mile). This fact along with the following others, affects the conception of physical planning:

- a. The very low proportion of agricultural land per head - 0.51 hectares (2.48 hectares in the USA including Alaska and Hawaii).
- b. The high density of settlement units: the average distance among individual settlement units is about 2 miles.
- c. The high density of road networks - nearly 0.5 kilometers per 1 square kilometer.
- d. The shortage of spaces suitable for the construction of water dams and the unsuitable flow-off conditions of the waterways; only six rivers show an annual average flow-off surpassing 100 cubic meters per second.
- e. The very favorable conditions for recreation in both main seasons; the area of important recreational value covers about 53,000 square kilometers, that is about 40% of the whole surface of the country.

Due to its economic development and the conditions of its natural environment Czechoslovakia belongs to the industrial-agricultural states. Forty-six per cent of all people active in economic life are employed in industry, including the building trade. Although it does not have a large area, it is one of the 10-12 most industrially developed countries in the world. According to approximate calculations, with its national income amounting to nearly 1,000 dollars per capita, the Czechoslovak Socialist Republic is a country with a relatively high economic and living standard.

The present position of Czechoslovakia in some fields is explained by the following tables:

TABLE 1

Calorie value of consumption of food per day
and per inhabitant in several countries

<u>Country</u>	<u>Value</u>	<u>Period</u>
USA	3140	1965
Canada	3130	1965-1966
Germany-West	2910	1965-1966
France	2970	1964-1965
Sweden	3000	1965-1966
Austria	2970	1965-1966
Netherlands	2920	1965-1966
Great Britain	3250	1965-1966
Czechoslovakia	3060	1965

TABLE 2

Housing Stock

<u>Country</u>	<u>Number of dwelling units per 1,000 inhabitants</u>	<u>Footnote</u>
Germany-West	254.7	1964
France	283.0	1964
Sweden	356.1	1964
Austria	335.0	1965
Netherlands	263.5	1965
Great Britain	327.5	1965
Czechoslovakia	293.5	1965

TABLE 3
Dwellings with bathroom units

Percentage of the total housing stock
year: 1964

Germany-West	51.9
France	28.7
Sweden	60.3
Austria	29.6
Netherlands	26.8
Great Britain	78.7
Czechoslovakia	33.3

Note: Source of data: Statistical data : Statistický úřad, Prague, 1968.

An analogous situation is in the consumption level of textile and leather products. The consumption of textile products is about 40 meters of textile material per head yearly and such a quantity corresponds to the consumption in Switzerland and West Germany and surpasses the level in Austria and France.

TABLE 4
Industrial good per 1,000 inhabitants
year: 1964

Item	Czechoslovakia	West Germany	France	Austria	USA
Refrigerators	62	185	116	45	275
Washing Machines	182	90	68	32	265
TV Sets	101	122	74	56	360
Cars	25	119	147	76	351

We can, therefore, produce a picture of a relatively well fed and dressed citizen who can even begin to claim other levels of living such as long-term consumer goods, better housing opportunities, recreation abroad and others.

URBANIZATION

In Czechoslovakia, almost 50% of the population live in cities and towns (41% in 1961). On the other hand, residential centers of mixed, transitional type, partly urbanized countryside are very frequent.

TABLE 5

Structure of Settlement
Year: 1961 *

Site groups of communities (number of inhabitants)	Number of Communities	per cent of all communities	Number of popu- lation in 1,000	% of total country pop.
0-200	2,241	18.7	314	2.3
200-500	4,283	35.9	1,418	10.3
500-1000	2,890	29.2	2,035	14.8
1,000-2,000	1,505	12.5	2,075	15.1
2,000-5,000	753	8.3	2,241	16.4
5,000-10,000	172	1.5	1,185	8.6
10,000 and more	119	1.0	4,470	32.5
Total	11,963	100	13,741	100

The degree of urbanization does not correspond to the degree of industrial development. The characteristic features of urbanization are the low number of larger cities (only six, with more than 100,000 inhabitants) in which one-sixth of the population lives, and the dense network of small towns, with a relatively extensive semi-urban settlement. Since 1950, over one million people have moved to the towns and cities, but during the same time mass settlements have grown in their neighborhoods, in the semi-urban settlements. In the period between 1950 and 1961 (between two censuses) the development was as follows: (1950=100)

Population	Czechoslovakia	Bohemia & Moravia	Slovakia
Total	111	107	116
Towns(communities of over 5,000 inhabitants	124	120	138
	128	116	138
Communities of transi- tional type (2,000-5,000)	97	96	106

Footnote:

The following communities are considered statistically as towns: they usually have 5,000 or more inhabitants; they are built up as towns, that is, they have more than 100 inhabitants per 1 hectare of a built-up area, at least 15 per cent of the houses have 3 or more flats, the major part of the community is equipped with water supply and canalization; they have at least 5 general practitioners and a pharmacy, one nine-year secondary school, a permanent cinema, a hotel with at least 20 beds, a network of services and distributing trade of not only a local significance, a concentration of labor possibilities for the population of the surrounding area, a system of bus lines with the terminal in the center, and 10 persons out of 100 inhabitants (at a maximum) are active in agriculture.

Communities of transitional type (small towns) have 2,000 or more inhabitants; they are not entirely built-up as towns, that is, they have more than 75 inhabitants per 1 hectare of built-up area, 10 per cent of the houses have or contain 3 or more flats, and at least a part of the town is equipped with water supply and canalization. They have 2 general practitioners and a pharmacy, and further town characteristics even if to a lesser degree, 15 per cent of the inhabitants are active in agriculture.

After 1945, the urbanization of Czechoslovakia clearly lagged behind the rapid changes in the economy and the structure of the population. (In Slovakia, a republic with an active population, even the population in the countryside increased.) The explanation for this paradox can be found in two facts:

First, in the considerably historically conditioned dispersion of industry everywhere, even to non-urban settlements. (In the year 1930, the portion of industrial factories with less than 250 employees amounted to 99.72 per cent.) The extent of partly urban settlements described previously is a result of this dispersion.

Even after the year 1948, the dispersion of industrial investments continued. It was due to the endeavor to level the differences in economic potential among individual regions and towns.*

Second, in the high share of the population employed in industry, the building trade, and transport - and to a small extent in services - who, as a result of tradition or of the shortage of housing in towns and cities or

*Note: The dispersion of industrial labor opportunities in Czechoslovakia is illustrated by the following table (year:1965):

Number of industrial labor opportunities								Number of settlements with:		
51- 100	101- 250	251- 500	501- 1000	1001- 2500	2501- 5000	5001- 10,000	10,000 & more	51- 500	501 & more	more than 50
								opportunities		
327	408	241	234	232	129	55	30	976	680	1,656

The situation up to now has not yet considerably improved.

preferring a country way of life, remain in the villages. At present, only Slovak villages in non-industrial areas and only the smallest villages in Bohemia and Moravia (with less than 200-300 inhabitants) have an agricultural character according to the structure of the activity of their population.

According to the situation ascertained by the last census (1961) about 5.8 million of the population lived in the countryside, about one-third of which worked in agriculture and forestry. In the neighborhood of large industrial centers, in mining districts and zones of industrial plants, the agricultural population forms only a fraction of the total.

Another aspect of this situation is the extremely large number of commuters. In 1961, about 2.5 million people traveled to work every day to the industrial and administrative centers. Adding to this figure the number who traveled to school, to shop, etc., it can be estimated that almost 25 per cent of the population commutes daily (in 1967, nearly 5 million persons used buses and more than 4 million persons used urban public-service every day). But it is necessary to add that the commuting is done within relatively short distances (mostly in distances of 20 kilometers). This is due to the relatively high density of industrial labor opportunities.

Data for the whole of Czechoslovakia:

<u>Average distance of communities with 51-500 labor opportunities</u>	<u>Average distance of communities with more than 500 opportunities</u>	<u>Average distance of all communities</u>
8.7 kilometers	13.7 kilometers	2.7 kilometers

DEVELOPMENT OF TOWNS AND THE SETTLEMENT PATTERN

The present settlement network began to rise between the eighth and the tenth centuries, but the location of some villages is of even older origin.

An important phase in the development of our towns was concentrated in the eleventh to the fourteenth centuries. At the end of the twelfth century and the beginning of the thirteenth, society was ready for a change in the style of living and, in fact, for a change in the class structure. Agriculture had long ceased to be the only means of livelihood. The crafts had advanced and specialized and were now producing surplus goods and promoting an increase in trade. The feudal lords had discovered that renting their land, rather than farming it themselves, saved them both money and time.

A new epoch began to appear, in which a revolutionized economy could assist in changing the whole of society.

This social transformation affected the whole country, and culminated in a grandiose reconstruction of existing settlements and the construction of new ones. The secular feudal lords, transformed by their new affluence into a cohesive aristocratic class, began to abandon their unsafe strongholds and build massive stone castles. New villages were founded with a new social structure. Craftsmen sought new markets for the increasing number and variety of their products. Market settlements with no firm trade organization became inadequate. To replace them, new towns were founded which could insure sufficient sales, market rights, and defense against competition by obtaining various privileges from the sovereign, who soon found that this form of leasing rights was very remunerative. Furthermore, the cities sup-

* This part has been prepared by using the materials of S. Vodera and E. Hruska.

ported the sovereign's power against the growing economic power of the aristocracy. For this reason, the promotion of the cities' influence became a preoccupation of royal policy. A revolutionary aspect of this policy was the decision to create new cities.

In the fourteenth century, the location period was drawing to a close but another revolutionary change occurred - qualitative construction within the settlement unit. A number of church buildings were built in a new artistic spirit. Most of these buildings are still preserved today.

At the end of the fifteenth and the beginning of the sixteenth centuries a new wave in philosophic and artistic thinking made its impact on Bohemia, Moravia and Slovakia. It was the Renaissance. The Renaissance, however, did not influence the layouts of existing settlement units. Its effects were limited to correcting the forms of the principal city components. The most prominent new type of building was the town hall, the expression of urban self-administration. The Renaissance did not exert any remarkable influence on the state of the Czechoslovakian settlement pattern. New villages were rarely found, and as a rule, only in the regions up to that time covered with forests. A more remarkable feature was the foundation of numerous mining cities which, however, soon lost their importance.

The following period until the nineteenth century brings no substantial changes to the layout of settlement units, not even changes in the existing settlement pattern.

The nineteenth century was a period of grandiose transformation from the late feudal economic forms to new capitalist relations, accompanied by profound structural changes in economic, social and cultural life as well as in the settlement pattern. The manufacturers were gradually eliminated by

factories which grew up 1) on the outskirts of the historical cities or 2) on new sites located near sources of water power or raw materials, 3) in those agricultural areas that, after the abolition of serfdom, contained an ample supply of cheap labor, and, last but not least, 4) in the vicinity of transport routes.*

In the course of the first half of the nineteenth century, no remarkable changes as far as the settlement organization took place.

In the second half of the century, on the other hand, investments of industrial capital began to distort the organic homogeneity of the forms of the cities that had resulted from six centuries of continuous development. Their historical cores began to be surrounded with suburbs extending towards railway stations and factories - settlements founded on the chessboard pattern or on some other formal geometric principle without any architectural quality.

At the end of the nineteenth century, the settlement pattern and the production structure of the first phase of industrial society had become stabilized. Almost all towns underwent reconstruction. Their inner cores were gradually acquiring "city" functions which, however, also spread beyond their boundaries. At the same time, suburbs of clerks, tradesmen, and merchants economically connected with the city, originated and expanded. And beyond these suburbs, unrestrained construction of worker's housing proceeded with great intensity. In most cases, there was no purposive concept, only sites for speculation.

The twentieth century in Czechoslovakia has been characterized by several marked phases of development.

*It is not without interest that Bohemia was the site of the first railways in central Europe (1830-1832) and that the first "industrial exhibition" on the continent took place in Prague (1898).

The first phase dates from the beginning of the century to the fall of the Austro-Hungarian monarchy - from approximately 1900 to 1918, when an independent Czechoslovak state was established. This period prepared for a general development that took place after 1918, when Czechoslovakia inaugurated a state settlement policy. In the West, this period was characterized by the appearance of garden cities such as those of Howard and by the precursors of those structures and the forms of functional town-planning that were to overcome the "stone sea" of the nineteenth century cities - in other words, by the emergence of the concepts that were to govern town-planning throughout the world until the beginning of the sixties.

Czechoslovakia, however, was still controlled by the old Austrian building codes which understood town-planning only as a system of "master plans," as building on predetermined sites in accordance with certain limitations of height and depth (although the ratio of the height of the buildings to the width of the street was set approximately 2 to 3). The codes ignored differentiations in the functions of communications and roads; they revealed no distinct ideas about the development of settlements or the organization of construction. In short, they were thoroughly inadequate.

The second phase 1920-1930:

The 1920's were marked by the discovery and promotion of a modern concept of architecture and town-planning throughout the world and Czechoslovakia played a role of primary importance both in the evolution of theory and in actual construction.

The range of theories was wide, including the activities of architects who made of Czechoslovakia a bastion of "modern" architecture and functional town-planning, often in close contact with the Soviet avant-garde and with

the Bauhaus. During this decade, the effects of Il'jutin's zoned city, Socgorod, which revolutionized town-planning, first penetrated to Czechoslovakia, and town-planning began to develop in cooperation with economists, sociologists, and naturalists, toward physical planning in its widest implications.

In addition to state protection of historical memorials, which took on territorial dimensions and earned Czechoslovakia a position of leadership in the care of the national cultural heritage, the country broke ground for a second vast field, concerned with the political and economic, rather than the historical aspects of the creation of man's living and working environment--regional planning. But the regional plans did not spring from any real economic decision and, therefore, remained to be only historical examples of thinking in this period.

The Period between 1930 and 1945:

In this period, modern concepts of town and country planning can be considered as established, at least theoretically. The possibilities of complex planning were merely matters of facilitation.

The industrial boom in the years before the war brought about not only intensive construction and reconstruction within the compact city centers, but also a vast increase in the area of suburbs which expanded into the landscape.

The twenties had seen the birth of countless theories of architecture and town and regional planning. The thirties concentrated on the detailed elaboration of scientific methods. But the Nazi occupation brought stagnation in both theory and practice.

The Period between 1945 and 1960:

The years between 1945 and 1960 were undoubtedly the most important period in the modern history of Czechoslovakian town-planning. Substantial changes in

theory and practice were undertaken in the context of the socialist economy that emerged after the liberation of Czechoslovakia from Nazi occupation. Like every important political and economic experiment, it had a very agitated history. The endeavor to achieve socialist construction of settlements in Czechoslovakia proceeded with great success, but also with the many errors of modern socialist utopism.

For an understanding of town-planning development during these years, a brief summary of administrative changes is necessary. Until 1948, there was no significant reversal toward a socialist or a planned national economy. The year 1948 witnessed widespread acceptance of Soviet planning methods. The Planning Act stipulated that all physical plans were to be based on the economic plan.

The first Town and Country Planning Act (No. 230), passed in 1949, recognized only perspective and detailed plans of the development of communities and towns, without considering any higher phase of planning such as had been attempted by the regional plans of the twenties. This function was allotted to regional economic plans, prepared by the central State Planning Committee. Simultaneously, the territory of the country was divided into twenty regions. A large-scale plan for the industrialization of Slovakia was prepared, together with a plan for the industrial development of regional centers. Successive urbanization of the whole territory of Czechoslovakia ensued. This progressive requirement which called for a more uniform distribution of productive forces, was directed against their agglomeration in central settlements (in Hungary, for example, the capital of the country, Budapest, incorporated some 80 per cent of the industrial potential of the whole country in 1960). But the plan, naturally, also had negative results - excessive scattering of industry and

the reduction of its effectiveness. Furthermore "state planning" was to a certain extent unprepared to consider the allocation of investments, that is, to deal with wider physical planning. Therefore, the revised Physical Planning Act of 1958 (No. 84) introduced the new category of physical plans, the physical regional plans.

After 1960:

The development after the year 1960 can be characterized on one hand, by the more realistic approach to the arising problems and on the other, by the more complex investigation of and approach to the problems.

With respect to the previous development, the tasks of physical planning can be expressed in the following main ways:

1. the successive reconstruction of a whole settlement network which represents an independent complex task involving not only the conception of the development of individual towns but also the long-term spatial organization of the Czechoslovak economy. This task is long-term not only in its realization but also in the projecting works which must be based on the investigation of the best social conditions, the improvement of living environment, and the efficiency of individual formations in working and in construction.
2. the successive reconstruction of individual towns including their hinterland. The building up of new towns is not planned.
3. the preparation of regional physical planning schemes for the development of whole regions of different character, valued for their natural or economic value.

These are official endeavors. In addition to these objectives, there are also the tendencies, or quasi-utopian dreams, of town-planners who foresee a

further transformation of the Czechoslovak spatial-physical-organization in the framework of an economically integrated Europe (or at least central Europe). They are supported by the belief that the economic, social, and technical process of a modern industrial society cannot be solved within the political boundaries of European countries which contain only ten to twenty-five million inhabitants, when the minimum consumer basis for automated production of motor cars, for example, is - in European conditions - some thirty million people. But the political conditions, up to now, have not provided for such a conception.

POLITICAL BACKGROUND AND ECONOMIC MECHANISM

The Czechoslovak Socialist Republic is a federative state of two equal nations, the Czechs and the Slovaks. The base of the Czechoslovak Socialist Republic is the voluntary federation of the national states of the Czech and Slovak nations, having equal rights, grounded on the right of the self-determination of each of them.

The Czechoslovak Socialist Republic is formed by the Czech Socialist Republic and by the Slovak Socialist Republic, both having equal position in the framework of the Czechoslovak Socialist Republic.

The political system of both Republics is in principle the same. State power is exercised by the people through representative bodies which are elected by them, controlled by them and responsible to them. The representative bodies are the Federal Assembly, the Czech National Assembly, the Slovak National Assembly and national committees.*

*National committees are elected bodies at the regional, district, and local levels.

1. Federal Assembly:

The Federal Assembly is the highest organ of state power in Czechoslovakia. It consists of two Parliaments: the House of Parliament of the People and the House of Parliament of the Nations. Both Parliaments have equal rights. The resolutions of the Assembly are valid if supported by the resolutions of both Parliaments. It consists of 350 members.

The House of Parliament of the People consists of 200 members who are elected by direct vote in the territory of the whole Republic.

The House of Parliament of the Nations reflects the equal position of both Republics. The Parliament of Nations consists of 150 members, one half of whom are elected by direct vote in the territory of the Czech Socialist Republic, and the second half, in the territory of the Slovak Socialist Republic. The members of both Parliaments are elected for a period of four years. The Federal Assembly has the following chief functions:

- a) it makes decisions pertaining to the constitution of the Czechoslovak Socialist Republic and other laws of the Federal Assembly and ensures their execution;
- b) it discusses the principle questions of foreign and inner policy;
- c) it approves the middle-term (5 year) plan of the development of national economy, the budget of the Federation, and controls their fulfillment. It also approves the final balance-sheet of the Federation;
- d) it elects the president of the Czechoslovak Socialist Republic and discusses his reports;
- e) it discusses the program of the policy of the government, controls its activity and that of its individual members, and decides upon the confidence to the government;

- f) it elects and revocates the members of the Constitutional Court of Law;
- g) it constitutes the federative ministries and other federative bodies of state administration.

The Federal Assembly also makes decisions about the declaration of war. The intentional pacts and international commercial conventions of common nature as well as international agreements which require the edition of a federal law for their execution, must be approved by the Federal Assembly before their ratification. The Federal Assembly is entitled to cancel the orders or resolutions of the government or of the federative body of state administration if they are inconsistent with the constitution or other laws of the Federal Assembly.

2. Deployment of the sphere of action between the Federation and the Republics:

The following are included in the sphere of action of the Czechoslovak Socialist Republic:

- a) foreign policy
- b) defense
- c) administration of federative material reserves
- d) federative legislation

The following are included in the joint action of the Federation and both Republics:

- a) planning
- b) financing
- c) the emission of currency
- d) price questions
- e) foreign economic relations
- f) industrial affairs

- g) agriculture
- h) transport
- i) post and tele-communications
- j) science and techniques
- k) socio-economic affairs
- l) technical normalization
- m) inner safety
- n) press and information affairs

Other activities, including physical planning, are under exclusive jurisdiction of both republics.

3. The National Committees:

The National Committees are elements of the state power and administration in the regions, districts and communities. The whole Republic is divided into ten administrative regions*, each region into districts, and districts into communities (towns and villages). There are 108 districts. Barring the town of Prague (291 square kilometers) the extent of the territory of a region ranges between 7,810 - 17,960 square kilometers.

The population ranges between 659,000 - 1,959,000 persons.

The extent of the territory of districts differs considerably but generally amounts to about 1,000 square kilometers. The number of inhabitants ranges mostly between 100,000 and 130,000 persons; but the differences among individual districts are far greater than those among regions. At the minimum, the populated district amounts to about 46,000 inhabitants, the highest populated district, to more than 200,000 inhabitants.

* After July 1, 1969, it is expected that the administrative regions will be eliminated in Slovakia.

The committee consists of two bodies: the elected body, and the administrative staff which is controlled by the elected body. Principle decisions require the approval of the elected body.

The Law on National Committees (No. 69) 1967, stipulated the following minimum number of voted members:

a) local and town committees:

<u>size of community</u>			<u>number of voted members</u>
up to:	300	inhabitants	11
	600	"	15
	1,500	"	25
	5,000	"	30
	10,000	"	40
	20,000	"	60
	50,000	"	80
more than:	50,000	"	100 and more

b) district committees:

up to:	30,000	inhabitants	60
more than:	30,000	"	80

c) regional committees at least 30

d) town committees with the position
of district committeesat least 130

The members are elected (by ballot) for a 4-year period.

It is possible and it is usual that the chairman of the national committee of a lower degree is simultaneously the member of the national committee of a higher degree in the same territory. Therefore, a personal link exists between individual committees in the framework of a region.

The chairman of the regional committee takes part in the sessions of the government if some question is discussed which concerns the activity of the national committees. The activities, jurisdictions, and organization of national committees are stipulated by the Federal Assembly.

Structure of the National Committee:

- the plenary session of the national committee
- the council of the national committee
- commissions
- professional staff

a) the plenary session of the national committee:

The general assembly plenary session of the national committee is the highest of all voted members. The general assembly session of the national committee is held at least four times a year (the local committees meet at least six times a year). The program of the activity of the general assembly is prepared by the council of the committee in cooperation with its individual commissions and national committees of lower degree.

The convocation of the general assembly provides the chairman of the national committee on the base of the resolution of the council of the national committee. The general assembly must be called-in if the resolution requires at least 1/4 of its members, or the national committee of higher degree (or its council), or the government.

The general assembly makes decisions about the principle questions concerning the economic, cultural, health and social activity of its territory. The general assembly constitutes its executive and control bodies. All these bodies are responsible to the general assembly for their activity.

The following points are conditions of the decisions of the plenary session of the national committee:

1. stipulation of the long-term conception of the development of the administered area.

2. stipulation of the long- and short-term plans of the economical development directed by the national committee.
3. stipulation of the budget of the national committee and the approval of the terminal balance-sheet.
4. constitution (and cancellation) of the professional committees and the stipulation of the organizational scheme of the national committee, appointing (and recalling) the leading professional staff members, and voting for (and withdrawing) the members of the council, the professional committees, etc.

b) the Council of the National Committee:

The Council of the national committee represents the executive elected body of the general assembly. It organizes the fulfillment of all tasks of the national committee. The following are the number of members of the council of the national committee:

1. communities:

<u>size of the community</u>	<u>number of members</u>
up to: 600 inhabitants	5-7
1,500 "	7-9
5,000 "	9-11
10,000 "	10-13
20,000 "	11-14
more than: 20,000 "	12-15

2. the number of members of the district council averages between 12-15 and that of regional council between 15-18 persons.

c) Commissions:

The commissions manage and control the activity of individual groups of professional staff. They consider the problems of the development of individual sections of the economy administered to by the national committee.

The members of commissions are appointed from members of the general assembly and from other citizens which are not necessarily members of the general assembly.

All voted bodies of the national committee are collective bodies, decisions of which are valid if approved by the simple majority of their members.

d) Professional staff:

The organization of professional staff is stipulated by the decisions of the general assembly, but the general directions of the government must be followed. This means that a unified basic organization must be safeguarded within all national committees.

The sphere of activity of individual levels of national committees:

1. National Committees in villages

The local national committees must create the best possible conditions for satisfying the needs and interests of the inhabitants, to organize the building up of the community, to develop the cultural and social life and to safeguard the public order and the rights of citizens. Further, the local national committees must create the conditions for the most effective development of the agriculture. Besides that, the local national committees:

- a) administer the primary schools, the preschool arrangements, and the cultural arrangements.
- b) administer local roads and local services.
- c) approve the location of stores and provide arrangements necessary for supplying goods to the inhabitants.

- d) secure for the state administration the statistics on inhabitants, the management of dwelling units and non-habitable spaces, and the preservation of agricultural and forest land.

2. Town National Committees:

The town national committee organizes the proportionate development of the town and takes part in the solution of questions of regional development.

Besides the sphere of activity of the local national committee, the town committee administers the town's cultural arrangements and services.

The spheres of activity of the town national committee of Prague and of Bratislava (capitals of the Czechoslovak Republic and the Slovak Republic respectively) are stipulated differently, in the manner corresponding to the sphere of activity of a regional committee. The position of additional bigger towns (Brno, Ostrava, Plzen, Kosice) corresponds to the position of districts.

3. District National Committees:

The district committee controls the activity of the local and town committees. The district committee provides the state administration in the following main fields:

- a) physical planning and building system
- b) housing policy
- c) education
- d) culture
- e) health
- f) water supply
- etc.

4. Regional National Committees:

The regional committee takes care of the proportionate development of the economical, cultural and health arrangements within the region. It prepares the plan of the development of the region and takes part in the preparation of the state developmental plan of national economy and in the solution of important questions touching on the development of the region.

The regional committee controls the activity of the district committees. It administers the organizations which satisfy the needs in the above mentioned spheres of several districts.

Financing the National Committees:

The national committee prepares and approves its five-year economic plan, short-term programs (for one year) and the budget (balance). The financing of regional committees consists of two parts:

- a) of the financial means stipulated in the state plan, that is, of the state financial subsidy.
- b) of the revenues of organizations administered by the committee and of local taxes and fees.

The same goes for the committees of lower degree with the exception only that the limits of the state financial means are stipulated by the regional committee. The prevailing part of the budgets of the national committees of all degrees is formed by the means stipulated in the state plan. The budgets of national committees form a part of the uniform state budget. The proper revenues of the national committees are mainly formed by:

- revenues from the activity of enterprises managed by national committees
- car taxes

- housing property taxes
- agricultural fees paid by agricultural enterprises
- local fees

TABLE 6 - Balance sheet of national committees (in millions of Czech crowns)*

	1965	1966	1967	1968
I. Revenues				
Proper revenues	13,193	14,489	16,158	16,568
Other revenues		907	1,910	1,241
State financial subsidies	18,325	19,396	23,725	29,626
Total	31,518	34,792	41,793	47,435
II. Expenditures				
Development of Economy administered by H.C.	9,181	11,424	13,375	15,541
Cultural & Social Arrangements	20,861	21,353	26,894	30,332
Administration	1,476	1,515	1,524	1,562
Total	31,518	34,792	41,793	47,435

The expenditures per capita amounted to 3,352 Czech crowns in 1968, that is, about 300 U.S. dollars. When we take into account only the expenditures concerning the cultural and social spheres which are more comparable with the sphere of activity of the American metropolitan, county and municipal agencies, then the ratio is 2,166 Czech crowns per capita, that is, about 150-200 U.S. dollars per capita.

* Czechoslovak Statistical Yearbook, 1968 (Číslo pro rok 1968/69) S.N.T.L., Prague.

Sphere of action of national committees:

I suppose that a good understanding of the sphere of action of national committees requires at least a brief description of the management system of the whole economy:

The whole sphere of national economy comprising the productive as well as the unproductive spheres is divided into individual branches:

- industrial branches including the building industry
- agriculture and forestry
- transport and communication
- water economy
- education
- health
- trade
- social insurance
- local economy

The double principle of management is in existence:

- a. the management of branches
- b. the regional principle of management (or territorial principle of management)

In the principle of the management of branches, the activity of individual enterprises is directed and controlled by central bodies - ministries. The industrial enterprises, some large factories of building industry, transport, etc., are subordinated to this principle of central management-control (i.e., in the framework of a republic).

The force of the national committee, and in this case the force of the regional national committee, in relation to the central managed branches comprises

the following spheres of activity:

- the central bodies are obliged to cooperate with the regional committees in the preparation of the long-term developmental plans of individual branches and enterprises.
- the regional committees cooperate with the central bodies in the preparation of important investment projects.
- the national committees (district and regional) make decisions concerning the siting of new investments which produce the changes of land use.
- the national (regional) committees advance their opinions on the location of new capacities and increase the existing ones with respect to the use of existing labor sources and the preservation and the amelioration of the living environment.

In the case of dispute, the government decides upon it.

The principle of regional (and district) management is exercised in spheres of activities which serve a limited number of the population, that is, mostly the inhabitants of a given area. Even this sphere of activity is controlled by the central bodies but their force of action is of a different kind.

The Central Bodies:

- prepare the conception of the development of the branch as a whole (in the framework of the Republic or the Federation - see the previous chapter)
- provide the technical assistance (advice services) for the national committees and provide, through the medium of the national committees, the necessary uniformity of the professional activity of individual enterprises and arrangements.
- care for the education of professional personnel

The immediate management of this sphere, however, is entrusted to the national committees. The sphere of the free action of the national committees comprises, therefore, the following activities:

- care of the amelioration of living environment
- care of the amelioration of housing conditions
- development of local services
- development of cultural and health services and arrangements
- physical (territorial) organization of all activities.

Jurisdiction of National Committees:

The jurisdiction of national committees is very limited. The legal rules are unified and valid to the same degree in the whole territory of the state. The same goes for the taxes and fees (if any differentiations occur, they are mostly stipulated by the republic government). But the national committees are entrusted to judge the misdemeanors of minor importance and make decisions upon administrative legal acts - for example, the issue of building permits, territorial decisions, expropriation in favor of common interests, etc. This sphere of jurisdictional activity is regulated by separate law which is valid to the same degree in the whole territory of the state.

The role of the national committees within the state planning system

Up to the year 1964, the planning system was a so-called system of "fully-planned economy." Fully-planned economy is a system in which all decisive material and value relations in the national economy are set by the plan. The needs and resources were put into harmony by a balancing method. Investment, volume of production, deliveries for the domestic market, export, as well as the value of reserves and stocks, were fixed for the enterprises by directives, as obligatory tasks set by the state plan.

According to the plan, enterprises and institutions received financial means for investments and/or funds to cover the accession of stock. The depreciation of capital funds was also managed in a centralized system and the sums were paid by enterprises into the state budget. Thus, the system of financial plans which was controlled by the state budget was part of the plan.

This system affected the shifting of decision-making functions by the central bodies. In this way, the decision-making capacity of the central bodies was burdened and that of lower bodies, enterprises, and their associations not used enough.

The system of the fully-planned economy restricted the functions of national committees to the position of executors of the instructions of the central organs.

Principles of the new economic planning conception

The uniform economic plan represents the basic instrument for the management of the national economy. It expresses the goals stipulated by the society for a given period, and shows the means fit to the achievement of these goals.

The principal task of the economic plan includes the solution of problems in the proportionate development of individual sectors of the national economy (industry, agriculture, education, culture, etc.) and of individual parts of the country (regions). It aims at the development of the economy in its macro-structure. The development of micro-structural relations is decided by the enterprises and their branch directory bodies (branches= heavy chemistry, textile industry, etc.; in the sphere of spatially managed enterprises this role is undertaken by the national committees). This conception of the division of tasks and responsibilities corresponds to the degree of recognition of the needs in individual levels of the management of national economical development. Such a division of tasks is and must be supported by stipulation of economic rules which would instigate

the enterprises to the fulfillment of the conception of the plan. These economic rules are stipulated centrally for individual sectors for a period corresponding to the period of the long-term (5-year) plan. The question is often raised whether the nature of planning is directive or informative. I must explain this question in such a way that the nature of the Czechoslovak system of economic planning is mixed.

The plan contains the directive tasks to be fulfilled in the given period and informative data expressing the forecasted development of needs. The specific problems of the development of the national economy have to be solved by the directive tasks. These are stipulated in volume measured by material units or by other technical data.

Set of Economic Plans:

a) the long-term project is elaborated for the period of 10-15 years (not yet finished; the preparations started two years ago). The project is based on the analysis of the developing tendencies of economy and on the evaluation of possibilities of scientific, and technical development in Czechoslovakia as well as on the analysis of tendencies in world-wide economic development. The long-term project roughly stipulates the basic directions of the 5-year plan.

The elaboration of projects is supported by the preparation of studies of possible development of the important branches in the period of 20-30 years.

b) The 5-year plan represents the main instrument for the management of the development of the economy. It stipulates the conception of the development. This conception is being realized by the means of one year plans which involve more detailed data needed for the successive realization of the 5-year plan.

Planning of Investments:

The investment activity represents one of the most important instruments for provision of the economic policy and for fulfillment of the conception of the 5-year plan. According to this fact, the center, that is, the government on the base of recommendations of the ministry for economic planning and the ministry for techniques, decides the questions of investment activity to a greater extent than that of current production. The management of the investment policy differentiates with respect to the classification of investments. We are distinguishing the following categories of investments:

I. Productive Investments

- A. nominally stipulated
- B. investments of branches
- C. investments of enterprises

II. Non-productive Investments

- A. nominally stipulated
- B. others

A. Nominally stipulated productive investments:

This category of investments involves those which are of basic importance for the proportionate development of the national economy. To this category belong investments of the value surpassing 100 million Czech Crowns (about 10 million U.S. dollars), or effectuating the increase of employment of 300 persons. This category of investments is being financed by the state budget.

B. The investments of the branches:

These investments are undertaken for the reconstruction and renewal of basic stocks. They are planned by the branch directory bodies and partly financed by the investment bank. The effectiveness of the investment project is judged

by the financing bank and the bank stipulates the conditions of the repayment of the loan. The criteria of the minimum effectiveness of investment projects are stipulated (differentially for individual branches) by central bodies. The participation of the bank in the investment process is obligatory and it does not depend upon whether or not the branch directory body has or has not available financial means. That is, the bank provides the control over this sphere of investment activity. The same goes for the financing of greater investment of locally managed enterprises, the national committee being in the position of a branch directory body.

C. Investments of enterprises aim at the repair of basic stocks; they are of less economic importance, and are financed by the proper financial sources of the enterprise or with the aid of the bank-loan. All investments in the non-productive sphere are financed by state budget. The investment surpassing the value of 40 million Czech Crowns and 60 million Czech Crowns, as the technical works, must be approved centrally. Other projects are approved by the respective national committees.

Spatial Harmony of the Economic Development

The formation of spatial harmony, that is, the formation of the proportionate development of individual parts of the country, represents one of the principal tasks of economic planning. This goal is being achieved in these ways:

- a) by the participation of the regional committees in the formulation of the national economic plan.
- b) by the formulation of principle tasks to be achieved in individual regions.
- c) by the participation of national committees in the preparation of all investments projects in their location. The regional committee, on the

base of the data produced by committees of lower degree, also elaborates the development (5-year) plan of its region which forms a part of the economic plan of the whole republic.

HOUSING POLICY

Today's housing policy includes two spheres of activities:

- organizing and supporting the different forms of new housing construction.
- regulating the management of the housing stock.

Both of these sides of the housing policy are actually interrelated, this being the reason why they are being analyzed at one time.

1. Dwellings in private ownership

Private ownership of a dwelling may have two forms:

- a) a flat may be bought in a block of flats built by the state (or national committee) either from the national committee, or from the owner of the flat. The flat becomes a private property of the buyer who can dispose of it at his own free will.

The ownership is hereditary. The owner pays no lease but has to contribute to the current expenditures connected with the management of the house, the rate of the contribution depending on the size of the flat (the number of the total of square meters of all of the rooms).

The buyer can get a bank loan of up to 75 per cent of the value of the flat at 4 per cent interest on 20 year's installments.*

*This form has been developed in the last two years. At the beginning the flats used to be delivered shortly - within a few months - but now the times of delivery are lengthening because of the growing number of interested buyers (although the flats are rather expensive). The flats are valued according to the extent of the floor space, this one costing 1200-1400 Czech Crowns per square meter (the average salary of a skilled worker is about 2,000 Czech Crowns per month).

b) a citizen may buy or build a family house.

Definition of a family house:

The house is a dwelling house* the number of dwelling units of which do not surpass 5 habitable rooms**, kitchens not included. Far greater number of dwelling units*** is admissible when their total living area does not surpass the limit of 120 square meters (1,290 square feet).

When calculating the total living area, the parts of the floor area of kitchens surpassing 12 square meters have to be taken into account.

The habitable parts of landed properties have to be judged according to the same criteria.

*

definition of dwelling house:

the dwelling house is one in which two-thirds of the entire floor area is destined for dwelling purposes. When examining the ratio of exploitation of the floor area, there need not be taken into consideration the meter spaces which are open to all tenants and other persons (staircases, corridors, etc.) Also included, would be those meter spaces destined for agricultural and other non-habitable purposes.

**

definition of a habitable room:

All rooms with the exception of the kitchen which have direct daylight illumination, can be directly ventilated, directly or indirectly sufficiently heated, have a floor area of at least 8 square meters and are intended for living purposes by their interior arrangement, are registered as habitable rooms. Kitchens are rooms which are designated as such in the blueprints for construction, regardless of the manner of use by the occupant, or a room which has been altered by constructional changes for use as a kitchen, and whose floor area is larger than 4 square meters.

definition of a dwelling unit:

a dwelling unit is a room or a number of habitable rooms and the respective amenities serving for living and farming, from the technical and structural point of view. It is one integral whole under one lock and key, provided with one unit leading to a common corridor, staircase, street, yard, or some other space of common use. Separate rooms in the house which are used by the dwelling occupant are considered as part of the said dwelling.

The bank offers convenient loans for construction of family houses - a long-term loan on 30 year's installments at 2.7 per cent interest up to the amount covering the expenses of the design material and transportation. Apart from that, in cases of cooperative construction, the enterprise employing the owner of the family house can lend him up to 35,000 Czech Crowns. These loans can be remitted after a certain time, ususally after 10 years.

Family houses can be built either on privately owned lots or on public property where the right of private use has been declared. This right is being declared by national committees, as a rule without any fees. In both cases, a territorial decision permitting the construction must be obtained. One of the main reasons for this legal act is the safeguarding of arable land. The size of the lot is limited, the maximum being 1,200 square meters; the average 600-800 square meters, including the backyard and the garden. With the exception of vacant lots in older parts of towns or villages, a detailed plan giving the lay-out of the lots has to be worked out first.

As has been said, the family house is the private property of the owner who has full right to use it for his own use, and for the use of his family. If the parents or married children of the owner are living in the same family house, their flats can in no case be considered as excessive.

The flats in a privately owned family house may also be rented. If a citizen (or group of citizens) owns a family house in which neither he nor his married children wish to dwell, he is obliged to rent the house to persons designated by the national committee. He can, however, keep one room for himself or for the members of his family for recreational purposes or for the upkeep of the garden. The national committee has no right to dispose

of this room.*

The lease (rent) of a flat in a family house may be agreed upon mutually by the owner and the tenant. If no agreement can be arrived at, the rent is fixed by the national committee in relation to similar cases in blocks of flats.

2. Dwellings in cooperative houses

In 1959, Czechoslovakia introduced a new house-building scheme - the cooperative one. Its function is to increase the financial participation of the population in housing construction, and to raise the rate of housing construction in general.

Cooperative house building in Czechoslovakia is generally subsidized by the State to the extent of 58 per cent of the cost through a capital grant. An additional 25 per cent is available in the form of state credits (at 1 per cent interest on 30 year's installments). The down-payment due by the members of the cooperative (17 per cent) may be considered rather large, but the State Savings Bank may grant individual loans to members, so as to enable them to pay their shares. The loan may amount up to 15 per cent of the total cost of the flat and is offered at 2.7 per cent interest on 5-10 year's installments.

Apart from the State, even interested organizations may help the cooperative housing construction in either or all of the following forms:

- (a) the organization may become a member of a cooperative and pay the enrollment fee and the membership shares. The flats are then allotted to the organization which designates the actual users.

*

A distinction is to be made between the family house and the weekend house (bungalow). Since the last one is not suitable for an entire year's sojourn, the national committee can exercise no right of disposal on it.

- (b) the organization can lend the cooperative construction machinery and productive and transport facilities at the cost of bare expenses. It can also sell construction materials on similar conditions.
- (c) the organization can offer loans bearing no interest up to the amount of the membership share to its employees who are members of the cooperative.

The member of a cooperative does not become the actual owner of the flat, being only its occupant. The owner is the cooperative. The right to obtain a cooperative flat for personal use originates from the payment of the membership share. This payment cannot be made unless the Board of the cooperative decides on the right of allotment of the flat, the decision resulting from the precedence of members. The list of allotted flats is worked out every year by the Board and approved by the session of all members of the cooperative.

The precedence is regulated by the same rules as the State housing policy, that is to say, by the existing housing (dwelling) situation of the members and by the social importance of their respective jobs.

The member of a cooperative can delegate his right to use the flat to another person but only with the approval of the Board of the cooperative. The membership is hereditary. The members of a cooperative do not pay for the lease of their flats (the rent), but for all expenses arising from the management and the upkeep of the house.

3. Dwelling in State-owned houses

State-owned houses are all houses built either privately or by organizations, the management of which has been taken over by national committees representing the State, or houses built by State investments and again, managed by national committees. Flats in these houses are allotted by national committees on request.

The precedence of applicants is viewed from their existing housing situation, as well as from the importance of their jobs. Commuting, the hygiene situation of the existing housing, the state of health of the applicant and his family, the number of children and other factors are taken into consideration.

Precedence is given to families with lower incomes and more children. The importance of the applicant's job is considered not only from the point of view of qualification but also in relation to the importance of the branch of production in which he is employed. Here, precedence is given to employees of enterprises whose further development is dependent on the cutting down of travels to work.

The occupants in the State-owned houses have the right to take part in the management of the house either personally or through elected representatives. The right of personal use of the flat has no time limits, passes onto heirs, and is guaranteed in much the same way as the right of ownership. Attached to the right of personal use is also the right of exchange of flats. It can be executed by mutual agreement which must be approved by the respective national committees. The exchange is admissible if better use of housing stock is achieved by it.

Should the user of the flat die, the right of use passes onto the wife (or husband). After that the right passes onto children, grandchildren, parents, or other relatives living in the flat at the time of death of the occupant, if they have no flat of their own. Even those who nursed the deceased occupant or who have been dependent on him while living with him in one household for at least one year and who own no flat of their own, may succeed in the right of the use of the flat. The right of use becomes extinct by a written agreement between the user and the owner, or by a written statement of the user that he shall exercise his right no more.

National committees may invalidate the right of use of the flat:

- a) if the flat may be considered as excessive according to the rules regulating the housing policy.*
- b) if it is necessary to dispose of the flat or of the house in a way that makes further use of it impossible. The occupant whose right of use has been invalidated must receive an adequate compensating flat in every case.

RIGHTS AND DUTIES OF THE OWNER OF A HOUSE:

a) Duties:

- to hand the flat over to the occupant, in habitable conditions, i.e., in a state requiring no repairs at the time of moving in;
- to keep the flat in a habitable state (the occupant pays only small repairs and usual maintenance);
- to keep the house in good order and cleanliness;
- to maintain the house and its facilities and to ensure the current services;

b) Right:

- to demand the rent for the use of the flat and supplied services. The rent for the use of a flat (the lease of it) depends on its quality and the floor area. It is uniform throughout the State and cannot be altered by the owner of the house. However, National Committees can lessen the rent by up to 50 per cent. Certain cases of lowering the rent are governed by the laws. (For instance, for families with one child, the rent

*The flat is considered as excessive if its dwelling area (i.e., the sum of areas of the living room and all bedrooms, plus the surplus over 12 square meters of the floor area of the kitchen) exceeds the total of 18 square meters per every person in the household (plus 6 square meters). Should the flat consist of just one single room, it may become excessive if the floor area exceeds 30 square meters and is occupied by only one person: According to additional ruling, the right of use is not invalidated if the excessive flat is of low standard (in old houses).

is lowered by 5 per cent, with two children by 15 per cent, with three children by 30 per cent, with four or more children by 50 per cent; flats in basements are valued at 5 per cent less, etc.)

Percentage of expenditure of manual workers' families spent upon:*

<u>Rent</u>	<u>Fuel and Light</u>	<u>Furniture, upkeep and equipment</u>	<u>Total</u>
1.4	2.9	6.2	10.5

The percentage of expenditures can be estimated to be a little higher by now.

4. Dwellings in blocks of flats or in family houses owned by enterprises or organizations

In recent times - in connection with the widening of economic self-sufficiency and rights of enterprises - it has been made possible for enterprises and organizations to use parts of their profits for investments in housing construction of either blocks of flats or family houses for the use of their employees.

The actual legal relations between the enterprise as the owner and its employee as the user of the flat or family house are fairly unrestrained and may go up to the handing over of a family house, for instance, into private ownership for the duration of employment.

~~The~~ allotment of flats owned by enterprises is removed from the legislature of national committees.

* Year of inquiry, 1963; Source: UI "Major problems", Study.

Structure of the newly built dwellings:*

a) according to the ownership:

<u>number of newly built dwelling units</u>					
<u>year</u>	<u>state</u>	<u>cooperative</u>	<u>enterprises</u>	<u>individuals</u>	<u>total</u>
1964	28,366	26,842	1,804	20,289	77,301
1965	20,080	38,267	276	19,195	77,818
1966	16,275	39,913	166	19,172	75,526
1967	14,434	44,398	630	19,835	79,297

b) according to the size of dwellings:

Relative structure of newly built dwellings:
(the total sum of dwellings = 100)

Year	dwelling with one room with-out kitchen		dwelling with kitchen and -			four and more rooms	average habitable floor space in square meters
			one room	two rooms	three rooms		
1960	A	3.2	4.6	72.3	18.3	1.1	36.8
	B	0.9	11.6	57.6	21.1	8.8	45.2
1961	A	3.6	4.7	67.2	22.8	1.7	37.2
	B	0.5	9.3	61.0	22.4	6.8	44.6
1962	A	3.3	4.6	62.0	27.8	2.3	37.4
	B	0.2	8.0	57.1	25.8	8.9	45.4
1963	A	2.6	6.3	52.6	35.1	3.4	39.3
	B	0.2	6.4	52.3	30.6	10.5	46.1
1964	A	4.5	5.9	50.1	35.9	3.6	37.5
	B	0.2	5.1	51.3	32.3	11.1	46.8
1965	A	5.7	7.2	40.4	42.5	4.2	38.3
	B	0.1	4.6	46.7	35.2	13.4	47.5
1966	A	5.8	7.5	36.9	45.3	4.5	39.9
	B	0.1	4.5	42.3	37.7	15.4	47.9

Note:

A= flat blocks:

B= family houses.

*Czechoslovak Statistical Yearbook, 1968.

c) according to the respective amenities (in per cent):

Item	PORTION of the total of newly built dwellings						
	1960	1961	1962	1963	1964	1965	1966
gas	73.0	75.8	77.2	77.0	83.5	83.6	81.2
central heating	78.7	83.4	88.7	89.8	94.2	94.2	94.4
laundry	84.5	80.6	79.2	71.4	61.1	49.5	40.0
built-in furniture	88.7	90.9	89.9	91.0	92.8	94.3	97.4

CONCLUSION

The previous chapters have indicated that the development of the town is for the most part dependent not upon private activity but upon the activity of the respective national committees and also, to a significant degree, upon the recommendations of the planning center to put together the whole developmental plan of national economy and submit it to the government and the government to the respective parliamentary bodies.

As for the private activity, we can speak about it only in the following two ways:

- a) activity of voted members of the national committee:
- b) activity of citizens.

The first group of activities cannot be underestimated, nevertheless, it is limited to the financial means at the disposal of the national committee. But we can mark the increasing activity of the national committees, especially in the last period, due to the following main reasons:

- a) The new economic model concentrating on the stipulation of the main long-term trends of the development of the national economy opened the door to the increase of the activity not only of enterprise, but also of the national committees.
- b) The new state formation based on the principle of federation provided an impetus to the increase of local feeling. This feeling has been strengthened due to the "August events."
- c) This increase of activity is backed by the stable organization of national committees and by the fact that they are staffed for the most part by professional personnel.*

The activity of citizens as potential constructors or entrepreneurs is limited, barring the financial means, by the property legal rules. The Czechoslovak legal rules distinguish:

- a) state property
- b) cooperative property
- c) private and personal property

The state property is prevailing. The greater part of industrial activities is concentrated in the hands of national and communal enterprises, that is, enterprises managed by state bodies.** The same is valid, considering the organization of transport, commerce and services of all kinds. In the agricultural sector, almost 10 per cent of the surface of agricultural land is managed by private farmers.

*the portion of university students reaches 1 per cent of the total population and the universities or some of their faculties are located in every region; the high school, in every district.

**this fact does not exclude another fact that these enterprises are working on commercial basis, the state body being then a sort of general directory.

The state property cannot be transferred to private hands. It can be, in certain cases, transferred to the cooperative property; this reflects mainly the agricultural sector and the smaller communal enterprises.

The cooperative property is of collective character, it belongs to the members of the cooperative. The disposition of the property is regulated by articles of association which are uniform in principle questions in the whole country.

The form of cooperative property and cooperative enterprising takes its place especially in the agricultural sector, (the cooperative farms managing 60.5 per cent of the total sum of agricultural land) in the sphere of smaller factories and partly also in the trade sector (especially in the villages).

The cooperative could be dissolved on the demand of the majority of the members. In such a case the property would fall to the member's share. But this eventuality is rather of theoretical meaning.

As for the personal property, it is necessary to differentiate between private and personal property.

"Private property" is the property of production means. This form of property is very limited: to the agricultural sector, as mentioned previously, and, to diminutive handicrafts carried on only by the owner (i.e., without employees).

The possibility of carrying on trade is dependent upon the approval (permission) of the respective national committees. The enlargement of private farming is limited by the practical impossibility of transferring the land managed by cooperative or state farms into private hands. All these means provide strict regulation of private enterprising.

By the term, "personal property", is meant a property which serves the personal needs of the owner and his family, such as furnishing of the house, car, family house, etc. This form of property is not restricted in any way.

The development of towns can be influenced by private activity, but only in the construction of family houses. Barring the restrictions resulting from the term "family house", as has been mentioned previously, the indirect regulation of the tempo of the construction is determined by the tempo of construction of the technical infrastructure provided by the commercial enterprises.

As for the location of the family houses, direct regulation is provided by the territorial decision and building permit issued by the national committee. These regulations do not aim, however, at the restrictions of this activity but at the appropriate architectural organization and renewal of the communities.

II. PHYSICAL PLANNING

NATURE OF PHYSICAL PLANNING

What is the nature of every planning activity?

Planning as a systematic activity can be expressed as a set of orders or recommendations on what to do in certain situations in order to achieve certain results.

Planning as a systematic activity supposes:

- the existence of various alternative solutions
- the selection of goals and means
- a system in which this activity can be provided

Various alternative solutions exist in all societies, in all spheres, and in all times.

Selection of goals and means will be dependent upon the socio-economic formation and the level on which these goals and means are selected. When the goal is profit, the means will be measured in terms of "efficiency" and "costs" and will be of monetary character. If the goal is a "beautiful living environment" other means are used and "non-rational" criteria must be introduced into the process of planning.

Every planning activity supposes a system in which exist the sources of orders or recommendations*, the manners in which to handle them, and the organizational units which put them into action.

* whether we can speak about "orders" or recommendations" is dependant upon the socio-economic system of a country.

Physical planning meets all of the suppositions laid on every planning activity. What makes this activity different in respect to the other planning activities are the goals to be achieved and therefore, the means to be used for this purpose.

The basic goal of physical planning is to create a certain macro-material living environment by means of the spatial organization of all activities which cause changes in the existing way of the use of the territory. This goal is valid in all socio-economic formations. Changeable elements are the nature of the means being used and the mechanism through which they are put into action.

What is the macro-material living environment?

The living environment is an abstract idea. The feeling of the living environment is the result of all elements affecting the human individual or human collective. The living environment is conditioned by the existence of living space; the degree of the feeling of contentedness in this space is dependent upon the quality of its formation. This quality is formed by the quality of the elements conditioning the existence of the space - natural elements (territory, forests, waters) - and by the elements created by human activity - artificial elements (houses, factories, technical works, etc.). All of these elements are of material nature.

We are speaking about the macro-material elements (or macro-material living environment) in order to distinguish the micro-environment, formed by the quality of objects (and by the quality of their arrangement) which surround the human individual in his house, in his working place, etc., from the macro-environment, and the quality of objects forming the macro-living space.*

*the interconnection of the macro- and micro- living space explains the important role played by architects in all these spheres.

What are the changes in the use of the "territory"?

I am limiting the sphere of action of physical planning to activities causing changes in the use of the territory and not of "space."* The changes in the use of the space can be caused, for example, by changes in the production structure, or technology, resulting in different degrees of air pollution, and other consequences affecting the quality of the living environment. To deal with these consequences is the task of separate hygiene bodies, all consequences of the project, and are entrusted to deny the permit enabling the realization of the project.

Changes in the utilization of territory are mostly associated with investment activity, and for this reason the close connection of these activities exists.

Incentives for changes in the use of the territory:

- a) of social nature:
 - changes in the style of life
 - changes in the volume and structure of population
 - changes in social relations
- b) of economic nature:
 - origin, decline, enlargement of economic activities
- c) of technical nature:
 - new techniques creating new opportunities for economic activities for the adoption of new social incentives

Management of incentives:

The incentives of social nature on one hand reflect changes in the incentives of economic and technical nature, and on the other hand form the motor of the development of incentives of other natures. Their management is indirect, provided through the development of the economy and techniques, and through the

* the term, "territorial" planning is, therefore, more appropriate than the term, "spatial" planning.

development of the civilization which has again its material and immaterial basis. The investigation and forecasting of the social development in its expression "desire-opposition," represent a necessary aspect of all activities influencing the social development by their results. That goes for the physical planning as well as for the activity concerning the creation of the best macro-material living environment.*

The term "the best" in itself is subjective and, therefore, has a different meaning in a different time and in a different space. Therefore, physical planning investigates the social processes, and represents, to a degree, the social planning which is necessary for the creation of the mentioned living environment. That is the limit of the sociologic contents of physical planning in regards to investigated elements and processes.

Another limit of this investigation is presented by the way in which the management (or the stimulation) of economic and technical incentives, causing the changes in the use of the territory and the changes of social incentives, is provided.

This way of management is different in different socio-economic formations and therefore, produces the differences in the meaning of the term "physical planning" in different countries. The physical planning can have the character of a remedying activity which in some sense solves the consequences of certain economic activities. Then, the endeavor is concentrated on the problem of how to forecast most precisely the future development, and especially the tendencies of these economic activities.

Just in the sphere in the USA, methods have been developed which can hardly be supplemented by the countries with state planning systems. On the other hand,

* it explains that the physical planning, esp., elaboration of physical planning is the task of many specialists.

if the development of towns, and the physical planning as a whole, forms a part of an active state policy, then it is necessary to develop other methods aiming at the optimum formation of a given territory.

It can be summarized:

- it is not possible to separate the activity aiming at the formation of living environment from the activities affecting the changes in the living environment. Otherwise, we should be faced with a utopian physical planning.
- the question is to what extent the physical planning can or cannot receive the intentions or decisions of economic nature or whether it is forced to formulate them on the basis of proper forecasts.

To speak the planning language, the tight connection between the economic and physical planning will always exist. If the economic planning does not exist as a firm system covering all economic activities in all necessary relations, then the physical planning will take over some of its functions the character of which is influenced by the extent of territory and the time period in question.* It is the nature of the management of socio-economic-technical processes that they are subordinated to a certain goal which is the goal of the society as a whole.** This subordination produces necessary limitations of the interests and even the rights of individuals. It is the old theme: planning versus freedom.

I mention that in every socio-economic formation, the following principle can be used:

*there is another possibility and that is that the planning does not exist at all. Then, however, the development is the result of victorious private interests in their mutual competition. But such a possibility produces small confidence in a better future.

**Another is the question of political mechanism safeguarding that the aims of the minority won't be made out for the aims of the whole society.

The limitation is justified if without this limitation the grounds on which the freedom of action can be exercised, would be undermined. These grounds represent the natural sources and the living environment, that is, the physical elements of our life.

PROBLEMS TIED UP WITH THE DEVELOPMENT OF THE PHYSICAL PLANNING ACTIVITY

It is possible to accept the opinion of the Advisory Commission on Intergovernmental Relations * that "the respective facets of metropolitan area planning must be closely geared to the practical decision-making process regarding land use, tax levies, public works, transportation, welfare programs, and that like."

Putting this conception into action presupposes the solution of a set of problems connected with the effective development of planning activity. In this study all problems cannot be analyzed and compared. However, the analysis and comparison of the following ones is considered useful and effective both for the American and the Czechoslovak theory and practice in this field:

1. Categories of plans - their contents, aim, mutual relations, liability.
2. Procedure and financing - ordering of plans, stipulation of their tasks, financing, discussion, and approval of the plans.
3. Realization and control - investment projects, procedure for their approval, territorial decisions, building permits, permanency of physical planning activity.

All of these questions should be considered in view of the extent to which these activities and procedures help solve the principal task: that is,

* A Commission Report on Governmental Structure, Organization and Planning in Metropolitan Areas / July, 1961, p. 33.

what should be done in order to ameliorate the existing organizational structure of the towns, and to establish better living and recreational conditions in the towns for the present and for future populations.

This premise, I should say, is commonly valid. In the USA, it is accentuated by the rapid growth of population, its high living level, and therefore, by the durable increase of all claims of inhabitants. A high volume of the production of a large variety of goods has been preserved. I venture to say that the present and future task is to also achieve this high standard in the sphere handled by this study.*

CATEGORIES OF PLANS

All physical plans can be categorized according to the following criteria:

- 1 - Extent of territory
- 2 - Time-period of the plan
- 3 - Dimension

The content and the aim of the plans are differentiated according to individual categories.

1 - Extent of the territory

The Czechoslovak theory and practice distinguishes the following three categories of plans:

- a) regional physical plans
- b) master plans of towns (and villages)
- c) detailed plans

*See Robert C. Weaver - Taming Megalopolis:-: "We have not yet developed, as we must, policies for our urban areas that rationally and effectively relate people to land and land to people in urban environment."

The American practice is poorer, knowing only the metropolitan area plans, and the master plans. None of these categories can be considered without some corrections and comments in order to be equal with the categories of the Czechoslovak plans.

a) Regional physical plans

The regional physical plans are usually set up for economic, administrative or geographical units as under:*

1) Heavy investment depending chiefly on a raw material base or other operating condition, where it is important for its realization to create a coordinated system of regional organization (of transport, the supply of industrial and drinking water, energy, ground meliorations and changes, the organization of housing, the coordination of other development activities, etc.)

2) Development which would in a disturbing manner interfere with the up-to-date structure of the region and its settlement and would cause serious discrepancies if not coordinated.

3) Development in a region with already existing relations and proportions resulting from previous development and production activity which is impossible to deal with isolatedly but only in relation to regional problems. This concerns the questions of coordination, for example, regarding the development of mining, industry, the realization of large investment projects having serious repercussions on water supply, supply of evergy, etc., and the realization of large water works projects or the planning of recreational areas.

*Physical Planning Law, No. 84/1958.

This enumeration of causes enforcing the elaboration of a physical regional plan is only of exemplary character. It can be said commonly that the physical regional plans are prepared for territories of larger extent than one town.

When judging this conception it is important to answer, at first, the following questions:

- a) Is the preparation of the plan voluntary or obligatory and in what cases?
- b) What is the extent of the territory and who stipulates it?

Legal Background of the preparation of physical plans

The law on physical planning does not stipulate explicitly that the physical plan must be elaborated. It is said that "the physical plan is being elaborated," in cases where the circumstances forecasted by the law occur.

The nature of physical plans is that they are instruments of the daily management of the building up activity. Their elaboration would be provided for if the problems connected with the management became so complicated that it necessitated the assistance of a team of specialists to provide the preparation of the physical plan. To judge this necessity is the right of the Regional National Council. On the other hand it is supposed that the respective national committees will fully use all of their rights. Usually, that is the case.

We can speak about the tendency to require more than less physical plans. That tendency is due to the following facts:

- the expenditures connected with the elaboration of physical plans

are fully covered by the state budget.

- the physical plans provide the necessary data and argumentation which are then used by the regional authorities when preparing the regional budget and proposals of new investments which have to be approved on the central level

- the regional national committees which only are entitled to order the elaboration of the regional physical plan form the highest link of the hierarchy of local governments.

I am speaking expressively about the hierarchy of governments. The national committee of a higher degree directs and controls the activity of the national committee of a lower degree. It even has the right to cancel the incorrect decision of the committee of lower degree.

This mixture of the power based on local support and that which is delegated, is important especially with respect to the whole procedure of preparation and approval of physical plans. The aim of physical plans is to propose the solution preserving the common interests. However, that means that the local interest, although forming a part of a common interest, must necessarily be subordinated to the interest of higher territorial and then social units.

Therefore, the preparation of the physical regional plan and then putting it into action cannot be made impossible by the opposition of a local government if the common interest is evidently prevailing.

We, in Czechoslovakia, are aware of the necessity of judging and solving the problems of the physical organization of the territory in a broader context and have the legal instruments to carry this out.

I dare say that the Americans are aware of this fact too, but that the strong position of local governments produces obstacles which are too serious to bring about the implementation of physical plans concerning the territories of the greater number of local governments.*

All of these facts operating in the same direction culminate in the regional physical plans being prepared successively for all areas enjoying substantial development. On the other hand, this conception coming from practical needs, results in the effect that the territory of the whole state is not covered by the regional physical plans. It is necessary to mark a difference between the regional economic plans and the regional physical plans. The economic plans pursue the proportionate development of individual regions within the territory of the State.

The economic regional plan contains:

- evaluation of the exploitation of natural and economic resources of the region
- proposals for the development of the economic structure of the region including the investment programs
- proposals for other provisions to be undertaken in order to accelerate the development of the region.

The regional physical plan concerns itself with the basic tendencies of a possible physical development of the territory, determines the principles of a long-term structure of the territory and determines the conditions for physical and chronological coordination of investments or of other interventions into the existing territory.

* See Harvey S. Perloff Taming Megalopolis, p. 725: "Metropolitan planning should concern itself with area-wide problems (only)."

For practical activity it is assumed that regional, economic and physical plans should be executed simultaneously. In the individual phases of the planning process they mutually influence each other, because none of these disciplines may attain optimum results without information of the possible economic effects or territorial and technological consequences of partial solutions.

The economic and the physical plans have instruments at their disposal by means of which they realize the conceptions expressed in the form of documentation. The instruments of physical planning find their expression in territorial regulations (territorial decisions); the instruments of regional economic planning, barring the centrally approved individual investment projects, are economic stimuli which are differentiated according to the specific economic conditions of the regions and production branches.

Extent of the territory of the physical region

The conception of the regional physical plans indicates that the boundaries of the region in question are stipulated with respect to the territorial extent of problems and their relations to be solved. Thus, the extent of the territory of the physical region is stipulated in such a way that it enables the solution of main problems connected with the spatial organization of the development. The following problems and relations are considered as most relevant for stipulating the boundaries of the regions:

- the stipulation of the future size of towns and therefore, the extent of commuting to work *
- the attractiveness of the settlement centers located in the area of forecasted development and the resulting commuting to cultural and other services

*See app.: "Methods of stipulation of the future size of a town."

- the basic system of water supply, and energy supply with respect to the growth of centers of development
- basic system of roads connecting the main centers of future development
- area of recreational facilities fit for daily (short-time) recreation of the inhabitants of the centers of development.

Using the language of Harvey S. Perloff,* they are the "skeletal" items which stipulate the boundaries of a regional physical plan. With respect to the American practice, it is necessary to put emphasis on two points of the described conception:

a) the boundaries of the physical plan region are stipulated with respect to the territorial incidence of problems to be solved.

b) the boundaries of the territory of a regional physical plan need not follow the administrative boundaries of individual districts or even of the administrative region but must follow the administrative boundaries of individual communities. Theoretically taken, they need not follow these boundaries either, but with respect to the problems of the realization of the plan, it is followed the mentioned way.

It is necessary to add that the territory of the physical regional plan represents only a part of the whole territory of the administrative region. The extent of the territory of the regional physical plan amounts usually to 1,000 - 3,000 square kilometers, while that of administrative regions to about 10,000 square kilometers. This is because the development program arouses special problems to be solved by means of the physical plan only, in several focuses and usually in towns and adjacent areas.

In accordance with this conception the regional committee stipulates the boundaries of the territory of a physical regional plan in preliminary form

* Taming Megalopolis , pp. 719-724.

only and they are fixed by the designing institute during the designing process.

The result of the regional physical plan

Each regional physical plan differs both in its contents and in the definition of its main task. Enclosed are diagrams of the examples of various types of regional physical plans.

Fig. 2 and 3 - show examples of a plan which was drawn up for a mining and industrial district. The main task was to insure the region's economic development, to determine suitable areas for housing purposes and other necessary investments.

Fig. 2 - shows the limitation of the region in question, and its relation to the surrounding regions, primarily in the mining of minerals for industrial use, and the wider territory of space and agricultural regions.

Fig. 3 - indicates the main principles of physical planning of the region. The mining of raw materials, in this case, open-cast-mining, causes the redistribution of housing areas as well as the re-siting of railways and roads. New industrial land and new areas for residential development are being proposed. A further important regional requirement was the need for recreational districts for the well-being of the workers.

Fig. 4 - an example of the layout of a recreational district in the vicinity of a new water dam. It is essential to mention that the task was allocated only after the completion of the water project; it was not concerned with the planning sequels of the development nor with flooded areas or their immediate surroundings, not

even with residential areas. The aim of the plan was the defining of suitable recreational areas, classifying them according to purpose, establishing their capacity, proposing the solution of the problems of transport connections, and supplying drinking water.

Despite the differences of the tasks and contents of each regional physical plan, it is possible to produce generalized conclusions concerning the results of these kinds of plans.

The results of physical regional plans consist of propositions for a general conception of the future spatial organization of all main physical functional units in the frame of the given territory.

The propositions of a regional physical plan involve:

- main principles of the territorial development of settlements, including new settlements
- stipulation of spaces for individual purposes:
 - production - both industrial and agricultural
 - housing
 - recreation
- main principles of the territorial organization of the transport network
- main principles of the territorial organization of the energy supply
- principles of the water economy: general balance of water-supplying systems, sewage systems, principles of the regulation of the main water courses, stipulation of the areas destined for irrigation and drainage purposes.
- stipulation of areas of future sanitation and recultivation - of special protection due to their natural or cultural value
- stipulation of the necessary functional and time schedule of the realization of the basic investments projects

As for the scale of the graphic presentation, the regional physical plans are usually drawn to a scale of 1:25,000, and sometimes, even in detail to a scale of 1:10,000.

Comparison with USA practice

When taking into account the extent of the territory to be covered by the physical plans, the conception of regional physical plans would correspond to the plans of metropolitan areas. But there are important differences:

a) metropolitan planning is at an early stage of development and there is no one accepted view of what metropolitan planning is or ought to be.*

b) metropolitan plans should cover the area of a county, but the counties have no direct power to put such a plan into action.

c) the Detroit metropolitan area plan which is now under elaboration covers the area of 4,454**square miles:that is about 11,000 square kilometers. The scale of the plan - 1:100,000 - that is about 1:250,000 in comparable decimal system, corresponds to the extent of the territory. But this scale can provide no more than a rough scheme of spatial organization of the territory. It is then questionable whether such a scheme can represent a sufficiently firm guideline for the master plans which will be elaborated, that is, whether its conception will be respected and completed by the master plans of individual cities.

The other and substantial difference between the typical physical regional plan and that of the Detroit metropolitan area is the contents of these plans. The regional physical plans are complex plans in the sense of the complexity of the elements forming the macrophysical environment which is considered.

The Detroit metropolitan area plan mainly considers economic factors, population, land use and transportation factors. This means that the Detroit plan is not complex in comparison to regional physical plans.

* See Harvey S. Perloff - Taming Megalopolis.

** See "Talus and Tomorrow," report of the Detroit Regional Transportation and Land Use Study.

On the other hand this plan is intended to deal with future tax bases affecting individual governmental units (373 units) and to call for capital and operating expenditures by many of them. Such a type of financial balance is missing in the regional physical plans up to now. As for the perspective, the Detroit metropolitan area plan has to propose the solutions until the year 1990. The average time-period of the propositions of regional physical plans is 15-20 years.

b) The Relationship of the regional physical plans to the master plans of towns(cities)

The aims of the master plans are the following:

- to test, on the basis of the analysis of the territorial conditions, and make more precise, the future size of the town accounted by the local authorities
- to fix the boundaries of the future territorial development of the town and its historically valuable parts
- to repartition the sites according to their use - housing, production, traffic, parks, recreation, etc.
- to stipulate the principles of their use and incorporation into the whole organization of the town
- to fix the areas for systematic sanitation and reconstruction
- to fix the boundaries of areas to be preserved and the zones of protection
- to stipulate the principles of the architectural structure of the town and its important parts - principles of the formation of the center, of main street and squares, location of important services, hospitals, theaters, universities, principles of architectural solution of main buildings, etc.
- to stipulate the principles of organization of the technical infrastructure - water and energy supply, sewerage systems, etc.
- to stipulate the principles of the organization of the road and railway lines
- to stipulate the successive procedures of construction

- to prepare a balance-sheet of costs and benefits.

The need of interpreting the future economic and social development in all of the correlations to be co-ordinated within the territorial arrangement, dictates the necessity of carrying the design of a master plan over the town boundary into the surrounding territory.

According to the extent of the economic and social correlations between the town and its surroundings, three different methods of a physical planning link-up might be used:

- 1) in the case of very simple correlations, the town and its adjacent suburban zones are planned together
- 2) in the case of more complicated correlations, the town and the wider "town's surroundings" are planned separately
- 3) in the case of very complicated correlations, the relations of the town to its surrounding territory are coordinated within the framework of a regional plan.

The suburban zone is composed of all territories outside the town boundary which are required for the location of facilities and services that cannot be placed on the proper territory of the town. The method of the incorporation of other territory into the developmental plan of the town results from the one-sided view of the spatial satisfaction of the needs of the town and its protection without taking into consideration the proper interests of development of the hinterland of the town as a geographical and administrative unit. The structure and the town boundary are consequences therefore, of the analysis of individual needs, of the whole conception of the spatial organization of the town as well as the use of town territory for the siting of individual functional units. In the nature of these consequences, there are technical relationships and problems which stipulate

the necessary extent of the incorporated territory. The social relationships, for instance, the attractiveness of the town and its influence on the formation of the settlement structure, etc., are not taken into consideration.

The city-region, too, is based on the conception that it is not possible to design the spatial organization of the towns, especially the larger ones, without taking into consideration some part of their hinterland. As compared to the suburban zone, the city-region also includes areas related to the town in a productive or a social way.

The limits of the town's hinterland may be determined in several ways. Practically all of them are based on the idea that the relationships between the town and its hinterland are manifold, that is, since it is impossible to take all of them into account, the prevailing relationships should be considered decisive only for the determination of the town's hinterland boundaries. And so, while travels to work are analysed, the relationship between the dwellings and the places of work being considered prevail, while at some other time the relationship between the dwellings and the areas of recreation might prevail, and so forth.

Comparing the function and structure of physical regional plans with that of the master plans of the town, the elaboration of the physical regional plans is necessary and advantageous in the following cases:

- the forecasted development will deal with the problems of the organization of areas in which some important settlement centers do not exist. This is the case with some recreational areas or areas destined for the construction of dams. But it is supposed in all these cases, that the extent and the structure of the building-up will be of such a nature that it will be necessary to prepare a document in order to safeguard the coordinated spatial organization of individual

functional units.

- the forecasted economic development will be so immense that its consequences shall touch not only the proper territory of the town but also shall inflict structural changes in the whole settlement network within a region and that will be accompanied by necessary changes in the capacity of the technical infrastructure of municipal services, their location, etc.

- the forecasted economic development directly affects the whole group of towns and the areas among individual towns (coal basins, for instance) and therefore, the need arises to design a new system of technical and social arrangements among individual towns and a new formation of the countryside, etc.

The results of the physical regional plans naturally affect the spatial organization of towns which are situated within the region. Therefore, the elaboration of a physical regional plan usually precedes the preparation of a master plan in complicated condition. The main directions of the physical regional plans are then prerequisite to the solution of the spatial organization of the respective towns.

That goes especially for the following problems:

- the perspective size of the town
- the basic functional zoning of the town
- the main network of the transportation system (roads, railways, waterways, airports)
- the main network of the technical infrastructure
- the basic system of recreational facilities, specification of their functions and capacities
- the layout of services and facilities serving for more settlements than one town only (schooling of higher types, hospitals, etc.)
- the rules for recultivation of devastated land, for the planting of green belts, etc., e.g., all the rules relating to the improvement and amelioration of the living

environment, including those which cover the preservation of natural and historical monuments.

In regards to the methods being used in the regional plans and in the master plans, the following differences can be specifically noted:

- the main emphasis is being laid on the complexity of the solution with respect to the technical, natural, spatial and economic criteria, while the architectural aspects find their assertion in master and detailed plans of towns
- the methods of economic balances are used more often when preparing the physical regional plans than the master plans
- the more numerous variety of problems to be solved leads to a greater variety in the use of projecting methods. The problems are analyzed in respect to their importance and the results are expressed in various scales. Usually the scale of 1:25,000 is used, but the use of more or less detailed scales does not represent something exceptional.

The master plan of the town is usually elaborated in the scale of 1:5,000 and represents the long-term conception (for about a 20-year period) of the territorial organization of all main functions of the town.

The master plan of a town is prepared for:

- settlements enjoying substantial perspective development
- settlements characterized by complicated territorial relations of individual elements

The attitude toward the question of whether or not to elaborate a master plan, is the same as stated for the category of the regional physical plans.

Comparison of Czechoslovak master plans with those prepared in the USA

The master plans being elaborated in the USA render more possibilities of comparison than the metropolitan area plans.

The master plan of the Nankin Township is used for a comparative basis.* The size of this town - 60,763 inhabitants in 1960 - corresponds to the size of smaller regional or bigger district towns in Czechoslovakia. From the Czechoslovak point of view the following features of the plan are remarkable:

a) the boundaries of the plan follow the administrative boundaries of the Nankin Township; no attempt is being made to judge the problems of its development and territorial organization with respect to the neighbourhood of the township.

This fact is rather surprising especially when considering that the boundaries of the Township are artificially stipulated in the sense of physical environment and that another type of physical plan covering the whole area had not been elaborated. The additional fact leading to this opinion is that the Nankin Township is a "bedroom community" adjacent to an urban metropolis and is dependent on the development of the metropolis.

b) the key point of the proposals of the comprehensive plan is the estimation of the future size of the town.

This estimation is based on the analysis of the former development of the Township and the forecasted development of the county. The Czechoslovak approach to this point is different. It is based mainly on the analysis of existing and planned employment opportunities.

It is understandable that such an approach could not have been provided in the case of the elaboration of the plan of the Township. But the forecasted size of the Township varies very substantially from 188,215 to 536,004 inhabitants. No sufficient proof has been submitted that the medium size of 462,491 persons, which

* Comprehensive Plan of Nankin Township, Wayne County, Michigan, October 22, 1965, prepared by Parkings, Rogers, and Assoc., Planning and Urban Renewal Consultants, Detroit, Michigan.

is used as the base for further considerations, is really foreseeable and what is more important, no proposals (alternative proposals) have been provided in case the population of the town would surpass the designed size.

c) the Czechoslovak master plans involve the principles of the architectural design of a town as a whole and of its important parts. This dimension is missing in the plan of the Township. The comprehensive plan of the township is concentrated on the land-use organization mainly.

d) the proposals of the Czechoslovak master plans are supported by detailed balances proving the necessity of the realization of individual investment projects, especially in the sphere of the technical infrastructure (water supply, sewerage). These proposals of the comprehensive plan of the Township are not prepared in so great detail.

e) On the other hand, the comprehensive plan of the Nankin Township is dealing with financial questions of the management of the town in very great and very realistic detail.

f) the Czechoslovak master plans, besides including the planning period, also comprise the long-term view of the spatial arrangement of the town (of about thirty years). This long-term view represents, to some degree, a test of the proposals submitted for the planning period.

It can be said, generally, that the American master plans represent more of a general scheme of the organization of a town and allow a larger space for the decision-making of local authorities. They represent the technical background for further operation and are less devoted to the sociological questions than are the Czechoslovak master plans.

c) Detailed Plans

Detailed town plans are elaborated for individual homogeneous parts of the town (individual functional zones of the town) or the whole territory of a smaller settlement unit. These plans are usually prepared in the scale of 1:2,000 or 1:1,000.

The Difference between the master plans and detailed plans:

The master plan of a town represents a long-term conception of the future territorial organization of the life of the town. Even if its elaboration is initiated by the immediate planned development of the town, its aims surpass the time-period of the planned investments. The master plan, backed by a long-term forecast of the population growth, its social structure, and by a sociological analysis and programs of the future needs, forms the background for the stipulation of investment and other provisions to be undertaken in individual planning periods in order to preserve the best living conditions for the inhabitants. The detailed plans differ in the aims as well as in the period of building up to be covered by it. The detailed plan represents a more technical project than the plan. Its elaboration originates from an immediate impetus of a planned investment in an immediate period (usually three to seven years). The volume and the structure of investment is already known and the question arises of how best to allocate this program in the spatial and architectural sense.

The detailed plans, however, do not represent lay-out plans of individual buildings. They are elaborated for complex parts of towns affected by the new building up (or reconstruction) and they represent complex plans, i.e., that they solve not only the location of individual buildings and their architectural incorporation into the whole frame of the town but also the necessary structure and

location of the infrastructure, of green belts, parks, etc.

The detailed plans serve the issue of territorial decisions and the elaboration of technical projects of individual actions.

Comparison with American detailed plans is lacking. The detailed plans cannot be compared with the "zoning ordinance" which represents only a land-use division combined with certain technical regulations of the constructions. The "zoning" is only a two dimensional provision. It does not represent a conception of the architectural formation of the town, especially its sections.

The Central Business District Study of Detroit* which has been under preparation since July, 1967, indicates that, in scale, it would be at least comparable to the detailed plan described previously. Barring the fact that this study has not yet been completed, the report indicates that the study, in its analytical background of socio-economic elements, should even surpass the contents of a detailed plan and should correspond to the conception of a master plan.

The Time period of the physical plans:

Up to now, the physical plans have not been categorized according to the time period covered by these plans. The new Law on physical planning which is under preparation now, divides the physical plans according to the "factor of time" which determines the contents of the physical planning documents with respect to the period in which the proposals must be realized.

With respect to these considerations, the physical planning documentation has to be formed by:

- territorial (spatial) prognoses
- physical plans

* CBD Study, Progress Report, July 26, 1967- June 30, 1968.

- territorial projects

1. The territorial (spatial) prognoses have to be prepared on the order of regional and town authorities who will stipulate basic demands to be met.

The following differences in the function and contents of these prognoses can be noted in respect to the physical plans:

- the incentives for the elaboration of the prognoses do not form the economic tasks resulting in changes of the land-use, but rather the proper need of physical planning authorities to recognize the possibilities of territorial (spatial) organization of the area in question.

- the territorial prognoses contains the conception of alternative utilization of the territory with respect to the natural and human resources. These conceptions surpass the periods of economic plans.

- the territorial prognoses need not be approved and, therefore, they are not binding. But on their bases, the investigation of some problems can be undertaken.

2. As far as the physical plans are concerned it is supposed that the function, contents and relation to the uniform economic plan will remain the same as mentioned in previous chapters. The physical plans are, and have to be, approved by the regional and district authorities; in special cases, by the government.

3. The function of the so-called territorial projects consists in the stipulation of conditions for the realization of space- and time-concentrated constructions in the next three to seven years.

The territorial projects have to be elaborated on the ground of a real investment program. This program is elaborated by the department of physical

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The territorial projects have to be elaborated on the ground of a real investment program. This program is elaborated by the department of physical

planning of regional, district or town committees with the aid of other divisions of local committees, and it is approved by the local council. Meanwhile, the territorial prognoses need not be obligatory at all, and the results of physical plans need only be obligatory in decisive principles. The results of territorial projects have to be obligatory in all parts and details.

The territorial projects, therefore, immediately serve the formation of territorial decisions. Besides these physical planning documents, the local authorities are entitled to allow the elaboration of whatever analyses and studies are needed for the judgement of problems and for the formation of decisions.

Dimensions of the physical plans:

All categories of physical plans are drawn on their graphic presentation of the background of topographical maps of certain scales. This procedure ensures at least two dimensions of expression of the proposals - the latitude and the longitude. The preciseness of this presentation depends upon the scale being used.

It would not correspond to the conception of physical plans if we would understand them as simple land-use plans only. Such an attitude would not correspond to the basic aim of physical planning, that is, the formation of the best living environment of inhabitants. The fulfillment of this task requires a third dimension, i.e., the physical shape of the territory in question. Considering the scale used for graphic presentation, it would not be possible to impose these requirements on all categories of physical plans in the same degree.

The category of regional physical plans, therefore, involves the third dimension - height - only in exceptional cases when necessary to fix the limits of the spatial

formation of elements surrounding the towns or, generally said, of elements expressively encroaching the formation of the landscape (for example the disposals, the chimneys of the factories, etc.). The architectural disposition of a town is solved, in principle lines, in the frame of a master plan, that is, that the presentation of master plans is in principle three dimensional.

In a more detailed sense, this three dimensional shape of a town, esp., of the part being constructed immediately, is expressed in the frame of detailed plans. The master and detailed plans, therefore, are not prepared in their graphic presentation only but also in models and technical schemes of important parts influencing mostly the shape of town.

I dare say that this approach is different than the physical plans prepared in the USA. The USA plans represent mainly the land-use plans; that is, the plans of a maximum of two dimensions. This is due to the strong position of individual builders, promoters of the development of a town. In Czechoslovakia even the private interests have to be subordinated to the common interest expressed in the physical plans and territorial decisions.

PROCEDURES AND FINANCING

The elaboration of physical plans of all types is financed from the state budget (republic budget): This item need not be stipulated in the financial plan of the regional (district) committee concerning individual plans to be prepared; it is enough to make a general item for the physical planning purposes.

The physical plans are elaborated by order of regional or district national committees through specialized projecting (design) institutes.

The regional physical plans and master plans of towns are elaborated by order of regional national committees. The same goes for the detail plans of towns.

The district committees order the elaboration of master and detailed plans of villages. As said in part one of this study, the regional national committees are subordinated to the respective republic governments. As for the activity in the field of physical planning, the methodological guidance is provided by the ministry for techniques.

In this field, the ministry determines the principles for the formation and protection of living environment and the assurance of a high architectural and aesthetic level of building and of physical planning. Further, it ensures the expert management of physical planning through the department of physical planning in the regional committees. The formerly mentioned national committees are entitled to approve it.

Projecting (designing) institutes

The present organization of projecting (designing) institutes had its origin in the early fifties. At this time a new organization of state administration was established resulting in the establishment of twenty regions and twenty regional committees. The organization of projecting institutes dealing with physical planning studies was subordinated to this administrative organizational scheme and it has remained without any substantial change until the present time. The reorganization of administration connected with the reduction of the number of regions to ten, did not have any influence on the organization of projecting institutes. Barring that scheme, the specialized institute for the preparation of physical regional plans and physical planning studies, covering the territory of the whole state, was established in the year 1954. The branch of this institute in Bratislava became an independent institute in the year 1964.

The present state is as follows:

An average of two projecting (designing) institutes exist in every region and deal with the elaboration of master plans, detailed plans and projects of individual public buildings and habitable houses.

Their size is subordinated to the needs of the physical planning bodies of the individual regions and districts. In selected towns with complicated territorial-technical problems, chief architect's departments have been established. (Total: in sixteen towns.) These bodies also prepare the physical plans of respective towns.

The institutes are subordinated to the regional (town) national committees. The term "subordinated" means that the respective committees control the activity of these institutes and approve the structure of their plans of activity. The institutes work on commercial basis, which means, in the economic sense, that they represent independent agencies. This position is comparable to the position of TALUS - Detroit Regional Transportation and Land Use Study; but what is not comparable is the size of this type of institute.

It can be estimated that the average size of a regional designing institute is about 500 employees, that constitutes at least 5,000 designers in the territory of the whole republic active in the field of physical planning and design.

The specialized institutes for the preparation of physical regional plans in Prague and Bratislava are subordinated to the respective republican ministries for techniques.

The number of employees of the institute in Prague (TERPLAN) is about 170, and in Bratislava (REGIONPLAN), about 130 persons. These institutes, besides the preparation of regional physical plans by order of the regional committees, render

technical services to the republican central planning bodies(ministry for techniques, ministry for economic planning) and to other central bodies in the field of location of important investments.

Czechoslovak Socialist Republic devotes a lot of financial and other endeavors to the preservation and renovation of historical heritage which is extremely rich. The needs for special projection work are met mostly by the activity of the National Institute for the Reconstruction of Monumental Cities and Properties with headquarters in Prague and a branch in Brno.*

As said previously, the physical plans of all types are prepared by respective designing institutes by order of the respective national committees.

The tasks which have to be solved by the physical plans are stipulated by the council of national committees in the form of so-called "economic and technical principles." These principles contain:

- a) the reasons why the plan should be undertaken
- b) a summary of the chief problems which have to be solved
- c) the preliminary stipulation of the area to be covered by the plan
- d) detailed proposals for single sections of the work to be commenced
- e) the extent of the commentary, statistical and graphical presentation of the plan; the proposed scales

* Besides these institutions being active immediately in the field of physical planning esp., meeting its needs, another group of specialized projecting institutes touches this field indirectly. Every branch of investment activity is backed by the specialized projecting institute. So, institutes exist for the designing of chemical factories, textile factories, machine factories, roads, railways, agricultural building, etc. The designing capacity is concentrated in specialized institutes managed by the respective central branch body. The number of employees of all these designing institutes is about 30,000 persons.

- f) a list of the most important documents, old plans and surveys which have to be used and appraised in the course of the elaboration of the ordered plan
- g) basic data concerning the planned economic development of the given area

Customarily, these basic documents are prepared in cooperation with the respective designing institutes. The designing institute, after having received these "economic and technical principles" prepares the synopsis, the time schedule and the financial calculation of the work. This preparation contains in detail the following points:

- a) a methodological account comprising principle methods to be used;
- b) the degree to which individual problems will be solved and the data which will be used for them;
- c) required cooperation with individual national committees;
- d) results of the plan which can be expected and the manner of their presentation;
- e) time schedule for the work;
- f) financial calculation of the work related to individual groups of problems to be solved.

These two documents - "economic and technical principles" and synopsis, time schedule and calculation - form the base of the financial contract concluded between the national committee and the designing institute. What can be of interest for comparison with the American practice is the fact that the expenditures connected with the elaboration of the plan (the price of the work) are principally stipulated in fixed form and the designing institute takes the risk of miscalculation. Only in the case where the number of tasks to be solved has been enlarged, on order of the national committee during the designing process, can the calculation be changed

after mutual approval. The same goes for the time schedule of the work.*

The elaboration of a physical plan can usually be divided into the following working phases:

- a) accumulation and survey of the basic facts for the given task, their analysis and evaluation
- b) preparation of the first sketch of the plan
- c) discussion of the first sketch of the plan
- d) elaboration of the final plan
- e) discussion and approval of the plan.**

The results of the analytical phase of the designing process are not usually submitted to the discussion; they represent the internal phase of the work. Only if new problems, not incorporated into the "economic and technical principles," are revealed, are the results discussed with the respective national committees and the synopsis of the work and the contract are changed.

The results of the first sketch of the plan are discussed with all organs concerned with or entitled to comment on the proposals of the plan. The physical planning department of the regional national committee considers all admonitions and on this ground it prepares the directions for the completion of the final plan which are obligatory for the designing institute. The final result of the plan is again discussed with the same organs as the first sketch and if principle objections do not arise it is approved by the assembly of the respective national committee.

* Last year, such a procedure was accepted, that at the start of the work, only a preliminary price was stipulated and this price was made precise and fixed after completion of analytical phase of the work.

** This last phase of designing process is not incorporated into the time schedule of the work and is calculated separately.

The plan can be approved even in this case if the assembly of the national committee comes to the conclusion that the proposed solution of the plan is in accordance with the common interest. But selected (principal) solutions of the plan are obligatory and in the approving list such provisions are explicitly fixed. Other proposals of the plan have only the character of recommendations. By this provision, the role of physical plans has been increased considerably.

The participation of inhabitants in the whole planning process and the preservation of their rights.

Up to the elaboration of this paper, the rights and interests of inhabitants could have been asserted in the phase of formation of the territorial decision only. The citizens could have raised objections and the national committee was forced to handle them in regular judicial proceedings. If unsatisfied they had the right to appeal to the court. The conclusions of all sorts of physical plans have been discussed with public authorities and with enterprises but not with citizens.

In the new physical planning law that is under preparation, the assertion and preservation of rights of citizens is regulated as follows:

- the citizens must have the opportunity to get familiar with the results of all physical plans before their approval. The citizens must be entitled to submit the proposals for the solution of a physical plan and the approving authority must take an attitude towards these proposals when approving the plan. To raise the admonitions and objections against the results of detailed physical plans is possible. In these plans, it is possible to fix relatively precisely the extent of encroachment into the rights of citizens.

- meanwhile in the case of proposals for the physical plan offered by citizens, it is necessary to judge and decide upon these proposals in the phase of approval of

a plan and to make them one of the directions for the realization of the plan; in the case of admonitions and objections against the results of a physical detailed plan, it is the duty of local authorities to judge and decide them in a form of the legal act and that before the approval of the plan. Then there is the possibility to appeal to the court.

- it is a duty to publicly announce the discussion period of the proposals of the plan and the period in which it is possible to raise other proposals, admonitions and objections.

These regulations shall bring on serious changes in the process of the elaboration of a physical plan. The designing institute will be forced, in the phase of the preparation of the plan to take into account and to respect the interests of citizens and to adequately account for the proposals not only under the view of common interest but also those which are individual. Otherwise, all of its work could come to nought.

- before the formation of the territorial decision it is a duty to carry on a local investigation. The citizens whose rights are in any way affected must be invited to this investigation. The participants of this procedure are entitled to raise admonitions and objections and it is a duty of the local authorities to decide upon these objections when formulating the territorial decisions. In the formation of the territorial decision, it is possible to appeal to the court. Such an appeal has a delay effect.

REALIZATION AND CONTROL

The physical plan serves the following practical aims:

- a) regional physical plans:

- formation of the long-term physical planning policy in the area of

concentrated activity

- formation of the long-term conception of the spatial organization of economic activities and of the long-term conception of the investment policy of the region
- specification of further designing (projecting) activities and further immediate provisions to be undertaken
- help to stipulate the location and other conditions concerning the realization of the investment projects (territorial decisions) if other more detailed physical plans do not exist.

b) master plans of towns:

- formation of the long-term architectural conception of the organization of the town
- formation of the long-term conception of spatial organization of individual activities of investment activities and other provisions in structure and time
- specification of further designing (projecting) activities and further immediate provisions to be undertaken
- help to stipulate the location and other conditions concerning the realization of the investment projects (territorial decisions) if other more detailed plans do not exist

c) detailed plans:

- stipulation of the detailed functional and time schedule of the building up
- issue of territorial decisions
- base for the elaboration of technical projects of individual buildings (so-called "lay-out plans")

- decision-making concerning all provisions of short-term character.

Territorial decisions *

The territorial decisions are legal acts carried out by district or town authorities. The territorial decisions are issued before work on the design of the building begins. In it the conditions for the solution of concrete proposals are determined as far as it concerns the design preparation of the construction and the execution of required changes in the territory, and the protection of important interests in the territory. The territorial decisions do not serve the division of land-use only. They represent the tool of realization of the conceptions involved in the physical plans. That means that the dimensions of territorial decisions must at least correspond to the dimensions of these plans.

The territorial decisions have to be obtained for any investment activity, no matter what its type (the same applies where a building is to be pulled down), size, value or originator might be.

The territorial decisions represent a substantial encroachment into the rights of constructors but they express and safeguard the interests of the whole society.

The main problem of such a conception lies in ensuring that the territorial decision really expresses the interests of the whole society, while also being professionally correct, e.g., while it leads to the optimum arrangement of the territory. Up to date, the results of the studies of this problem lead to the following conclusions:

"The interests of the whole society" may be defined only in a very general way. Still, the safeguarding of the interests of the whole society by local authorities

* Territorial decisions provide the legal basis for development, construction and investment.

seems to be the only solution on hand. It is perfectly true that local authorities represent in fact only the interests of people living in a given territory. But they do have two distinctive advantages.

Firstly, they are able to adapt the generally formulated interests of the whole society to the actual local conditions of the territory. Secondly, they are organizations led by elected bodies, e.g., bodies under public control.

Much depends, of course, on the quality of the personnel of the physical planning departments and on the quality of the basic data for decision making, both being crucial points of physical planning.

The territorial decision is a two-sided business. One side is its legal aspects; the other, its physical planning aspect. And it is obvious that both of these aspects have to be dealt with in the most satisfactory way, each one of them depending on the other.

There are two ways of getting the best results:

a) the first requires staffing of physical planning departments with sufficient numbers of high class personnel. This number varies in Czechoslovakia between three to five in districts (and bigger towns) and five to eight in regions.

Considering the extent of the territory, the mentioned number of personnel cannot fulfill all its tasks in the best of ways. But no more people of high quality can be got at present, since the jobs are far less attractive than those in the design offices, where there are not only incomes about one third higher but the type of work bringing more professional satisfaction as well.

b) the second way requires enlargement and rising of the quality of the whole system of information needed in physical planning. The system consists of three groups:

- basic data required from investors. These contain information of all kinds, depending on the type of investment activity, and the physical planning department is fully authorized to require them.

- data collected or otherwise provided by the physical planning department itself. This might be data on housing and other constructions realised in the territory, networks of technical infrastructure, analysis of all kinds, etc. The extent of these data depends directly on the number of personnel of the department.

- data demanded from other authorities or institutions. These might be subdivided into:

- physical plans and physical planning studies

- expert reports by other departments (health, education, technical, economical, etc.)

The rising quality of whole systems of information represents a long-term process which cannot be speeded by administrative provisions.

Link between territorial decisions and other provisions concerning the construction

1. Building Regulations:

The conception of the building code rests on the following principles:

a) The permits issued by the building authorities:

- the construction may be executed only according to the permit issued by the respective building authorities;
- the building permit is required for construction and construction activities of any kind regardless of their technological execution, their purposes and duration;
- building authorities must be informed of all repairs and maintenance work

done in the building which could influence the stability or the appearance of the building and of all repairs and maintenance work done on building monuments; the building authority will then decide what is required in every particular case;

- by setting up certain conditions, the building authority ensures the safeguarding of public interests and interest of the persons and organizations concerned during the construction and the use of the building, its completeness, elimination (limitation) of the negative effects of the construction, the adherence to the respective technical regulations and conditions put forward by the cooperating state authorities; the harmonization of the executed construction with its environment;

- the validity of the building permit expires after two years provided the construction has not started in the meantime; an appeal against the building permit can be made to a higher authority;

b) The Approval of Buildings:

- a building or a finished part of a building capable of independent use may be opened for use by the owner or by another user only after an approval procedure; the approval procedure is carried out by the building authority who has issued the building permit and expressed the standpoint of the state administration authorities;

- after the approval procedure the building authority will pass a resolution indicating whether the use of the building or of a finished part of the building is approved or will specify what other steps should be taken and when; at the same time it will decide about the objections submitted by third parties; if an immediate approval cannot be made, the authority may issue a license for the temporary use of the building, provided that public interest is not jeopardized and may further some special conditions;

- the completed building or finished parts of the buildings may be used only for the purpose specified in the permit; modifications can be made only with the approval of the building authority.

c) The State Building Supervision:

- the state building supervision safeguards public interests as well as the rights and the legitimate interests of organizations and citizens from the negative effects of construction - use and demolition of buildings; the supervision begins after the building permit has been granted; it is executed by the building authority and the other state administration bodies subject to an authorization specified by special provisions;

- if defects are found by the building's authority, it requests the persons or organizations responsible for the defects to remedy them; if such a request is not obeyed, the building authority may issue an order for the removal of the defects or stop the construction;

d) Maintenance of Buildings and Their Demolition:

- the owner of the building must maintain the building in the condition qualifying it for the use for which it had been approved, where the maintenance of the building is not appropriate, the building authority may order the owner to remedy its state within a certain period and under specific conditions;

- if the building is in such a condition that it endangers the safety of persons, the building authority will order the evacuation of the building or of its dangerous part simultaneously it will charge a competent professional building organization operating nearest the endangered building to undertake the necessary safeguarding measures and charges the owner to put the building into proper condition;

- if the organization does not carry out the necessary operations in the extent and within the period specified by the building authority, the organization will be made responsible for the ensuing damages;

- the building authority may order building reconstruction to be carried out provided that some hygienic, fire safety communication or other defects are to be remedied and that such reconstruction is in the interest of the society; the reconstruction shall be made at the expense of the owner; if the owner of the building cannot execute the reconstruction due to lack of money for the payment of the expenses connected with such work and has no possibility to procure the necessary amount, the Local National Committee may contribute to the expenses or pay the total amount;

- for the demolition of a building not directly ordered, a permission of the building authority is required.

2. Protection of Nature and Cultural Monuments

The Law on the State protection of nature No. 40/1956, states in its introductory provisions that "the Law protects natural wealth and the appearance of the countryside and ensures that these values serve for teaching, recreation and the care of the people's health."

In paragraph 17 of the bill, it is stated that "the respective organs of the State protection of nature must be present at the proceedings on the physical plan, the construction of communities and waterworks and at every negotiation which concerns the interests of the protection of nature."

The statement of the respective organs of the State protection of nature must be required before the issue of the territorial decision and this statement must be

incorporated into the conditions of the territorial decision (and building permit).

The same goes for the protection of cultural monuments.*

3. Protection of Agricultural Land

The protection of agricultural land is based on the following main principles:**

- the expected location of construction on agricultural land has to be justified during the elaboration of the physical plan by an economic calculation of losses in agricultural production and profits resulting from the location. Before being submitted for approval, the physical plan must be settled from the point of view of the protection of the agricultural land, according to the importance of the physical plan, either by the ministry of agriculture or the agricultural department of the regional national committee.

= the so-called "preliminary consent" for the removal of agricultural land from agricultural production is introduced and the basic conditions are determined when this consent is granted. The granting of preliminary consent is a condition for the approval of the investment task of building for the territorial decision, and for the beginning of work on the design. The preliminary consent for the removal of land from agricultural purposes is granted by the district national committee if it concerns land up to 1 hectare, from 1 to 5 hectares by the regional national committee, and above 5 hectares by the Ministry of Agriculture.

- in the case of permanent removal of agricultural land from agricultural production, payment is prescribed if the value of annual gross vegetable production

*

Law on cultural monuments: No.22/1958.

**

Law on protection of agricultural land: No. 53/1966.

from 1 hectare exceeds 1,500 crowns (about 150 US dollars) and in the case of pastures and meadows, 750 crowns. The basic rate of payment is 100-fold annual production (the rate may be increased to 200-fold annual production or reduced to 50-fold; it depends upon the value of the agricultural production). No payment is required in cases of the construction of works of common use, as roads, railways, airports, water dams, etc., and in the cases of the use of land in the covered territory of a community.

4. Protection of Health

Law on the care of the people's health* gives great authority to the bodies of the health service in the field of construction. The physical plan cannot be approved and the territorial decisions and building permissions issued without the obligatory opinion of the organs of hygiene. The law also states the possibility of ordering the discontinuance of building or production, etc., until matters are corrected, if the violation of regulations on the protection of health and of satisfactory living conditions would or could cause serious damage to health.

5. Other Provisions

By other provisions the measures arising from the protection of air and water are stipulated.** Their character is similar to that mentioned previously.

Revision of the physical plans

The effectiveness of physical plans has to be systematically followed by the respective bodies of physical planning. If the suppositions of the plan changed

* Law No. 20/1966.

** Law on measure against the air pollution: No. 34/1967; Law on water management: No. 11/1955.

to such a degree that the plan could no longer serve the physical planning policy, its revision is to be ordered.

The stability of the physical plans represents a serious problem. The physical plan being of practical use, must be based on certain suppositions of future development. The legal regulation of physical planning in 1958* was based on the principle that physical planning forms a link between the state plan of development and the realization of capital construction. This principle fully complied with the principle of fully-planned economy. It was envisaged that the long-term plan would specify concrete projects, whose gradual realization would not be interrupted by anything and would be coordinated by the means of physical planning.

This assumption, however, did not come true. A long-term plan has not stabilized. In the annual plans, fundamental changes were made and the physical plans lost their real basis. A new position of the physical plan with respect to the economic plans is being sought.

This process has not been completed yet. It requires the change in the methods of elaboration of physical plans. This necessity especially concerns the conception of the elaboration of regional physical plans, because their relation to the economic plan was tighter than that of master plans.

Firstly, it will be necessary to deepen the methods of evaluation of the social efficiency of individual proposals. The second way offers greater flexibility of the plans. Greater flexibility of the plans requires the elaboration of a greater number of alternatives reflecting to individual possible future situations. A way has not yet been found to select the limited number of possible situations without achieving the sequel that the physical plan, instead of being an instrument for the

*Law on physical planning: No. 84/1958.

management of the building-up, will be transformed into the set of not quite obligatory studies presenting the skill and ideas of the designers but of restricted practical use.

III. CONCLUSIONS

From the Czechoslovak point of view, the following provisions could be taken into consideration when developing the American system of physical planning:

1. The principle, "to proceed from the broader territory to the smaller one" and the stratification of problems and physical plans according to this principle.

The acceptance of this principle presupposes the stipulation of relationships among the individual categories of physical plans which need not be rigid, but must make clear the principal position of individual plans in the whole process of planning.

The background of this proposal is formed by the idea that the development of individual communities and their sections in the framework of the metropolitan urban area would not have to be a result of mutual competition but of mutual cooperation of individual governments aiming at the achievement of a common goal.

2. The principle to subordinate the boundaries of the territory to be covered by a physical plan to the territorial impacts of problems to be solved.

Also the acceptance of this principle presupposes tight cooperation among individual governments. The aim of this proposal is to achieve coordinated development of the whole area.

3. In the sphere of enhancement of the role of physical plans as instruments in daily decision making:

- a. stipulation of requirements concerning the scale and degree of solution of individual problems.
- b. introduction of two phases of discussion of the results of the plan - preliminary and final results.
- c. stipulation of array of solutions which have to be considered as binding for further activity.

4. In the sphere of control of building activity: implementation of the building code by the provisions concerning the supervision of the maintenance of buildings with respect to accepted standards. This provision would represent an encroachment into the private rights, but it would bring the improvement of some sections of the city, and would stop the decline of their quality. Annual rate of expenditures in maintenance might be a means of achieving this aim.

IV. APPENDIX

I. Terms

i. the future size of a town is one which is calculated to be reached at a certain date and measured by the number of inhabitants. In spite of the fact that the future size is expressed in the form of an absolute quantity, it does not represent a quantity which could be stipulated absolutely precisely. For this reason the term "approximate size" is being used.

ii. the future size of a town does not represent its "optimum" future size. The optimum future size is one which should be reached in order to achieve the most suitable conditions for the life of inhabitants and simultaneously the most effective economic criteria of the building up and working of a town. The term "optimum size" is not equivalent to a quantity which should be valid in all cases but one which would correspond most suitably to the existing conditions.¹

iii. the future size of a town is not its maximum possible size. The future size of a town is proposed for a certain period. The maximum size of a town need not be limited in time.

In spite of this difference it is advantageous to use the methods aiming at the stipulation of the maximum possible size of a town for the verification of the reality of the results of the stipulation of the future size.

¹ There are many theories dealing with the problems of the optimum size of a town, for example:

"Niveau optimal des villes" - University Lille- which indicates the following four criteria mostly important for the evaluation of the optimum size of a town:

- number of inhabitants
- density of population
- social structure of population
- territorial form of a town

The economic aspects have been analyzed by Walter Isard, Robert Coughlin, William L. C. Wheaton, etc.

2. Followed aims

The stipulation of the future size of a town follows these aims:

- i. to form the idea of the future size of a town in order to achieve the coordination of the construction of technical and municipal services in time and in capacity
- ii. to prepare the timely provisions for the adequate functions of the town

3. Extent of the territory

The stipulation of the future size of a town does not represent a mathematical task only but a result of the whole conception of the functional organization of the whole settlement network. When stipulating the future size of a town it is, therefore, necessary to take into consideration not only the proper territory of the town but its neighbourhood too.

The Czechoslovak experience shows that the town development problems might be solved in two different ways:

- i. in compliance with the theory of the so-called "territory of interest of the town"
- ii. in compliance with the theory of the so-called "neighbourhood area of the town"

Both of these methods have been described in the part II of this study.

4. Methods of stipulation of the future size of a town

It is difficult to classify all existing methods. There are many combinations of methods according to available data and the philosophy of the physical planning. The best classification may be one which would divide all methods into two groups:

- retrospective methods
- prospective methods

This classification considers the used data not the results.

A - Retrospective methods

The principle of the retrospective methods consists of the analysis of the former development of the growth of a town. The main factors to be analyzed are the demographic development, migration, changes in labor market.

The following methods are ususally used:

i. demographic retrospective method:

This method is based on the analysis of the natural and migrational increase of inhabitants during a certain period. The results of this analysis are used for the assessment of the future development.

ii. method of the permanent or progressive yearly increase of inhabitants

This method represents a modification of the method mentioned previously.

The base - natural and migrational increase of inhabitants - is the same.

The average yearly increase of inhabitants, in simple or additive form, is being calculated.

These methods cannot be used for the assessment of the future development without some corrections. The endeavour to fix these corrections and to discover the rules of the growth of a town represents the main topic of the studies of many authors (Prof. Czamanski, Prof. W. R. Thompson, etc.).

B - Prospective methods

The prospective methods are characterized by the endeavour to follow the development of economic and demographic factors influencing the growth of towns most of all.

These methods have been developed especially in the countries with centralized planning.

In principle, we can distinguish two methods:

- i. the method of the so-called "basic groups"
- ii. the method of the balance of the labor market

A - Method of the so-called "basic groups"

1. This method derives the future size of a town from two principles:

- i. from the growth of the economic base of a town
- ii. from the ratio of individual groups of economy

Two groups of economy are distinguished:

- i. the basic group involving:
 - a. workers and apprentices being active in industry, agriculture, facilities and services of higher than local importance
 - b. students attending universities
- ii. the group of services of local importance

The future size of a town is assessed on the base of stipulated relative relations between these two groups and the absolute volume of the basic group according to the following formula:

$$P = \frac{A \cdot 100}{100 - B + C} + R, \text{ where:}$$

P = the future number of inhabitants of a town

A = the future volume of the basic group

B = the future relative portion of the group of local services

C = the future relative portion of the non-active population

R = the reserve

The group of non-active population is formed by :

- i. children and aged people and women over 55 and men over 60
- ii. persons unable to work permanently
- iii. women in households
- iv. students of secondary schools

As for the estimation of the volume of basic and non-active groups of population, see the next chapter. The proportion of the group of the so-called local services to the total volume of active persons has been estimated as follows:

<u>size of town</u>	<u>relative portion of the group of local services (in per cent)</u>
2,000 - 9,999	10 - 15
10,000 - 49,999	13 - 17
50,000 - 249,999	15 - 18
250,000 -1,000,000	17 - 20

The mentioned criteria do not express the growing trend of the group of services which can be seen throughout the world. Therefore they should be revised.

2. Main problems

- i. stipulation of the contents of the term "basic group"

This group should involve the assortment of labor opportunities in branches where the development of these is not influenced directly or to a prevailing extent by the number of inhabitants of the town but which export the results of their activities, respectively render the services to the broader circle of consumers than those in the town (hospitals, wholesale stores, etc.).

ii. The group of local services is related in its volume and structure to the local population. It represents a dynamic group the volume of which will be reduced or broadened according to the number of inhabitants of the town but the volume of which will not represent the factor of the increase of the town.

The differentiation of both groups of services is disputable and it is difficult to fix the dividing line.

iii. stipulation of the future proportion of the so-called "group of local services" of the total population:

The possibility of stipulating the future proportion of the group in a precise way is very disputable. It is, therefore, reasonable to fix this rate in certain limits. But the space of these limits could not be too large. The extent of the misrepresentation of the number of inhabitants is given by the following formula:

$$E = \frac{D}{L} : 100, \text{ where:}$$

E = the extent of the misrepresentation

D = the extension of the group (difference of space between limits)

L = the low limit of the extension of the group

iv. Assessment of the future migrational moves and travel for job:

Because of the fact that these factors cannot be enumerated exactly, the following practical method is being used:

the first step consists of the ascertainment of the existing travel to work; the second step is represented by the enumeration of the future size of the town which should be reached in order to cover the development of the basic group under the condition of preservation of a certain proportion of this

group to the total number of inhabitants;

the third step consists of the assessment of the labor sources under the condition of the natural increase of population;

the fourth step is represented by the assessment of the possibilities of covering the needs by travel to work and migration and the stipulation of conclusions arising from these calculations.

B - Method of the balance of labor market

1. The principle of the method consists of the detailed enumeration of expected labor sources and labor opportunities.

2. Size of a town

- i. the size of a town is expressed by the number of persons "living in fact" in the town comprises the following categories of inhabitants

- a. residing and present in the town

- b. residing but temporarily absent

- c. non-residing but permanently present

The category of "non-residing but permanently present inhabitants" involves the persons living in fact in the town and traveling to their durable dwelling-places only once a week or in longer periods. The category of "residing but permanently absent inhabitants" is not deducted. This procedure is due to the complications which would arise in the calculation of natural increase of population which is provided on the base of evidence of a set of population of registered population to permanent stay.

- ii. the size of a town in this way represents the first part of the total balance of labor market, that is, the labor sources.

The category of "non-residing but temporarily present inhabitants" is calculated separately. The results serve the planning of capacities of infrastructure.

iii. When stipulating the future size of a town it is necessary to consider a certain reserve. This reserve although expressed by the number of inhabitants forms the base for neither the calculation of labor sources nor for the programming of housing construction. Its calculation serves the stipulation of reserve areas for different purposes (dwelling, production, etc.).

3. Further factors influencing the future size of a town:

Apart from the structure and development of economic base and the productive potential of population, the following factors are taken into consideration:

- i. attractivity and polarity of the town in the whole settlement system
- ii. configuration of the territory
- iii. hydro-geologic characteristics of the territory
- iv. characteristics of climate and hygiene
- v. architectural value of the town
- vi. economic efficiency of the development of the town

The factors i. - vi. are of specific nature which means that they are of different importance in different conditions. The structure and development of economic base and the productive potential of population are of common validity in all conditions.

4. Economic base of a town

The term "economic base" represents the sum of labor opportunities in all branches of national economy. The volume of the economic base of a town is

measured by the total number of employed (active) persons and by the intensity of the labor opportunities. The intensity of labor opportunities is expressed by the ratio of number of employed (active) persons and the number of living inhabitants of the town:

$$I = \frac{P \cdot 100}{O}, \text{ where}$$

I = intensity of labor opportunities
P = number of employed persons
O = number of inhabitants

5. Labor sources

The labor sources are derived from the future number of inhabitants of a town gained by the natural increase and their expected activity. The expected activity will be influenced by :

- age structure of inhabitants
- social development resulting in the increase of the portion of students, of active women , etc.
- expected structure of households
- volume and structure of labor opportunities

6. Procedure

The procedure of the stipulation of the future size of a town is corresponding to that described in the previous chapter (method).