Chapter 4

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THE DEVELOPMENT OF INFRASTRUCTURE OF THE EUROPEAN CMEA COUNTRIES

I. Introductory Remarks

The purpose of the present paper is a general characteristics of the development of infrastructure of the European CMEA countries.

Infrastructure is treated as defined in time and space part of widely understood national wealth of each state, which constitutes the basis of functioning and development of particular elements and spheres of socio-economic life. We also assume the most frequently found literature division of infrastructure into social infrastructure embracing in particular science, education, health care, social security, culture, tourism, and physical education, and into economic infrastructure which includes transport, communication, energetics, water economics and environmental protection. Infrastructure produces different kinds of services which satisfy the needs of the population and of the economic units.

We also assume that within infrastructure the so-called material capital and intellectual capital can be differentiated. The first one includes different kinds of objects and installations permanently connected with the region. Intellectual capital are people together with their abilities and qualifications who either use the material components of infrastructure for direct rendering of services for the population and/or economic units, or whose work ensures the use of the services rendered by these objects. In our further considerations attention will be concentrated on the material components of infrastructure which enable rendering of services.

II. The place of infrastructure in the growth of socialist economy

Using the concept of infrastructure within the frameworks of theoretical considerations concerning socialist economy has a more than twenty years old tradition. This does not mean however that agreement has been reached as to the definition of infrastructure. There exist different

conceptions concerning the place of infrastructure in the development of socialist economy. Two basically opposite approaches can be differentiated here.

The first approach, leading to minimization of the significance of infrastructure, has never been characteristic for a wide circle of economists. [1] Since, however, this concept found its reflection in the previously carried out and partly continued now policy of infrastructure development in socialist countries, it calls for particular attention.

Advocates of limiting the role of infrastructure in the development of socialist economy, on the one hand use in their analysis remarks on functioning of infrastructure in capitalist economy, and on the other hand they accept the assumption of basic differences between capitalist economy and socialist economy, particularly as regards the role of market mechanism. [2]

Under capitalist economy the state carries out or strictly controls the policy of infrastructure development and this policy is one of the main instruments of shaping the remaning socio-economic proceses. Thus infrastructure plays an active role performing a number of economic and social tasks, from influencing allocation decisions of private investors to contributing towards introduction of welfare state principles. The consequence of the active role of infrastructure is a tendency of its more advanced development in relation to the remaining elements of the economy.

Other mechanisms which can be used in socialist economy conditions seem to be more effective than indirect impact by means of infrastructure development policy. This general and basically right statement may be interpreted in various ways, especially from the point of view of solutions in the sphere of the system of functioning of the socialist economy.

Minimization of the infrastructure importance is undoubtedly a consequence of understanding socialist economy as one large multienterprise firm functioning on the basis of maximum centralization principles. This involves among others elimination of market mechanism as a regulator of economic processes, and abandoning of measures other than direct impact mechanisms. This is connected with the fact that the so-called Centre assumes the role of the main and in many cases the only decisive factor. Therefore there is no necessity of using the infrastructure development policy to direct the remaining subjects. Thus there are no grounds for the active role of infrastructure and its main aim is the passive satisfaction of the needs resulting from the development of the remaining elements of the socioeconomic space. Approaching infrastructure from the point of view of its passive function involves recognition of the usefulness of limiting its development to the necessary minimum and preference of the so-called consequent development consisting in

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[1] Examples of denying the adequacy of the notion of infrastructure to the conditions of socialist economy as well as minimization of its importance can be found in the following papers: J. Beksiak, Wzrost gospodarczy i niepodzielność inwestycji, PWN, Warszawa 1965, S. Nosova, Apologetika kapitalizma i nekotorye burzuaznye teorii infrastruktury, Ekonomiceskie Nauki 1970 no. 11, J. Pajestka, Inwestycje infrastruktury, a inwestycje bezpośrednio produkcyjne w: O gospodarce mieszanej w krajach Trzeciego Świata, PWN, Warszawa 1967.

[2] Comp. J. Kleer, Rola infrastruktury i oświaty w rozwoju: Azja Radziecka—Azja Centralna, Ekonomista 1967, no. 5.

„catching up with" the development of the main receipients of its services. [3]

Centralized system existing in the European CMEA countries was connected with many other phenomena which do not foster the development of infrastructure. These included permanent preferences for the accelerated growth of production of the means of production ie undertakings of equally high capital intensity as infrastructure. In the situation when the means were definitely limited, apart from single investments, infrastructure was excluded from the so-called economic priorities area.

Centralized system causes distinct predominance of the branch structure over spatial structure. From the point of view of the first one infrastructure constitutes a relatively loose set of branches classified — acording to the accepted in the socialist countries methodology — either among the non-productive sphere (social infrastructure), or among the service components of the productive sphere (economic infrastructure). Thus infrastructure is a set of those elements of the economy which only participate in the distrubution of the national income or only indirectly contribute towards the growth of effects in their material form.

The fact that the Centre concentrates on the current management and on sloving numerous segmental problems is also connected with the centralized system. This does not foster the development of infrastructure which because of its typical long period of exploitation and considerable spatial stability of the existing structures, requires sufficiently long time horizon taken into account in the process of planning.

The lack of stimuli for outlays saving is one of the features of the centralized system. From the point of view of infrastructure it meant maximization of demand for its services.

As it has already been stated, the views which underestimate the importance of infrastructure in socialist economy are worth noting first of all because of their practical consequences. An overwhelming majority of economics have always acknowledged that in spite of basic differences between socialist and capitalist economy, also under the predominance of the social ownership of the means of production, there is not only a possibility but even a need for the active role of infrastructure. Creating the grounds of socialist economy does not mean autonomous solution of the so-called general economic conditions ie all material conditions necessary for the realization of the process of production. [4]

Since infrastructure performs numerous specific functions it not only constitutes one of the basic factors securing socio-economic development but also plays a significant role in the realization of the goal which is more and more adequate satisfaction of human needs. Infrastructure is also necessary for the integration of particular segments of the socio-economic space. Without the sufficiently developed infrastructure it is impossible to prevent economic and social losses. Savings in the infrastructure development under the expansion of the consumers of its services, become apparent in their character and lead to infrastructural barrier of development.

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[3] Comp. A. Csernok, É. Ehrlich, Gy. Szilágyi, A. Hundred Year of Infrastructural Development: an International Comparison, Acta Oeconomica 1972, vol. 9/1, pp. 9—10.

[4] K. Marks, Kapitał, vol. 1, KiW, Warszawa 1951, p. 191.

Purposefulness of proper assessment of infrastructure seems to be connected with the certain approach to socialist economy. Treating infrastructure development as one of the necessary and essential conditions of effectiveness of the socio-economic policy becomes important in practice, especially when one consistently rejects approaching socialist economy as one big enterprise and recognizes the purposefulness of a higher degree of decentralization. Only under such conditions — also in planned economy — the policy of infrastructure development can play an active role as a measure of indirect impact of the Centre on the decisions of other economic subjects. If, however, we asumme the concept of one big enterprise managed in a centralized way, we must accept the consequence ie understanding infrastructure first of all as a rival as regards the means which could be allocated for other, directly productive goals.

Thus, a thesis can be put forward that there is a close relation between various concepts concerning the place of infrastructure in the development of socialist economy and views on the principles of functioning of this economy. The practical reflection of this statement is the growing interest in infrastructure problems in many socialist countries observed during the period of serching for or implementing new solutions in the field of systems of functioning of particular economies.

Durability and slowness of the changes belong to characteristic features of infrastructure. Therefore it may be expected that in the nearest future the situation of infrastructure conditioning growth and integration of European CMEA countries will be determined by the consequences of the previous policy of maximum savings in the field of infrastructure and not by the effects of a new, gradually introduced strategy assuming more active role of instrastructure in economy. [5]

III. The level of infrastructure development of the European CMEA countries

Empirical invesigations of infrastructure development can be based on the application of different kinds of partial measures, or an attempt can be made to construct a synthetic indicator. Since the size of the paper is limited, and because we are interested in infrastructure treated not as a loose set of different chains of the economy, but as a certain complex, application of synthetic indicators of the level of infrastructure development in our further analysis seems to be justified.

There are different methods of obtaining synthetic indicators. The one used in the present paper is based on the method previously used for similar purposes by the Hungarian economists [6]. The essence of this method consists in handling natural and not value, partial indicators of the level of infrastructure development and in using the concept of threshold equal to maximum of all empirical values. The starting point is matrix consisting of „n" columns where „n" is the number of partial measures, and of „m" lines where „m" equals the number of compared

[5] Comp. M. Ratajczak, O systemowe ujęcie kształtowanie infrastruktury społecznej, Polityka Społeczna 1984, no. 5/6, p. 3.

[6] A. Csernok, É. Ehrlich, Gy. Szilágyi op. cit., p. 7—8.

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countries + 1. An additional line ie threshold can be treated as a hypothetical country which would obtain maximum values for all measures. Maximum values which make up the threshold are then treated as 100 and the remaining values are compared with the extreme value.

Adding up the obtained in this way partial indicators of the level of infrastructure development for each state and dividing them by the number of measures gives figures contained in the interval 0 to 100 which are synthetic indicators of the level of infrastructure development within a given group of countries and the partial measures taken into account. Since calculations are made separately for each period, lowering of the value of synthetic measures which sometimes occurs cannot be interpreted as absolute lowering of the level of infrastructure development. This only means that under new conditions, in relation to the new threshold infrastructure of a given country represents a lower level than infrastructure of the same country in relation to the threshold of the previous period.

Table I

SYNTHETIC INDICATORS OF THE LEVEL OF INFRASTRUCTURE DEVELOPMENT IN THE EUROPEAN CMEA COUNTRIES IN THE YEARS 1970, 1984
(in % of the standard level ≡ 100)

Countries	Economic Infrastructure		Social Infrastructure		Infrastructure as a whole	
	1970	1980	1970	1980	1970	1980
Bulgaria	47	59	69	66	55	64
Czechoslovakia	93	92	72	70	80	78
GDR	98	96	95	92	97	94
Hungary	58	65	75	76	68	72
Poland	59	59	56	52	58	56
Romania	42	47	50	51	46	49
Soviet Union	53	54	72	76	64	67

Source: The author's own calculations based on Statisticeskij Ezegodnik Stran-Clenov SEV 1971 and 1984.

Table II

DYNAMICS OF INFRASTRUCTURE DEVELOPMENT IN THE EUROPEAN CMEA COUNTRIES IN THE YEARS 1970—1984
(the level of infrastructure in 1970 = 100)

Countries	Economic Infrastructure 1984	Social Infrastructure 1984	Infrastructure as a whole 1984
Bulgaria	156	123	131
Czechoslovakia	131	118	123
GDR	126	118	121
Hungary	134	126	130
Poland	143	117	127
Romania	151	132	139
Soviet Union	145	127	135

Source: as in Table I.

Interpreting the data from the two tables, especially from Table I, we must remember that: 1 — the obtained synthetic indicators illustrate the quantitative differences much better than the qualitative ones, 2 — the calculations embrace countries of very different spatial — — geographic, economic and demographic conditions which particularly refers to the relation between the Soviet Union and the other countries. 3 — the available statistical data are not complete and fully comparable. Therefore, in spite of taking into account a relatively small number of partial measures (15), several times there appeared a necessity of appraised determination of particuliar values on the basis of other existing information, 4 — considering other partial measures would undoubtedly influence the value of the obtained synthetic measures. However, comparison of the obtained results with the results of other authors makes it possible to find out considerable similarities not so much in the values of synthetic measures, but as regards the positions of particular countries and the observed tendencies. [7]

Table I shows that there are quite significant differences in the level of infrastructure development between European CMEA countries in spite of the noticeable tendency to diminish dispersion from the point of view of extreme values (economic infrastructure: 1970 — 98:42, 1984 — 96:47, social infrastructure: 1970 — 95:50, 1984 — 92:51, infrastructure as a whole: 1970 — 97:46, 1984 — 94:49). The differences in the level of economic infrastructure development are bigger than those in social infrastructure. Considerable stability of positions occupied by particular countries is also very characteristic and it corresponds with the already pointed out feature of infrastructure — ie the slowness of changes.

The GDR is the country of definetely the highest level of infrastructure development among all the socialist countries. Specific demographic conditions (in the years 1970—1984 the number of population decreased by 2%) undoubtedly play a certain role from the point of view of the values of synthetic indicators. The importance of demoagraphic conditions results from the fact that all partial measures taken into account in the calculations use the number of population (eg the number of beds in hospitals in relation to the number of population) or the number of population and the area of the country (eg the length of railway lines in relation to the number of population and the area of the country).

Czechoslovakia occupies the second position as regards the level of infrastructure development as a whole among all the countries under analysis. This position is however an effect of the high level of development of economic infrastructure not of social infrastructure.

Hungary and the Soviet Union are countries of similar level of development of social infrastructure, and the differences existing between them as regards the value of measures of the level of infrastructure development as a whole are a consequence of different situation in the field of economic infrastructure. The two countries mentioned above deserve special attention because of thier specificity which in the case of Hungary can be seen in different policy of infrastructure

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[7] Comp. e.g. N. Belousowa, Urowen razvitija proizvodstviennoj infrastruktury stran-clenow SEV i ego ekonomiceskij analiz, Problemy razvitija proizvodstvennoj infrastruktury stran-clenov SEV, Moskva 1986, p. 93.

development, and in the case of the Soviet Union in absolutely incomparable geographic — spatial and demographic conditions.

Activities aimed at infrastructure development in Hungary confirm the thesis put forward in the previous part of the paper about the existence of close relations between the role attributed to infrastructure in economy and the solutions applied in the sphere of the system of functioning of the economy. The Hungarian reform providing for advanced decentralization and independence of economic subjects brought about a change in the approach to infrastructure, the development of which was regarded as one of the main decisive factors in the effectiveness of the socio-economic policy as a whole. This found its manifestation among others in the fact that in planning at the central level infrastructure is treated as a separate complex embracing both economic infrastructure and social infrastructure. This means a break through in the traditional approach which consists in viewing infrastructure development in a branch structure and neglecting the connections and interdependencies existing between the particular components of infrastructure. [8]

Specific conditions of the Soviet Union make any comparisons where the size of the territory and the number of population are taken into account very difficult. The lack of adequate data does not allow effective elimination of the territory completely uninhabited or economicly unexploited from the value under analysis. It can be seen from the available information that there are very significant regional differences in the level of infrastructure development in the Soviet Union. The density of railway lines and roads in the baltic republics (Estonia, Lithuania, Latvia) is similar to the GDR level, but in the Asian republics these measures are about 4 times lower. Although these differences can be partially justified by different geographic conditions, this is not the only reason. [9]

In 1984 Bulgaria occupied the fifth position as regards the level of infrastructure development as a whole meant an improvement by one place in comparison with 1970. This resulted from the substantial development of economic infrastructure — the biggest in relation to the results achieved in this field by the remaining socialist countries. The pressure on the development of railway transport, stronger than in other countries of similar geographic conditions is characteristic for the programme of infrastructure development carried out in Bulgaria. [10]

In Poland during the studied period the value of the indicator of the level of economic infrastructure development did not decline but as a result of the rise in its value in Bulgaria and in Hungary, Poland dropped from the third position to the fifth one. In the field of social infrastructure there was quite a distinct decline in the value of the indicator reflecting very significant difficulties in this sphere. Both of

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[8] K. Husar, S. Farkasdi, Analiz sistemy planirovanija i upravlenija otrasljami proizvodstvennoj infrastruktury v VNR i puti ich soversenstvovanija, Budapest—Moskwa 1986, duplicated material.

[9] Comp. V. Kotilko, Proizvodstviennaja infrastruktura, Nauka, Moskva 1986, pp. 37—43.

[10] V. Vasiliev, A. Bryczkov, J. Hristoskov, Osnovnye napravlenija perspektivnogo razvitija proizvodstvennoj infrastruktury v Narodnoj Respublike Bolgarii, Sofija-Moskva 1986, duplicated material.

these phenomena caused the fact that as regards the level of infrastructure development Poland occupies the last but one position among the seven analysed countries. No distinct improvement in the sphere of infrastructure can be expected in Poland due to its complex economic situation. Plans in this field — particularly in social infrastructure — are more oriented towards preventing worsening of the situation than its improvement. It is a matter of concern particularly in the light of the already felt, though difficult to measure, consequences of social infrastructure underdevelopment connected with its shaping of an individual as a main component of productive forces. [11]

Romania is the least developed European socialist country. The situation in the sphere of infrastructure is among others the reflection of this fact. Romania occupies the last position both in the field of economic infrastructure and social infrastructure. However, a clearly seen tendency to diminish the distance between Romania and the remaining countries should be underlined.

One of the main questions dealt with in the literature is the analysis of relations between the level of infrastructure development and the level of general growth. A predominating view in this field ie the opinion that there is a close interdependence between both these values is confirmed by the obtained values of correlation coefficients between the level of GDP per head which, in spite of many objecions, is treated as measurement of the general development, and the level of infrastructure development.

Table III

CORRELATION COEFFICENTS OF INFRASTRUCTURAL AND GENERAL LEVEL OF DEVELOPMENT IN THE EUROPEAN CMEA COUNTRIES IN 1970, 1984

Parameter	Economic Infrastructure		Social Infrastructure		Infrastructure as a whole	
	1970	1984	1970	1984	1970	1984
r	+0,92	+0,87	+0,84	+0,90	+0,95	+0,97

Note: r — Pearson coefficient of linear correlation

Materials: the author's own calculation based on the data in table I; Handbook of International Trade and Development Statistics New York 1983; Statistical Year-Book of Chief Census Bureau, Warsaw 1985, tab. 845.

All the obtained values of correlation coefficients are high or very high. Even if we consider the possibility of modification of the data used as the basis for calculation and the resulting changes of the obtained correlation coefficient values, it should be said that no real growth of general development is to be expected without adequate outlays for infrastructural development. If the role of infrastructure is reduced to the function of an element „catching up" with the other elements of economy, it will sooner or later become a serious obstacle to development hindering the effective utilization of both extensive an intensive elements of economic growth.

[11] M. Ratajczak, Infrastruktura społeczna w warunkach niedoboru w gospodarce, Polityka Społeczna 1986, no. 10, pp. 13—15.

It is sometimes said that apart from a close correlation between the level of infrastructure development and the level of general development there is also a strong negative correlation between on the one hand the already achieved level of infrastructure development and general development level and on the other hand the outlays for infrastructure development, and a consequent dynamics of its changes. From the point of view of the analysed countries the a/m thiesis has been confirmed mainly as regards the economic infrastructure and infrastructure as a whole and to a smaller extent for social infrastructure. It is illustrated by the table below.

Table IV

COEFFICIENTS OF CORRELATION BETWEEN DYNAMICS OF INFRASTUCTURE GROWTH IN 1970—1984, THE LEVEL OF INFRASTRUCTURE DEVELOPMENT AND GENERAL DEVELOPMENT LEVEL IN 1970

Correlation between:	r
— rate and level of economic infrastructure growth	−0,88
— rate of economic infrastructure growth and level of general development	−0,84
— rate and level of social infrastructure growth	−0,42
— rate of social infrastructure growth and general development level	−0,72
— rate and level of development of infrastructure as a whole	−0,83
— rate of infrastructure growth as a whole and general development level	−0,85

Note: r — Pearson linear correlation coefficient

Source: Compare table 3 and Statisticeskij Ezegodnik Stran-Clenov SEV 1985, tab. 20.

The comparisons made so far concerned only seven European CMEA member states. We could, however, compare their situation as regards infrastructure growth with other European countries. Table V contains the results of calculations carried out by the already mentioned Hungarian economists. The a/m data refer to the end of the seventies but due to the fact that infrastructure changes very slowly it can be assumed that no considerable changes have occurred since the time the Table was prepared especially as regards the positions of individual countries.

As Table V shows apart from Greman Democratic Republic and Czechoslovakia, the level of infrastructure growth in other socialist countries under analysis was rather low.

The state of infrastructure in individual countries, the economic infrastructure in particular, determines development level of the so-called international infrastructure. This concept defines a system of objects and equipment belonging to infrastructures of individual countries. This system creates conditions for the functioning and development of international relations and particularly for international division of labour. The infrastructure connecting socialist countries is not satisfactory in

spite of many efforts to improve it, especially as far as its quality is concerned. The data in the table below illustrate the a/m thesis as regards the road infrastructure.

Table V

SYNTHETIC INDICATORS OF THE LEVEL OF INFRASTRUCTURE IN EUROPEAN COUNTRIES IN 1978
(in % of standard level = 100)

Countries	Value of indicator	Position
Norway	71	1
Switzerland	70	2
Sweden	69	3
Denmark	68	4
Belgium	60	5
FRG	59	6
Holland	59	7
Finland	58	8
Austria	56	9
Great Britain	56	10
France	55	11
GDR	51	12
Czechoslovakia	46	13
Greece	46	14
Italy	45	15
Ireland	45	16
Spain	42	17
Hungary	41	18
Bulgaria	39	19
Poland	38	20
Portugal	34	21
Yugoslavia	33	22
Roumania	29	23
Turkey	19	24

Source: M. Csizmadia, É. Ehrlich, Gy. Pártos, The Effects of Recession on Infrastructure, Acta Oeconomica 1984, vol. 32/3—4, p. 319.

Table VI

CHARACTERISTICS OF MAIN EUROPEAN ROADS IN 1982

Groups of countries	Length of the main roads (in kilometers)	Total	Structure according to road category (%)			
			A	CII	CI	E
Europe [a]	106000	100,0	28,9	7,6	35,8	27,7
EEC [b]	42200	100,0	52,0	13,9	23,8	10,3
CMEA	27500	100,0	8,9	3,9	43,1	44,1
Other European countries	36300	100,0	17,3	3,1	44,1	35,5

Note: [a] — Turkey and the European part of the Soviet Union included
[b] — ten member countries (without Spain and Portugal)
[c] — 7 countries, only the European part of the Soviet Union

A — motorways
CII — roads of second category (more than two traffic lanes each min. 3,5 m wide)
CI — roads of first category (two traffic lanes, min. 3,5 m wide)
E — E roads (roads of worse parameters than first category roads), a network of main European roads as in the document of the European Economic Committee of UN ECE/TRANS/16

Source: the author's own calculation based on the data of UN EEC as well as cartographic informations.

As it eppears from Table VI the essential difference between the CMEA and EEC countries not consist so much in concentration of international roads (the CMEA without the Soviet Union, — 8,8% of the analysed area and 19% of all international roads, the EEC — 14,7% of the analysed area and 39,8% of all international roads) as in the essentially different roads structure.

The small number of motorways and roads of second category among international roads in socialist countries exemplifies the unsatisfactory quality development of road infrastructure.

Therefore it is necessary to intensify the development of infrastructure in socialist countries both from the point of view of their internal needs and from the point of view of intra-bloc integration policy. To make it possible we have to stop yielding to the so-called „temptation of putting off" outlays for infrastructure. [12] However, due to rather mild limits of infrastructure development, a considerable increase in the number of infrastructure services is sometimes possible though it generally involves decrease in their quality. Owing to the nature of infrastructure functions consisting in protection of various socio-economic processes, any deficiencies in its functioning involve serious social costs. These costs are rather difficult to estimate since they are very often revealed only after a long period of time.

Thus in order to solve successfully problems of infrastructure in the analysed countries both the actions concerning formation of infrastructure services supply and projects aiming at the rationalization of demand for these services are necessary. It can be exemplified by transport intensity reflecting the intensity of transport services as the basic element of economic infrastructure. Differences it this respect are presented in the table below.

Table VII

TRANSPORT INTENSITY OF GROSS DOMESTIC PRODUCT IN THE EUROPEAN CMEA COUNTRIES IN 1984

Carriages indispensable for obtaining 1000 $ GDP (in ton-kilometers)

Countries	Sea transport included	Sea transport excluded
Bulgaria	2151	750
Czechoslovakia	1142	991
GDR	957	492
Hungary	855	702
Poland	2657	1175
Romania	3061	1316
Soviet Union	4514	3850

Source: the author's own calculation based on Staticeskij Ezegodnik Stran-Clenov SEV 1985 tab. 105 and as in table 3.

[12] The notion „temptation of putting off" is used by J. Kornai in: Economics of Shortage, Amsterdam—New York—Oxford 1980.

There is no doubt ,that volume of transport services utilization in relation to the achieved GDP results from such factors as territory size, its shape, location of industrial centres and raw material sources, participation in the international division of labour, transit services etc. Nevertheless, on the basis of various calculations, transport intensity in socialist countries is much higher than in developed capitalist countries under similar geographic-spatial and economic conditions. [13] Therefore shortage within infrastructure can be divided into absolute and relative. The former ones consist in the actual quantitive and qualitative underdevelopment of different elements of infrastructure and the best way to liquidate them is to invest in infrastructure development. On the other hand the relative shortage are to some extent the results of a wrong organization of infrastructure functioning but first of all they result from an excessive demand for infrastructure services as compared with the actual needs and the achieved results. The basic way to limit this relative infrastructure shortage should be a complex reform of socio-economic life which would subordinate the activity of particular subjects to demands of rational activity and prevent the shift of decision making responsibility from those subjects to the whole economy and society.

VI. Conclusion

Macroeconomic decisions taken in all European CMEA countries and concerning the second half of the eighties and nineties take into account the assumption of development intensification and improvement of economy effectiveness. This should result in a new approach to problems of infrastructure development. Neither the capital investment savings nor minimization of losses as well as growth in satisfying the needs are possible without a complex qualitative and quantitative development of infrastructure. It is also the expected growth of intra-bloc integration within CMEA that requires a quick infrastructure development. The point is that development of economic relations in socialist countries should, to a large extent, consist in use of those form of co-operation which asume a much bigger flexibility of activity and extension of direct contact between economic subject of lower grades. It requires new infrastructural connections. The more diversified economic and non-economic connetions beetween different countries are the more perfect infrastructue connecting them must be. [14]

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[13] T. Zotova, Voprosy ocenki ekonomiceskoj effektivnosti razvitija proizvodstvennej infrastruktury stran-clenov SEV, in: Problemy razvitija proizvodstvennoj infrastruktury stran-clenov SEV, Moskva 1986, p. 108.

[14] J. Szita, Perspectives for All-European Economic Co-operation, Akademiai Kiado, Budapest 1977, p. 21.

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