JPRS-EEI-85-091

27 November 1985

East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

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EAST EUROPE REPORT

ECONOMIC AND INDUSTRIAL AFFAIRS

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GERMAN DEMOCRATIC REPUBLIC

POLAND

YUGOSLAVIA

EXCESS CONSUMPTION OF MATERIALS DEPLORED

Tirana ZERI I POPULLIT in Albanian 7 Aug 85 p 1

[Article: "A Stricter Regime of Savings in the Use of Materials"]

[Text] Material outlays in production consume about 60 percent of the gross national product, while in particular branches and sectors, this figure is even greater. For that reason, the use of a strict regime of savings of raw materials, auxiliary materials, and fuels has always constituted a major front in the work of the party and in that of state and economic organs and mass organizations to increase the effectiveness of the economy. In the execution of tasks assigned in this area, as well as of instructions of Comrade Enver Hoxha to introduce deep innovations everywhere with regard to cost, while reviewing outmoded cost structures and estimates, improving control, and applying many other measures which are linked with the optimum use and savings of material values and labor, general and particular measures have been taken by certain labor collectives, and positive results have been achieved. But along with these, in many enterprises of various branches of the economy, there has been further overspending, above the plan, for steel, coal, solar oil, mazut, electrical energy, coke, etc.

The 12th plenum of the party Central Committee again emphasized the need to raise work and responsibility for savings of raw materials and other materials to a higher level. The work of party organs and organizations, as well as their levers, must lead in strengthening the feeling and spirit of economizing everywhere and in everything, as well as in taking the necessary organizational, technical, and technological measures to place the use of materials of production on a more scientific and controlled basis. These measures must be taken not only to eliminate overexpenditures, but also to realize the designated objective that planned production should be achieved with less consumption of raw, auxiliary, and energy materials.

It is not possible to speak about planning and restrained use of materials without technical norms established on a scientific basis and according to advanced experience. But what is, in fact, the level of norms setting? Norms are used for more than 90 percent of materials, of which about 72 percent are technical. Certainly, this average is not the final scientific and technical limit of material norms setting, especially because behind the advanced level of some enterprises are concealed the backward levels of

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certain other enterprises. When we seek restricted norms, it is
unjustifiable that, everywhere in the enterprises of the systems of the
Ministries of Communications, Communal Economy, and Agriculture, there are
still materials without the proper norms. The same thing must be emphasized
for some auxiliary materials, chemicals, and spare parts used by certain
enterprises of the Ministry of Industry and Mines. It is to be criticized
that even though tasks involving norms of electrical energy were assigned
early, work is still carried out without norms in some sectors, especially
in agriculture.

The technical norming of materials, like all other measures for the strength-
ening of the practice of savings, is promoted by the militant spirit of the
communists and all the workers, who place the general interest at the fore-
front. This is achieved with a greater struggle against foreign concepts of
subjectivism, which appear in tendencies that are harmful to the planning
and fulfillment of tasks involving the lowering of costs. Herein lies the
source of outmoded norms which are retained, of indifference to progressive
experience, of slowness in unifying norms, etc. It is unacceptable that from
one food enterprise to another there are perceptible differences in norms for
use of sugar, commodities, fuel, etc., and the ministry must exact responsi-
bility for this and take appropriate measures. In another case, work is
carried out in the Cerrik TEC [thermoelectric power plant] on the basis of
the stipulated coal norm, while thousands more tons of coal are used in the
Tirana plant. Examples may also be given of differences in fuel consumption
from one auto repair shop to another and from one machine and tractor
station to another. In enterprises manufacturing one type of product, there
is no reason to have different norms or coefficients for the effective use
of raw materials, as happens in fact with such raw materials as cloth,
sheet iron, steel, and timber. There has been repeated assignment of the
task to unify the norms of their planning on the basis of advanced experience.
Nevertheless, the variations and differences which are observed indicate
"differences" in understanding and evaluating this important problem, as well
as in the method of organizational, management, and control work of cadres
and specialists in branches of enterprises and agricultural cooperatives, in
sections of executive committees of people's councils in districts, and in
the directorates of ministries, especially the accounting directorate. In
this area, the role of the Ministry of Finance and the State Planning
Commission must be more active, not relying on the cadres for observations,
but giving them ways to solve problems.

Persuasive work of the party organizations and all their levers must
precede the scientific norming of raw materials, other materials, fuels, and
electrical energy. The point is that every worker must become responsible
for the reserves that exist. It must become clear to everyone that by using
a little less cotton or cloth, a little less steel or sheet iron, a little
less fuel or electrical energy per production unit, revenues increase,
foreign currency is saved and its sources grow, capital increases, the
economy is strengthened, and the well-being of the people is raised. But
the way to convince people involves taking organizational and scientific
measures, organizing the work of production in a better manner, improving
technology and advanced methods, and - above all - strengthening control

over tasks in this area. The positive example of the role played by this complex of measures has yielded us clear achievements and pledges recently in many prominent collectives. In response to resolutions of the 12th plenum of the party Central Committee, the workers of the electrical wire plant in Shkoder, the "Petro Papi" instrument plant of the NPN [enterprise for various products] in Pogradec, etc., have made it their valiant and revolutionary objective to perfect the technical norm and lower costs. Great attention must be paid to this experience, since it is the expression of the mobilization and the militant spirit of the communists and all the workers for continually higher results. It is not possible to speak of savings on the scale which is required and as the examples given attest to without strong daily control, as the 12th plenum of the party Central Committee instructed. But it is impossible to say that this control is at the requisite level from the enterprises up to the appropriate ministry directorates. As evidence of this, the following may be cited: in the "Steel of the Party" metallurgical combine, the coal norm is exceeded in the production of steam, and the gasoline norm is exceeded in foliation; electrical energy norms are exceeded in the ferrochrome plant in Burrel and the ammonium nitrate plant in Fier; there is excessive use of solar oil in the glass factories in Korce, Kavaje, and Tirana. Under these conditions, rigorous control from the work place and in all the designated links must ensure high discipline for the application of all measures connected with savings.

12249/13046
CSO: 2100/2

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OBZINA ARTICLE ON DEVELOPMENT FOCUS CITED

LD121407 Prague CTK in English 1321 GMT 12 Nov 85

[Text] Prague, Nov 12 (CTK)--"At the present stage of history we are facing the pressing task of maintaining world peace and achieving superiority in economy", wrote the weekly HOSPODARSKE NOVINY in its lastest issue.

In an article on the Czechoslovak scientific and technological developments in the 8th Five-Year Plan period (1986-1990) and until the year 2000, Czechoslovak Deputy Premier and Chairman of the State Commission for Research and Development and Investment Planning Jaromir Obzina wrote that "We are facing this task...once we have surpassed capitalism in the political, social, cultural and educational fields, once we have achieved military strategic balance on a world scale and a high level in many spheres of science and research."

The management of research and development in Czechoslovakia is concentrating on the development of electronics and computer technology, on speeding up the introduction of robots, automation and flexible production systems, and large-scale application of lasers and composite materials. Necessary resources are being sought to increase the rate of exploitation of nuclear energy and make the construction of nuclear power plants more economical. Czechoslovakia also is creating conditions for the development of biotechnology with the aim of staying at the world level.

The Czechoslovak deputy premier and chairman of the state commission for research and development and investment planning further wrote that Czechoslovakia, as do other socialist countries, takes measures to proceed to the intensive development of national economy. To this end it is necessary to double labor productivity by the end of the century and to improve the levels of work organization. It is necessary to eliminate the degree of technological dependence on the most advanced capitalist countries, which constitutes potential danger to Czechoslovak economic and social developments. At the same time, the country must achieve full self-sufficiency in food and substantial growth of quantity and quality of consumer goods production, and reduction of material and energy consumption by at least 30-50 percent.

/9871
CSO: 2400/45

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INDISCIPLINE IN AGRICULTURAL SECTOR CRITICIZED

AU221542 Bratislava PRAVDA in Slovak 17n Oct 85 p 2

["PA-FG"-signed article: "On the Deliberations of the Commission Directing
Plant Production; Lack of Discipline Steals From the Harvest in Places"]

[Excerpts] Bratislava--The Commission of the Slovak Ministry of Agriculture
and Food Directing Plant Production held a session in Bratislava yesterday
[16 October]. The session was presided over by Deputy Minister Jan Sabik.

The commission concentrated its attention on the solution of some
disproportions regarding supplying the market, creating winter stocks of
potatoes, vegetables, and fruit, and ensuring the transportation of corn
from the West Slovak region to places of consumption.

Regarding potatoes, the cause of the current concern is the poor crop of
potatoes in the Central and East Slovak Regions, which--according to the
latest estimates--will not fulfill even half of the plan of state procurement
of potatoes for human consumption. The situation is being solved by imports
from the Czech Socialist Republic and from abroad. However, the situation
could be resolved substantially earlier if some producers were more realistic
when it comes to assessing their own capabilities and did not confuse their
wishful thinking with reality, reality which emerges in the end anyway,
and which usually not only fails to contribute to the solution of the
situation, but considerably complicates it.

And this applies not only to potatoes, but also to certain kinds of
vegetables, concerning which this yeaer, too, estimates were thrown about
like market people haggling on the town square. Specifically, as regards
fallen apples, in several places growers complain that nobody wants them.
At the same time representatives of the General Directorate of the Distillery
and Canning Industry told the commission that they will take everything,·
and that they even have a shortage of fallen fruit. Or take tomatoes.
In some places in the West Slovak region part of the crop is being plowed
under, while they are allegedly being carted to Kosice all the way from the
South Moravian region.

But it is corn that causes the biggest worry. There is a shortage of drying
plants, but also of railroad freight cars to transport it from the West Slovak

region. In an effort to speed up its gathering, measures have been adopted which involve having the corn harvested in the West Slovak region "run" through the drying plant only once and drying it to the standard humidity only at the place of consumption where at present they have free drying capacities.

On the subject of irrigation, it seems unbelievable that during the season, out of about 300 irrigation equipment users, only 40 (all of them in the West Slovak region) were using this for a full 24 hours. And now in the fall, despite the drought before and after sowing, only 12 agricultural enterprises have been irrigating for a full 24 hours. Is this not over-expensive indiscipline, particularly since the state helped users of irrigation equipment by enabling them to use it during times when others had to stop using electric energy?"

/9871
CSO: 2400/44

CURRENT WAGE PROBLEMS EXAMINED

LD082352 Bratislava Domestic Service in Slovak 1730 GMT 8 Nov 85

[Text] Milan Blaha, editor of NOVE SLOVO reports on current problems of
remuneration: Since the start of the year, our most advanced collectives
have begun to adopt stricter working conditions as part of the program of
the second stage of increasing effectiveness of the wage system. Despite this
we are encountering the problem which was upsetting the fulfillment of the
conditions in the first stage. The fact is that many directors of the enter-
prises, in their effort to avoid conflict with the technical and economic
personnel have not only failed to introduce remuneration according to merit,
according to real output and quality--that is, to differentiate--but on the
contrary they do this in the conditions of the second stage of the increased
economic effectivenss of the wages system. Naturally, the implementation of
the merit principle is an illusion in this context. How does it manifest
itself? It can be summed up under the title that personal assessment has
joined the game and is beginning to acquire key importance.

The issue is that in the context of the new state-wide regulation of
remuneration of technical personnel and management, the existing wage limits
were cancelled and instead a monthly wage tariff and personal assessment were
introduced. The latter is a new element in the technical and management
personnel remuneration system and takes into consideration, apart from
outlined preconditions such as achieved standards of education, long-term
work achievements. And this is where the problems start. Some complain that
although higher education is not prescribed for them, their achievements are
better than those of personnel with higher education. The staff with higher
education are also--and rightly so--asking why did they study if they are to
get as much or sometimes less, than those with intermediate education. And so
a philistine solution is taken. If the regulation cannot be used, then
personal assessment will do. In other words, personal assessment serves to
level-out basic pay, which has to be reduced owing to lack of qualifications.
It is obvious that this is a new form of egalitarianism and a total
misunderstanding of the thought, expressed with such urgency by Comrade Husak
at the 16th party congress--that it is necessary to overcome more decisively
egalitarian tendencies and other false tendencies--the so-called social
attitudes towards remuneration.

/9871
CSO: 2400/45

DISMISSAL OF INCOMPETENT MANAGERS REPORTED

[Editorial Report] Prague RUDE PRAVO in Czech on 18 October on page 3 carries a 1,400-word article by Vaclav Pergl entitled "Steps Toward Recovery." The article deals with the "poor managerial and organizational work" at the Sigma plant in Ceska Trebova in East Bohemia, which resulted in the replacement of its director, Jiri Doskocil, in mid-1985 as well as in changes in "other functions."

Pergl says that, because of the "irresponsible approach" of the enterprise management, the Sigma plant, which only 2 years ago was receiving "one award after another," has since the beginning of 1984 fallen significantly behind in plan fulfillment. The mistake of the Sigma management, according to Pergl, was that it concentrated on the development of only one type of product-- "production for the nuclear program"--and was caught completely unprepared when the Sigma general directorate "limited this production." Although the management and the party organization knew well in advance of this structural change, he says, they did not prepare alternative production programs but "temporized" and "speculated" that the change would be only temporary and that everything would return "to the old tracks." The result was "growing nervousness," "deepening conflicts among individual divisions in the enterprise," and "chaos in production." All these problems also adversely affected the "authority of the party organization and the enterprise management" and brought about a "deterioration of the political situation in the enterprise."

Pergl says: "Mistakes of such gravity could no longer be passed over in silence. It was no longer possible to give credence to further promises and assurances of the management. One experience was enough. Following a thorough analysis of the political-economic situation carried out by the general directorate and the district party committee, Jiri Doskocil, the enterprise director, was recalled from his post in mid-year. Vilem Harlender, until then deputy director of the Sigma plant in Opava in charge of technology, was appointed new director. There continue to be, however, serious problems with appointments for other plant functions because there are no reserve cadres for the posts of department heads, deputy directors, and foremen." The situation is made even more complicated by the fact that 98 employees, including deputy directors, heads of major departments, technicians, designers, and workers, have given notice since the beginning of the year. A total of 37 of them have already left the enterprise.

In addition to the cadre changes, the enterprise party organization also imposed "party punishments" on "four leading managers" and "expressed dissatisfaction with six more comrades, including Jam Pterka, chairman of the enterprise committee of the Revolutionary Trade Union Movement, for inconsistent controls." Pergl complains, however, that all these steps came too late and only at the behest of the district party committee. "For a long time," Pergl says, "the party organization did not have its own opinion on the situation, uncritically accepted Comrade Doskocil's assurances of plan fulfillment, and underestimated and inconsistently applied its right to control."

In concluding the article, Pergl reports on the "program of consolidation" that has been adopted at a meeting of the enterprise party organization in August and on the efforts of the new management to bring about a recovery.

/9871
CSO: 2400/44

CZECHOSLOVAKIA

CITIZEN COMPLAINTS ABOUT VANDALISM, SHORTAGES AIRED

[Editorial Report] Prague ZEMEDELSKE NOVINY in Czech on 21 October on page 3 publishes in the "Readers' Letters" column two letters, one complaining about vandalism by children, and the other, rather irate, bemoaning the lack of spare parts for bicycles, mentioning that "formerly" things used to be better in that respect.

In the first letter, H. Voctarova, wife of a construction company foreman in the Central Bohemian town of Brandys nad Labem writes that her husband, dejected, told her that morning that "our local kiddies" vandalized his project--the construction of a new school building--and smashed a glass panel worth kcs 6,500 and broke to pieces 100 polystyrene boards. "This is not the first case. A month ago at the housing development (in a locked storeroom) they put holes in a great number of bags of cement. They got in through the ventilation shaft, and little children's footprints were around the bags," Voctarova writes, and wonders what these children "will be like when they grow up."

In the second letter addressed to the editor, J. Behal from Otrokovice writes that 4 years ago he bought a collapsible bicycle, and last year he needed a new center axis, but was told in the shop that that particular type and size was no longer in production. "This is incomprehensible to me, but so are many other things. I am 61 years old and when I formerly needed some part for a bicycle, I went to the shop and got it. And now...? You hardly ever get it. The salesmen only say: We do not have it, we do not have it..." Although what is involved is not large or expensive spare parts, only penny-worth things, such as various screws and so forth. "And a new Favorit [a CSSR-made sports bicycle--FBIS] You cannot get it either. Can anyone explain to me why these bicycles and spare parts are not available and when they finally will be?" Behal asks at the end of his letter.

Then follows an answer to Behal's letter by Engineer Frantisek Havlena, "commercial director of the trust of the enterprises of engineering consumer goods Prago-Union in Prague," who explains the spare parts shortages thus: His enterprise is neither the manufacturer nor the supplier of spare parts for bicycles. Pedals, including spare parts for them, are manufactured and delivered to the market by the Obzor Kosicei production cooperative, seats by the Koh-i-noor Decin enterprise, and screws and other parts are supplied by the metallurgical secondary production organization. In the conclusion of his

letter, Havlena "recommends" that Behal "accurately define" his requirement of spare parts and get in touch with the ESKA enterprise in Cheb, which is the "decisive manufacturer of bicycles in our country."

/9871
CSO: 2400/44

DAM PROJECT CONSTRUCTION SITE INSPECTED

LD291505 Bratislava Domestic Service in Slovak 1130 GMT 29 Oct 85

[Report by station editor Ladislav Mikus]

[Text] A party economic and inspection day has been held at the construction
site of the Gabcikovo-Nagymaros dam project. Comrades Josef Lenart, Peter
Colotka, Miroslav Hruskovic, Frantisek Pitra, and other officials were
present. Ladislav Mikus, our editor, telephones to report on the purpose of
this working visit.

First of all, the guests inspected a 17-kilometer-long section of the supply
[privodni] canal and 33-meter-deep hole of a hydroelectric power station,
(Stupne Gabcikovo), which is now being lined with concrete. Then, shortly
after 1030 the guests met with the Gabcikovo-Nagymaros construction workers
in the site social club near (Horny Bar) at the aktiv, which was opened and
being chaired by Comrade Josef Lenart. In the opening of his speech, Comrade
Lenart welcomed Frantisek, Pitra, secretary of the CPCZ Central Committee,
Ladislav Gerle, deputy federal premier, and other representatives of federal
agencies. In the opening speech he recalled the importance of this project
for our energy and irrigation systems and for water transport. He then handed
over to Deputy Federal Premier Ladislav Gerle who gave a detailed report on
the problematic issues of this construction.

He stated that during the course of this year the sum total of construction
costs should be 900 million Kcs. However, this volume will not be achieved.
He therefore demanded that work teams be stabilized and that the number of
workers engaged in certain professions, mainly those in carpentry and steel
construction erection be increased. During the next 2 years, the biggest
volume of construction works worth 1.75 billion Kcs will be achieved.
The deputy federal premier demanded that accurate schedules for construction
be elaborated and emphasized that all efforts must be aimed at putting the
first aggregate into use in 1990.

At present, the aktiv is continuing the discussion. The site senior
management and resort ministers are taking part in this discussion.

/9871
CSO: 2400/44

BRIEFS

SHORTCOMINGS NOTED IN BAKERY GOODS PRODUCTION--A plenary session of the Slovak Committee of the Union of Farmers Cooperatives is discussing in Bratislava today the strategy of the union in ensuring measures for developing the agricultural and food complex. At a news conference in Bratislava, representatives of the dairy industry and bakery mills industry reported on their tasks in the Eighth 5-Year Plan. During the conference it has been stated that per capita bread and bakery product consumption is 90 kg per annum in the Slovak Socialist Republic. Consumption of dairy products in Slovakia in comparison with the Czech Socialist Republic, is 45 kilograms less, and is on the whole very low. The reason is found in quality and range of products offered. Low quality and the narrow range of dairy products is caused primarily by shortcomings in available packaging, such as aluminum foil, bags, and by a shortage of machinery and technology. These shortcomings are then reflected in a lack of flavored milk-based beverages, curd cheese products and long-life cheese spreads. Therefore, in the Seventh 5-Year Plan, Kcs 831 million will be spent on construction of new modern plants and on purchasing modern processing technologies. As far as bakery products are concerned, the supplies to the market are balanced, although the low quality of certain bakery products is criticized from time to time. [Summary] [Bratislava Domestic Service in Slovak 1130 GMT 22 Oct 85] /9871

ENERGY COMMISSION VIEWS PERFORMANCE, PREPARATIONS--The Federal Government's Energy Commission met today in Prague, chaired by the commission's chairman, Federal Deputy Premier Ladislav Gerle. The commission discussed the supply of fuel and energy to industrial and domestic consumers in the past few months, and preparations for the forthcoming winter period. It noted that the extraction trends for solid fuels and stockpiles already built up in the power system showed that the necessary attention had been devoted to preparations for winter in the fuel and power sectors. At the same time, however, it stressed the need for discipline on the part of consumers in order to cope successfully with the most taxing season of the year from the fuel and energy point of view. The commission also discussed a preliminary draft of a state target program for the rationalization of consumption and utilization of fuel and power for the Eighth 5-Year Plan, with particular emphasis on economies of oil and oil-based products. [Text] [Prague Domestic Service in Czech and Slovak 1600 GMT 22 Oct 85] /9871

ECONOMIC TALKS BEGIN IN BUENOS AIRES--The Czechoslovak-Argentinian Joint
Economic Commission opened in Buenos Aires today. Our delegation is led by
Bohumil Urban, minister of foreign trade; the Argentinian delegation is led by
Ricardo Campero, secretary of foreign trade. The purpose of the meeting is to
outline measures for development of cooperation between the two countries for
1986. [Text] [Bratislava Domestic Service in Slovak 2030 GMT 4 Nov 85] /9871

LENART IN LIPTOVSKY MIKULAS--Jozef Lenart, member of the Presidium of the CPCZ
Central Committee and first secretary of the CPSL Central Committee, paid a
working visit to the Liptovsky Mikulas district today. At a meeting with
district party and state officials, he was told about the fulfillment of tasks
in the district over the last year of the 7th 5-Year Plan, about the course of
the annual membership meetings of the primary party organizations, and about
the preparations for the district party conferences. During a visit to the
Tesla enterprise in Liptovsky Hradok, he was told about the fulfillment of the
tasks of the state plan and preparations for the 8th 5-Year Plan. He took
a special interest in results in applying science and technology, introducing
new production programs, and innovation. [Text] [Prague Domestic Service
in Czech and Slovak 1900 GMT 31 Oct 85] /9871

SHORTCOMINGS IN LIQUID GAS CONTAINERS--The unsatisfactory state of liquid gas
containers and their enforced elimination from production process have in the
course of this year considerably upset the running of some of the production
units of the Slovanaft Bratislava national enterprise. Because of this big
production shortfalls have occurred. By the end of this year the enterprise
is to produce almost 30,000 tons of polyethylene. These measures and demands
made upon smooth running of production processes were discussed at the annual
membership meeting of CPCZ Primary Organization No. 8. Its members adopted
a demanding program for the rest of this year and for the start of the next
year. [Excerpts] [Prague Domestic Service in Czech and Slovak 1830 GMT
4 Nov 85] /9871

LENART ADDRESSES ECONOMIC SEMINAR--A political seminar on the problems of
increasing the standards of management of the national economy was held in
Bratislava today by the CPSL Central Committee. In the concluding speech,
Comrade Jozef Lenart stressed the significance of using the experiences of
Soviet communists in the sphere of management of the national economy to also
improve the planned management in Czechoslovakia. The urgent nature of
tackling this set of problems calls for harmonizing the plans of labor
collectives with the conditions in which they are operating. Improvement
of the economic mechanism, Comrade Lenart continued, emerges as a necessity in
the sphere of plan preparation. The interests of the entire society must be
harmonized with the interests of enterprises. In conclusion, Jozef Lenart,
first secretary of the CPSL Central Committee, stressed the significance of
supporting the initiative of the working people and stressed that in the
coming period, increasing labor productivity must be understood in the
dialectical unity with safeguarding the high degree of quality and
technological standards of products. [Excerpts] [Prague Domestic Service
in Czech and Slovak 1900 GMT 4 Nov 85] /9871

IRAQI OIL TALKS--Minister of Foreign Trade Bohumil Urban today in Prague received Iraqi Minister of Oil Gasim Ahmad Taqi. They discussed the development of mutual economic relations and evaluated the possibilities of Czechoslovak participation in the realization of the development program of the Iraqi oil industry. Minister of Metallurgy and Heavy Industry Eduard Saul also met with the Iraqi guest. They discussed the cooperation between the two countries up to now and about the perspectives for its further development in metallurgy and heavy engineering. [Text] [Prague International Service in Czech and Slovak 1600 GMT 85] /9871

SURPLUS INVENTORY ON SALE--The inventory increases in the Czechoslovak national economy during the Seventh 5-year Plan will amount to approximately Kcs 47 Billion--that is 9 billin more than planned. This state of affairs constrains the national income. The 22nd market show of unused inventory will contribute to accelerating the turnover of certain commodities from their production to their purchase and use. The market show will be held in the A-1 pavillion of the Brno fair exhibition grounds on 3-7 November, from 1000 to 1800 hours daily. Yesterday's [1 November] press conference revealed that 79 Czechoslovak organizations of industry and agriculture have already offered their excess inventory for sale at the Brno exhibition grounds. [Text] [Bratislava PRAVDA in Slovak 2 Nov 85 p 2] /9871

CSO: 2400/45

GERMAN DEMOCRATIC REPUBLIC

NUCLEAR HEATING STATIONS; PROSPECTS FOR EXPANDED USE STUDIED

Leipzig ENERGIETECHNIK in German Vol 35 No 3, Mar 85 pp 98-111

[Article by Dr. Ing. Alfred Langner, Weimar]

[Excerpts]   1.   Introduction

Substitution of fossile fuels by nuclear energy has for the long term become
an imperative necessity. The main directions of strategy for the development
of nuclear energy management in the GDR provide for increased utilization
of nuclear energy [1]. Utilization of nuclear energy will be of a different
kind in the decades after 1990; while nuclear energy today represents an
auxiliary primary energy source which is part of electrical energy
production, it will after 1990 grow into the role of a major primary energy
carrier [2]. Nuclear energy utilization development is also recognized as
important on the international level; the nuclear energy share of the total
world energy needs is expected to rise from 2 percent in 1978 to 12 to 13
percent in 2020 [3].

Utilization of nuclear energy will in the long term affect electrical energy
and district heating as part of the overall utility energy structure. Heat
supply from a nuclear heating power plant is being practiced, among others,
in Bilibino, USSR, since 1974. District heating with nuclear energy plants
is planned for several cities in the USSR [4],[5]. In the GDR heat supply
from nuclear sources is being planned on a long term basis. Results of
preparatory studies have been recorded in numerous scientific publications
and reports (e.g. in [6] through [23]). Other developed industrial countries
are also working on the tasks of supplying heat from nuclear sources [24]
to [31].

Provision of district heating media (hot water, steam) from nuclear energy
can be based on three technologies:

--Direct heat output from a nuclear power plant,
--District heat from a nuclear heating power plant,
--District heat from a nuclear heating plant.

In the planning studies, which will be reported on below, only such district
heating systems are being designed in which nuclear heating plants supply
the base load.

District heating of a region or a city is always linked with a multitude
of territory related facts. The problem areas of the complex-territorial
energetics on one hand, and of regional and city planning on the other hand,
overlap especially intensiveley in the field of heat supply, since about

80 percent of the man-related energy needs (useful energy) in the majority of regions occur as heat [32]; about 50 percent of the man-related energy needs are needs for heat in the low temperature region (up to 200 degree C). The planning studies reside in the area of overlap of "Territorial Energetics" and "Regional and City Planning"; aspects of this inter-disciplinary area thus predominate.

2. Goal of Planning Studies

The long term replacement of fossile fuels by nuclear energy must be carried out under the concrete conditions of the existing systems of settlements. Heat supply from nuclear sources presents a new kind of response to heating requirements. During the preparatory phase for the necessary realization the conditions of the historically grown settlement network must be considered in such a way, that the dimensioning of technical installations and the technology of construction and operation can be realized with maximum benefits for society. Results of the planning studies are intended to help provide foundations for ideas of orders of magnitude and for new tasks, based on the example of four selected supply areas.

3. Heat Supply in the Settlement Net of the GDR

3.1 Settlement Net

The net of settlements is given by the spatial distribution and interlinkages of metropolitan areas, medium size cities, small towns and villages. The settlement net is the basis for site distribution for forces of production. The settlements represent a local concentration and combination of residential and work places with the corresponding facilities, installations and networks of the infrastructure [33].

The settlement net of the GDR has grown historically and has a relatively high stability. The present and future activities in the settlement net serve to improve the economic and social structure within the regions, while the territorial base structure remains unchanged.

The following qualitative and quantitative characteristics are relevant in connection with the future integration of an area-wide district heating supply into the settlement net of the GDR [34]:

--the territorial base structure is characterized by a high degree of industrialization; 38 percent of workers are in industry.

--The net of settlements is relatively dense. Settlements are administratively organized in 7548 communities (Gemeinden). As a GDR mean this corresponds to a community density of about 7 communities in an area of 100 km^2. Since many communities consist of several localities (Ortsteile), the number of localities (settlements) as a GDR average are about 11.3 per 100 km^2. The settlement net density in the various districts deviates more or less from the GDR mean; thus the community density in the Gera district is 13.4 communities/100 km^2 while it is only 4.6 communities/100 km^2 in the Neu-Brandenburg district.

--Of the 16.7 million inhabitants (INH) of the GDR 23.5 percent live in

6522 rural communities (up to 2000 INH) and 76.5 percent in 1026 urban communities; 26.2 percent of the total population live in the 15 large cities (over 100,000 INH).

--Inhabitant density differs considerably from district to district; the GDR average is 154 INH/km^2, in the Karl-Marx-Stadt district it is 318 INH/km^2, and in the Neu-Brandenburg district it is 57 INH/km^2.

--In some conurbations there are high degrees of concentration of funds and of resources.

Further development of industrial production and of industry-like agrarian production will take place in the existing territorial structure. It is generally important to develop the productive forces at high efficiency in all parts of the settlement net in order to assure a high standard of living. This intensification acts as a stabilizing influence on the existing basic structure in the settlement net.

3.2 Heat Supply

In order to cover the need for heat in the low temperature region (up to 200 degree C), at present all utility energy media types are utilized in quite different proportions: solid, liquid and gaseous fuels, district heating systems, and electrical energy. About 23 percent of the total utility energy is provided by district heating systems (steam, hot, and warm water). Public district heat supply (under jurisdiction of energy combines) has in the last years developed considerably. (Table 1). Almost 18 percent of all apartments in the GDR were in 1982 supplied with district heating.

District heating has been expanded considerably in the past years, especially in the capital, the district cities, and at newly constructed, large residential sites.

Decentralized heat supply dominates in most cities and communities of the GDR. The majority of apartments are heated with individual solid fuel stoves. Industrial and agricultural enterprises operate their own heating plants; installations of the infrastructure supply their heat with their own boilers, whose capacity is relatively low. Decentralized heat supply has a series of disadvantages: low energy transformation efficiency, large demand for labor, relatively great environmental impact etc. The level of decentralized heat supply must also be considered low with regard to working and living conditions.

Considering measures for territorial rationalization, initial steps are possible which will lead to an increase of the degree of centralization. The number of non-public heat supply areas presently still exceeds the number of public heat supply areas by a large number.

4. Planning Study Results

Studies were made for four specific areas in the settlement net of the GDR for district heating supply with a nuclear heating plant. The following guidance was given for the studies:

--Design of district heating systems for the year 2020 taking into account the long-term development of the area,

--Inclusion of a nuclear heating plant for maximum replacement of raw brown coal,

--Increase of degree of centralization of heating supply coverage,

--Extensive use of existing and still functioning installations and nets.

The studies are characterized as planning studies, and are preliminary to detailed planning documents. The methodology and the representation of results take this into account [35],[36],[37].

4.1 Characterization of Areas

The areas which were analyzed for the planning studies for long term development of district heating with a nuclear heating plant are called "supply areas". Characteristics of these supply areas have been minimized and are relevant to the task.

Supply Area A

--Large city with approx. 210,000 INH; estimated for the year 2020 are 230,000 INH (Process of urbanization),

--Industry: Machine construction, office machines, electronics, shoe and textile manufacturing,

--Administrative city area: 106 km^2, Table 2 shows the area utilization structure of the city. The actual city functional ara (built-up area) where heat demand is expected, is about 35 percent of the administrative area.

--The city functional area is subdivided into 32 structural areas: 1 central area, 6 residential areas, 18 mixed (residential and industrial), 3 industrial areas, 3 green spaces, 1 waste area. As in many historically developed cities of the GDR, the mixed areas dominate.

Supply Area B

--Large city with 105,000 INH; 115,000 estimated by 2020 (Urbanization).

--Industry: apparatus construction, glass manufacturing, pharmaceuticals,

--Administrative area: 58 km^2; Functional city area 25 km^2 i.e. 43 percent of administrativ area.

--Inhabitant density, related to administrative (city functional) area will increase from 1,810 (4,200) INH/km^2 at present to 1,980 (4,600) INH/km^2 in 2020.

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--The city functional area divides into 13 structural areas: 1 central area,
  7 residential areas, 2 mixed areas, 3 industrial areas.
  In this major city, residential structural areas are in the majority.

Supply Area C

--Economic region with 18 industrial and agriculturally oriented communities:
  12 cities and 6 rural communities.

--Approx. 82,000 INH live in an administrative area of 273 km^2; while the
  community density approx. corresponds to the GDR average, inhabitant
  density in the economic region is twice that of the mean of the Republic
  (Table 3). Number of inhabitants will not increase by 2020.

--Production structure: Mining, chemicals, metal processing, textile
  manufacturing, agriculture.

--The economic region is approx 40 km long and 7 km wide.

Supply Area D

--Large city and environs: about 430,000 INH, 450,00 by 2020.

--Supply area covers an administrative area of about 570 km^2 (about 15
  percent) of the total surrounding area of about 3,850 km^2.(100 percent).
  Environs cover area surrounding city with radius of 35 km.

--The supply area, which was formed by the routing of the district heating
  lines, includes 35 communities; INH distribution differs from GDR average.
  Over 90 percent of inhabitants live in urban communities. (Table 4).

--Industry: Metallurgy, chemical industry, glass-ceramics, textiles,
  equipment construction, machine construction.

--Agriculture: industrialized plant and animal production, food stuff
  production.

The four selected supply areas mirror the real situation in the settlement
net of the GDR but they do not claim to be representative.

4.2 District Heat Requirements

4.2.1 Definition

The total heat needed by an area, which could be supplied by the known
district heating media hot water, warm water, and steam, is defined here
as district heat requirement. This includes heat supplied for space heating,
for warm tap water and for technological processes using low temperatures
(up to 200 deg. C) or partially medium temperatures (200 to 400 deg. C).
The thus defined district heat requirement is determined in two ways:
District heat power requirements and district heat quantity requirements
[9].

4.2.2 Methodology

Determination of the maximum district heat power requirements is made in accordance with the mandatory standard [38] according to the relation:

$$P_{Qmax\,jt} = k \cdot \sum_{i} P_{QAn\,it},$$ (1)

where $P_{Qmax\,jt}$ is the maximum district heat power requirement for the region j (structural area, community, city) in the year t,

$P_{QAn\,it}$ is the total connected load of the region (user group) i in the year t

k is a general correction factor

The correction factor considers [38]:
--the utilization factor of the installed load v,
--the simultaneity factor g,
--the maximum heat loss power in the district net h, and
--the factor of realization probability.

This defines the general correction factor:

k = v . g . h .. r. (2)

The standard provides recommended values for the individual factors.

It has proven useful in the planning studies to differentiate between three different user classes within an area j : population, industry, and communal institutions (Infraregion). In order to cover the differentiated development of urban structural areas sufficiently, the structural areas of the supply areas A and B were considered as regions j. In the planning study for the supply area C a community is considered as region j.

The maximum district heat power requirement of the total supply area $P_{QmaxVGt}$ in the year t is calculated from

$$P_{Qmax\,VGt} = g_j \cdot \sum_{j} P_{Qmax\,jt},$$ (3)

Here g_j is the simultaneity factor between the regions j; in general one can set $g_j = 1$.

In the determination of the maximum district heat power requirements for the supply region D, a simplified method was used [9]:

$$P_{Qmax\,VGt} = \sum_{i} p_{Qmax\,jt} \cdot N_{jt},$$ (4)

Here $p_{Qmax\,jt}$ is the specific maximum district heat power requirement referred to one inhabitant (INH) in the region j in the year t,
and N_{jt} is the number of INH in the region j in the year t.

This simplified, and thus less accurate, method can be justified for long range planning if sufficient accurate values exist for the specific maximum district heat power requirements.

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The district heat load density p_{QDjt} is an essential quantity in the design of a district heating system:

$$p_{QDjt} = \frac{P_{Qmaxjt}}{A_j}.$$ (5)

The reference area A_j of the region j should, if possible, be the functional area (built up area) of the region j; generally, however, the less meaningful value for the administrative area is available.

The maximum district heat power requirement and the district heat quantity Q_{VG} for a supply area in the year t are related by the number of user hours of the maximum power requirement:

$$T_{P_{Qmax VGt}} = \frac{Q_{VGt}}{P_{Qmax VGt}}.$$ (6)

The district heat quantity Q_{VG} is calculated with the aid of the annual duration graph for the particular supply area [9].

4.2.3 Results

With the aid of the above cited methods the development of district heat requirements was determined for all four supply areas. Today recognizable social developments in the supply areas were included in all requirements studies. All four planning studies showed, that determination of the district heat requirements was, under present conditions, the most labor intensive task of the studies.

The determined values for district heat requirements of the four supply areas in the year 2020 show little difference between the two large city areas (Table 5 and Figure 1). The heat-intensive industry in the supply area C caused a relatively great power demand during the summer time and thus relatively high annual usage hours, also the specific maximum power requirement with almost 20 kW/INH is very high. Similarly in the supply region D, industry is the cause of the quite favoarable summer load share of over 40 percent.

The district heat power requirement is not constant for the four decades considered (Figures 2 and 3). Development of requirements mirrors the social dynamics in the supply area under cnsideration. In the requirements determination an attempt was made to consider all activities which could be used for rational and economical energy usage today and in the future and which might impact the energy situation. Thus consideration was, for instance, given to the improved physical characteristics after building improvements in the inner cities have been made, and the lower loads required in the new apartment buildings. Causes for increased district heat power demand are seen in the following factors:

--Increase of industrial production by intensivation,

--Construction of new industrial plants and of agricultural establishments,

--Expansion of the infrastructure net,

--Further improvement of working and living conditions,

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--Increase of number of inhabitants and number of apartments in urban areas
  (process of urbanization)

Development of district heat power requirement in the supply area A (Figure
2) corresponds to a mean annual increase of about 1 percent. Development
in area D (Figure 3) is about .9 percent average per year.

Regional distribution of power requirements can be well represented with
the district heat load density according to equation (5) (Figures 4 and
5). In both large city areas A and B the greatest load densities are in
the central areas. In the supply area A (compact inner city with beginnings
of an elongated structure) there will by the year 2020 be some structural
areas with relatively high load densities (over 32 MW/km^2) which cluster
around a line from the north-west to the south-east of the city. (Figure
4). In the region B (elongated city structure), the distribution of
structural areas with different district heat load densities is heterogenous
because of the historical growth of the city.

The values for the district heat load density in the various structural
areas deviate considerably from the mean value for the particular supply
area. (Table 6). While the load densities in the central city areas of
both cities aare above 100 MW/km^2, thinly built-up residential areas show
load densities below 3 MW/km^2. This shows that it is necessary, also in
planning studies for district heating, to decompose the functional city
area down to the structural areas.

The regional distribution of district heat power requirements in economic
areas can be represented by the maximum district heat power requirements
of the individual communities (Figures 6 and 7). The site distribution
of the district heat power requirements corresponds to the settlement net
in the supply area C (Figure 6); In the supply area D only those communities
are shown as heat sinks, which are later planned to be connected to the
regional system. Both supply areas contain communities with relatively high
summer loads, which are caused by technological processes in the local
industries.

4.3 Present Heat Supply in the Supply areas A to D.

District heat carriers are presently used in all four supply areas to provide
heat to users. Additionally, there are numerous decentralized installations
and individual heaters, which primarily use solid fuels.

District heat distribution in the studied areas is both public and
private. In both cases heat carriers are generated in heating plants and
in heating power plants. Some of the urban areas have isolated district
heating systems with extensive district nets. Heat carriers are hot water,
steam, and warm water.

In order to characterize the achieved state of district heating supply in
a supply area, characteristic numbers can be used which indicate the degree
of district heat supply and the degree of district heat centralization. The
degree of district heating supply in year t is defined as follows:

$$G_{rst} = \frac{P_{Qabs \cdot t}}{P_{Q\,maxt}} \cdot 100\,\%$$

(7)

or as
$$G_{Vai} = \frac{Q_{abei}}{Q_{maxi}} \cdot 100\%$$

(8)

The degree of centralization of district heat supply is defined as:

(9)

$$Z_{Vai} = \frac{P_{QAnFWi}}{P_{QAni}} \cdot 100\%,$$

For a global estimate of the present state of district heat supply, the degree of district heat supply (based on equations (7) and (8)), and the degree of centralization (based on equation (9)), were determined (Table 7). In the years 1981 to 1983 degrees of district heating of 40 to 57 percent were obtained in the studied areas. During that time the degree of centralization in the two studied urban areas was somewhat above 40 percent. If the total area of the supply area and the presently achieved degree of centralization are considered, a quite different picture appears (Figure 8). In the supply area A only 2 out of 23 structural areas are supplied by a central district heating system; the degree of centralization in the central city area--the structural area with the greatest district heat load density (Figure 4)--lies at this time at 27 percent.

4.4 Future District Heat Supply with Nuclear Heating Plants

The district heating systems for the four supply areas were designed in variants. Based on a series of criteria a preferred variant was determined for each area. Development of the district heating systems was envisioned in 2 or 3 development phases, which cover a 20 year period. We show in the following the preferred variants for each supply area as they would appear fully developed in the year 2020.

4.4.1 District Heat Generation

The nuclear heating plant will supply the base load in each supply area; still functioning conventional district heating plants (Brown coal heating plants) will cover peak loads in each supply area (Table 8). The nuclear heating plants will be operated with high utilization hours of the installed power; systems designed for areas A through C were determined as 6,500 h/a to 8,000 h/a. Utilization hours of installed power in the associated peak load plants are relatively high at 710 h/a to 2,100 h/a.

In designing the nuclear heating plants it was asssumed that reactors with block powers of 200 MW, 300 MW, and 500 MW would be available. Although it is known that specific investment costs of nuclear heating blocks depend strongly on the block power (Table 9), distribution of the installed base load power was made to two or more blocks, as a matter of supply reliability. The share of nuclear heating plant power as part of the total generated power varies between almost 60 percent in the supply area B and almost 90 percent in the supply area D (Table 8).

Site determinations for nuclear heating plants could not be considered thoroughly in these studies, since the numerous detail problems would have severely affected the assumptions of the studies. Site considerations were thus primarily based on the following factors:

--Maintenance of maximum safe distance to nearest settlement,

--Minimum possible line length from heating plant to distribution points in supply area,

--Sufficient area availability based on size and topography.

The site determinations based on these points resulted in the fact that distance between nuclear plant and the nearest settlement is always less than 4 km. In the planning studies it was asssumed that in the settlement net of the GDR safe distances from the heating plant to the nearest settlement would be 2 km.

4.4.2 District Heat Transport

The studies of district heat transport were limited to route determination and a first preliminary dimensioning of the primary network and of the transit lines.

The primary nets will carry hot water with a maximum initial feed temperature of 150 deg.C or 160 deg.C and a maximum flow velocity of 2.5 m/s; a maximum temperature spread of 80 K was assumed. Estimated determination of the required inside pipe diameters was based on the following equation:

$$d = 0{,}56 \sqrt{\frac{P_Q}{v \cdot \Delta \vartheta}},$$

d in m,
P_Q in MW,
v in m/s,
$\Delta \vartheta$ in K.

(10)

Calculations of pressure loss were not made.

Net configurations were usually star networks, and in individual cases also ring nets. Existing networks were included in the considerations. In order to increase supply reliability of the star networks, 3 pipes per line were planned, in a few cases there also were 2- and 4-pipe lines; one preliminary feed line was designed for the maximum summer load requirement, the second preliminary feed line was designed to meet maximum demand during the heating period. In assigning the type of installation of the primary lines first, the less expensive above ground method on supports and mounts was chosen, in built-up areas under-ground sectors were provided.

Primary line routes determined in these studies have the character of a rough first route. In urban supply areas, existing, or already planned heating line rights-of-way were chosen, the needed new routes were integrated into the urban environment after study of existing buildings. Existing water or road networks were used for the routing of the primary net. In determining the route of the transit lines (primary net outside of built-up areas) it was attempted, as far as possible, to run parallel to existing water routes, roads, turnpikes, and railroads. This permits good matching to the topography.

The district heating systems designed for the year 2020 contain the generating stations, the primary routes, and the heat delivery stations in the municipal supply areas A and B (Figures 9 to 11). In both cities star type networks are planned with 3-pipe lines. While in the supply area A the nuclear heating plant can feed the primary net from a central location, the supply area B --because of the topography--shows an extremly one sided feeding of the power plant. The greatest pipe diameters in the area A have a nominal diameter of 1,400 mm and in the area B of 900 mm, both in the return lines.

The district heating systems developed for the industrial areas (Supply areas C and D) include the elements from generating plants to the distribution centers for the supplied communities (Figures 12 and 13). The supply area C is supplied by a star network, which is fed at one of the supply nodes by the nuclear plant supplying the base load which assures district heat supply; supply area D is provided with a ring-star network, in whose supply node a nuclear heating plant with installed power of 3,500 MW generates district heat. Pipe diameters were determined to be nominally 1,200 mm : in the district system of supply area D in proximity to the nuclear heating plant transit routes were planned to have 4 lines with nominal diameters of 900 mm.

4.4.3 System Evaluation

In planning of district heating systems with nuclear heating plants it was assumed, that supply of heat requirements through a district heating system would also be not economical in 2020 for regions with low district heat load density. This hypothesis needs further scientific investigation. The question of an economic service energy medium structure for regions with low energy demand density must be answered for that time, when heating fuels are no longer available.

In the year 2020 degrees of centraliztion between 80 and 90 percent will have been reached in the supply areas by the district heating systems described in 4.4.1 and 4.4.2 (Table 10). These mean values, valid for a whole supply region, can vary considerably within a region. Thus in supply region A in 2020 10 structural areas out of 32 will not be connected to the district net; in only 8 structural areas of the supply region A will a degree of connection of 100 percent be achieved (= degree of centralization in 2020) (Figure 14). Similarly in region C, which will achieve an average degree of centralization of 90 percent in 2020, there are larger communities with a degree of centralization of 75 percent and less (Figure 15).

The needed investment costs were roughly determined for all designed nuclear district heating systems as follows:

$$I_{FS} = I_{KHW} + I_{SA} + I_{FN},$$

The estimated investment costs for the planned district heating systems lie between approx. Mark 2.9 x 10^5 in the supply area B and Mark 12.2 x 10^9 in the supply area D (Table 11). Although the stated investment costs for the individual system elements are somewhat uncertain, the distribution of required investment costs for the three system element groups is surprising. The investment cost share for the nuclear heating plant is in all supply areas between 72 and 88 percent, which is quite high; the primary transit nets require about 7 to 17 percent of the total costs. The difference of investment cost shares between the urban areas (A and B) and the industrial areas (C and D) is significant.

A detailed comparison of investment costs for the planned district heating systems for the studied areas is possible, using specific quantities (Table 12). Investment costs related to specific system power are between Mark 2.2 x 10^6/MW and Mark 3.4 x 10^6/MW. If the required investment costs of nuclear district heating plants are related to the substituted raw brown coal quantity for the time from 2020 to 2045, values between approx. Mark 28/t and Mark 40/t appear. The specific investment costs for the net lie between approx. Mark 5.7 x 10^6/km and Mark 8.9 x 10^6/km.

The degree of air pollution in the studied areas differs considerably. Categories are pollution category 2 (polluted) to category 5 (very strongly polluted). Use of nuclear heating plants will effectively reduce air pollution. In the four investigated areas, starting in 2020, about 25 x 10^6 t of brown coal can be substituted; thus emission of flue gases is eliminated for this quantity of brown coal.

4.5 Recognizable Problem Areas

During evaluation of the planning studies for nucelar heating plant district heating in four areas of the settlement net, problem areas became apparent, which require further work. Scientific attack of these areas, which are stated below, must, in terms of long range preparation, substitute working hypotheses, assumptions and opinions by solid knowledge. The listing of problem areas does not claim to be complete.

(1) Determination of Heat Requirements in Settlement Net

Present methods and available information are not sufficient. Studies are ncessary to develop a "heat atlas" for the settlement net, based on rational methods, sufficient accuracy, and consideration of social development.

(2) Socially Optimum Structure of Future Heat Supply in Settlement Net

When fuels for heat generation are no longer available, heat supply must

be provided almost exclusively from nuclear sources via the utility energy media: district heat and electrical energy. In the long term, an optimal utility energy medium structure--considering possibilities of use of regenerative energy sources [39]--for heat energy supply to the different settlement categories in the settlement network, must be justified.

(3) Appropriate Technologies for District Heat Supply from Nuclear Sources

Depending on technical-economic possibilities, the appropriate technology for district heating must be found for the various supply areas in the settlement net: direct heat from nuclear power stations, operation of nuclear heating power plants, and nuclear heating plants.

(4) Site Requirements and Site Conditions for Nuclear Heat Sources in the Settlement Net.

Matching the requirements which result from the technical-economic concepts of nuclear sources, and the realities of the settlement network, conclusions must be drawn for the nuclear source and site planning. Nuclear safety is a predominant factor.

(5) Optimum Technology and Methods for District Heat Transport over Great Distances.
The new kinds of future requirements for area-wide district heat distribution requires inclusion of all new knowledge for optimum heat transfer with minimum social expenditures, sufficient reliability and quality, and long term utility.

(6) Routing of District Heat Transit Lines

Purposeful layout of transit lines which link communities must be guaranteed by development of routing guidelines. Compatibility with existing roads, and with environmental considerations must be guaranteed when planning district heat transit lines.

(7) Guarantee of Required Service Reliability of Area Wide District Heating Systems with Nuclear Sources.

The required operational reliability of area wide district heating systems must be determined, based on the settlement system. In order to realize the required service reliability, conclusions must be drawn for design and operation of all system elements.

(8) Heat Storage in District Heating System

In order to equalize heat requirements and the most effective heat generation on one hand, and to guarantee a building block for the required service reliability on the other hand, possibilities for long term storage must be explored. Natural conditions in the settlement net are here an essential boundary condition.

(9) Optimum Development Strategy for Large District Heating Systems

Optimum development strategies must be justified, under the conditions of

the settlement net, for large district heating systems with nuclear sources, which guarantee socially effective utilization of the invested funds.

5. Summary

As part of some planning studies, district heating systems with nuclear heating plants were designed for four supply areas in the settlement net of the GDR for the year 2020. After considerable effort a maximum district heat power requirement of between about 8 kW to 20 kW per inhabitant was determined, with annual user hour values of 4,200 h/a to 5,800 h/a—depending on local industry—for the year 2020. In the planned systems nuclear heating plants with installed power of 500 MW to 3,500 MW were envisioned; the primary district networks have pipe diameters up to nominally 1,400 mm. An estimated calculation of investment costs shows that over 70 percent are attributed to the nuclear heating plant and that in the course of 25 years investment costs, referred to the substituted brown coal quantity, will lie between Mark 28/t and Mark 40/t.

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Table 1: Development of Public District Heat Supply in the GDR

Kenngröße	2 Index	
1	1970	1982
1	2	3
3 1 Spezifischer Anschluß-wert in kW/10³ EW	100	319
4 2 Höchstmögliche Wärme-leistung in MW	100	254
5 3 Anzahl der durch öffent-liche Fernwärmenetze ver-sorgten Wohnungen	100	412
6 4 Wärmeabgabe in TJ	100	213
7 5 Trassenlänge des öffent-lichen Fernwärmenetzes in km	100	222

Key:
1. Characteristic
2. Index
3. Specific connected value in kW/10³ per inhabitant
4. Maximum heating power in MW
5. Number of apartments supplied with district heat
6. Heat supply in TJ
7. Route length of public Heating net in km

Table 2: Utilization of Administrative Urban Area--Supply Area A (Metropolitan Area)

1	2
Art der Nutzung	Anteil der Nutzungsart in %
1	2
3 1 Wohn- und Misch-gebiete	13,4
4 2 Industriegebiete	4,5
5 3 Zentrum	0,8
6 4 Städtische Grünfläche	8,9
7 5 Verkehr	4,9
8 6 Sonstige Baugebiete	2,2
9 Zwischensumme	34,7
10 7 Landwirtschaft	52,6
11 8 Forstwirtschaft	7,1
12 9 Wasserflächen	1,3
13 10 Sonstige Flächen	4,3
14 Summe	100,0

Key:
1. Type of utilization
2. Share of type of utilization in percent
3. Residential and mixed areas
4. Industrial areas
5. Areas in town center
6. Urban green areas
7. Traffic
8. Other built-up areas
9. Subtotal
10. Agriculture
11. Forests
12. Water areas
13. Other areas
14. Total

Table 3: Selected Characteristics of Settlement Net

Kenngröße 1	2 Versorgungs-gebiet C	3 DDR-Durch-schnitt	4 Bereich der bezirl Durchschnitte
1	2	3	4
1 Einwohnerdichte in EW/km² 5	300	154	57 ... 318
2 Gemeindedichte in Gemeinden/100 km² 6	6,6	7,0	4,6 ... 13,4

Key:
1. Characteristic
2. Supply area C
3. GDR average
4. Spread of district averages
5. Population density in inh/km²
6. Community density in communities/100 km²

33

Table 4: Community Groups and Population Distribution in Supply Area D

Gemeindegruppe	Anzahl der Gemeinden	Einwohnerverteilung in % Versorgungsgebiet D	DDR 1980 (Vergleich)
1	2	3	4
1 Dörfer (bis 2 000 EW)	13	4,0	23,6
2 Landstädte (2 000 ... 5 000 EW)	7	4,4	11,5
3 Kleinstädte (5 000 ... 20 000 EW)	9	21,2	16,3
4 Kleine Mittelstädte (20 000 ... 50 000 EW)	4	30,1	14,8
5 Große Mittelstädte (50 000 ... 100 000 EW)	1	14,5	7,9
6 Großstädte (über 100 000 EW)	1	25,8	25,9

Key:
1. Community group
2. Number of communities
3. Population distribution in percent
4. Supply area D
5. Compared to GDR in 1980
6. Villages (up to 2,000 inh.)
7. Rural towns (2,000–5,000 inh.)
8. Small towns (5,000–20,000 inh.)
9. Medium-sized towns (20,000–50,000 inh.)
10. Large medium-sized towns (50,000–100,000 inh.)
11. Large cities (above 100,000 inh.)

Table 5: Heat Requirements of Areas under Study in the Year 2020

	2	3	4	5
Versorgungsgebiet	Max. Leistungsbedarf P_{Qmax} in MW	Verhältnis $P_{QSommer}/P_{Qmax}$	Jahresbenutzungsdauer der max. Leistung in h/a	Spez. max. Leistungsbe in kW/EW
1	2	3	4	5
1 A	1 910	0,32	4 680	8,3
2 B	930	0,25	4 160	8,1
3 C	1 610	0,48	5 810	19,6
4 D	4 720	0,44	5 310	10,5

Key:
1. Supply area
2. Maximum power requirement P_{Qmax} in MW
3. Ratio $P_{QSummer}/P_{Qmax}$
4. Annual power usage of maximum capacity in h/a
5. Specific maximum power in kW/inh.

Table 6: Load Density of District Heat in Metropolitan Supply Areas in 2020

(1)	(2)	(4)
Versorgungsgebiet	(3) Fernwärmelastdichte in MW/km² Mittelwert des Versorgungsgebietes	Bereich für die einzelnen Strukturgebiete
1	2	3
1 A	18	0,3...101
2 B	37	3...160

Key:
1. Supply area
2. District heat load density in MW/km²
3. Average value for supply area
4. Spread for the individual structural areas

Table 7: Degree of District Heat Supply and Centralization of Supply Areas in 1981 through 1983

	(1) Versorgungsgebiet	(2) Fernwärmeversorgungsgrad* in %	(3) Zentralisierungsgrad in %
	1	2	3
1	A	54 (57)	43
2	B	53	41
3	C	46 (39)	26
4	D	40	8

(4) * Werte in den Klammern wurden nach Gleichung (8), die übrigen nach Gleichung (7) errechnet.

Table 8: Installed District Heat Generation in the Supply Areas in 2020

	(1) Versorgungs-gebiet	(2) Kernheizwerk (KHW) Grundlast (GL)		(5) Konventionelle Anlagen Spitzenlast (SL)		(8) Installierte Leistung	
		(3) Anzahl/Block-leistung	(4) Install. Leistung in MW	(6) Anzahl	(7) Install. Leistung in MW	(9) absolut in MW	(10) spezifisch in kW/EW
1	A	5 × 200 MW	1 000	4	576	1 576	7,4
2	B	1 × 200 MW	500	2	345	845	7,3
		1 × 300 MW					
3	C	4 × 200 MW	800	4	207	1 007	12,3
4	D	7 × 500 MW	3 500	2	421	3 921	8,7

Table 9: Specific Investment Costs for Nuclear Heating Plant Blocks

	(1) Blockleistung in MW	(2) Spezifische Investitionskosten in M/MW Index
	1	2
1	100	312
2	200	179
3	300	135
4	500	100

Table 10: Degree of Centralization*in Supply Areas in 2020

(1) Versorgungsgebiet	(2) Zentralisierungsgrad in %
1 A	83.
2 B	90
3 C	86
4 D	83

(3) * Im Jahr 2020 sind der Zentralisierungsgrad gemäß [Gleichung (7)] und der Fernwärmeanschlußgrad [gemäß Gleichung (9)] identisch.

Key:
1. Supply Area
2. Degree of Centralization in %
3. *=In 2020, the degree of centralization (acc. to equation (7)), and of degree of district heat connections (acc. to equation (9) are identical

Table 11: Investment Costs of Designed District Heating Systems

Tabelle 11. Investitionskosten der entworfenen Fernwärmesysteme

Investitionskostenstelle		Versorgungsgebiet A	B	C	D
1		2	3	4	5
1 Kernheizwerk	10^6 M	3 005	2 069	2 330	9 468
2	%	88,5	71,8	78,7	77,3
3 Spitzenlastwerke	10^6 M	149	627	160	704
4	%	4,4	21,7	5,4	5,8
5 Primär-/	10^6 M	243	187	470	2 070
6 Transitnetz	%	7,1	6,5	15,9	16,9
7 Summe des Fern-	10^6 M	3 397	2 883	2 960	12 242
8 wärmesystems	%	100,0	100,0	100,0	100,0

Key:
1. Ranking of investment costs
2. Supply area
3. Nuclear heating plant
4. Peak load plants
5. Primary/transit net
6. Total for district heating system

Table 12: Relative Investment Costs of Designed District Heating Systems

Art der spezifischen Investitionskosten	Versorgungsgebiet A	B	C	D
1	2	3	4	5
1 Summe der Investitionskosten, bezogen auf die installierte Erzeugerleistung, in 10^4 M/MW	2,16	3,41	2,94	3,12
2 Summe der Investitionskosten, bezogen auf die substituierte Rohbraunkohle*, in M/t	28,6	40,3	28,0	32,4
3 Investitionskosten für das Primär-/Transitnetz in 10^4 M/km	5,66	6,54	7,97	8,92

* Rohenergie bei einer Nutzungsdauer des Fernwärmesystems von 25 Jahren

Key:
1. Type of costs
2. Supply area
3. Total investment costs, related to installed generated power, in 10^6 M/MW
4. Total investment costs related to substituted brown coal* in M/t
5. Investment costs for primary/transit net
6. *=Primary energy for a 25-year useful life of the heating system
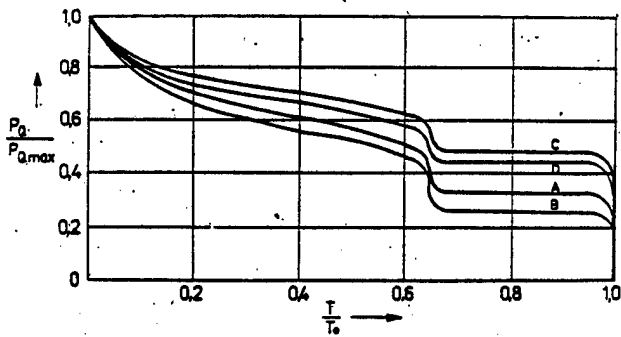
Figure 1: Annual Duration Characteristic of District Heat Power Requirements in the Year 2020 in Supply Areas A-D.
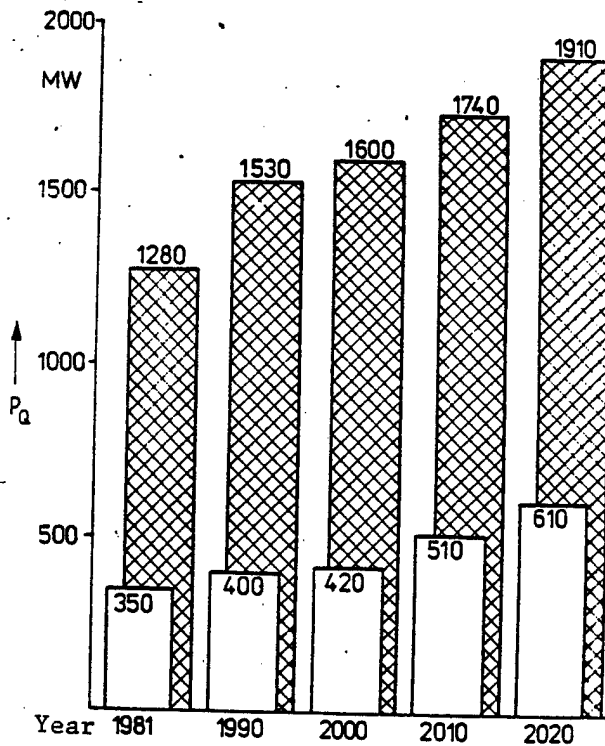
Figure 2: District Heat Power Requirements in Supply Area A from 1981-2020.

> Cross-hatched areas: Maximum Power requirements during the winter in MW.
>
> Blank areas: Maximum power requirements during the summer in MW.
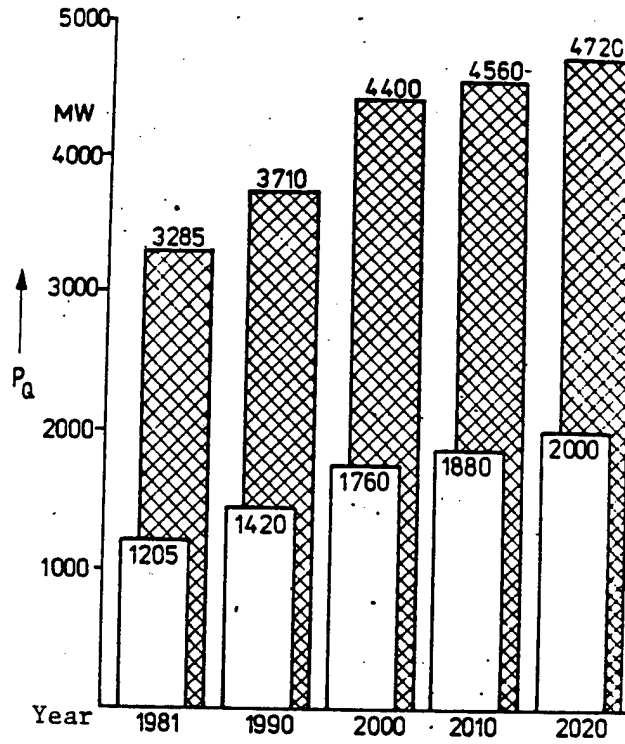
Figure 3: District Heat Power Requirements in Supply Area D from 1981-2020.
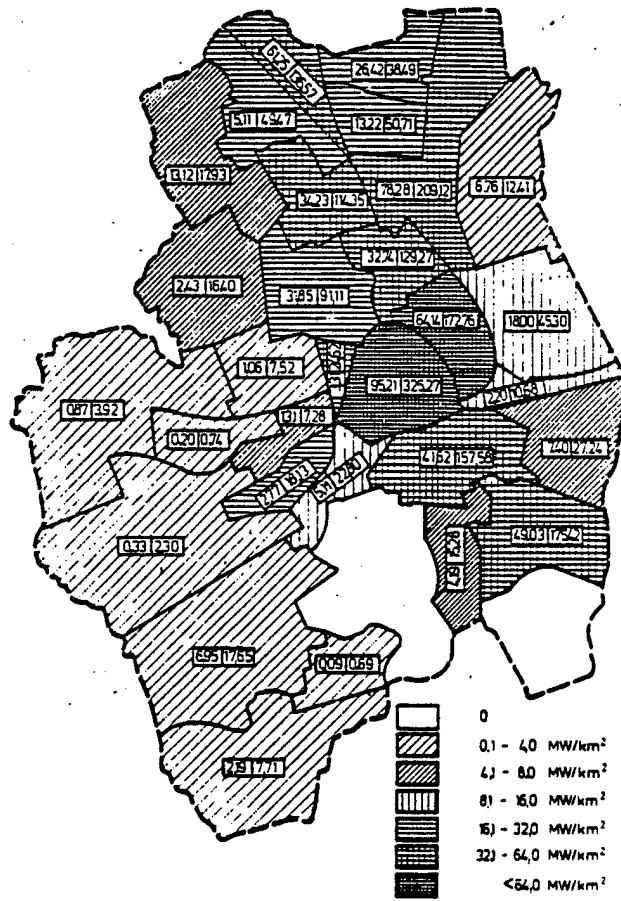
Figure 4: District Heat Load Density in Supply Area A in 2020.
(Box shows power requirements in MW; left summer, right maximum.)

Legend

0 - 10 MW/km²
11 - 20 MW/km²
21 - 30 MW/km²
31 - 40 MW/km²
41 - 100 MW/km²
101 - 160 MW/km²
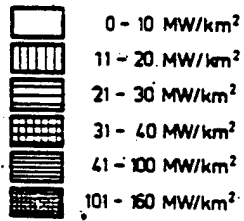
④ Structural
Number of
Area
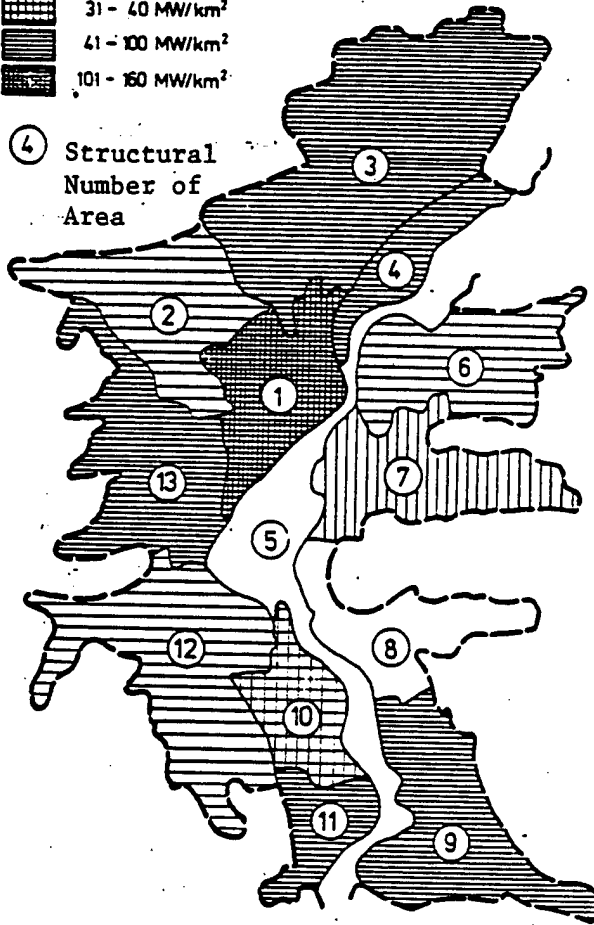
Figure 5: District Heat Load Density in Supply Area B in 2020.
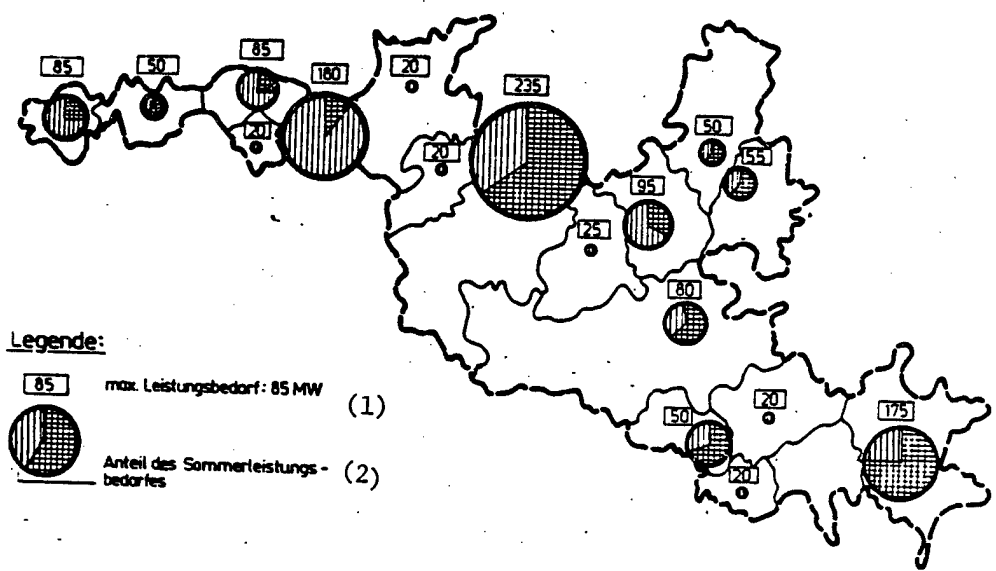
Figure 6: District Heat Load Requirements in Supply Area C in 2020.

Legend:
1. Maximum power requirements: 85 MW
2. Share of summer power requirements

41
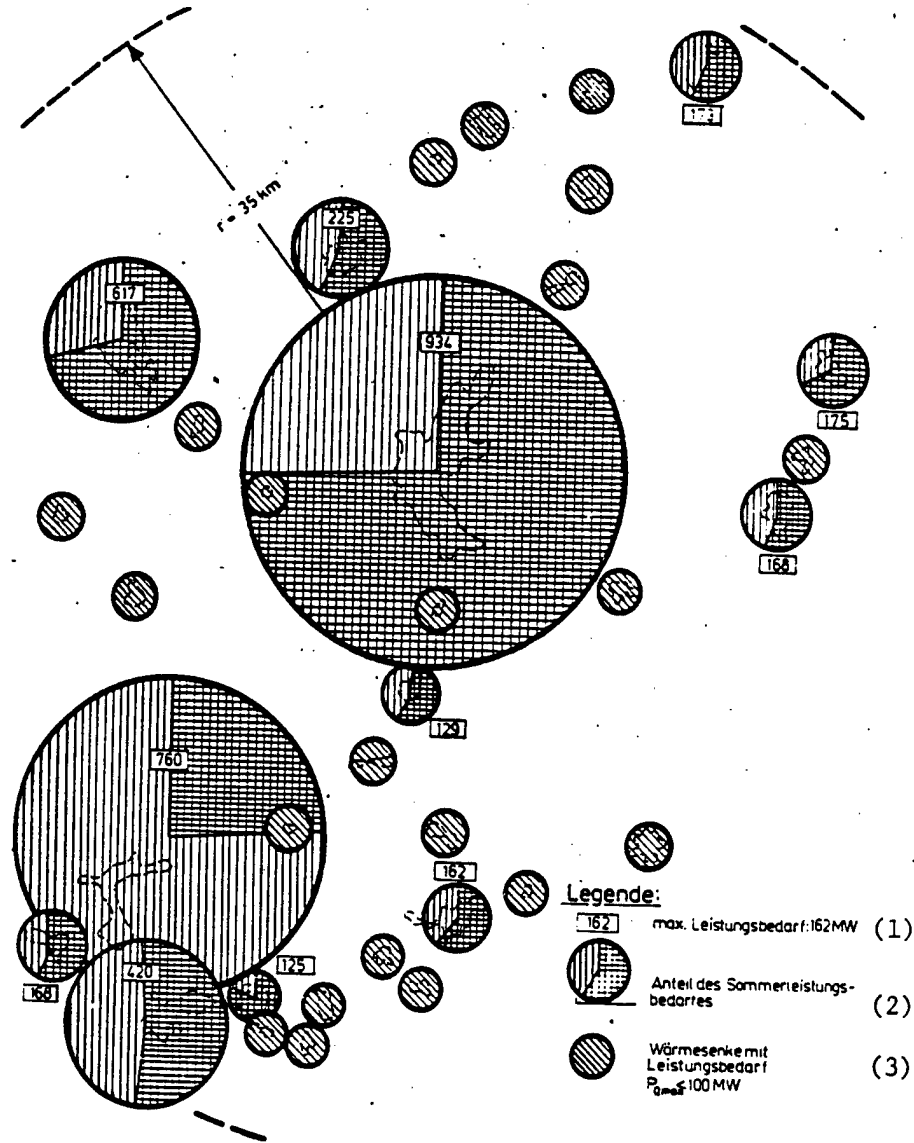
Figure 7: District Heat Load Requirements in Supply Area D in 2020.

Legend:
1. Maximum power requirements: 162 MW
2. Share of summer power requirements
3. Heat sink with power requirements

Legende:
Z Zentrum
M Mischgebiet
W Wohngebiet
I Industriegebiet
G Grünland
Ö Ödland

(1) (2)
(3) (4)
(5) (6)

0 - %
0 - 25 %
25 - 50 %
50 - 75 %
75 - 999 %
100 %
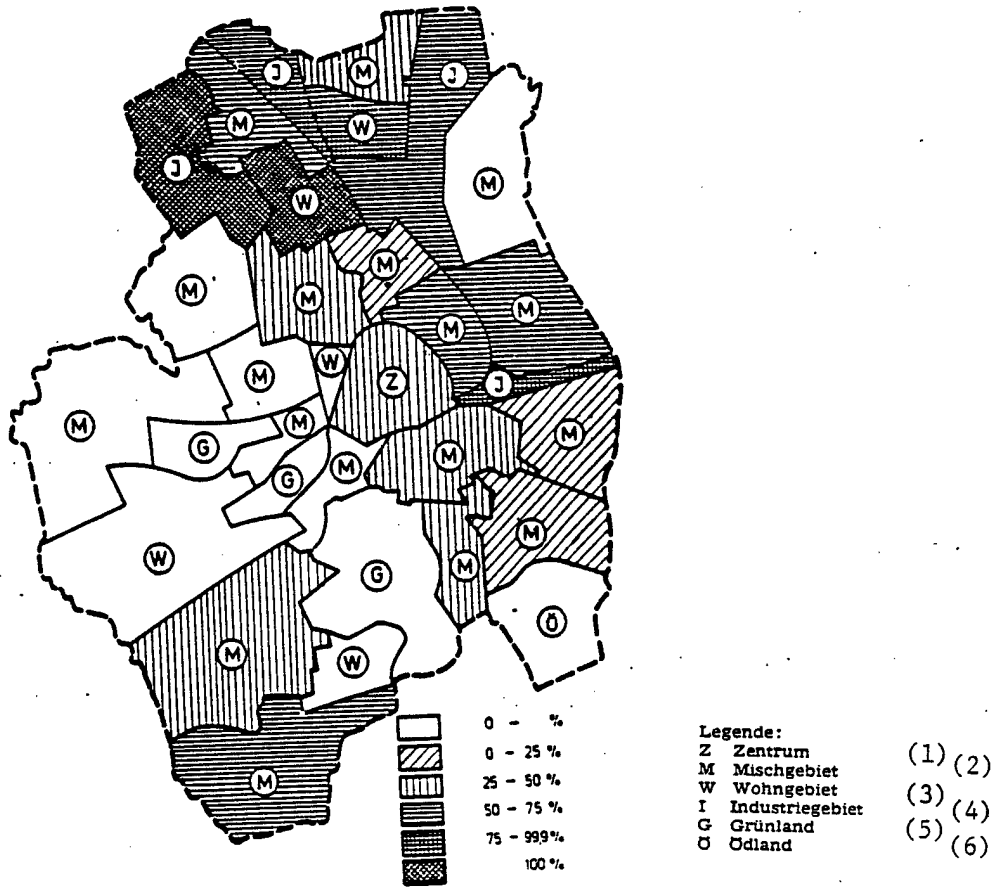
Figure 8: Structural Areas and Centralization of District Heat Supply in Supply Area A in 1981.

Legend:
1. Z center area
2. M mixed area
3. W residential area
4. I industrial area
5. G green spaces
6. O wasteland
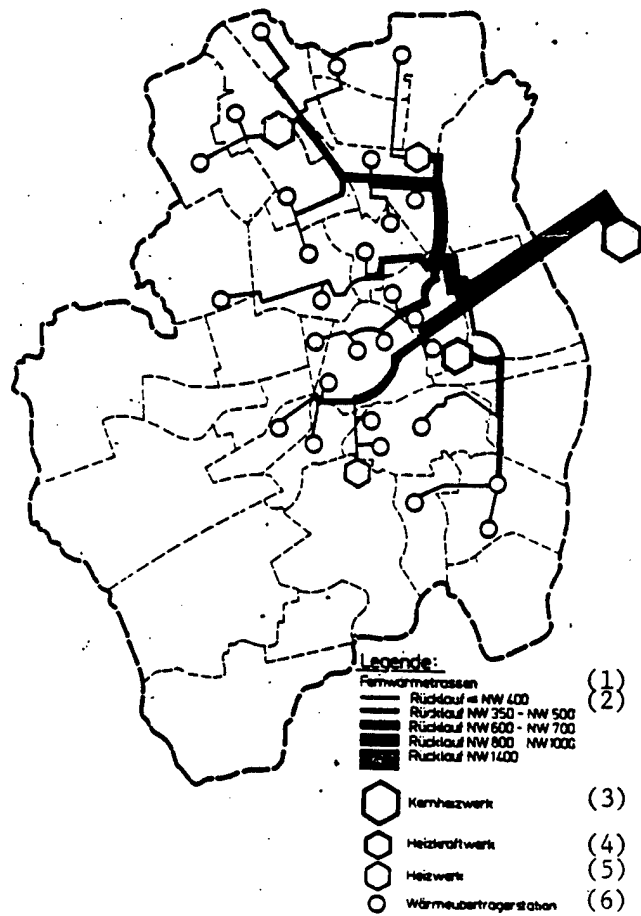
Figure 9: District Heat System in Supply Area A in 2020

Legend:
1. District heat routes
2. Reverse flow
3. Nuclear heating plant
4. Heating power plant
5. Heating plant
6. Heat transmission station
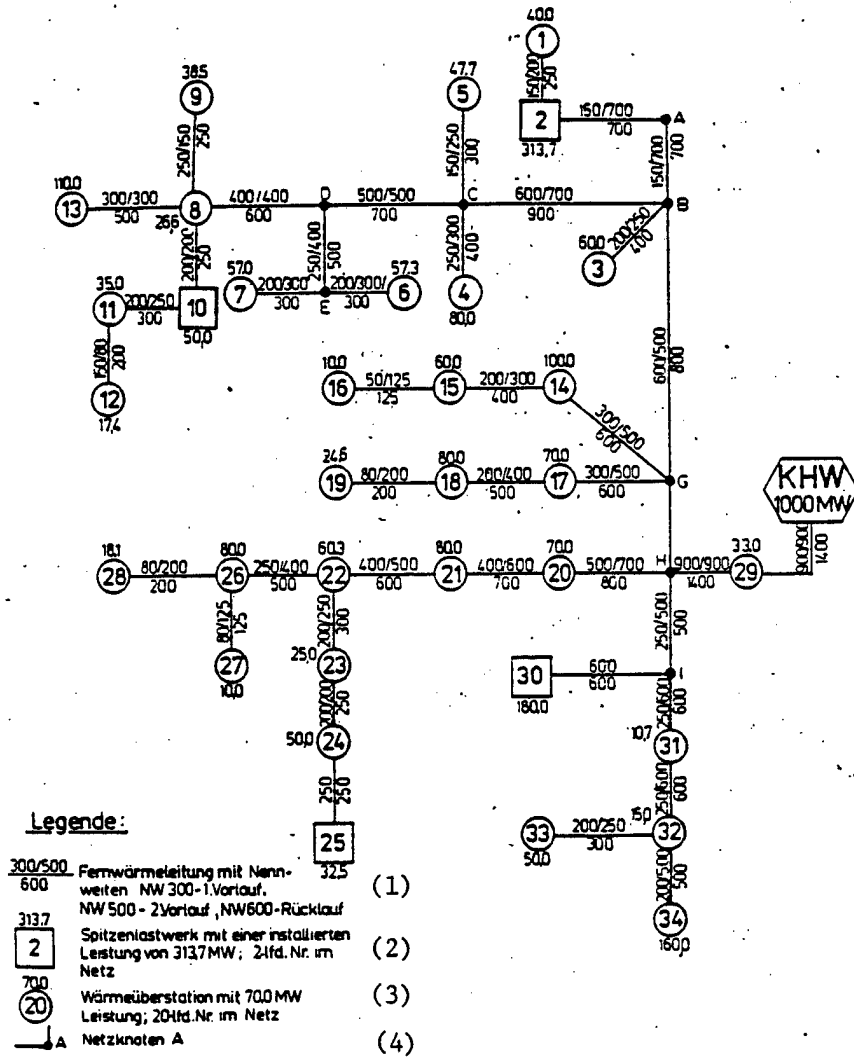
Figure 10: District Heat System of Supply Area A in 2020--schematic.

Legend:
1. District heat line with nominal diameters. Nominal
   diameter (NW) 300--first forward line; NW 500--second
   forward line; NW 600--reverse flow.
2. Peak load plant with installed power of 313.7MW; second
   sequential number in net.
3. Heat transmission station with 70.0 MW power;
   20th sequential number in network.
4. Network knots.
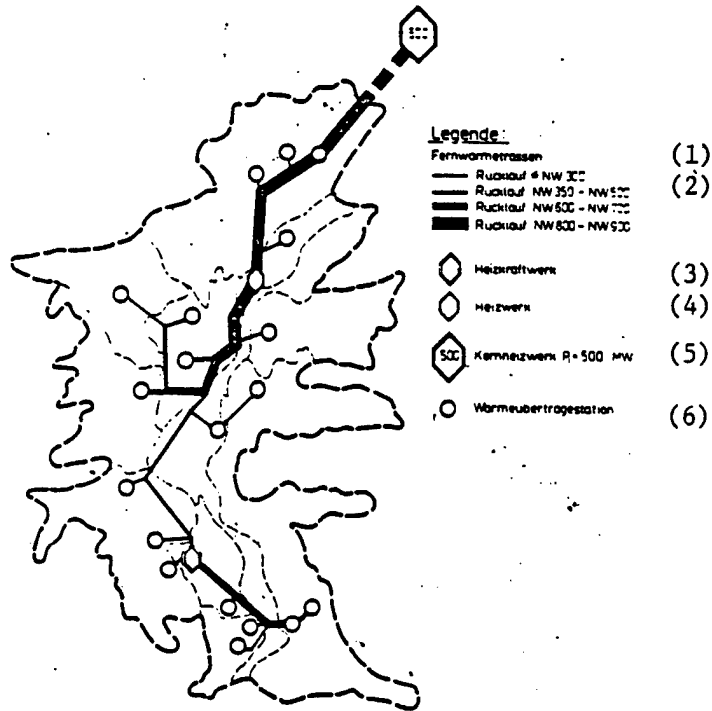
Figure 11: District Heat System of Supply Area B in 2020

Legend:
1. District heat routes
2. Reverse flow
3. Heating power plant
4. Heating plant
5. Nuclear heating plant P_1=500 MW
6. Heat transmission station.
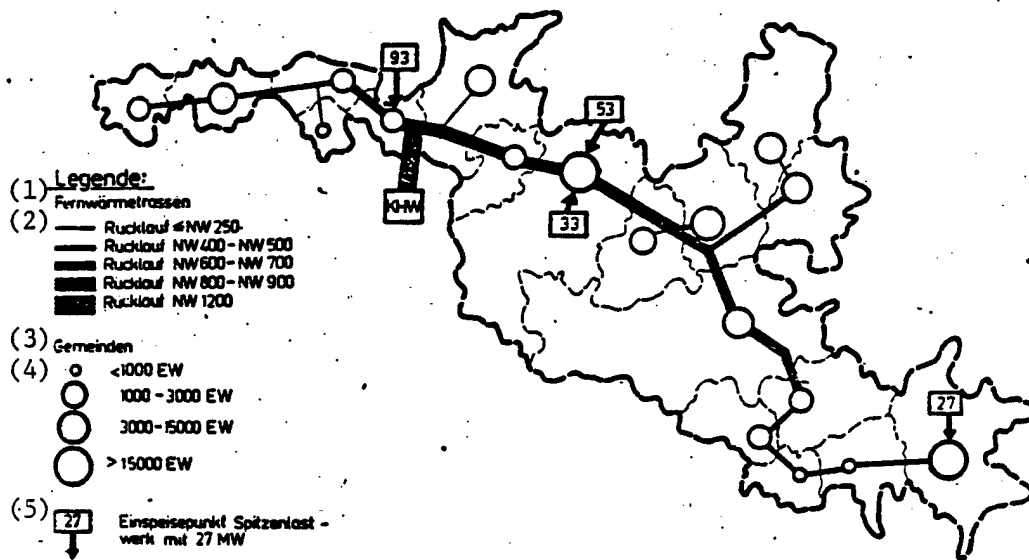
Figure 12: District Heat System in Supply Area C in 2020

Legend:
1. District heat routes
2. Reverse flow
3. Communities
4. Inhabitants (EW)
5. Power supply point for peak load plant with 27 MW.
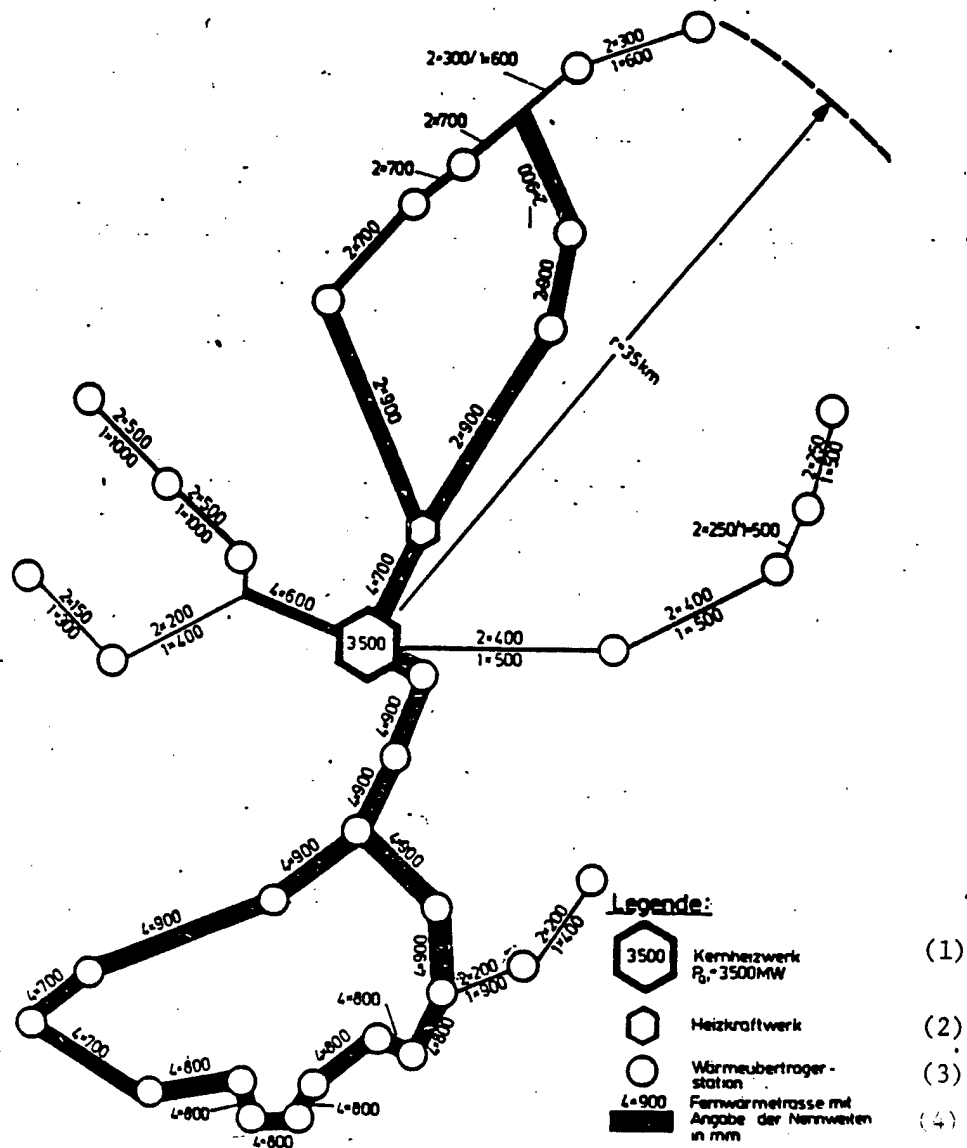
Figure 13: District Heat System of Supply Area D in 2020.

Legend:
1. Nuclear heating plant
2. Heating plant
3. Heat transmission station
4. District heat route with nominal diameter in mm.
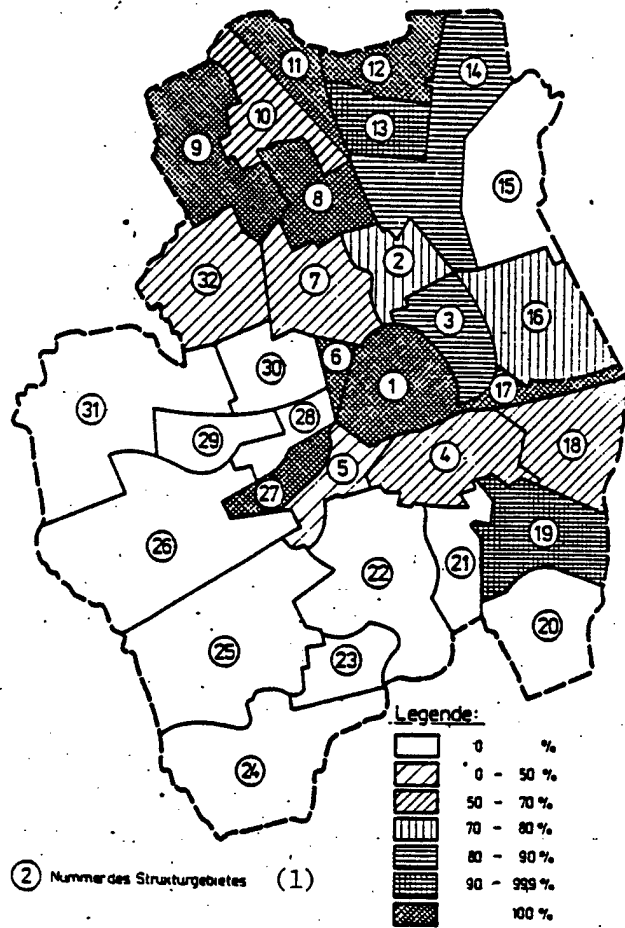
Figure 14:   Degree of District Heat Connection in Supply Area A in 2020.

(1) Number of structural area.
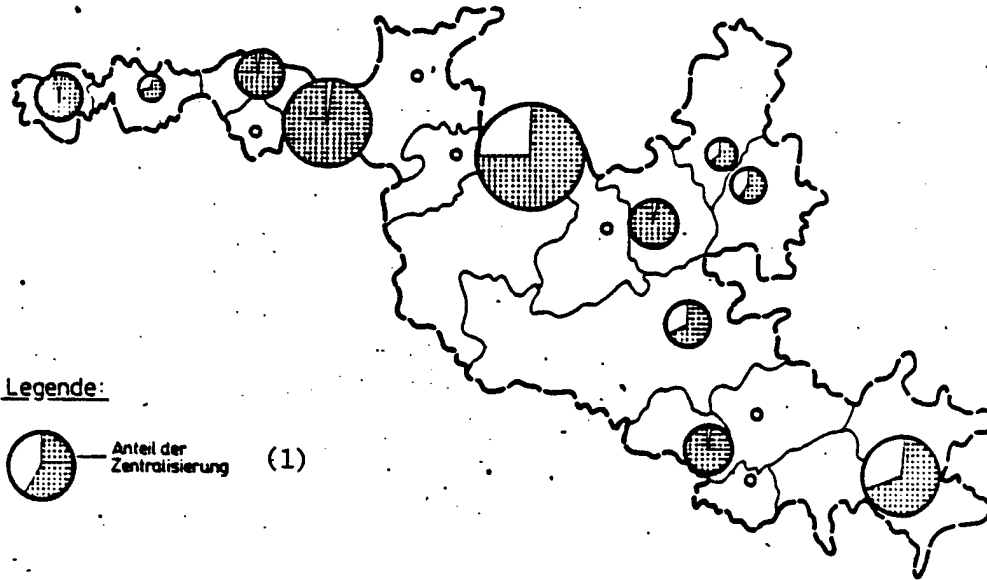
Figure 15: Degree of Centralization of Heat Supply in Supply Area C in 2020

(1) Degree of centralization.

PLANNING COMMISSION TASK FORCE WORKS ON CHANGES IN ECONOMY

Warsaw RZECZPOSPOLITA in Polish 22 Oct 85 p 1

[Excerpts] Work on the program of structural changes to be made in the national economy is in progress. Within the Government's Planning Commission a special task force has been set up to mastermind specific projects to institute these changes.

Basic criteria for the selection of these projects include standards of both quality and modernity, the degree to which these projects promise to satisfy the needs of the domestic and export market, and the possibility of reducing imports, consumption of energy and materials and levels of employment.

Following in-depth analysis and consultations with the relevant ministries a list of 42 projects was drafted with an eye to fostering a more effective socio-economic development of the country. The list includes projects designed as a raw material base for industry, enterprises supplying insulating and construction materials, semi-finished products, and standard components for machinery and equipment as well as investment projects. All of them are expected to step up development of new technologies and new products.

For instance, the production of diesel engines will mean the release of a new generation of cars. The application of electronic components will affect many of the economy (machinery and equipment, machine tools, common appliances). The introduction of a new material--politrioksan--is expected to improve the quality of many products and reduce steel consumption.

The projects are expected to produce effects rapidly. In the case of projects designed as a material and technological base for the national economy and return on capital will take slightly more than three years on average (2.95 exactly), with two projects expected to be refunded within a year of their commissioning day. Ten projects will be refunded within a period of up to two years, and four within three years. The refunding time will exceed 10 years in the case of only one project.

In the case of projects designed to boost the supply of finished products the return-on-capital period will be one year for 7 projects, up to 2 years for 5 projects, and more than 10 years for 3 projects. In this group the average refunding period will be 3.13 years. The average return-on-capital period for all projects to institute structural changes in the national economy is estimated at 3.06 years.

/9274

POLAND

NEW ORGANIZATIONAL PATTERN FOR FOREIGN TRADE

Warsaw RZECZPOSPOLITA in Polish Supplement REFORMS GOSPODARCZA No 61, 19 Sep
85 pp 1, 2

[Text] The Council of Ministers, at its 23 August, 1985 session, heard and
took note of the document "Organization of Foreign Trade in Conditions of
Economic Reform," submitted by the Minister for Economic Reform. The paper
gives an assessment of changes introduced in the field so far and sets general
guidelines for future development of organizational structures serving the ex-
pansion of foreign trade. As such, it provides the interpretation of central
policy lines in developing the organizational pattern of foreign trade. Be-·
low is a summary of the document.

* * *

The organization of foreign trade in conditions of the economic reform--along
with regulations of economic nature--is supposed to provide conditions and en-
couragement for economic units to develop efficient exchanges with foreign
partners, while at the same time making it possible [for the central author-
ities] to pursue a unified, coherent policy of foreign trade in the interest
of the national economy.

With this in mind, it has been found purposeful to diversify the organization-
al forms of foreign trade in such manner as to enable economic units to act on
their own account in contacts with foreign partners, to establish partnerships,
or to use the intermediary of specialist foreign trade agencies--with the
proviso, resulting from the Constitutional principle of the state's monopoly
of foreign trade, that commercial obligations to foreign partners may only be
accepted by either enterprises established by the foreign trade minister or
corporate bodies and individuals authorized by the foreign trade minister to
carry out foreign trade operations.

The purposefulness of extending enterprises' autonomy and powers in the foreign
trade field stems from the conviction that their economic performance indica-
tors should be influenced by the efficiency of trade exchanges and that the
access to foreign exchange resources should reflect their export activeness.
This makes it possible to realize the principle of the unity of foreign-trade
powers and responsibilities at the enterprise level.

In step with the growing autonomy of enterprises, the body responsible for the state's monopoly of foreign trade should be strengthened and provided with necessary powers and resources--in order to ensure the coherence of foreign trade policy and the conformity of economic units' operations with the interest of the state. The Foreign Trade Ministry should design and implement foreign trade policy in cooperation with the interested bodies of state administration, which will protect the overriding interests of the economic policy of the state.

Organizational Forms

The new legal organizational regulations are to provide conditions for the development of foreign trade, by bringing producers closer to international markets, by stimulating their interest in export specialization, by making the organizational structures more flexible, and by enhancing the strategic role of the foreign trade minister as the executor of the state's monopoly of foreign trade.

The new model of foreign trade organization provides for three major organizational forms:

1. The state-owned foreign trade enterprises, with the foreign trade minister as the parent body--trading mainly in goods of strategic importance for the national economy;

2. The joint-stock company with the state treasury's capital share--trading mainly in processed and manufactured goods.

Its purpose is to shape a complementary export offer of industry and to organize import of all necessary supplies for the partners' current production. The company helps to combine the efforts of enterprises making the same or similar products.

The highest body of the company is the meeting of partners, which appoints the supervisory board and the board of management. The meeting of partners considers and approves plans and reports on the company's operations, makes decisions on profit distribution, votes on a motion of confidence for the boards, and adopts resolutions on other matters specified in the agreement on the establishment of the company. The state treasury's share should be at least 51 percent of the statutory capital, and its dividends will be spent on the expansion of export production. The state treasury is represented in the company by the foreign trade minister.

The form of joint-stock company brings the foreign trade apparatus closer to industry. In particular, it may become an important tool for influencing export specialization by producers. Under one roof, it combines the knowledge about manufacturers' productive potential and about chances for sales in foreign markets.

If the partners decide so, by making relevant decisions on income distribution, the company may finance joint production ventures aimed at export growth.

At present, there are 26 foreign trade agencies with the status of joint-stock company.

3. Licensed production and service units, authorized to perform independent foreign trade operations after meeting the conditions specified in the relevant Sejm law (dated 26 February, 1982, published in DZIENNIK USTAW No 7, item 59).

The principal condition is that the value of direct exports of goods or services should reach at least 25 percent of the value of production, or exceed Zl 1 billion a year (adjusted for changes in the exchange rate of the zloty). The licenses may be issued to organizations involved in economic activity in Poland, including:

a. corporate bodies (enterprises, cooperatives, associations, and joint-stock companies);

b. Polish individuals;

c. foreign individuals and corporate bodies operating in the small businesses sector.

In the socialized sector, 103 units have been granted licenses so far.

Lines of Long-Term Policy in the Field of Organizational Structures

The direction of changes in the organization of foreign trade conforms with the adopted system of the functioning of the economy. The organizational structures are rendered more flexible, being adjusted to the specific features of trade in particular product groups and to foreign-trade policy lines. The changes are taking place with active participation of producers. But the extent to which the new organizational forms (especially as regards licenses) have been used so far is unsatisfactory.

Further changes in the organizational structures in foreign trade should be made as part of the adjustment of organizational structures in the whole economy to the adopted concept of its development. It is assumed that:

a. changes in the structure of the economy will consist in shaping new export-specializing production structures, capable of competing with foreign suppliers in terms of prices, product sophistication, and after-sale services;

b. economic mechanisms in foreign trade will be strengthened, especially as regards the rate of exchange, the [producer-trader] settlements in transaction prices [international prices converted into Zl at the official rate of exchange], stimulation of export efficiency, foreign-exchange self-financing, and financing of development.

The production structures specializing in exports may take various organizational forms, as specified in the document "General Assumptions and Guidelines

for the Shaping of Organizational Structures in the Economy [ER No 7-85 of 22 January, 1985], adopted by the Government presidium at its 17 December, 1984 session.

In selecting organizational forms for the shaping of export-specializing organizational structures, the following aspects should be assessed in particular:

a. the enterprise's capability of expanding export production on its own;

b. the extent of co-production links and the need for combining efforts of two or more enterprises for the purpose of creating export-oriented capacities;

c. interest taken by foreign organizations in creating or expanding the export-production capacity.

Depending on the combination of the above assumptions, the production structures with export specialization may take the following organizational forms:

a. the enterprise;

b. the combine (multi-plant enterprise);

c. the association of enterprises--either mandatory or voluntary;

d. joint-stock company (mixed enterprises);

e. company with foreign capital share;

f. consortium.

The terms on which export-specializing entities are authorized to carry out foreign trade operations, and the related procedures, are specified in the relevant Sejm law. It is expected that the scope of export production and the influence of economic mechanisms in foreign trade will attract interest in applying for licenses on the part of units specializing in export production.

In step with the development of the licensing system, measures should be taken to strengthen the financial basis of joint-stock companies. In particular, the goal is to enhance their capacity to finance trade with their own resources, and to encourage them to commit funds to the expansion of production enterprises' export potential. Such attitudes on the part of companies should be stimulated by the state's tax policy. In step with the growth of exports and increase in the number of exporting producers, a portion of the state treasury shares should be ceded to enterprises developing export production. It is warranted that the state treasury should be represented in joint-stock companies by the minister of foreign trade. In special cases, justified by the economic interest of the country, it may be allowed to establish and run a joint-stock company without a state treasury share. Also in such cases, the treasury may be represented by another body of the state administration (which may act jointly with the foreign trade minister).

It has been found purposeful to continue the process of transforming the state-owned foreign trade enterprises into joint-stock companies. This also holds true for enterprises servicing units authorized to engage in foreign trade (organization of exhibitions, trade fairs, advertisement, etc.). The status of state enterprise should be retained, in principle, by units trading in goods of strategic importance, and by service establishments which, because of the character of their operations, have to be independent from units authorized to trade with foreign partners.

An active part in the shaping of organizational structures in foreign trades should be taken by entities expanding export production. They should be allowed to operate directly in foreign markets, or to freely choose the intermediary from among authorized units. Of great importance here is the delineation of product-range and geographical [limits] for these units. The regulations governing this field, which are not unambiguous, should be reviewed and adjusted. Understandably, they must take into account the determinants and strategy of Poland's foreign trade, but at the same time they must not be subordinated to particularistic interests of either producers or foreign trade agencies. Steps should be taken to improve cooperation among export/import units dealing in the same or similar goods or acting in the same market. Undesired behavior in this field should be countered with the help of the system of export/import permits and—in extreme cases—by means of limiting or withdrawing the licenses.

It is necessary to work out and implement the procedures for arbitrating disputes among enterprises over the export of production-supply articles which are in short supply domestically. This concerns the goods which are distributed by producers under freely concluded contracts with foreign trade agencies or other producers. The goal is not to yield to pressure from enterprises demanding the reduction of such exports, but to resolve the problem in accordance with the interest of the national economy. Decisions on these matters are in the purview of the foreign trade minister.

The role of the Foreign Trade Ministry as a functional body inspiring the development of export-oriented production structures and shaping the organizational pattern of foreign trade should be strengthened. It should increase its supervision over operations of units authorized to carry out foreign trade operations and ensure adequate cooperation among them—so as to bring their operations into line with the interest of the economy.

The increase in the number of entities authorized to engage in foreign trade operations will require that greater attention be devoted to the organization and functioning of sales networks abroad, and the functions and operating modes of Poland's commercial representations in other countries. It would not be appropriate to atomize foreign networks, which should be adjusted to actual structure of trade.

Status of the Polish Chamber of Foreign Trade (PIHZ)

The initiative of PIHZ members on the adjustment of legal acts governing the operation of this organization to the requirements of the economic reform is

warranted. The PIHZ activity is regulated by a Council of State decree, issued in 1949 in the strength of the Constitution of 1947. Hence the need for a new legal act which would take into account the systemic requirements introduced under the economic reform, and especially the principle of the autonomy of economic entities. This principle should be applied in respect to the PIHZ as well. New arrangements should concern such questions as: membership, selection of the authorities, organization's own representatives abroad, the right to present position papers on proposed economic arrangements related to foreign trade, and the right to carry out the chamber's own economic activity, serving export promotion and at the same time permitting the organization to be fully self-financed.

The PIHZ, as a sui generis organization affiliating domestic corporate bodies and individuals interested in the expansion of foreign trade and cooperation, is an association of special importance. It has contacts with foreign entities--e.g., it concludes agreements on cooperation with them--organizes collective exhibitions of Polish exporters abroad, and runs information services. For these reasons, it must be closely connected with the state's economic policy. But on the other hand, the PIHZ also acts as an institution of public confidence in international trade. It authenticates commercial documents, certifies about the existence of force majeure, announces trade customs, administers international arbitration, etc. All this should also be taken into account in the new regulation, preferably at the level of a Sejm law.

Edited by: Jozef Majdek

/9274
CSO: 2020/23

BAKA MAINTAINS REFORM TO ENTER NEW STAGE

Warsaw RZECZPOSPOLITA in Polish 9 Oct 85 p 1

[Text] "The economic reform is about to enter a new, qualitatively different stage. Up to now, it has relied mainly on simple reserves, but from now on, as we are facing the difficult tasks of the next five-year plan, the reform's instruments must be closely linked to efficiency," said Minister for Economic Reform Wladyslaw Baka during a news conference at the Government Spokesman's Office yesterday.

Baka briefed reporters on decisions the Council of Ministers made at its latest session. The new regulations are designed to improve the economic instruments to be used in implementing the reform from now on. They include regulations concerning a new technology revenue fund [formed from profits achieved by the commercial application of new products and processes], the system of currency allowances, and an experimental system of rouble allowances for enterprises. In addition to some amendments to the reform rules, which are now only to be supplied with concrete parameters (these will be set either in 1986 Central Annual Plan or in the 1986-90 National Socio-Economic Plan), the Council of Ministers has also endorsed an overall concept of some matters of close interest to enterprises and even citizens such as a tax on overdrawn wage funds (which will replace the often-criticized Labor Redeployment Fund PFAZ), income tax concessions, or the issuing of bonds by companies. These and some other devices will be decided following analyses of the economic performance during the first three quarters.

What are these changes in the reform's instruments designed to bring about? Above all, economic management is to be made more efficient in the face of changing conditions, and company operations are to be subject to tougher financial rules. Besides, the new regulations will boost the role of profit as an economic category which will be the overriding factor of business operations once the reform has been pushed through, and they set up new mechanisms stimulating innovation and the production of export goods—for these two are closely interrelated goals. Finally, the idea behind the new regulations is to furnish more favorable conditions for a restructuring of the national economy beginning at the bottom, that is, to induce companies to gear their investment and modernization endeavors to modern, profitable and much-demanded products. Baka paid special attention to projected more flexible pricing procedures, especially where they concern negotiated prices.

Here are some of the most important questions asked by reporters and Baka's replies:

Question: The economy's performance this year is worse than planned. Isn't this perhaps one consequence of "quashing" the reform by rigid, involved and restrictive regulations as well as by frequent interventions by the central administration in price-setting?

Answer: Erroneous diagnoses may lead to erroneous conclusions. We therefore need to be more cautious in formulating our conclusions, we need more in-depth analyses of the economic performance in the first three quarters, to give shape to some reform instruments. The first half's effects are not fully reliable. For instance, it is remarkable that production growth rates in September were better than in the preceding months, reaching 6-7 percent. Nor do some people appreciate another encouraging development, namely the growing productivity rate, which is now higher than that of 1979. I am not saying the situation is excellent. For this reason, both the legislation and the implementing regulations of the reform we are planning to push through are designed to improve or even substitute some of these instruments. The PFAZ, for instance, is to be replaced by a tax on overdrawn wage funds.

Question: What will be the general rules for companies planning to issue bonds?

Answer: Our proposal is to license public, cooperative as well as private firms, and even individual citizens, to do this, but the Finance Minister is to be authorized to intervene in bond issues depending on the economy's needs.

Question: Isn't the reasonable policy of demonopolizing the economy at variance with moves toward the creation of huge concerns such as, say, the envisaged iron-and-steel community?

Answer: True, there is too much monopoly power in some areas of the national economy. But it is also true that too little has been done to integrate enterprises with a view to speeding up their development. Economic structures are still an open question and are being discussed. We have got to learn a new approach in line with the reform. I don't see anything wrong in an iron-and-steel community which would be created in order to speed up the steel industry's modernization, as long as it is a fully voluntary community, say, one organized like any other industrial association. I am sure that matters raised in this discussion which indicate a danger that the state administration may be barred from influence in some basic economic sectors are very important points.

/9274
CSO: 2020/23

POLAND

FIVE HUNDRED TOP MANUFACTURING ENTERPRISES RANKED

Warsaw ZARZADZANIE in Polish No 6, Jun 85 pp 40-41, 44-61

[Text] Our list of the 500 largest enterprises is already becoming a
tradition. This is the third time we are presenting it to our readers.

Each of the three lists (the previous ones included entries from 1983 and the
first half of 1984) is a bit different from the others. It turned out this
way not only because life causes our economic mechanisms to change and certain
indicators of enterprise economic health turn out to be less important and
others essential. The other reason is that we learn from our heroes and
readers by asking for their opinions. After the first publication we sent
questionnaires to each of the 500 directors asking them what they thought
about the criteria we adopted to evaluate the enterprises, and we tried, to
the extent of our technical capability, to take their suggestions into account.

New column headings dealing with fixed assets appear in the present "500
List." We accepted the argument of those directors and economic observers who
pointed out that this would decrease the arbitrariness of the ratings and that
it would distinguish those enterprises that were more fortunate in the past
decade and had more than their share of modern technology from those that are
poor and have to make due with old machinery. In any case, this leads to the
more general conclusion that our economy continues to suffer from relativism
in terms of how assessments are made to measure how one period's performance
stacks up against the performance of a previous period, something which is
often unfair (e.g. the notorious bonus points given to growth rates in
relation to 1982 rewards those who worked poorly before).

We hope that our list will continue to improve, but then we do not harbor
illusions that we will reach perfection. In a socialist economy there is no
absolute criterion of success (in capitalism it is money). Social
considerations dictate that food prices, for instance, be kept at an
artificially low level. International agreements dispose companies to the
production of goods whose profitability can be estimated only in comparison to
import costs. In a word, the figures never speak for themselves. However we
are always open to readers' suggestions as to how we can make an even clearer
picture of the Polish economy from our future publications in the series "The
Big 500."

General Remarks (Excerpts from GUS documents)

For the third time the Central Office of Statistics [GUS] has presented detailed information on the earnings of 500 selected manufacturing enterprises (excluding those in the power industry) that achieved the highest income from sales, and thus played a major role in determining how the economy as a whole performed. The purpose of the following report on these earnings performance records is to make it possible for interested individuals to observe the changes in the management of these enterprises and the consequences of these changes. As before, the enterprises are ranked according to the value of their sales beginning with the highest ones.

The present version of the "500 selected manufacturing enterprises" covers all the industrial manufacturing enterprises in keeping with the system of economic classification used in the Regon system; also, as in the first half of 1984, three mining enterprises were included, i.e. the Copper Mining and Metallurgical Plant in Lubin, the Sulphur Mines and Processing Plants "Siarkopol" in Tarnobrzeg, and the Sulphur Mines "Siarkopol" in Grzybow. The organizational data given here is current as of 31 Dec 1984.

In comparison with previous studies, the subject headings breakdown has been expanded to cover additional information on net output per employee and fixed assets together with accounts associated with fixed assets. The source material used to compile the data were the financial statements drawn up on the F-01, F-02 and P-30 forms. Multidivision concerns (combines) were also treated as single enterprises.

In column heading three next to the name of the enterprise is the symbol of the industry that the enterprise belongs to according to the statistical number of the Central Office of Statistics. Related branches of an industry can be identified on the basis of the first two numerical symbols given in the attached table. The relative figures (indicators) were calculated on the basis of absolute figures expressed in thousands of zlotys.

Definitions of Basic Concepts

SPRZEDAZ (SALES) includes revenue from sales in terms of final sales prices charged for a firm's own goods, labor, services, patents, licences and other sci-tech achievements, and also the profit margin generated by sales of production from outside sources.

PODATEK OBROTOWY (SALES TAX) can be levied on economic activity performed by enterprises and consisting of: sales of manufactured goods made by them and those manufactured elsewhere, sales of imported goods and services rendered.

DOTACJE (SUBSIDIES) serve as compensation by setting a profitability baseline for goods whose prices, owing to justifiable social or economic reasons, were set at a relatively low level in relation to the production costs of specified goods (itemized subsidies) or specified enterprises taken as a whole (blanket subsidies).

AKUMULACJA Z CALOKSZTALTU DZIALALNOSCI (AGGREGATE NET EARNINGS) represent the difference between the cash revenues generated by sales of goods and services over the cost price of these sales adjusted for the balance of losses and windfall profits. Both positrive and negative values can be assigned to this difference.

WYNIK FINANSOWY (NET EARNINGS) constitute the difference between the revenues from sales and the costs of these sales, plus subsidy entitlements, minus sales taxes, and adjusted for compensatory settlement of accounts in foreign trade, offsetting differentials in prices and also the balance of losses and windfall profits. Positive net earnings are profits while negative ones are losses for the enterprise.

PODATEK DOCHODOWY (INCOME TAX) is the tax paid on profit gained.

RENTOWNOSC NETTO (NET PROFITABILITY) is the ratio of net earnings to the enterprise's actual costs of goods and services sold.

PRODUKCJA CZYSTA (NET OUTPUT) constitutes the difference between the aggregate value of all output, which is calculated by adding or subtracting the values assigned to inventories of finished goods, goods in production, and earnings from miscellaneous sales from sales as measured in actual prices, and direct costs adjusted for the payment of interim charges and other adjustments related to the costs of goods sold. Direct costs include the costs of materials and nondurables, energy, transportation and repair service, outside processing, miscellaneous services classified as direct, and depreciation. Components of net output also include indirect costs (wages, personal income taxes, social security insurance, and other payroll expenses, deductions for enterprise and special funds, business trips, bank payments, rent, etc.) and accumulation (sales tax, subsidies, offsetting differentials in domestic and foreign trade and net earnings).

PRODUKCJA NETTO (ADJUSTED NET OUTPUT) is the difference between the value of output sold as measured in final sales prices (minus sales taxes due on these sales, positive compensatory settlements in foreign and domestic trade, and plus itemized subsidies, negative offsetting price differentials and foreign trade clearing settlements) and direct costs adjusted for the payment of interim charges and other adjustments related to the costs of goods sold.

ZATRUDNIENIE W PRZEDSIEBIORSTWACH PRZEMYSLOWYCH (EMPLOYMENT IN INDUSTRIAL ENTERPRISES) refers to persons employed on the basis of established terms of employment, i.e. work contracts, appointments, election or designation, members of organized workers' groups, and also individuals performing alternative military service in an enterprise, individuals in work training, and individuals who are employed abroad working in behalf of domestic industrial enterprises. Apprentices and those involved in temporary labor are not counted as employees. The figures refer to the average number of employees, while figures on part-time workers are converted to count as full-time workers.

WYDAJNOSC (PRODUCTIVITY) stands for the quotient of net output sold over a one-year period divided by the average number of employees.

PRZECIETNE WYNAGRODZENIE MIESIECZNE (AVERAGE MONTHLY WAGE) is a decimal fraction ratio (including also workers compensation, payment of distribution profits and net profit in cooperatives and not including wages for apprentices and publishing work) to the average level of employment divided by twelve.

FUNDUSZ ROZWOJU (DEVELOPMENT FUND) is made up of retained earnings deductions taken for the depreciation of fixed assets, and assets of intangible and legal value. It is earmarked above all for paying off capital investment loans, financing the enterprise's own investments, and the financing of working capital reserves.

FUNDUSZ WLASNY W OBROCIE (NET OPERATING FUND) is that portion of the statutory fund allocated to meet working capital needs.

WSKAZNIK POKRYCIA ZAPASOW FUNDUSZAMI WLASNYMI (OPERATING FUND-RESERVES COEFFICIENT) is the ratio of a firm's operating fund to reserves (including interim settlements).

KREDYT OBROTOWY (WORKING CAPITAL LOAN) is a supplementary source for financing working capital requirements given by banks to enterprises whose operating funds are insufficient to meet these needs.

WSKAZNIK POKRYCIA ZAPASOW I NALEZNOSCI KREDYTEM OBROTOWYM (WORKING CAPITAL LOAN-RESERVES AND RECEIVABLES COEFFICIENT) stands for the ratio of working capital loans to reserves (including interim settlements) plus accounts receivable from customers and suppliers.

SRODKI TRWALE (FIXED ASSETS) are means of production and durable goods carrying a purchase price or production cost of zl 30,000 and up and having a service life of more than 1 year.

SRODKI TRWALE PRODUKCYJNE (PRODUCTIVE FIXED ASSETS) include only those objects used in a manufacturing enterprise (plant) involved in direct production activity by the given enterprise (e.g. it does not include residential buildings, vacation/rest homes, factory schools, etc.).

WARTOSC BRUTTO SRODKOW TRWALYCH (GROSS BOOK VALUE OF FIXED ASSETS) is the value equal to their purchasing or manufacturing costs without subtracting their depreciation value (amortization).

The gross book value of fixed assets is given in 1982 prices. This value is comprised of:

1) in the case of fixed assets that were put into service before 1 Jan 1983, the value of their replacement cost in 1982 prices. This was determined as a result of the revaluation of the economy's stock of fixed capital assets as measured in accordance with conditions prevailing on 1 Jan 1983.

2) in the case of fixed assets put into service after 1 Jan 1983, their value as measured in current purchase prices or production costs. Fixed assets depreciation represents the sum total of annual amortizations claimed from the moment the fixed asserts were put into service.

STOPIEN ZUZYCIA SRODKOW TRWALYCH (FIXED ASSETS DEPRECIATION RATE) defines the percentage ratio of depreciated value to the gross book value of fixed assets.

NAME OF INDUSTRY	INDUSTRY SYMBOL
Fuels (except coal)	02
Ferrous Metallurgy	04
Nonferrous Metals	05
Metalworking	06
Machine Building	07/08
Precision Instruments	09
Transportation Vehicles	10
Electrical Engineering and Electronics	11
Chemical	12/13
Building Materials	14
Glass Products	15
Porcelainware	16
Wood Products	17
Paper Products	18
Textile	19/20
Apparel	21
Leather goods	22
Food Products	23-25
Animal Feed	26
Printing	27
Miscellaneous	28

500 WYBRANYCH PRZEDSIĘBIORSTW PRZEMYSŁU PRZETWÓRCZEGO ZA 1984 R.

OGÓŁEM "500"

1. POLMOS Warszawa
2. PETROCHEMIA Płock
3. Huta LENINA Kraków
4. Huta KATOWICE Dąbrowa Górn.
5. Komb. G.-H. Miedzi Lubin

6. FSM Bielsko-Biała
7. RAFINERIA Gdańsk
8. FSO Warszawa
9. O.P. Przem. Mięsn. Katowice
10. URSUS Warszawa

11. Huta BIERUTA Częstochowa
12. Huta Met. Nieżelaznych Katowice
13. Huta STALOWA WOLA
14. O.P. Przem.Mięsn. Bydgoszcz
15. O.P. Przem.Mięsn. Wrocław

16. Huta NOWOTKI Ostrowiec Św.
17. Z-dy Metalurgiczne Trzebinia
18. O.P. Przem Mięsn. Warszawa
19. Huta WARSZAWA
20. BUMAR-ŁABĘDY Gliwice

21. SIARKOPOL Tarnobrzeg
22. RAFINERIA Czechowice
23. FSC Starachowice
24. FSC Lublin
25. Komb. Koksowniczy Zabrze

26. O.P. Przem. Mięsn. Łódź
27. JZS Jelcz
28. AZOTY Tarnów
29. Z-dy Chemiczne Oświęcim
30. H. CEGIELSKI Poznań

31. O.P. Przem. Mięsn. Koło
32. Cukrownie Lubelskie Lublin
33. UNITRA-WZT Warszawa
34. O.P. Przem. Mięsn. Olsztyn
35. Z-dy Ch. BŁACHOWNIA Kędzierzyn

36. WSK Mielec
37. Huta BATORY Chorzów
38. POLAR Wrocław
39. AZOTY Kędzierzyn
40. Z-dy Włók.Chem. Gorzów

41. Huta ZAWIERCIE Zawiercie
42. Huta KOŚCIUSZKO Katowice
43. HUTA BAILDON Katowice
44. Z-dy Ch. BŁACHOWNIA Kędzierzyn
45. Huta FLORIAN Świętochłowice

46. ZZG INCO Warszawa
47. WSK Świdnik
48. Stocznia Gdańska Gdańsk
49. O.P. Przem. Mięsn. Lublin
50. STOMIL Olsztyn

51. ELANA Toruń
52. KPN VIS Warszawa
53. Huta ŁABĘDY – Gliwice
54. AZOTY Puławy
55. Z-dy Przem. Tytoniowego Kraków

LISTA 500

Pozycja sprzedaży		Nazwa przedsiębiorstwa i symbol branży	Sprzedaż	Podatek obrotowy	Akumulacja z całokształtu działalności		Dotacje	Wynik finansowy		Dodatek dochodowy	Rentowność netto		Produkcja czysta		Zatrudnienie przeciętne		Wydajn. mierzona prod. sprzedaną netto w ciągu roku		Przeciętne wynagrodzenie miesięczne		Środki trwałe produkcyjne brutto (31 XII)		Stopień zużycia środków trwałych	Procentowy wskaźnik pokrycia zapasów i należn. kredytem obrot.	
Rok 1984	1983		mln zł	mln zł	mln zł	poz.	mln zł	mln zł	poz.	mln zł	%	poz.	mln zł	poz.	liczba zatr.	poz.	tys. zł	poz.	zł	poz.	mln zł	poz.	%	31 XII	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
111	92	K. Cement CHEŁM 142	10050	171	2146	78	14	1785	65	1335	21.72	110	3580	102	3133	179	1004	113	16332	263	13066	74	55	13.3	18.1
112	108	Mennica Państwowa Warszawa 067	10366	108	565	319	–	318	431	156	3.21	439	867	417	640	462	1078	94	16977	214	866	491	51	33.0	36.0
113	122	F-ka Sam. Specj. Kielce 102	10254	185	1067	197	–	883	183	381	9.60	312	2709	144	4461	100	565	375	15304	391	7146	147	50	51.1	40.3
114	123	RAFINERIA Jasło 024	10180	1597	2655	62	–	1058	138	614	14.06	227	3418	114	1535	358	1189	70	16852	226	5198	210	43	42.7	25.9
115	116	AZOTY Chorzów 122	10088	4	1169	182	49	1274	182	728	14.45	222	2760	140	3311	165	850	177	18313	111	12041	60	59	14.5	13.5
116	118	O.P. Przem. Miesn. Rzeszów 231	10048	223	-408	444	916	335	419	148	3.21	439	272	465	2080	294	370	492	15451	374	2454	391	40	40.5	19.7
117	94	PZL-WOLA Warszawa 071	10045	–	1849	100	–	2201	44	446	26.81	78	4135	80	5190	80	897	163	20722	45	10260	100	54	50.4	36.9
118	96	Cukrownia Opolska Racibórz 243	10004	1096	-400	443	686	286	445	–	2.75	445	999	401	3031	186	610	339	16021	230	9186	108	57	69.7	72.4
119	134	ZPS PODHALE Nowy Targ 222	9925	–	2143	79	285	1343	108	689	17.34	177	4895	108	7126	44	517	108	18370	107	2957	356	63	26.3	17.5
120	209	Centr. Pwn. Win Import. Warszawa 247	9862	6217	7068	12	–	851	186	571	30.36	51	7663	32	1057	421	1093	69	20032	59	2496	388	69	55.9	59.0
121	112	AGROMET Płock 082	9785	207	1996	85	–	1791	64	589	22.94	100	3590	101	3791	135	870	167	15926	318	9878	101	32	45.3	32.4
122	191	FASTY Białystok 191	9754	940	2013	85	–	1074	136	646	13.90	230	3805	89	4918	88	562	378	16504	262	7238	146	54	51.6	38.2
123	128	EMA-CENTRA Poznań 113	9708	2970	4435	27	–	1465	100	979	27.86	69	5636	46	2766	214	952	131	17990	139	3149	356	41	35.3	29.2
124	98	Stocznia Północna Gdańsk 105	9658	–	681	288	–	1336	109	–	14.89	211	3032	126	4028	122	906	153	17990	3	6235	172	37	25.6	55.8
125	101	PPDiUR „Odra" Świnoujście 234	9640	–	-980	471	1641	681	258	–	6.14	391	1856	264	5720	66	547	392	19157	76	16645	59	48	10.6	6.2
126	148	Z. Przem. Skórz. Krapkowice 222	9675	843	1659	120	115	991	176	528	11.88	266	4417	89	8084	33	450	468	15959	315	3753	292	49	32.9	12.9
127	110	RADOSKÓR Radom 222	9545	1384	2424	62	186	1186	128	663	16.51	187	5585	48	9052	25	471	452	15621	350	3313	326	48	30.7	24.2
128	143	Huta JEDNOŚĆ Siemianowice 042	9488	105	4435	425	420	438	374	219	4.69	417	1922	252	2920	123	540	401	20448	51	6927	152	63	47.2	36.3
129	121	POLFA Tarchomin 134	9383	–	3132	45	67	3132	27	2171	50.21	13	4444	67	2920	200	1550	195	18433	104	5690	183	63	44.4	6.5
130	136	KB CZĘSTOCHOWA – Kłobuck 062	9356	53	1167	183	–	1181	124	688	14.57	221	3781	124	5362	76	692	278	21698	22	6169	176	43	42.4	33.1
131	107	SIARKOPOL Grzybów 138	9356	–	2150	77	–	2149	47	1266	29.97	56	3853	88	2174	286	1776	20	20979	39	14332	68	46	21.0	0.0
132	243	Cukrownie Toruńskie Toruń 243	9343	4	-706	460	865	155	490	–	1.55	457	755	435	3229	170	539	405	16639	281	10439	97	51	73.4	83.8
133	234	PPDiUR „Gryf" Szczecin 234	9299	–	-1417	476	2002	585	293	979	5.43	404	1628	305	4770	90	789	214	20918	40	14401	67	44	29.9	27.5
134	071	ANDORIA Andrychów 071	9206	126	1659	119	–	1575	90	–	20.78	124	3225	120	3589	149	824	195	18671	240	8784	115	49	49.2	6.5
135	108	Stocznia Remontowa Gdańsk 108	9190	–	2312	70	67	2363	38	1323	34.33	31	5269	54	5678	67	952	132	22605	15	6106	177	52	36.1	10.0
136	243	Cukr. Bydgoskie Inowrocław 243	9167	–	183	416	273	455	358	–	5.07	409	1297	358	4423	102	592	351	16823	229	9011	111	60	68.9	76.2
137	234	TRANSOCEAN Szczecin 234	9088	–	6388	500	–	601	280	–	7.07	378	2315	193	2790	210	581	361	21448	29	3628	306	29	29.3	42.4
138	195	F. Dywanów Kowary 195	9044	5056	1877	96	–	1331	111	857	49.88	14	9124	25	1717	338	1213	65	17493	175	4186	264	36	47.2	35.7
139	091	ZAMECH Elbląg 091	9000	–	1623	85	–	1876	90	1046	26.22	80	4637	80	5812	83	843	183	17681	161	15750	62	47	42.1	44.0
140	191	ZPB ANDROPOL Andrychów 191	8980	1191	2754	59	–	1563	93	878	25.43	132	5269	72	5020	63	640	313	15699	338	6106	177	52	56.6	45.8
141	142	PRONIT Pionki 136	8868	118	607	304	2207	636	265	147	7.69	365	2520	168	4423	102	592	351	16071	308	13842	70	44	48.9	38.7
142	144	PPDiUR „Dalmor" Gdynia 234	8861	1022	-1615	478	153	591	291	23	5.61	399	-1405	342	5657	68	581	361	16661	92	13781	71	49	18.4	22.7
143	137	ZPS ALKA Słupsk 222	8800	12	1594	129	–	775	224	245	10.82	288	4271	75	6754	51	500	432	16639	221	3894	230	47	67	35.3
144	171	Z-dy Drzewn PW Kalowice 171	8722	933	414	366	–	402	395	104	4.84	415	1532	319	3085	180	539	402	17309	148	1926	435	52	10	0.6
145	251	GOPLANA Poznań 251	8709	–	1425	152	–	1025	147	668	14.06	227	2156	215	2403	285	700	271	15329	388	2454	392	52	27.4	17.0
146	157	Rafineria GLINIK Gorlice 024	8687	2208	3035	49	–	827	203	477	14.63	219	3478	109	863	440	1414	40	15758	334	2143	416	53	56.0	35.2
147	151	Huta MAŁAPANEW Ozimek 081	8592	–	2077	84	–	2103	50	1317	32.15	41	4664	63	6490	58	727	255	18310	112	11668	83	41	29.3	19.0
148	115	ELTRA Bydgoszcz 115	8543	1084	2092	83	–	1008	152	324	15.64	198	4081	83	5453	73	521	420	14859	431	3653	302	47	38.8	41.7
149	081	BUMAR-WARYŃSKI Warszawa 081	8530	8	1698	118	6	1692	75	991	24.70	118	3516	108	3950	128	918	147	17681	161	7928	129	51	54.0	40.0
150	191	ZPB UNIONTEX Łódź 191	8480	840	1623	125	–	789	218	406	11.57	274	3915	85	6298	59	487	442	17270	190	11048	92	63	53.0	35.6
151	167	Huta FERRUM Katowice 042	8456	–	1573	134	–	1610	84	943	23.38	95	2779	139	2465	259	1111	86	21958	21	7272	145	58	43.4	27.7
152	151	Przeds. Przem. Handl. Gliwice 133	8444	233	678	289	–	899	181	548	11.58	273	1423	336	1841	348	1054	89	18166	128	3994	275	52	52.5	52.7
153	146	ELWRO Wrocław 092	8380	30	1914	94	–	687	76	855	26.01	81	4037	81	4874	85	926	141	14751	433	4023	272	47	21.4	20.6
154	164	EMAG Katowice 091	8313	233	1015	206	–	1003	154	350	13.74	233	4168	78	7633	85	552	386	19067	79	7425	141	51	53.1	46.9
155	139	PIOMA Piotrków Tryb. 072	8258	12	1443	150	–	1442	102	886	21.11	119	3380	119	4999	84	663	299	18708	271	5968	181	36	60.9	42.9
156	152	Walc. Met. Czechowice Dziedz. 054	8246	22	366	378	–	364	405	216	4.63	419	1370	347	1988	311	667	295	19664	68	6541	162	56	47.9	38.9
157	169	Walc. Met. ŁABĘDY Gliwice 054	8151	8	208	412	–	203	483	84	2.52	449	1000	400	1008	348	1064	427	22658	14	3459	315	52	52.5	37.2
158	177	Huta BĘDZIN 054	8101	2	708	412	–	704	247	336	9.50	314	1319	353	1099	416	1185	69	21506	25	2573	380	52	29.4	18.5
159	168	Wytw. Wyr. Tyton. Poznań 285	8078	–	580	314	6	580	294	362	7.74	363	1287	360	1721	337	689	337	18166	128	1908	438	51	28.3	30.8
160	172	PZZ Olsztyn 241	8064	–	-2085	486	3063	978	159	591	9.64	311	1266	490	6298	373	2245	7	17905	143	5574	200	35	66.1	83.5
161	161	OPAKOMET Kraków 065	8060	21	1046	200	–	1025	148	610	14.58	220	2391	183	3717	141	667	325	15284	396	8430	123	44	43.2	38.9
162	163	F. Łożysk Tocznych Kraśnik 063	8046	233	949	227	–	716	242	98	10.09	301	3631	98	6834	49	507	430	15611	351	16715	59	54	43.6	37.2
163	201	Sł. Z-dy Drobiarskie Chorzów 233	7965	–	397	373	397	794	214	512	10.48	295	1172	373	2070	95	683	433	14845	433	6641	244	37	21.4	30.8
164	136	GAMRAT-ERG Jasło 136	7920	247	1145	186	–	898	182	271	13.27	243	2445	172	3146	177	655	305	15766	333	10410	98	46	53.1	30.5
165	147	MERA-BŁONIE Błonie 092	7915	9	3366	38	–	3357	–	2230	74.65	5	4860	61	3289	166	1478	35	16647	243	3365	323	48	26.8	23.9

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Pozycja sprzedaży 1984	1983	Nazwa przedsiębiorstwa i symbol branży	Sprzedaż min zł	Podatek obrotowy min zł	Akumulacja z całokształtu działalności min zł	poz	Dotacje min zł	Wynik finansowy min zł	poz	Podatek dochodowy min zł	Rentowność netto %	poz	Produkcja czysta min zł	poz	Zatrudnienie przeciętne liczba zatr.	poz	Wskaźn. wartości prod. sprzedanej netto w ciągu roku tys. zł	poz	Przeciętne wynagrodzenie miesięczne zł	poz	Środki trwałe produkcyjne brutto (31 XII) min zł	poz	Stopień zużycia środków trwałych %	Procentowy wskaźnik pokrycia zapasów i należn. kredytem obrot. 31 XII
166	145	Cukr Leszczyńskie Wschowa	7844		157	421	86	243	468			3.17		1112						17281		7145			
167	155	KOMUNA PARYSKA Radomsko	7800	338	1556	137		1218	119	771	19.53		2365						17160		5514			
168	156	PZL-HYDRAL Wrocław	7777	439	1974	88		1548	94	478	26.64		1412						16388		8512			
169	217	Z-dy Metalurgiczne Skawina	7750	2	503	338		500	330	223	6.77		1106						18593		4938			
170	160	F Spcz i Narz Górn Katowice	7728		1300	162		1307	114	82	20.43		2364						21455		5282			
171	149	ZC-W GORAZDZE Chorula	7713	70	2405	66	344	2338	41	1739	44.48		3779						16970		21513			
172	183	POLIFARB Cieszyn	7711	21	1099	180	207	845	198	572	12.81		1848						16184		6200			
173	158	KZKS WINIARY	7644		428	362		634	268	453	8.80		1084						15539		3116			
174	182	FROTEX Prudnik	7534	1213	1571	93	24	359	409	161	6.05		2470						14700		3392			
175	181	STOMIL Grudziądz	7505	1470	1919	93		474	349	263	8.52		3624						15360		3076			
176	188	POLFA Starogard Gd	7469		3208	40		3208	24	1889	45.09		4239						15442		5773			
177	174	Z-dy Piwowarskie Poznań	7414	4270	4868	24		597	283	381	23.37		5613						16619		7291			
178	175	Huta BUCZKA Sosnowiec	7394	13	880	242		867	190	520	13.34		2270						26320		8040			
179	166	Huta ZYGMUNT Bytom	7319		1648	121		1675	78	1010	29.80		3608						21179		1138			
180	186	ZPB PAMOTEX Pabianice	7232	815	1402	153	50	637	264	308	10.92		2913						16607		6730			
181	176	POLLENA-LECHIA Poznań	7192	707	1697	118		982	158	561	17.80		2410						15553		3135			
182	163	Cukr. Gdańskie Malbork	7136	6	311	394	246	552	307		8.08		1415						16130		7600			
183	141	PAFAWAG Wrocław	7058		992	213		991	190	639	16.43		2812						16348		6185			
184	173	Z-dy Przem. Barw. Częstochowa	7042	775	2409	65		1634	78	1134	35.23		3518						17077		6301			
185	180	Z. Sprzętu Mot. Praszka	7035	538	2173	75		1682	77	1018	34.63		3652						15113		9045			
186	179	Wytw Tytoniu Przem. Lublin	6967	239	361	394		361	407	217	5.44		871						16008		2168			
187	171	Dom Przeds Przem. Drzew. Wrocław	6901	1	865	248		627	270	376	10.39		2236						15478		5112			
188	195	TELKOM-ZWUT Warszawa	6898	230	1550	139		1572	92	671	20.75		3672						16669		7529			
189	208	AGROMET – Lublin	6857		1287	168		1037	143	457	18.57		2562						16972		5476			
190	203	DYWILAN Łódź	6813	4183	4647	25		454	360	317	21.00		5434						18179		4264			
191	194	F-ka Sam. Dostaw. Nysa	6684	1530	1913	95		1048	141	670	21.17		2654						15635		2056			
192	220	Huta SZCZECIN	6661		118	426	300	408	388	214	6.26		807						16278		4446			
193	205	Z-dy Wyr. Mięt. Rybnik	6605	1140	1621	126		481	345	299	9.88		2973						15290		4788			
194	220	EMA-CELMA Cieszyn	6581	177	1004	199		867	198	405	15.59		2454						16563		7035			
195	211	Przędz Czes. Gwardii Lud. Łódź	6562	35	496	345		450	385	256	7.744		1525						16393		2963			
196	237	F-ka Kabli Ozarów Maz.	6518	3	1045	201		1095	132	482	19.86		1913						18491		11144			
197	197	ZWAR Warszawa	6473	1	852	250		878	165	292	15.52		2282						15539		5620			
198	256	Huta ŁAZISKA	6473		503	449	110	606	276	325	8.73		890						22699		4811			
199	215	Łódzkie Z-dy Drob Łódź	6464		373	380	238	610	274	163	10.02		103						15319		4009			
220	150	FLT ISKRA Kielce	6436	260	1271	167		1011	151	550	19.54		3245						15144		16042			
		Druga „100" ogółem	856028	53343	136232		20892	106915		55063	14.86		292147		356084						735480			37.6
		Udział długiej „100" w „500"	16.0	7.0	12.1		135.	18.9		18.4			15.2		20.2							15.8			
		Udział długiej „100" w przem. przem.	10.4	5.9	9.4		6.7	11.8		11.9			10.0		9.9							10.5			
201	210	MERINOTEX Toruń	6382	123	572	318		449	366	122	7.70		2148						16595		4569			
202	204	Z-dy Piwowarskie Żywiec	6314	3265	4130	30	1276	972	163	712	44.56		4487						15564		2892			
203	236	BACUTIL Bydgoszcz	6269		-1027	472	635	249	216	168	3.41		-634						14598		2280			
204	202	P Przem Spoż Łomża	6278	755	773	267	2	654	260	442	11.87		1302						14998		2935			
205	193	LENTEX Lubliniec	6227	259	1122	188		865	191	551	16.92		1984						18017		3650			
206	246	F-ka Farb i Lak. Włocławek	6210	306	623	300	550	325	427	194	5.81		1119						17233		2491			
207	198	ORGANIKA Nowa Sarzyna	6196	21	-145	437		464	353	233	7.28		897						15834		6679			
208	199	Z. Elektr. Motor. Świdnica	6196	701	1511	144		811	208	547	17.16		2642						14356		4838			
209	215	RAFAKO Racibórz	6189		1578	132		1586	86	938	33.87		2973						21472		5905			
210	207	Huta Szkła Krosno	6104	366	1272	168		1183	122	607	24.38		3470						15814		7925			
211	191	Z Przem Tłuszcz Gdańsk	6162		-932	469	1290	358	411	387	5.04		-506						17534		1912			
212	189	ELTRA Łódź	6158		579	315		592	289	495	10.71		1989						16523		4840			
213	200	FAZOS Tarnowskie Góry	6107	9	976	216		976	161	1349	19.11		2019						20048		4595			
214	196	POLGAZ Gliwice	6107		1870	97	25	1861	57		41.06		2891						16703		10659			
215	212	ZPB POLTEX Łódź	6104	677	996	212		343	416	125	6.76		2659						17801		8516			
216	216	STOMIL Wolbrom	6082	157	760	271	329	603	277	356	11.33		1723						16398		4233			
217	273	ZPS ODRA Oleśnica	6061	570	1162	184		921	178	565	18.97		2542						15555		1990			
218	187	DOLMEL Wrocław	6055		975	218		975	162	539	19.22		2672						16678		9383			
219	184	Z Przem Tłuszcz. Brzeg	6046		-916	468	1457	541	316	118	7.76		-437						15650		1598			
220	234	Okr. Z-d Gaz. Poznań	6034		1003	210		1002	155	570	20.03		2520						18488		32730			

Pozycja sprzedaży 1984	1983	symbol branży	Nazwa przedsiębiorstwa	Sprzedaż mln zł	Podatek obrotowy mln zł	Akumulacja mln zł	poz	Dotacje mln zł	Wynik finansowy mln zł	poz	Podatek dochodowy mln zł	Rentowność netto %	poz	Produkcja czysta mln zł	poz	Zatrudnienie liczba zatr.	poz	Wydajn. tys. zł	poz	Wynagrodzenie zł	poz	Środki trwałe mln zł	poz	Zużycie %	Wskaźnik 31 XII (a)	(b)
221	257	261	BACUTIL Poznań	6027	-	-512	450	729	217	478	138	3.33	437	-142	471	747	456	754	236	14619	454	1822	442	38	55.8	53.5
222	178	231	WPPmS Kielce	6022	141	-629	457	915	145	491	55	2.22	454	-168	475	1375	379	1715	21	14701	449	1814	444	37	15.6	2.9
223	235	247	FRUCTOPOL Lublin	5987	1831	2118	81	-	287	444	54	7.56	370	2967	129	1978	314	710	267	15103	415	3112	341	34	71.7	68.0
224	262	067	PREDOM-PRESPOL Nieswiadów	5984	342	1099	194	8	755	230	-	15.41	201	1937	249	2032	303	797	209	17734	154	2375	397	34	26.4	10.9
225	258	131	POLIFARB Wrocław	5971	325	698	286	-	454	381	280	8.61	334	1210	370	837	442	1140	79	19106	77	2198	410	34	61.3	19.1
226	229	022	Okr. Z-d Gaz. Zabrze	5920	-	1231	171	-	1229	118	738	26.31	79	2664	147	3029	188	874	165	18354	108	33724	20	47	2.8	0.0
227	247	191	ZPB ALBA Łódź	5909	498	1298	163	-	800	212	543	17.46	174	2359	187	2703	220	697	275	18285	115	7972	128	61	43.1	27.6
228	278	134	POLFA Kutno	5874	-	1202	175	-	1201	120	751	25.70	83	1875	262	1603	354	1114	85	16335	282	2917	361	47	48.5	34.3
229	260	101	F-ka Wagonów Świdnica	5870	1	-199	438	-	672	255	294	11.09	284	464	459	1637	459	774	221	17960	140	2872	364	47	42.0	30.7
230	205	122	Z. Chem. Inowrocław	5866	3	-738	461	21	534	318	206	8.11	349	978	405	2637	230	830	191	15958	316	19212	50	33	13.2	10.6
231	218	067	PREDOM-ZELMER Rzeszów	5862	737	919	234	293	609	275	267	12.32	257	2391	179	4301	107	464	458	15273	398	3557	282	49	47.2	47.4
232	264	233	Krak Z-dy Drobiarskie Kraków	5849	-	363	383	-	656	259	368	11.92	265	997	402	1541	357	904	154	15634	347	3436	314	31	66.7	55.2
233	240	137	STOMIL Bydgoszcz	5845	40	493	340	-	487	342	305	9.09	324	1312	355	2104	289	589	353	15998	312	3059	346	49	55.4	43.5
234	223	248	Z-dy Piwowarskie Brzesko-Okocim	5841	3027	3447	36	-	493	336	263	20.62	68	4007	64	1450	368	784	216	16939	221	3249	330	49	49.6	43.5
235	249	191	ZPB HARNAM Łódź	5799	923	1468	147	-	545	310	328	12.60	253	2341	191	2556	244	493	434	16432	268	3333	325	55	46.4	36.0
236	224	111	EMA-APATOR Toruń, *	5766	48	1031	204	-	1030	145	589	21.75	109	1910	254	2357	270	822	198	14569	456	2278	405	48	48.9	39.0
237	251	193	Z.P Lniarskiego Żyrardów	5763	465	547	322	-	499	331	214	9.60	312	1950	246	3578	150	589	435	16638	259	7523	138	44	46.3	40.9
238	221	137	STOMIL Poznań	5759	-	834	352	277	349	412	129	7.07	378	1916	255	2369	168	958	352	18181	124	5795	188	37	52.1	53.4
239	226	233	Pozn Z-dy Drobiar. Koziegłowy	5757	-	456	352	863	732	236	339	13.81	291	1053	395	1418	372	958	129	16360	278	3760	291	24	58.6	40.7
240	232	261	BACUTIL Katowice	5755	-	-580	454	-	283	447	159	4.48	423	-254	478	633	463	964	126	14768	444	1818	443	27	47.2	14.7
241	253	082	AGROMET Strzelce Op.	5753	119	1061	198	-	942	170	507	19.61	138	1878	261	2060	299	898	156	15861	326	4806	227	45	47.3	31.1
242	255	092	EFA Warszawa	5745	18	1394	154	-	1380	105	997	31.82	43	2615	157	2941	196	869	168	16897	159	2744	371	38	31.1	26.2
243	253	115	UNITRA-RADWAR Warszawa	5741	24	1462	148	-	1438	103	363	33.76	36	3536	104	5103	82	638	315	16900	232	4655	237	49	53.5	41.7
244	259	073	DOZAMET Nowa Sól	5696	30	1137	187	-	1156	127	623	25.36	86	2609	159	3758	138	722	258	17798	150	4682	234	54	60.9	14.3
245	213	249	Z.P Tłuszcz Katowice	5689	-	490	343	2	491	338	240	9.46	315	826	425	826	445	1088	92	16578	253	1163	478	54	76.0	30.2
246	228	233	Lub. Z-dy Drob. Lublin	5685	-	251	406	125	376	400	198	6.92	382	772	433	1297	385	1285	54	15069	420	1897	440	41	41.0	62.8
247	262	233	Pom. Z-dy Drob. Toruń	5664	98	177	418	290	467	351	207	8.48	337	732	437	1486	437	789	213	14672	451	3494	313	21	52.0	54.6
248	281	231	WP.Przem. Miesn. Jarosław	5664	1583	-286	439	455	71	498	15	1.19	460	262	466	1687	344	287	499	15205	407	2082	421	31	50.7	45.5
249	225	227	Z.Białost-Rekawicz. Świdnica	5640	770	1302	161	-	503	455	275	11.50	273	2085	228	2552	228	530	409	15280	397	913	487	53	42.7	36.0
250	303	251	ZPC WAWEL Kraków	5613	-	1519	143	-	966	165	647	23.57	94	1937	248	1372	381	961	127	15114	412	1176	476	64	23.5	15.9
251	214	214	KONSTAL Chorzów	5595	594	966	224	-	966	204	341	20.91	123	1842	269	2026	306	817	204	18564	96	3548	311	52	37.3	29.5
252	314	314	ERG Tychy	5593	19	1308	160	-	793	215	196	18.50	159	2242	190	2102	174	849	178	21323	18	4106	267	60	40.4	33.8
253	342	342	Z-dy Metalurg. SILESIA	5593	-	282	396	-	263	117	136	4.95	411	958	407	1577	355	585	356	18619	356	2300	194	60	30.6	23.8
254	243	243	Z-dy Sodowe Janikowo	5566	4	733	278	-	1548	210	1151	32.07	42	1636	304	1973	153	1235	62	15935	93	10749	94	50	30.3	15.2
255	250	250	Si Z-dy Lin i Drutu Zabrze	5523	-	875	243	-	931	193	638	19.95	132	1646	301	1982	313	801	161	16638	304	4614	241	62	43.5	9.2
256	244	244	Huta 1 MAJA Gliwice	5493	-	535	328	-	559	304	298	11.32	279	1598	275	2292	275	695	276	20772	42	3786	285	63	38.7	27.9
257	272	123	Z-dy Now Fosforowych Gdańsk	5482	-	761	270	-	793	160	662	16.84	183	1323	450	780	450	1869	18	17659	163	6462	165	46	24.7	16.7
258	279	073	Huta ZABRZE	5479	-	1230	172	-	1236	172	454	28.99	64	2640	174	3176	174	777	219	19795	83	5706	194	59	50.0	42.1
259	276	233	Kiel Z-dy Drob. Kielce	5478	-	667	291	-	807	210	547	16.75	184	1145	387	1276	387	1081	93	15583	355	1463	461	39	58.2	47.6
260	363	363	Z.P.C. OPOCZNO Opoczno	5473	-	2396	67	140	862	67	-	27.46	185	3647	97	3048	185	657	304	16365	278	5693	195	29	37.8	33.2
261	320	241	PZZ Wrocław	5469	-	-2707	494	3470	763	227	461	9.33	318	2046	318	1386	378	2227	8	15922	319	4876	221	46	78.3	69.5
262	339	252	S.Z.Koncentr. Spoż. Skawina	5451	8	375	379	131	499	332	327	9.83	306	805	392	1223	392	784	217	14835	435	2122	420	55	37.8	57.1
263	268	241	PZZ Brzeg	5442	-	-2684	493	3765	1081	133	685	13.33	498	2028	399	1179	399	3116	3	17652	164	4035	271	55	84.9	77.6
264	242	181	Z-dy Cel. Papier. Ostrołęka	5423	3	686	287	-	744	233	396	15.70	197	1605	241	2571	241	637	316	15900	271	6436	166	59	0.0	15.0
265	291	222	Z-dy Przem. Skorz Warszawa	5372	938	1714	113	54	830	201	568	22.97	99	3043	178	3139	178	663	298	16266	290	2426	396	28	44.4	38.8
266	282	137	STOMIL Sanok	5358	102	491	342	263	474	348	263	9.74	308	2054	308	4821	233	428	478	14787	442	1474	86	31	29.8	29.7
267	282	134	POLFA Jelenia Góra	5356	-	3187	41	41	3188	41	2170	146.50	1	3777	1	1688	92	2223	25	16118	304	2223	412	43	35.6	37.3
268	233	181	Z-dy Papiern. Kostrzyn	5353	74	521	333	-	521	323	230	10.76	290	1538	290	2393	266	655	306	15900	322	7299	143	58	55.9	46.5
269	316	154	Huta Szkła Jarosław	5335	1341	2217	73	-	929	177	640	29.98	55	2941	55	1520	360	1146	76	16624	228	4068	269	40	57.6	51.4
270	239	072	RYFAMA Rybnik	5330	-	1029	205	-	1029	146	677	23.79	93	1804	272	1706	339	1023	108	18733	88	3605	307	44	49.8	41.3
271	271	233	Warsz. Z-dy Drob. Warszawa	5330	-	207	413	197	404	392	297	7.90	357	649	442	1026	425	868	169	15483	370	2685	375	31	39.7	29.7
272	287	249	Z. Przem. Tluszcz Warszawa	5327	2690	259	402	315	574	297	113	11.34	277	577	450	621	465	1632	25	16321	109	1101	461	47	81.2	75.9
273	266	201	ZHP FENIKS Łódź	5323	797	3009	51	-	319	430	170	13.78	232	3884	86	2507	254	490	447	16130	301	4357	255	37	33.9	2.3
274	316	102	F St.Kain POLMO Poznań	5321	1711	1527	141	-	730	239	388	19.32	145	2649	151	2789	211	620	332	15517	365	2756	370	53	45.3	44.3
275	384	137	STOMIL Łódź	5318	-	1933	91	-	222	475	78	6.58	387	2917	131	2517	252	449	469	16472	525	3707	294	41	27.0	24.9

Pozycja sprzedaż		Nazwa przedsiębiorstwa i symbol terenu	Sprzedaż	Podatek obrotowy	Akumulacja z zniekształt. działalności		Dotacje		Wynik finansowy			Podatek dochodowy	Rentowność netto			Produkcja czysta			Zatrudnienie przeciętne			Wydajn. mierzona prod. sprzedaną netto w ciągu roku			Przeciętne wynagrodzenie miesięczne			Środki trwałe produkcyjne brutto (31 XII)		Stopień zużycia środków trwałych	Procentowy wskaźnik pokrycia zapasów i należn. kredytem obrot.	
1984	1983																														

276	327	POLFA Poznań																												46.0
277	245	BORUTA Zgierz																												35.1
278	274	Z Przem Tłuszcz Bodaczow																												87.1
279	292	PZZ Poznań																												69.5
280	341	WISAN Skopanie																												29.9
281	219	Z-dy Piwowarskie Warszawa																												39.4
282	241	NITRO-ERG Krupski Młyn																												22.5
283	265	Z.P.Jedw. Gorzów Wlkp.																												32.4
284	227	Z-dy Włók. Chem. Jelenia Góra																												38.5
285	254	POLAM-PIŁA Piła																												50.4
286	299	Z-dy Przem. Baw Łomża																												59.0
287	302	Słoczna Remontowa Szczecin																												12.7
288	344	POLAM-GOSTYNIN Gostynin																												13.7
289	335	F-ka Kabli Bydgoszcz																												25.8
290	346	PZZ Szczecin																												74.8
291	289	ZUCHAP Kielce																												25.7
292	304	Okr. Z-d Gaz. Gdańsk																												0.0
293	325	FONICA Łódź																												27.6
294	370	Warmińskie ZPOW Kwidzyn																												53.7
295	275	Z-dy Papiernicze Myszków																												40.2
296	248	VISTULA Kraków																												42.5
297	280	AGROMET Jawor																												36.2
298	360	ZPS SKOGAR Łódź																												35.1
299	334	ZC-W NOWINY Siłkowa																												24.6
300	288	POLLENA Nowy Dwór																												30.7
		Trzecia "100" ogółem																												43.0
		Udział trzeciej "100" w "500"																												
		Udział trzeciej "100" w przem. przetw.																												
301	260	Okr Zakł Gaz. Warszawa																												3.7
302	303	F-ka Nici ODRA Nowa Sól																												60.1
303	403	Z-dy Chemiczne Szczecin																												33.0
304	267	Z-dy Piwowarskie Tychy																												31.5
305	365	Z P-ków ORTAL Łódź																												13.8
306	326	Fabryki Mebli Swarzędz																												43.4
307	284	EMA-ELESTER Łódź																												28.0
308	360	ZPS Konc. Spoż. Włocławek																												54.7
309	334	WSK GORZYCE																												40.8
310	318	POLLENA-URODA Warszawa																												5.7
311	338	PZZ Toruń																												72.2
312	340	F Naczyn Emaliowanych Olkusz																												29.7
313	345	ZAMET Tarnowskie Góry																												54.0
314	296	ZNTK Ostrów Wlkp																												41.9
315	343	ZPO WOLCZANKA Łódź																												8.8
316	353	POLFARB Dębica																												31.1
317	380	ZPDz. BISTONA Łódź																												22.1
318	361	Zł. Z-dy Urz.Jądr. Warszawa																												35.3
319	322	ZPB MORFEO Ozorków																												26.3
320	298	PREMA-MILMET Sosnowiec																												32.4
321	312	METALPLAST Oborniki																												40.1
322	380	POLAM-R LUKSEMBURG W-wa																												39.8
323	287	WSK KALISZ																												52.7
324	311	ZTS ERG Pustków																												41.0
325	297	Z-dy Wyr Paper Kielce																												25.0
326	424	Z-dy Drob. Szczecin																												24.1
327	357	DEZAMET Nowa Dęba																												40.2
328	317	ZUT Świętochłowice																												41.4
329	266	UNITRA-WAREL Warszawa																												55.9
330	277	Cement STRZELCE OPOLSKIE																												23.2

Pozycja sprzedaży		Nazwa przedsiębiorstwa i symbol branży	Sprzedaż	Podatek obrotowy	Akumulacja z całokształtu działalności		Dotacje		Wynik finansowy		Podatek dochodowy	Rentowność netto		Produkcja czysta		Zatrudnienie przeciętne		Wydajn. mierzona prod. sprzedaną netto w ciągu roku		Przeciętne wynagrodzenie miesięczne		Środki trwałe produkcyjne brutto (31 XII)		Stopień zużycia środków trwałych		Przeciętny wskaźnik pokrycia zapasów i należn. kredytem obrot.	
Rok			mln zł	mln zł	mln zł	poz.	mln zł	poz.	mln zł	poz.	mln zł	%	poz.	mln zł	poz.	liczba zatr.	poz.	tys. zł	poz.	zł	poz.	mln zł	poz.	%	poz.	31 XII	26
1984	1983																										
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

LISTA 500

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Pozycja sprzedaży	Nazwa przedsiębiorstwa i symbol branży	Sprzedaż	Podatek obrotowy	Akumulacja z całokształtu działalności	Dotacje	Wynik finansowy	Podatek dochodowy	Rentowność netto	Produkcja czysta	Zatrudnienie przeciętne	Wydajn. mierzona prod. sprzedaną netto w ciągu roku	Przeciętne wynagrodzenie miesięczne	Środki trwałe produkcyjne brutto (31 XII)	Stopień zużycia środków trwałych	Procentowy wskaźnik pokrycia zapasów i należn. kredytem obrot.

Nazwy przedsiębiorstw (kolumna 3):

- AGROMET-WARFAMA Dobre Miasto
- F Akces. Mebl Chełmno
- Z-dy Drob. Ostrów Wlkp.
- Z-dy Cem. Wap. Rudniki
- ZPL Siradom Częstochowa
- PZZ Bydgoszcz
- ZNTK Poznań
- BACUTIL Gdańsk
- K.C.W. Kujawy Piechcin
- K.C.W. WARTA Działoszyn
- CZSML Murowana Goślina
- WSK Warszawa
- PZZ Kielce
- ZPDz HANKA Legnica
- MIFAMA Mikołów
- Czwarta „100" ogółem
- Udział Czwartej „100" w „500"
- Udział Czwartej „100" w przem. przetw.
- ZPB MALTEX Łódź
- TONSIL Warszawa
- POWEN Zabrze
- F. Mech. Sam. Szczecin
- UNITRA-TELPOD Kraków
- Z. Obuwia Śr. PKWN Chełm
- UNITRA-BIAZET Białystok
- Fabryki Mebli Swarzędz
- PROGAL Łódź
- Przeds. Transb. Drzew Ostrów
- TECHMA-ZUGIL Wieluń
- Przeds. Techn.-Prod. Warszawa
- BUMAR-FABLOK Chrzanów
- Stocznia Rem. NAUTA Gdynia
- POLFA Grodzisk Maz.
- Z-dy Gum. Górnicze Bytom
- KOBRA Bydgoszcz
- Walc. Met. Warszawa
- RUNOTEX Kalisz
- FAMUR Katowice
- ZPO CORA Warszawa
- TELKOM-TELFA Bydgoszcz
- Przeds. Przem. Drzew. Poznań
- POLLENA Racibórz
- IZOLACJA Zduńska Wola
- Cementownia OŻARÓW
- ZWOLTEX Zduńska Wola
- Dom Słowa Polskiego Warszawa
- ZPW PROCHNIK Łódź
- ZĄBKOWICE-ERG Dąbrowa Górn.
- ZPW TRZUSKAWICA Sitkówka
- Z Chem Anwena
- Z New Fosfor. Luboń
- PKP-KZNiSD Racibórz
- HERBAPOL Poznań
- BUMAR-FADROMA Wrocław
- P. Mat. Bud. Przem. Węgl Katowice
- Cukrownie Szczecińskie Szczecin
- SIGMATEX Piotrków Tryb.
- EMA-TAMEL Tarnów

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Partia „100" ogółem
Udział piątej „100" w „500"
Udział piątej „100" w przem. przem.

KEY TO "500 LIST" CHART:

1. Sales ranking
2. Year
3. Name of industry and branch symbol
4. Sales
5. Sales tax
6. Aggregate net earnings
7. Subsidies
8. Net earnings
9. Income tax
10. Net profitability
11. Net output
12. Average employment
13. Productivity measured by net output sold in 1 year
14. Average monthly wage
15. Productive fixed assets (gross book value on 31 Dec)
16. Fixed assets depreciation rate
17. Operating Fund-Reserves Coefficient (in percents)
18. mln zl=in millions of zlotys
    poz.=ranking
    liczba zatr.=number of employees
    tys. zl=in thousands of zlotys
19. Total for the "500"

CSO: 2600/87

POLAND

SHIPPING, SHIPBUILDING, SEA TRANSPORT, FISHING STATISTICS 1983-1984

East Berlin SEEWIRTSCHAFT in German No 9, Sep 85, pp 456-61

[Article by Prof Czeslaw Wojewodka: "The Polish Shipping Industry in 1984"]

[Text] Last year additional progress in stabilizing the nation's economy was achieved. National income rose in comparison to 1983 by about 5 percent, and industrial production was 5.3 percent above the previous year's figure. In foreign trade, an increase of 9 percent was registered both in exports and in imports. Because the rate increases in foreign trade last year with non-socialist countries (exports +12.4 percent, imports +13.2 percent) were higher than with socialist countries (exports +5.5 percent, imports +5.9 percent), sea transport as part of Polish foreign trade has also increased sharply, since about 90 percent of it is made up of transport to and from non-socialist countries. Consequently, the amount handled in the seaports and the productivity of the merchant fleet increased.

Sea-Borne Freight

Last year, foreign trade by sea reached 46.5 million tons, 8.4 million tons (+22 percent) above last year's figure. Exports by sea have risen 29.8 percent, corresponding imports by 5.2 percent. The share of sea-borne freight in total foreign trade reached 40.8 percent (1983: 37.8 percent), 54.7 percent of it in exports (1983: 50 percent).

In exports by sea it was primarily transport of coal and wood that increased. Imports show a greater volume of iron ore. Transport of grain and imports of other bulk materials showed a decline. Break-bulk material transport rose both in imports and in exports. The import of mineral oil also increased.

Handling of materials in transit rose sharply in Polish seaports again, to 7.7 million tons, an increase of 1.2 million tons (+19.3 percent), which is primarily attributable to a further increase in handling petroleum for the USSR.

Ports

Handling of materials in Polish ports rose last year to 56.5 million tons, that is, by 21.8 percent (10.1 million tons) compared with 1983 (Table 1).

Table 1. Productivity of Polish Ports in Materials Handling in 1983 and 1984
           (10^3 tons)

Type of Cargo and Port	1983				1984				
	Total	Imports	Exports	Coastal and Inland	Total	Imports	Exports	Coastal and Inland	Changes 1983:1984 in percent
Total	46,409	14,847	30,631	931	56,513	15,913	39,386	1,212	+21.8
Types of Freight									
Bulk Cargo	34,656	11,909	22,209	538	42,555	12,705	29,177	673	+22.8
--Coal and Coke	19,688	–	19,261	407	26,312	10	25,742	560	+33.8
--Iron Ore	4,538	4,412	126	–	6,029	5,848	181	–	+32.9
--Grain	3,153	3,112	1	40	2,887	2,712	127	48	-8.4
--Other Bulk Cargo	7,297	4,385	2,821	91	7,327	4,135	3,127	65	+0.4
Mineral Oil and Products	3,773	669	3,044	60	4,629	921	3,514	194	+22.7
Wood	1,423	105	1,295	23	1,827	84	1,724	19	+28.4
Break-Bulk Cargo	6,557	2,164	4,083	310	7,502	2,203	4,971	328	+14.4
Origin of Load									
Polish Foreign Trade	38,985	12,200	26,785	–	47,553	13,034	34,519	–	+22.0
Transit Traffic	6,493	2,647	3,846	–	7,746	2,879	4,867	–	+19.3
Ports									
Gdansk	18,360	3,234	15,054	72	21,655	3,448	18,004	203	+17.9
Gdynia	8,868	4,357	4,496	13	11,271	4,607	6,650	14	+27.1
Szczecin-Swinoujscie	18,885	7,148	10,896	841	23,319	7,774	14,554	991	+23.5
Kolobrzeg	207	67	135	5	205	68	131	6	-1.0
Darlowo	89	39	50	–	63	16	47	–	-29.2

This was the largest increase in years. Except for grain, all types of cargo showed an increase, which was largest for coal handling (up by 6.6 million tons to 26.3 million tons, a 33.8-percent increase in comparison to 1983). Ore handling increased by 1.5 million tons to 6.0 million tons, up by 32.9 percent over 1983, handling of mineral oil rose by 0.9 million tons to 4.6 million tons (up by 22.7 percent). Wood showed a continuing tendency to rise, and it climbed by 0.4 million tons in comparison to 1983 to 1.8 million tons (28.4 percent). Break-bulk goods also showed an increase, with 7.5 million tons (+0.9 million tons, or 14.4 percent). The figures for break-bulk handling include 848,000 tons of container freight (+8.8 percent). Container traffic made up 11.3 percent of the total amount of break-bulk cargo handled. In addition, 295,000 tons of break-bulk freight on pallets and 1,634,000 tons of bundled wood were transloaded. As a result of the increase in coal handling, the directional structure of material handling in Polish ports has shifted further in favor of exporting, which has once more reached 71.8 percent of the total material handled.

Foreign trade and transit traffic were both involved in the increase in material handled in Polish docks in 1984. Material handled for foreign trade rose by 22 percent (8.6 million tons) to 47.5 million tons and it accounted for 84.1 percent of the total handled in the docks. Transit traffic (7.7 million tons) made 13.7 percent of the total. Inland and coastal shipping contributed 2.1 percent.

In transit handling at Polish seaports for 1984, the USSR is in first place with 2.7 million tons, which is almost exclusively the handling of mineral oil (Table 2). The CSR, with 2.6 million tons (+208,000 tons, or 8.6 percent), became the second largest transit customer for Polish seaports. Material in transit for Austria climbed by 188,000 tons (23.7 percent) to 981,000 tons, and for Hungary by 232,000 tons (37.5 percent) to 851,000 tons. Transit for the GDR, by contrast, declined by 74,000 tons (-39.6 percent) to 113,000 tons. Transit traffic in Polish seaports shows a good structure of cargo types—break-bulk traffic makes up almost 30 percent of it, but it constitutes only 13.3 percent of the total port material handled.

Among the individual ports, Gdynia registered an increase of 27 percent in its total of material handled in comparison to 1983, Szezecin-Swinoujscie 23.5 percent and the port of Gdansk 17.9 percent. By comparison, traffic in the small ports showed a decline.

Material handled in Gdansk increased by 3.3 million tons. Its share of the total handled in Polish seaports was 38.3 percent, coal was 40.2 percent, wood 57.0 percent and oil 81.5 percent. As a result of the Soviet oil transit traffic (2.652 million tons), the northern port was able to operate at higher capacity, because the total material handled there came to 8.844 million tons of coal and 3.563 million tons of mineral oil and mineral oil products. Wood, with 1.041 million tons, reached a record high figure. At the special installation for sulfur, 2.246 millions tons were handled, 0.666 million tons in liquid form. Handling of calcium-fluoro-triphosphate and phosphate amounted to 1.485 million tons. At 11,000 tons, handling of containers was minimal.

Gdansk was in second place, with 3.127 million tons in transit material handled. Of this, 2.652 million tons was for the USSR, 335,000 tons for the CSSR and 99,000 tons for Hungary.

Table 2. Transit Material Handling Productivity of Polish Seaports in 1983 and 1984 (10^3 tons)

Types of Cargo, Ports and Countries	1983			1984			
Total	6,493	2,647	3,816	7,746	2,879	4,867	±19.3
Types of Cargo							
Bulk	2,173	1,960	213	2,544	2,241	303	+17.1
Wood	204	56	148	232	74	158	+13.7
Break-bulk	1,955	631	1,324	2,318	564	1,754	
Mineral oil and mineral oil products	2,161	–	2,161	2,652	–	2,652	+22.7
Ports							
Gdansk	2,615	280	2,335	3,127	314	2,813	+19.6
Gdynia	896	207	689	1,104	349	755	+23.2
Szezecin- Swinousjscie	2,980	2,160	820	3,504	2,216	1,288	+17.6
Kolobrzeg	2	–	2	11	–	11	+450.0
Countries							
USSR	2,161	–	2,161	2,656	–	2,656	+22.9
CSR	2,125	1,338	1,087	2,633	1,291	1,342	+8.6
Austria	793	753	40	981	937	44	+23.7
Hungary	619	300	319	851	407	444	+37.5
GDR	187	86	101	113	76	37	-39.6

In Gdynia the amount of material handled in 1984 was 2.4 million above last year's figure. The port of Gdynia's share of the total handled in Polish sea ports was 19.9 percent. Coal handling in particular increased (by 69.6 percent to 4.3 million tons), as did ore handling (by 27.1 percent to 1.6 million tons). Break-bulk traffic, with 3.1 million tons, was 10.2 percent higher than last year. Gdynia was again in first place in break-bulk cargo handling among the Polish seaports with a share of 41.9 percent of the total. Its share in grain handling was even higher: it was 50.2 percent.

Gdynia is also the largest Polish container port. Last year 748,000 tons of break-bulk cargo in containers were handled (+8.4 percent). Gdynia's share last year of the total container traffic in Polish ports was 88.2 percent. Of this, 592,000 tons were handled in the new terminal on the Helskie quay, which is undergoing further expansion. An additional 138,000 tons of container freight was handled in the first container terminal on the Polskie quay. Gdynia also handled the largest amount of general cargo on pallets, with 156,000 tons (+41.8 percent) (52.9 percent of the total volume of all Polish ports).

Transit traffic in Gdynia in 1984 increased by 23.2 percent, reaching 1.104 million tons. The share of the CSR was 655,000 tons, that of Hungary 363,000 tons and the GDR 41,000 tons.

The twin ports of Szezecin-Swinoujscie registered the largest increase in material handled, with 4.4 million tons. Their share of the total amount handled in all Polish seaports amounted to 41.3 percent. The increases were mainly in ore (by 35.5 percent to 4.2 million tons) and coal (by 34.4 percent to 11.4 million ·tons). Handling of wood, 776,000 tons, was 21.8 percent above last year's figure, general cargo handling amounted to 2.96·million tons (+21.4 percent).

Swinoujscie handled 10.1 million tons (17.9 percent of the total for Polish ·ports), of which 5.3 million tons were coal, 2.3 million tons iron ore, 1.1 million tons of other bulk cargo and almost 1 million tons of general cargo. Ferry traffic reached a volume of 893,000 tons. Container handling in Szezcin-Swinousjscie rose to 89,000 tons (+20.3 percent) compared with 1983.

The largest amount of transit traffic came through the twin ports of Szezcin-Swinousjscie. Last year it was 3.504 million tons (+17.6 percent), that is to say, 45.2 percent of all transit handling in Polish ports. Of this amount, 1.643 million tons were destined for the CSR (62.4 percent of the entire traffic of the CSR through Polish seaports), 958,000 tons for Austria (97.6 percent), 378,000 tons for Hungary (44.4 percent) and 72,000 tons for the GDR (63.7 percent).

The twin ports of Szezcin-Swinousjscie also reported the greatest amount of passenger traffic among the Polish ports, mainly through the ferry port in Swinousjscie (connections to Ystad, Copenhagen and Travemünde). Last year, passenger traffic in Polish seaports reached 239,730 persons (+35.7 percent), and of these 177,983 (+40.5 percent) passed through Szezcin-Swinousjscie, constituting 74.2 percent of the total traffic.

In shipping traffic, Polish ports registered 10,058 incoming ships last year, with 27.190 million NRT. They included 4,685 Polish ships with 27.190 million NRT (49.7 percent of the total shipping traffic) and 5.373 foreign ships with 13.674 million NRT. Among the foreign flags the USSR was represented most strongly, with 1.83 million NRT, followed by Finland (1.076 million NRT), Greece (0.938 million NRT), Sweden (0.861 million NRT) and Panama (0.812 million NRT). The GDR, with 166 ships and 445,010 NRT, was in 10th place.

There was only limited investment in Polish seaports last year. The expansion of the container terminal in Gdynia, the new ore and coal handling installation in Swinousjscie and the ferry port was continued,

For 1985 a slightly smaller amount of material is expected to be handled than in 1984 (about 54 million tons). The amount of transit traffic is to be maintained at the 1984 level. Because the 3-year plan from 1983 to 1985 is coming to an end, it is estimated that the quotas in material handling for the seaports will be met with 115.6 percent.

Shipping

Following the 15.5-percent decline in the previous year, the fleet's tonnage rose again slightly in 1984 (+2.7 percent), with transport productivity increasing by as much as 6.3 percent. However, only bulk cargo tonnage has increased, with four new vessels totalling 73,395 BRT [gross register tons] and 118,318 tdw (three bulk cargo freighters, each of 26,600 tdw from Argentina, and one of 38,500 tdw from Bulgaria). In addition, a 145,000 tdw tanker, which had been sold in 1983, was bought back.

Line tonnage was further reduced as the result of the scrapping of 19 older ships; 5 old bulk cargo carriers were likewise scrapped. Thus the Polish merchant fleet had 278 ships at its disposal at the end of 1984, totalling 2,668,000 gross tons and 3,972,000 tdw. Tonnage of the tramp steamer companies (Polish Steamship Company, Polish Shipping Company) rose by 7.7 percent to 1,699,000 gross tons and 2,741,000 tdw; the tonnage of the line shipping companies (Polish Ocean Lines, Polish Shipping Assciation, Polish-French Shipping Company, Polish-Spanish Shipping Company) dropped by 8.0 percent to 843,000 gross tons and 1,062,000 tdw. The tonnage of the coastal shipping and ferry company Polish Baltic Shipping Company also declined: by 16.7 percent to 25,000 gross tons and 15,000 tdw. Finally, the Chinese-Polish Shipping Company's fleet increasedby one new ship to 101,000 gross tons and 154,000 tdw (Table 3).

As the result of the repurchase of one tanker, the only change in the structure of the Polish merchant fleet was the share taken by tanker tonnage, it came to 13.5 percent (1983: 10.2 percent). Bulk carriers make up 51.9 percent of the total tonnage, container ships 10.9 percent.

The average age of the Polish fleet—compared with 1983—has risen by 0.3 years to 10.5 years, that of the line freighters by 0.7 years to 12.6 years. The proportion of the ships less than 5 years old is 22.6 percent, between 6 and 10 years 37.9 percent, 11 and 15 years 20.7 percent, 16 and 20 years 13.8 percent , 21 and 25 years 4.2 percent, and more than 25 years 0.8 percent.

Table 3. Polish Merchant Fleet 1983 and 1984 (as of 31 December)

	1983			1984			
	Number of ships	Gross register tonnage (10^3)	Deadweight tonnage (10^3)	Number of ships	Gross register tonnage (10^3)	Deadweight tonnage (10^3)	Changes from 1984:1984 in percent (tdw)
Total	295	2,624	3,857	278	2,668	3,972	+2.9
Shipping Companies							
Line Shipping	148	903	1,154	134	843	1,062	-8.0
--Polish Ocean Lines	6	62	78	6	62	78	0.0
--Polish Shipping Association	134	647	901	119	587	809	-10.2
--Polish-French Shipping Co.	4	120	90	4	120	90	0.0
--Polish-Spanish Shipping Co.	4	74	85	4	74	85	0.0
Tramp Shipping	119	1,596	2,546	119	1,699	2,741	+7.7
--Polish Steamship Co.	26	215	330	26	215	330	0.0
--Polish Shipping Co.	93	1,381	2,216	93	1,484	2,411	+8.8
Polish Baltic Shipping Co.	17	26	18	13	25	15	-16.7
Chinese-Polish Shipping Co.	11	99	139	12	101	154	+10.8
Ship Types							
Dry freighters including:	279	2,346	3,447	261	2,309	3,416	-0.9
--Bulk carriers	73	1,227	1,968	76	1,284	2,063	+4.8
--Container ships*	37	404	431	37	405	432	0.0
Tankers	8	227	393	9	308	538	+36.9
Passenger ships	1	15	6	1	15	7	0.0
Ferries	7	36	11	7	36	11	0.0
New Acquisitions	5	94	130	6	170	280	+115,4

* Including semicontainer and ro-ro ships

At the end of 1984, 26.7 percent of Polish tonnage (in tdw) belonged to line shipping operations and companies, 69.0 percent to bulk cargo operations and companies, 0.4 percent to the Polish Baltic Shipping Company (coastal shipping and ferries) and 3.9 percent to the Chinese-Polish Shipping Company.

Transport productivity of Polish maritime shipping rose last year to 35.4 million tons (+6.2 percent), while productivity in ton-miles dropped by 1.9 percent to 104 billion. Polish foreign trade goods in the amount of 23.3 million tons (+9.7 percent) and 2.6 million tons (+26.5 percent) were carried. Transport between foreign ports came to 9.6 million tons (-11.1 percent), which is 26.9 percent of the total transported, which again indicates a high share (Polish foreign trade 65.8 percent, transit 7.3 percent) and contributes to the fleet's working efficiently at full capacity.

Last year line shipping carried 6.4 million tons (+5.5 percent), bulk cargo shipping carried 29.0 million tons (+6.4 percent).

Compared with 1983 the principal increase has been in the transport of iron ore (+ 4.8 million tons, or 33.6 percent), and also in the transport of coal (+ 11.3 million tons, or 17.6 percent). Transport of break-bulk cargo climbed to 6.6 million tons (+8.2 percent), and the movement of petroleum and oil products to 5.2 million tons (+19.0 percent). Grain shipments declined on the other hand (to 2.1 million tons, to 28.9 percent), wood (77,000 tons, 26.7 percent) and other bulk cargoes (to 5.1 million tons, 9.8 percent).

As the result of the increasing full usage of container tonnage, corresponding productivity rose to 1.9 million tons (+32.7 percent). It is remarkable that the container transportation of the Polish fleet was 124 percent higher than container handling in Polish seaports, which means that a greater part of the containers was carried between foreign ports. Part of the reason for this is that the container line to the United States for the most part only runs to and from Bremerhaven because of insufficient availability of cargoes, and the traffic with Gdynia is managed with feeder ships. As the result of increased productivity this line became profitable last year. With four con-ro freighters it is among the most efficient owned by Polish Ocean Lines. Operating from Europe to North America, these ships were operating at full capacity last year, with available reserves for the return voyage. This is of interest to the extent that Polish Ocean Lines has raised its transport capacity on the North American route three-and-a-half fold by the use of these ships.

In addition to containers, the Polish merchant fleet last year carried 255,000 tons of goods on pallets, although this form of transport showed a decline compared to last year (down by 21.3 percent).

Overall the Polish merchant fleet last year carried about 48 percent of Polish foreign trade goods in sea-borne traffic (1983: 52 percent). This demonstrates that the development of the fleet is not matching the rise in sea-borne foreign trade.

Productivity in passenger traffic rose 28.8 percent last year, in passenger miles the increase was as much as 38.3 percent. A total of 281,200 persons

was carried, 254,900 of them on ferries, consequently over short distances, 12,900 on the passenger ship "Stefan Batory" and 13,400 on freighters.

The expansion of the Polish merchant fleet, particularly the line fleet, continues to encounter delays. This is due primarily to small deliveries on the part of the Polish shipbuilding industry, over 90 percent of whose production goes for export. So Polish shipping companies are also interested in placing orders for ships abroad, although the relatively high prices and unfavorable conditions for credit cause difficulties. Currently bulk cargo freighters are under construction for Polish tramp shipping, 38,000 tdw in Bulgaria and 27,000 and 61,000 tdw in Argentina. Last year 8 bulk cargo freighters, each of 23,000 tdw were ordered in Turkey, where they are to be built following Polish plans and with material and fittings from Poland. The Polish Steamship Company will also finance the construction of 12 coastal freighters, each 2,000 tdw, for Polish Baltic Shipping, to be build in the inland shipbuilding yard in Wroclaw, which has experience in the construction of seagoing ships.

The reintroduction of steam boilers with coal firing and sail power is also planned for the future in Polish tramp shipping. The Szezcin yard is to build the first coal-fired steam freighter, then a series is to be built abroad. For the time being only studies are being conducted concerning the use of sails on freighters.

This year Polish yards are to deliver 3 more bulk cargo freighters of 32,000 tdw to the Polish fleet. Further deliveries of bulk cargo freighters will follow, of 27,000 tdw (2 ships) and the first of 2 of 61,000 tdw from Argentina and one more bulk cargo freighter of 38,000 tdw from Bulgaria.

This year Polish Ocean Lines can only count on the purchase of second-hand ships from abroad. They started with a ro-ro freighter from Finland of 4,000 tdw in March this year. Scheduled deliveries of ships from Polish yards were postponed until coming years.

The merchant fleet's productivity is expected to rise only minimally this year to 36 million tons. The 3-year plan 1983 to 1985 is expected to reach 106.6-percent fulfilment.

Shipbuilding and Ship Repair

Again last year there was a decline in production in ship construction, but only in volume, because the output in shipbuilding rose in value by 7.1 percent. Last year 44 ships were built in Polish yards, with a total of 344,347 gross register tons (-9.3 percent) and 484,923 tdw (-8.8 percent) (Table 4). The Lenin yard in Gdansk achieved the greatest output among the major yards, with 129,600 gross tons, followed by the Paris Commune yard in Gdynia, with 116,900 gross tons and the Warski yard in Szezcin, with 86,570 gross tons.

The pattern of shipbuilding shows that freighters take the largest share, with 299,070 gross tons and 461,110 tdw. Among them were 7 different break-bulk freighters with 91,070 gross tons and 112,610 tdw; they included a semi-

container freighter of 19,555 tdw, multipurpose freighters of 16,300 and 17,300 tdw and refrigeration ships of 7,500 tdw. Three tankers of 105,00 gross tons and 178,000 tdw as well as 4 bulk freighters of 103,000 gross tons and 170,500 tdw were built.

Table 4. Shipbuilding production in Poland 1983 and 1984

	1983			1984		
Total	36	379,663	531,810	44	344,347	484,923
Shipyards						
Lenin, Gdansk	12	104,100	130,200	13	129,600	176,900
Paris Commune, Gdynia	4	194,400	214,600	4	116,900	190,400
Warski, Szezecin	11	74,385	83,760	12	86,570	115,110
North, Gdansk	3	6,458	2,650	7	8,977	1,733
Ustka, Ustka	6	720	600	7	1,610	700
Wislaw, Gdansk	-	-	-	1	690	80
Types of Ship						
Tankers	4	184,000	297,000	3	105,000	178,000
Bulk freighters	2	58,593	98,250	4	103,000	170,500
Bulk-break freighters	7	91,070	113,610	7	91,070	112,610
Fishing boats	8	7,420	4,500	15	16,455	10,665
Others	20	38,580	18,450	15	28,822	13,148
Contracting Country						
Poland	9	25,763	36,250	1	1,900	2,300
Sweden	-	-	-	2	53,000	94,800
Liberia	5	160,970	252,910	1	52,000	83,200
USSR	15	42,748	25,650	26	50,732	28,448
Finland	-	-	-	2	40,000	65,600
Norway	1	38,000	65,000	1	38,000	65,000
FRG	-	-	-	2	28,970	39,110
Columbia	3	42,000	51,900	2	28,000	34,600
France	-	-	-	1	25,000	39,900
Greece	1	11,500	15,100	1	11,500	15,100
Iceland	-	-	-	3	945	465
Bulgaria	-	-	-	1	300	100
Malaysia	1	52,000	83,200	-	-	-
Turkey	1	6,682	1,800	-	-	-

Fifteen boats totalling 16,455 gross tons were built for the fishing industry. Fifteen additional units, totalling 28,822 gross tons, were built, primarily for the off-shore area.

The first ships of the following types were delivered in 1984:

--bulk freighter of 39,900 tdw (for France),
--bulk freighter of 32,800 tds (for Finland),
--fishing trawler of 220 gross register tons (for Iceland),
--fishing trawler of 250 gross register tons (for the USSR).

Construction of an additional new types of ships was started, the first of which will be delivered in 1985 (including research and crane ships for the off-shore area of the USSR). The third large ferry (about 20,000 gross tons) for the Stena Line (Sweden) was also launched; three of these ships are now being fitted out and a fourth is still to be built. The first two ferries should probably be delivered at the end of 1986.

The greatest part of Polish shipbuilding production was destined for foreign shipowners (99.4 percent). All in all, 43 ships totalling 342,447 gross register tons and 482,623 tdw were built for export. With the exception of the USSR, which took a 14.8-percent share of the total export production of Polish shipyards, most of the ships, above all tankers and freighters, were delivered to Sweden, Liberia, Finland, Norway, the FRG, Columbia and France.

The value of exports to socialist countries (ships, ships equipment, etc.) rose to R 369 million, those to other countries $228 million. Deliveries to socialist countries remained at about the level of 1983, while exports to other countries declined by about 18 percent.

Imports of ships equipment from capitalist countries declined in 1984 by 48 percent (to $33.8 million), while imports from socialist countries rose to R 44.1 million, that is to say, they doubled.

Only one ship was delivered to the Polish merchant fleet in 1984, intended for the Chinese-Polish Shipping Company and consequently counted under export production. The fishing fleet received a 2,300-tdw refrigerated transport ship.

Also in 1984 the number of those employed in the shipbuilding industry dropped further (by 1,675); at the same time productivity rose by about 10 percent.

The Polish shipbuilding industry received several new orders last year, principally from the USSR. Among them were another 25 "Neftegas"-type supply tugs, each of 2,7000 gross tons (value of the contract R 310 million), 4 geophysical research ships (value of the contract R 21 milion), 3 catamaran-style coastal passenger ships for the "White Fleet" (value of the contract R 19 million), and 2 training ships. At the beginning of 1985, orders included 7 harbor and anchorage tugs, 7 push tugs, 5 fireboats (value of the contract R 50 million) and 5 small passenger ships. A Finnish shipowner ordered a ro-ro ship, the second ship of this type for which Finland has placed an order in recent years (8,300 tdw).

The Polish shipbuilding industry's backlog of orders will keep production
facilities working at full capacity until 1987. This year 59 ships, totalling
720,500 tdw, are to be built in Polish shipyards. Production will be almost
one-half greater than in the previous year (but only 16 percent greater in
value). Exports to socialist countries are to increase further (by 27 percent
compared with 1984) and those to capitalist countries will continue to decline
(by 15 percent).

Last year 646 ships, totalling 2,042,500 gross tons, were overhauled in the
repair yards (only current classification and dock repairs)--32 ships, or
239,100 gross tons more than in 1983. The overall total (including repairs
between voyages and damage repair) was 3,095 ships. This included 520 foreign
ships, 259 of them ships totalling 896,000 gross tons in running, classifica-
tion and dock repair. In comparison to 1983 repairs to foreign tonnage
increased by 97 ships, or 208,500 gross tons. About 72 percent of export
repairs were carried out on ships from the USSR and 14.4 percent on ships from
the GDR. The FRG, Greece and the Netherlands appear most frequently among the
capitalist flags.

Fishing

Polish fishing continues to have difficulties in gaining access to the rich
fishing grounds that lie inside foreign fishing zones. On the other hand,
the fishing fleet shows a mild decline because of a lack of investment. The
volume of the catch in 1984 fell to 680,000 tons (-5 percent). The Baltic
fishing fleet took 180,000 tons of this, and the long-range fleet 500,000 tons.

The fishing fleet now has 569 ships available, totalling 305,000 gross tons
(-0.7 percent). One refrigerated transport ship of 2,300 tdw built in Poland
was put into service. At the same time, several old catch ships were retired
from service and sold for scrap.

The domestic market received 254,000 tons of fish and fish products (+8.8 per-
cent). One part of the catch was exported right away. In 1984 each inhab-
tant consumed about 6.9 kgs of fish.

As far as the further development of Polish sea fishing is concerned, there is
a program in existence for the fleet until 1990, but its implementation is not
running according to schedule because the fishing industry does not have
adequate investment funds at its disposal. According to the first version of
the program 31 factory ships, 31 cutters and 4 refrigerated transport ships
are to be built by 1990. Only if these investment plans are carried out will
it be possible to achieve a catch in 1990 of about 350,000 to 550,000 tons in
deep-sea fishing and 200,000 in the Baltic and to guarantee a consumption of
6.0 to 7.6 kgs of fish and fish products per inhabitant.

This year about 700,000 tons will be landed, slightly more than last year. In
the 3-year plan 1983 to 1985 catch quotas will be met by 119.9 percent and
domestic supplies by 112.8 percent.

Future Policy and Development of the Shipping Industry

Work continued last year on interpreting the future policy of the Polish shipping industry. In accordance with the corresponding resolution from the 10th Plenary Session of the Central Committee of the United Polish Workers Party of 28 October 1982 and the detailed plans and designs of the government, this point was discussed by Sejm. The government's information, presented by the minister of shipping, was noted in a resolution. Parliament determined at the same time that Poland's situation as a coastal nation is not being adequately utilized and that further activity in this area is needed. The principal objective was established of exploiting the bounty of the sea and Poland's seaward location in conjunction with the national, political, economic and social interests of the state, and the appropriate tasks were determined:

--increasing shipping's share of the national income and improving the nation's balance of payments through the reconstruction and modernization of the merchant fleet, of the shipbuilding and repair yards and the seaports

--raising shipping's share of the international division of labor in accordance with existing production capacity, the opportunities and requirements on the part of the economy

--stopping any further degradation and gradual improvement of the environment in the Baltic area

--ensuring the supply of the domestic market with fish and fish products and of agriculture with feed from fish processing

--rational utilization of the Polish coast and the coastal zone

--harmonic integration of the development of the shipping industry with the country's technical and social infrastructure and with the development of the Baltic region

--further utilization of sea and coastal areas for the purposes of recuperation, medical treatment, etc.

--deepening the knowledge and interest of the populace, primarily of young people, concerning maritime problems and constantly developing the maritime awareness of the nation.

Parliament accepted the principal directions of development for the nation's maritime policy and has required them to be incorporated into the prospective plan until 1995 and into the next 5-year plan from 1986 to 1990. The government was held responsible for informing parliament on a regular basis about the realization of these objectives.

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BRIEFS

POLISH-MONGOLIAN COOPERATION--A Polish-Mongolian agreement on trade and payments for the years 1986-1990, and a trade protocol for 1986, were signed in Warsaw on 2 October. An 80 percent increase in Polish-Mongolian trade is anticipated during the next five years compared to the 1981-1985 period. land will sell to Mongolia machinery and equipment for various industries, agricultural aircraft and a variety of consumer goods. In return, it will import Mongolian raw materials for light industry, meat, leather articles and other consumer goods. The documents were signed by the Polish and Mongolian Ministers of Foreign Trade, Tadeusz Nestorowicz and Djamsrangi Dulmaaa. Minister Dulmaa was also received by Deputy Premier Zbigniew Szalajda. [Text] [Warsaw RZECZPOSPOLITA in Polish 3 Oct 85 p 5]

FSO-RENAULT NEGOTIATIONS--Talks between the management of the FSO car factory in Warsaw and the POLMOT foreign trade enterprise with the president of Regie Renault, M. Georges Besse, were held over the last few days. This meeting follows the decision of the Government Presidium regarding the development of the car industry in Poland. The talks concerned the most important areas of possible cooperation, with special emphasis on credit arrangements and repayment in kind. [Text] [Warsaw ZYCIE WARSZAWY in Polish 11 Oct 85 p 1]

POLISH-BRITISH ECONOMIC TALKS--On 14-17 October, 1985, the Science and Technology Subcommittee of the Polish-British Joint Commission met in Warsaw to discuss cooperation between the two sides. Both parties are increasingly interested in developing scientific and technological cooperation as a factor promoting economic and commercial exchanges between the two countries. The Polish side presented the British partners with a list of proposed topics for cooperation in chosen areas, such as agriculture, health protection and industrial electronics. The list was prepared by the Office for Technological Progress in cooperation with the ministries and central economic organizations involved. The British side was also presented with a list of export proposals of Polish scientific and technological achievements. An appropriate protocol on these matters was signed. [Text] [Warsaw RZECZPOSPOLITA in Polish 19-20 Oct 85 p 8]

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EDITORIAL DISCUSSES INCREASED BUDGET, TAXES, INFLATION

Belgrade EKONOMSKA POLITIKA in Serbo-Croatian 23 Sep 85 p 5

[Editorial: "The Right To Rebalance the Budget"]

[Text] The fact that budget revenues are lagging behind the rate of inflation
(they are decreasing in real terms) seems to be sufficient reason for under-
taking to rebalance the federal budget (but also those of lower-level sociopo-
litical communities) and to increase the tax burden. As for the federal bud-
get, whose revenues increased 46 percent in the first 7 months of this year
(about 30 index points less than the rate of inflation), there are only two
ways to get more money: to increase the Federation's own revenues (by raising
the rates of the basic turnover tax, customs duties and import charges), but
it could also be done by increasing the contribution established for the repub-
lics and provinces to the federal budget.

This latter solution is considerably more sensible, since it would yield more
favorable results in both economic and social terms. That is, the propor-
tional pattern of the budget revenues of the lower-level sociopolitical commu-
nities is somewhat more favorable, since direct taxes are more heavily repre-
sented (taxes on corporate income, on personal earnings, on other income from
work and from property). This also signifies a smaller concession to the rise
of prices and a greater harmony between the tax obligation and the taxpayer's
ability to pay, and it also means more favorable social welfare benefits and a
higher degree of interest of the republics and provinces in the size and com-
position of government expenditure in the Federation. But experience to date
(and what has been manifested in practice as the interest of the republics and
provinces) indicates that the choice of the first solution--raising the rates
of the basic turnover tax--is almost certain, though it is possible that the
contribution of the republics and provinces to the federal budget will be in-
creased, but not beyond the increases of the revenues of the republic and pro-
vincial budgets because of the rise of the basic turnover tax (a portion of
this tax is a revenue of the budgets of the republics and provinces). It is
clear that this would be a rather fateful move from both the economic and the
social welfare standpoint, since it means a new degradation of the tax system
and tax policy, a new removal of social welfare policy from all acceptable
goals, and a new thrust, not a small one, for a higher rate of inflation.

Incidentally, the Federation would be the last to have the right to demand a rebalancing of the budget because the rate of inflation is twice as high as ·planned. After all, no one is so much to blame for that kind of inflation as federal bodies and agencies. This assessment is not altered by the difficulties which have cropped up in performance of certain federal functions. It is not the task of those employed in business organizations to fight inflation. Their primary interest is to minimize cost (input prices) and to maximize income (output prices). Nor is the influence of the opstina and the republics and provinces decisive, though not insignificant either. It is manifested not so much through tax policy, utility rates and the like as through the favoring of local enterprises, especially construction contractors and producers of capital goods.

What has been done in the Federation to slow down inflation, that is, to bring it within the planned 40 percent or so? Almost nothing with the exception of the Law on Social Price Control. The other moves made in the sector of the market and prices, such as the May decision to roll back prices to the February level or postponement of the price rises for certain products and services and similar measures, had the opposite effects, since the causes of the price rises were even accentuated—increased losses, larger inventories, higher interest charges and other costs.

The very fact that prices are rising as inventories grow is indicative of the profound systemic disturbances in the country's economy. This proves that work organizations are not primarily interested in the actual financial results of the conduct of their business, but in minimizing the consequences which could tend to reduce personal incomes. That is why inventories are growing; in most organizations they are financed with short-term credits, since the economy as a whole does not have resources of its own to finance current reproduction. Since a high nominal rate of interest is paid on those credits, business costs are increasing drastically. There is also another possibility—cutting back production. Since even in this case the size of the labor force would remain the same (or would even increase), the financial result would be the same—production costs per unit output would be higher. This means that organizations are primarily motivated to show the most favorable condition in their bookkeeping. That is why inventories are reaching an unrealistically immense value, approaching the country's annual social product. Unless essential changes in the system are undertaken that would put those employed in enterprises on the same footing as owners of resources with respect to their material interests, which means at least changing the system for computing gross income and income so as to prevent a growth of inventories, that is, so that the growth of inventories would have to be charged to the gross income of the current period.

Material disruptions are another problem. There are immense fictional quantities not only in the balance sheets of business organizations, but also in the banks where balance sheets are drawn up. What about the government? Both the federal budget and the budgets of other sociopolitical communities appear to be balanced, since expenditures as a whole are covered from the revenues collected. When revenues prove to be inadequate, budgets are rebalance and taxes are raised, which is exactly what is happening now. In essential terms the

largest uncovered expenditure, the largest deficits and most dubious aspects
are in fact concealed in the federal budgets and indirectly in the budgets of
the republics and provinces.

Let us look only at the differences in rates of exchange in the National Bank
of Yugoslavia, which this year along will increase by at least 1,500 billion
dinars and exceed the sum total of 3,000 billion dinars. The annual growth of
negative differences in rates of exchange in the National Bank of Yugoslavia
is alone more than twice as large as this year's entire federal budget. Can
the Federation or the federal budget stand aloof from the financial obliga-
tions of the National Bank of Yugoslavia? Of course it cannot, since the Na-
tional Bank of Yugoslavia is an integral part of the government in whose name
and on whose account it conducts specific money transactions. The figures
themselves are sufficient evidence of the size of this deficit and its impor-
tance as a source of inflation. There is a similar question with interest on
credits to finance the current business operation of economic organizations,
which this year exceed the sum total of 1,500 billion dinars. Nor has any-
thing at all been done in the Federation to reduce this source of inflation
either.

Although by comparison with these figures the growth of the federal budget
(and higher taxes), which will amost certainly occur, does not seem so impor-
tant, the pressure toward higher inflation will not be small, especially if
the problem of the shortage of money in the federal budget is solved in the
usual easiest, but also worst, way--by raising the rates of the basic turnover
tax.

7045
CSO: 2800/23

CROATIAN OFFICIAL DISCUSSES LCY DOCUMENT ON PERSONAL EARNINGS

Zagreb DANAS in Serbo-Croatian 1 Oct 85 pp 11-14

[Interview with Andjelko Jukic, executive secretary of the Presidium of the Croatian LC, by Josip Vukovic: "The Enticing Slogans of Leveling"; date and place not specified]

[Text] DANAS: Recently the LCY Central Committee adopted and forwarded for public discussion (you are a member of the working group for following up the discussion) a document on "political-ideological issues in achieving the constitutional status of the workers in decisionmaking and in the disposition of income and resources for reproduction," which has received quite a bit of attention and evoked quite a few questions, including whether it is a question of strengthening social welfare or solidarity at the expense of remuneration according to the results of work. Tell us by way of introduction what essential topics are dealt with by that party policy document.

Jukic: This is a critical analysis of the state of income relations in which several really crucial problems are pointed up on an absolutely sound basis. There can be no dispute that associated labor has not come even close to taking command of the conditions and results of its labor, that the economy's ability to generate capital has followed a negative trend for years, that in the sphere of expanded reproduction the decisionmaking of the workers is out on the margin, that socially unacceptable conditions have been created in conditions for the realization of income, that personal income comes last in distribution, and so on. In short, that document does a good job of taking note of the weaknesses of present practice. Whether or not the best solutions are offered in it is another matter. It is the business of the public discussion to confirm or refute that.

DANAS: What is the essential thing in the proposals offered?

Jukic: To start with a question which seems not to have any practical consequence, but is very important to the entire system of distribution since it determines everything else. That is, in this document the commitment embodied in the system that income is the basic motivation behind the conduct of economic activity and the source from which all needs of society are to be met has been abandoned, and the emphasis has been put on the workers' obligation to above all augment the resources for social reproduction through their labor.

This is a different point of departure in ideology and theory, and positions also have to be taken on that during the public discussion.

DANAS: The problem of the relationship toward the resources for social reproduction has also been defined in the Long-Range Economic Stabilization Program. Something has certainly already been accomplished in practice, but it calls for new changes.

Jukic: That is right. A social compact concerning income has been adopted at the level of Yugoslavia, a number of new criteria to govern the distribution of income have been introduced; they give considerably greater importance to optimum use of social resources in this area. Along with the criterion of income per worker, the indicators of income relative to assets employed, accumulation relative to resources invested, and gross personal income per worker have been introduced, which represents very essential changes in the system of distribution of personal incomes. Incidentally, the very purpose of introducing a real rate of interest and depreciation was to alter attitudes toward more efficient use of social resources. The problem, then, does exist, and should not be denied, but still we cannot get around the question of whether that means it is necessary and justified to shift the weight of the system toward the use and augmentation of social resources or whether this can be accomplished by enforcing the Law on Associated Labor and the constitution--that is, with the system already set forth, combined with the practical adjustments which I have mentioned. The question can be put of why we have not entered into a serious and scientifically grounded analysis and why certain essential commitments in the system have been so little realized and so difficult to realize in practice. I personally express doubt about whether our experience with this and many other documents will not be that we harbor an illusion that it is sufficient to merely adopt a norm, a statute, a commitment, for everything in life to immediately be different.

DANAS: And in real life it is not all milk and honey, but low output, low productivity, and pay envelopes so small that they do not motivate people to work. Social welfare, as everyone is saying, is not an economic incentive at all.

Jukic: The logic of socialist commodity production emphasizes the economic and production functions of the personal income. Any neglect of that fact severs the organic tie between personal income and business performance expressed in income, and that in turn seriously diminishes the worker's motivation for better conduct of business. That is in fact why this draft, although it does separate the personal income into two parts, emphasizes its social welfare function by stating the demand that the worker must be guaranteed financial and social security, but still one cannot fail to emphasize the necessity of the relation between personal income and the results of work. That is why it is said: "The personal income on the basis of current labor must be equal for the same quality and quantity /and results of labor!/ (in italics) (Emphasis supplied by A. J.)

DANAS: The emphasis on the criterion of the results of work has not excited the public, but it has been aroused by the demands to guarantee approximately the same personal income for approximately the same work, which would signify a kind of return to the "pay categories" we had after the war.

Jukic: The same personal income for the same work is a fine, but very decep-
tive slogan. Which makes it acceptable without any very profound reflection.
But the literal application of that commitment would have the result that the
same personal income would be received by the person whose product has not
been accepted by the market and the person who cannot keep up with the demand
for his product. That would be in direct opposition and conflict with the ba-
sic function of the personal income with respect to motivating output. As has
been sufficiently confirmed, I think, by our present leveling.

This new form of illogical leveling out of earnings would be still more bane-
ful. Incidentally, one can agree with the idea that approximately the same
income should be paid for the same work, but only provided the business per-
formance the collective has achieved is approximately the same.

DANAS: Otherwise approximately the same application would signify that a por-
tion is taken away from those whose business performance is better and given
to those whose performance is poorer.

Jukic: And some other things as well. We dare not forget how that idea con-
tradicts our fundamental social commitments. If it is applied, there is no
market, there is no production of commodities, there is no self-management ...
and the personal income becomes exclusively a matter of social welfare.

DANAS: Now that we have mentioned taking away from the better performers in
order to put them on a level with the poorer ones, there is also a dispute
over who is to guarantee the personal income and to whom it is to be guaran-
teed.

Jukic: Exactly. This brings us to those more subtle questions which are not
evident on the surface. If labor power is a commodity, if there exists a mar-
ket of labor, then anyone who hires that labor power and labor pays the price
for it which prevails on that market. That is the wage. That owner of re-
sources and capital himself suffers the favorable and adverse consequences of
the market and the fate of his product. Under capitalism that would be the
capitalist. In state socialism it is the state which takes upon itself all
the shortcomings and success in the conduct of economic activity, and it pays
the worker a wage, which does after all express a certain social security.
That status of the workers is not the same as under capitalism, since there
are also certain other social implications in society. However, the question
is who then in our context should be paying that wage? Who? The worker to
the worker! We could agree in society up to what level to siphon off re-
sources in the name of solidarity, and then beyond that we would not do it.
As soon as that siphoning is increased, then the system no longer has anything
whatsoever to do with the system of socialist self-management. These, then,
are very serious ideological issues!

DANAS: As far as solidarity is concerned in the system of socialist self-man-
agement, that has been stated very precisely and unambiguously by the Law on
Associated Labor. Is it an exaggeration to ask why that has been forgotten
and what purpose there is, then, in this public discussion?

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Jukic: That article of the Law on Associated Labor says approximately this: every organization of associated labor which in the conduct of its business cannot guarantee a level of income which covers the lowest level of personal income and minimum accumulation agreed on through self-management must become an object of concern on the part of society. At this point a red light goes on for the sociopolitical communities, they then take penalty measures, so that at least that collective does not go on showing losses. This, then, would be the lower criterion of the social justification of a particular production. Unfortunately, this is not applied in practice, which is probably why it has been forgotten. The draft version of the views [of the LCY Central Committee] offers a somewhat different mechanism. The idea of it is that that organization which cannot with its gross income cover the portion of personal income based on current labor would come under public scrutiny. I do not know which solution is more effective, although I do think that the one in the Law on Associated Labor is of somewhat better quality. But it is not a question of a norm, but of the social climate, do we want to enforce it or not?

DANAS: For a rather long time we have debated the ideological issue of whether our economy is a planned economy or a market economy. And when one has a little of the one and a little of the other, then productivity and remuneration according to labor are the first to suffer.

Jukic: I agree. After all, as soon as economic laws cease to be operative, that is, as soon as there is no very free market, then it is clear that income is not an expression of higher or lower productivity, but an expression of better or poorer position in the system, so that even personal incomes do not express that relation. They are then the result of factors outside the economy, government instruments and other favoring circumstances....

DANAS: Is it not easy to recognize those differences in income and personal incomes from one branch or grouping of the economy to another in the story about the same incomes of the cleaning woman in one organization and an engineer, say, in another work organization? Or the kind of motivation to work of the 15,000 workers in Zagreb whose personal income is just slightly more than 2 million old dinars?

Jukic: The question of primary distribution and the conditions for realizing income and personal income cannot be resolved with a wave of the hand. The problem of larger or smaller income and personal income requires an effort on the part of society to bring conditions for the conduct of economic activity into line. It is not good if all the differences in market position and the instruments of the economic system are indicated through differences in income, and if this results in differences in personal incomes, but I would be so bold as to say that differences in income (unless it results from monopoly) could have an exceedingly constructive impact on processes toward socially desirable restructuring of production. It would be socially undesirable to create the illusion that we have to retain all production operations in the present volume through personal incomes. Here again the market must be a stronger selector, since up to now we have often made the mistake of socializing idleness and have thus reached the absurdity of the situation in which no one can go under.

DANAS: Has this led to a policy of simplification in practice? In this situation of crisis hasn't personal income been turned into a form of social justice, rather than an economic motivation to fight for higher productivity? To what extent has the policy of "the same stomachs" been nurtured as well by conscious political action? And finally, isn't the almost constant pressure precisely on the level of the guaranteed personal income another contribution to that?

Jukic: There are elements of an erroneous political intervention, of pressures. But I am afraid that it would be bad to boil everything down to just bad politicians putting pressure on some social welfare aspect of the personal income, and that is why things are not working. There also exists another objective side. As soon as the total level of production and the standard of living drops, the pressure on the social welfare function of the personal income increases. And that means that the pressure for leveling is also great at such a time. When income is increased, average personal incomes are also raised, and the room is automatically opened up for greater motivation. But if on the other hand a low total income is accompanied by a subjective factor which often flees the "conflict" which could result from a real distribution according to work, then there is no drawing the line between work and idleness, nor between knowledge and ignorance. The personal income thus becomes an institution of social welfare which guarantees a minimum level of existence, while the desired level of the standard of living and of personal consumption is sought through moonlighting, through commerce, through the possession of property, that is, in the gray sector of the economy.

DANAS: But today it is the personal income which is the remainder left in income once all the obligations have been met to finance the government, social services, contractual obligations and other obligations. There are some 30 other appropriations which are made before personal income.

Jukic: It is true that personal income has fallen that low and that it is the only item that has been bearing all the consequences of the level of business performance. It is just as obvious that all segments of society are not sharing that fate. The draft of the views [of the LCY Central Committee] explicitly demands therefore that the personal income of the worker take the priority position in distribution. It is certainly necessary to emphasize that we - are talking about the gross personal income, since if we were to give the net personal income the same position as funds for pensions, health care, education and certain other vital needs, we would not solve the problem. To be sure, the level and degree of satisfaction of particular needs may be the subject matter of agreement and adjustment (that is something the public discussion must answer), but the fundamental principles would have to be preserved. After all, the workers want to work and desire to work, but they also want to earn an income.

DANAS: Isn't there a trap in the argument that there is no restriction on the level of the personal income until a limit is set for idleness?

Jukic: There ought not to be a limit on the level of the personal income which is the result of work, although that level is nevertheless limited by

social productivity as a whole. Let me use an analogy--the best worker in Albania cannot have the same pay as the best worker in Austria, even though his personal productivity is higher. So, there is no restriction provided respect is paid to the social productivity of Yugoslavia, of the particular community, republic or province. That productivity differs essentially even from one region to another within the same republic and province. And second, if we agree that there is no restriction on the level of the personal income, then we have to open up the limits that do exist not only upward, but also downward. There ought not to be limits on the low personal income either. Perhaps at least not down to the level of the guaranteed income. After all, if we allow all the average and poorer workers to receive the average, then there is not very much room for rewarding good performance. That is the type of opportunism that has made its way into many collectives.

DANAS: Is there a collision between social welfare policy and solidarity on the one hand and the motivation for higher productivity on the other? Who, for example, will be motivated to raise productivity 10 percent if he knows that this will mean he loses his good position on the housing list, the family supplement, and so on?

Jukic: Yes, that unfortunately is a perpetual collision which we will have a hard time overcoming altogether. The very principle of solidarity is by its internal logic in conflict with the motivation for larger production. These are some of the typical aspects of social welfare policy, and I think that in this area it is not possible to achieve an altogether harmonious operation, but it is possible to essentially alter the present situation. As for funds for social services, this form of solidarity must also rely, at least in part, on the results which a worker achieves in his work. To be sure, we say in advance that any worker who earns so much and so much comes under the social welfare category, but we first should analyze in detail whether that low personal income of his is the result of his idleness or of his objective position and of his impossibility to work more and earn more.

DANAS: Nevertheless, aren't there cases when the better workers "flee" the poor work organization and go to a better one? Aren't we using the resources for the social services to actually give greater incentives to the poorer workers than to the good ones?

Jukic: I would not say so, since in the final analysis these resources are always inadequate. In the social compact on income we set a limit on the level of appropriations for the social services, and therefore they cannot be decisive in the job changing you mentioned.

DANAS: But it is true that in some work organizations it is mainly the poorer workers who are left?

Jukic: That does occur. But that is another matter, something that indicates that a production operation which is unable to provide a larger personal income should either be abandoned or shut down. And something else: the Long-Range Program ... also contains a rather delicate innovation--the problem of the monopoly of labor. That is, it is certain that we can use the personal

income to differentiate work from idleness to some extent, but we have com-
pletely neglected and rejected the application of that measure which means
that someone could be left unemployed if he does not work.

DANAS: How do you explain the fact that at one and the same time we have lev-
eling and large social differences in this society?

Jukic: A sizable portion of the social differences do not originate in the
personal income. The extreme cases are isolated. There are growing differ-
ences in society based on income, be it legal or illegal, not based on work,
because of the shortcomings of the system or because of semicriminal behavior.
Differences based on personal incomes arise out of some sort of income from
capital, monopoly or the favorable instruments of the system which make it
possible for income to be realized without much trouble and then divided up.
If we do not solve this, then whatever system of distribution we use, it will
not in and of itself remove differences in personal incomes arising out of po-
sition in the realization of income. Regardless of whether we apply what is
offered by the draft version of the views, which is to divide personal income
into two parts, or on the other hand the provisions of the Social Compact or
perhaps some third solution, unless we drain off that "unearned income" which
is the result of a favorable position, the one who has a larger income or more
income will always and automatically become entitled to larger personal in-
comes as well.

DANAS: If stabilization means a turn toward the economy, how is this achieved
in view of the immense number of government administrative measures? What
room is left here for self-management?

Jukic: At this point that room has been so restricted that worker decisionmak-
ing has been reduced to almost what it was in the administrative period of our
development. There have been recent attempts to artificially impose on us a
confrontation among the market, the operation of economic laws and the system
of self-management, which in my opinion is nonsense. It is precisely in the
freer operation of economic laws that self-management finds adequate room for
the worker to decide not only on distribution of what has already been
achieved, but also about how it is to be achieved in the future. The way it
is now, when the government decides on everything (in the Federation, the re-
public, the opstina), there is no room for self-management, since everything
has been determined and distributed in advance. Then it is also easiest to
say that self-management is not working.

DANAS: Nevertheless, is there a fear of the market and of market laws in so-
ciety at large?

Jukic: Certainly there is. To be more precise, there are opposed opinions.
Some people advocate a completely free market such as no longer exists even in
the most expressly capitalistic countries, while others would abolish even the
small market that we have and would take everything back to the system of
state socialism with centralistic command control. The one extreme actually
gives rise to the other. But both should be rejected.

DANAS: Yet doesn't it happen too often that we see the old and superseded solutions being offered, even those which both we and the world have written off?

Jukic: There is no need to be amazed at that. In a crisis situation which has affected not only the economic system, but the political system as well, all sorts of solutions, theories and ideologies are allowed in. I would even say that any proposal of changes, however wrong it might be, receives support with the public, since it wants a change because of the situation it is in. All those offering something of the kind take that into account, along with the ignorance of that same public, which is not always in a position to get to the heart of the thing and evaluate whether it is sound and progressive or not.

DANAS: Because of all these outstanding issues we have been talking about, can you tell us what the working group for coordinating the public discussion, which you head, is insisting on?

Jukic: We are insisting that the draft version of the views that has been offered is not a final document and that that is precisely why it has been put up for public discussion, so that it would be broadly and freely discussed.

DANAS: Because of the social climate at the moment, is there a danger that that discussion would be similar to the one about the foreign exchange law?

Jukic: That does objectively exist. However, there is another problem. Often we treat the documents of the LC in a manner which does not suffer objection. Even though the draft version of the views was prepared in the bodies of the LC, people are all but asking if it is a breach of party discipline whenever someone casts doubt upon some of its solutions. I think that is not the way to look at it. The LC is building an open society and is at the same time opening up itself, which is in fact why it has initiated the public discussion. But not with the apologetic intention of supporting every solution that has been offered.

The very purpose of the discussion is for everyone to say in public what he thinks about this, to confirm it or reject what he does not agree with, so that it is ultimately not accepted if he has arguments and can back them up.

7045
CSO: 2800/28

ANDOV DISCUSSES NEW CONCEPT OF PERSONAL EARNINGS

Belgrade KOMUNIST in Serbo-Croatian 11 Oct 85 pp 10-11

[Article by Stojan Andov, MA]

[Text] There is no question that it was absolutely necessary for the LCY Central Committee to take the initiative toward clarifying the political-ideological issues related to the constitutional status of the workers in decisionmaking and in the disposition of income and resources for social reproduction. That kind of initiative, that is, does not contradict the provisions of the Long-Range Economic Stabilization Program, but is in fact absolutely necessary if we really desire to carry out those provisions consistently. The main. cause of the standstill in carrying out the Long-Range Program ... is that differing and indeed even diametrically opposed assessments and views have arisen in the context of the efforts to make the necessary changes in the economic system.

Those differing and altogether opposite views and positions taken in practice so far have in fact become the greatest impediment to rapid and effective changes which must necessarily be made in carrying out the Long-Range Program. And all those who defend one of these views explain it and substantiate it in such a way that it is precisely that view and no other that coincides with the interests of the workers and guarantees their constitutional rights. The standstill in carrying out the Long-Range Program ... will compel the League of Communists of Yugoslavia, in its status as the factor most responsible for the country's development and destiny, to intervene at all points where a standstill has occurred and where changes have to be made. However, that kind of intervention, regardless of the intentions, should it persist, will inevitably give rise to its acting as a political arbiter when particular, specific and indeed even technical decisions are made, which is both unnecessary and indeed even dangerous.

Grabbing the Middle Link

In order to avoid that danger, the League of Communists has to discover the central link which is the origin of all the threads of the country's economic organism and take hold of it.

That central link encompasses the status of the workers in decisionmaking and the disposition of income and resources for social reproduction. The attempt to portray the draft of the views of the Central Committee in public as an insignificant or indeed even unnecessary dressing up of what is referred to as earmarked distribution--reflects an inadequate grasp of the essence of the subject matter. The draft version of the views does cover the problem area of distribution, but not in the context in which that distribution has been conceived over the last 10 years or so in our scientific and indeed even broader community, i.e., as an area shut off from the entirety of the process of social reproduction.

In opting for the Draft of Views the Central Committee of the League of Communists has actually initiated discussion of relations in distribution in our socialist society in this phase of its development.

However, the League of Communists has also acted like this in the past in periods when society stood at a crossroads and when a revolutionary change of direction had become indispensable. Thus after the transition to socialist worker self-management of enterprises the new possibilities could only be glimpsed in material and social development for several years. The League of Communists then initiated discussion of precisely that problem area which we refer to as relations in distribution. In that discussion conceptions of the essence of certain basic economic categories in socialist society were altered, such as the plan, the market, money, prices, income, and so on. New solutions were also offered in the economic system on the basis of that new awareness. Some of the knowledge gained was such that it later made it possible for the League of Communists to introduce commitments in its program concerning production relations, relations in distribution, and in general the objective economic laws in socialist society, commitments which have lasting value and have gone far beyond the place and time in which they came into being.

There Is No Need To Flatter the Workers and the Working Class

The economic crisis is demonstrating that today the country stands at a crossroads, and the League of Communists has the task of indicating and plotting the right roads for future development. It is that process which the Draft of Views initiates. Various doubts, unless they are the consequence of momentary vacillation, can be only an obstacle to beginning a truly creative discussion of the problems and contradictions that have piled up concerning relations of distribution in our society. That is why those doubts should be clarified and eliminated as soon as possible. This is one of the urgent tasks of the League of Communists.

There are even misunderstandings about the way in which the problems concerning relations in distribution have been raised in the Draft of Views. That is, there have, for example, been hints to the effect that the way in which the Draft of Views treated the problem of the relationship between the workers and the resources for social reproduction can be taken as having blamed the workers and the working class for the use of resources for social reproduction not having been efficient enough. Arguments are advanced in this connection

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to the effect that in practice up to now the workers have proven to be the factor in earmarked distribution who behaved rationally, since even under difficult conditions they did set aside a sizable portion of net income for expansion of the material base of their own labor and social labor. Figures are given in that context which show that with respect to the share of investments in the social product our country has over a lengthy period of time been at the top of the world list, but in terms of average real personal income there are more than 100 countries ahead of it. It is said that the use of resources for social reproduction has not been efficient enough because of other factors operating in our society (statism, technocracy, bureaucracy, and so on) and that the workers and the working class are the least to blame.

However, in raising the question of the relationship between the workers and resources for social reproduction from the standpoint of the exercise of their rights and discharge of their obligation to expand the material base of their own labor and of social labor as a whole, the League of Communists does not do this from the standpoint of some abstract justice. Nor is there any need to flatter the workers and the working class, since that is not what they expect of it. The League of Communists must start with the real facts, it must examine their deeper essence in real life, and on that basis build its approaches to posing and solving the most complicated problems in society's development.

And the facts show that for two decades now the efficiency of use of resources for social reproduction has been declining, that this negative trend has been characteristic of the entire country, not only of all the republics and provinces, but indeed of all the branches of the economy. The League of Communists must look for the real causes of that situation. In so doing it dare not be satisfied with explanations to the effect that the principal cause of these negative trends lies in the continuing strong manifestation of statism, bureaucracy, technocracy, our practice, or, as some have recently been trying to prove, that the main obstacle to advancement in our country is the incompetence of the so-called macromanagers, i.e., the formulators of the country's economic policy. The League of Communists dare not be satisfied with such explanations, not because it is not true that there is statism and bureaucracy and technocracy in our society, nor because it is not true that we do have formulators of economic policy who are not as able as they should be or indeed even incompetent. On the contrary, it is true that that is the case and that those things are strongly manifested. However, the question is this: What social force is able to restrict the area for the operation of statism, bureaucracy, and so on? The League of Communists has a clear answer in readiness: only the working class can be such a force. But why has it not been operating in that direction up to now?

It is obvious that the general belief that the working class is the prevailing force in society, a force that is ready to act decisively toward finding progressive solutions, is not enough, but certain other factors are also needed to set it in motion toward such action. The working class is not some abstract category. It is made up by the mass of workers, who live their lives and create what they do in specific material, economic, social and other conditions. Their interests, above all their economic interests, stimulate them to be active. If the workers see and feel in a strong way that more efficient

use of resources for social reproduction is in their economic interest, then in order to pursue that economic interest of theirs, they will develop activity which will restrict the space for operation of all other factors that would hinder them in this. Accordingly, the two-faced nature of statism and bureaucracy lies precisely in the fact that their protagonists constantly reiterate that the working class is the ruling force of society, that the self-management rights of the workers in organizations of associated labor are inalienable, and so on, while at the same time they absolutely do not allow the immediate economic interests of the workers to be directly related to effective decisionmaking and use of resources for social reproduction precisely by the workers. The LCY Central Committee and the Draft of Views stress and specifically point to that vital connection between the concrete economic interests of the workers and the effective use of social capital. That connection is also being insisted on in the new conception of the personal income of the workers, which is to be realized in two ways.

Why There Is Doubt About the Ideological Purity of the New Concept

However, there have been differing and indeed even diametrically opposed views in the public statements made concerning the new conception of personal income contained in the Draft of Views. There have mainly been two kinds of doubts expressed in connection with this conception: first, there is doubt--if it can be put that way--about the ideological purity of that conception, and second, there is doubt about its feasibility from the standpoint of the quantitative possibilities afforded by the balance sheet.

The ideological doubts concerning the new conception of personal income are substantiated by the argument that it actually signifies an abandonment of the constitutional conception of personal income. It is said that personal income is a completely unified and rounded-off category and that only if its integrity and entirety are preserved, does it and will it represent the material expression of the new socioeconomic position of the workers in self-management. If personal income contains both parts, one realized on the basis of the worker's performance at his work station, by performing his job duties and tasks, and the other part on the basis of his successful contribution to the economic employment of social capital, and insofar as the first part of the personal income actually affords reproduction of labor power, then this other portion of the reproduction of labor power will be an altered form of worker wages and will hold the worker in the wage relation. That is why dangers of an ideological character presented by the new conception of personal income are being suggested.

However, this is only apparently so. There is no question that personal income is an entity in and of itself, but, like any organic entity, it necessarily consists of parts. The constitution itself specifically emphasizes the principle that the material position of the worker and his status as a protagonist in the process of social reproduction is determined by the results of his present and past labor. If the worker is to discharge his constitutional obligation of expanding the material base of his own labor and the labor of society, then he must necessarily, first, maintain that material base within the limits he inherited, and then on that basis also expand it. The material

base of labor certainly is not confined solely to the means of production, but also consists of the working ability of the workers to activate those means of production. The means of production are dead objects if the beneficial effect of the worker's labor is lacking. If the worker is to achieve simple reproduction, then, it is not enough to merely reproduce the means of production, i.e., the implements of labor and the subjects of labor, but he must also reproduce his own work abilities. If the worker does not succeed in this and if this is not ensured by the system itself, then all assertions and explanations to the effect that the wage status of the worker has been abolished in the society of socialist self-management are reduced to mere talk. Achievement of simple reproduction, and achievement of reproduction of the labor force of the workers within that framework, must be expressed in an altogether clear and distinguishably tangible and comprehensible form. This has to be explicitly and clearly related to the worker's immediate economic interest. That is why the necessary compensation for reproduction of labor power must in fact be expressed as a particular and separate part of the personal income.

If the worker expends his labor power effectively in the work process, i.e., if he expends it in performing the work tasks assigned to his work station to their full extent, at the required pace, and up to the required standard, then in the work he has done at his work station he has maintained and passed on the value of the subjects of labor and implements of labor in the value of the product and has created new labor at least as great as the value of his labor force. That personal income, which is meant to cover the value of his labor power, must be guaranteed to the worker so long as his tasks at his work station are efficacious and make economic and business sense, that is, so long as business activity is conducted without loss. If the organization of associated labor has losses and if there is a social interest in correcting the causes of those losses, which are not related to negligent and low-standard performance of work tasks by the workers, but to the orientation of the organization's program, to the technology, etc., and if that interest of society is expressed through the interest of specific entities, organizations of associated labor and banks providing emergency financial aid, then the financial aid program must necessarily furnish the resources from which personal incomes will be paid up to the level of reproduction of the labor force of the workers expended. If in certain cases the interest of society is not expressed in the manner defined by laws concerning an organization of associated labor operating at a loss, then the workers are to be guaranteed a personal income up to the level of reproduction of labor power from sources outside the organization such as joint reserve funds until the status of that organization's existence is resolved.

The second part of the personal income, the part which comes from successful economic employment of the resources for social reproduction, differs from the first part even in certain of its essential provisions. In addition to performing his immediate tasks, the worker has to be interested in the fate of the resources being set aside to expand the material base of labor. If the worker is not immediately and strongly interested in the fate of those resources, then forces outside the working class will establish control over those resources, and there can be no question of higher efficiency in the economic employment of social capital. Precisely because the worker in a

socialist self-management society does not work only to carry on simple repro-
duction, but is constantly expanding the material base of his own labor and
social labor as well, his behavior has to be strongly stimulated by his imme-
diate interest. That is why the second part of the personal income must be
directly and functionally dependent upon the continuing achievement of expan-
sion of the material base of labor which the worker accomplishes within the
limits of his organization of associated labor and by means of it. Thus when-
ever the worker achieves normal results in performance of tasks at his work
station and in the economic employment of social capital, his personal income
will exceed the limits of the value of his labor power, which is an economi-
cally exact proof that his wage position has been abolished. Abolishing the
worker's wage position must be measurable and must be visible to him. This is
expressed through his interest in successfully performing his immediate tasks
at his work station and through his interest in an organic dependence upon the
fate of that part of the result of his labor which he has turned into social
capital. Only insofar as the worker is directly pursuing his own economic in-
terest and thereby exercising control over the social capital which he has
created will he truly have an interest in exercising that kind of control.
That is why without the necessary reassessment one should not place too much
confidence in warnings originated from certain positions that were established
in advance and without question to the effect that the new conception of per-
sonal income is not sufficiently clear.

The Oversimplified View of the New Conception of Personal Income

The second type of objection addressed to this conception is quantitative in
nature and has to do with the balance sheet. That is, it is said that the new
thing in this conception is that by insisting on guaranteeing reproduction of
the worker's labor force, it has left open the question of what level of the
value of labor power should be reduced and contains the implicit demand that
the lower limit of the present personal income be shifted upward. But since
the views are clear in their insistent opposition to leveling, this means that
the overall level of the personal income would in real terms be increased by
the simple operation of a comparison of a conception of this kind. Such an
undertaking would cause inflationary developments in the country, the critics
go on to say, since those movements of the personal income would result in a
redistribution of the social product; thus the resources which are now in-
tended for other purposes, for development in particular, would be siphoned
over into the personal income.

Obviously, these objections originate in an oversimplified notion of the con-
ception of personal income contained in the Draft of Views, which is seen as
advocating a one-time undertaking, not a process based on a fundamental shift-
ing of the worker's immediate economic interest. However, one thing is clear--
those objections contain an implicit suggestion that everything should remain
the way it has been up to now whether we are talking about the personal income
of the worker, what it is made up of, or the way in which his economic inter-
ests are expressed in the work process and in the process of social reproduc-
tion.

The LCY Central Committee has rightly placed at the center of attention the political-ideological issues related to achieving the worker's constitutional status in decisionmaking and the disposition of income and the resources for social reproduction. At this moment we are now in a phase when political-ideological issues in this area are truly the most important. Those obstacles which have been arising in the creative commitment of science and practice are also political-ideological in nature. The League of Communists intends through this discussion to make it easier for science and through a scientific effort aimed at defending the present solutions to undertake new intellectual breakthroughs in order to create prospects for the future development of socialist self-management.

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BRIEFS

PRIVATE SHOPS IN SERBIA--Last week the Serbian Presidency examined the policy
for developing the artisan and service sector in the next medium-term period.
Despite verbal support over many years, facts show that small business accounts
for a small, almost negligible, part of the total economy. At the beginning of
the current medium-term plan there were 35,395 artisan-service businesses in
Serbia, while at the end of the last year there were 38,600. In the total
small business economy throughout the country the private sector accounts for
120,000 workers /as received/; in Serbia proper the number is about 20,000
workers, and if the provinces are included, the total for the republic is
35,000. Employment in the private sector of the small business economy in the
last 4 years has risen an average of 6 percent and 3.1 percent in the socialized
sector of small business. However, while 1,629 small business were newly
registered, 1,445 went out of business in the first half of this year /in
Serbia/. The Presidency stressed that opstinas must create good conditions
for economic operation and the initiatives must be left to citizens and not
to the opstinas (whose role is to implement the laws). Appeals were made for
a more stable tax and credit policy and the Presidency advocated that the
artisan sector have its own private organization and not be under the wing of
the /economic/ chamber which has stifled self-initiated organization of this
sector. /Summary/ /Belgrade EKONOMSKA POLITIKA in Serbo-Croatian 21 Oct 85 pp
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AGRO-INDUSTRIAL FOREIGN TRADE--The plan to export $1.5 billion worth of food
products this year will not come close to being met. According to the latest
statistics, in the first 8 months of this year $581.2 million worth of these
products were exported, $41.2 million (6.6 percent) less than last year at
this time. Moreover, it is uncertain how much can be exported by the end of
this year since production is inadequate to meet even domestic needs. At the
same time, $670 million worth of food products were imported, or $24.2 million
less than in the 1984 period but the export-import ratio is more unfavorable
than last year. In 1984 for 100 dinars of imports there was 89.7 dinars worth
of exports and the deficit amounted to $72 million, while this year for 100
dinars worth of imports there are only 86.7 dinars worth of exports so the
deficit has increased to $88 million. The food-processing industry exported
$320 million worth and imported $214 million worth; but this $106 million
positive balance is very small considering the number of workers and funds
this branch has. The beverage industry also achieved a positive balance (41
million worth of exports and only $9 million worth of imports), with the wine
industry exporting $1 million worth and importing nothing. But all other

branches of this industry had a deficit (field crops (146 million, fruit $66 million, livestock $10 million, fishing $3 million, and animal feed $2 million more imports than exports) which resulted in the total negative balance of $88 million. /Excerpt/ /Belgrade PRIVREDNI PREGLED in Serbo-Croatian 31 Oct 85 p 3/ /12851

MONTHLY EXPENSES OF POPULATION--According to a survey by the Zagreb Institute for Market Research, only 5 percent of Yugoslav households are believed to meet completely all their regular needs from their total /monthly/ income, 19 percent do not manage to meet payments by the end of the month, while the 76 percent between these two extremes only partially cover current needs from basic and supplemental income. Almost two-thirds of those surveyed (about 4.3 million households) believe that they will not live as well this year as they did last and only every 14th household believes life will improve, compared to 6 years ago when almost every third household expected the future would be better. /Excerpt/ /Belgrade PRIVREDNI PREGLED in Serbo-Croatian 31 Oct 85 p 4/ /12851

DEFECTIVE GOODS RETURNED--The Yugoslav Organization for Standardization and Quality (JUSK) will hold a conference on the quality of Yugoslav exports in Ohrid 24-25 October. Other co-sponsors of the conference include the Federal Committee for Energy and Industry, the Federal Secretariat for Foreign Trade, the Federal Committee for Market and Prices, the Federal Bureau for Social Planning, the Interest Community for Economic Relations with Foreign Countries, the Yugoslav Economic Chamber, and the SOUR (complex organization of associated labor) "Jugoinspekt." The president of the Federal Committee for Energy and Industry, Rade Pavlovic, said recently that up to 4 or 5 percent of the value of total exports was lost annually through poor quality and it is estimated that about 3 billion /dinars/ in foreign exchange is lost each year because goods are not of sufficient quality. Poor quality goods have been returned by a total of 41 countries, including Guatemala, Zimbabwe, Albania, Cyprus, and Bulgaria. Returned goods include furniture, vehicles, knitwear, machines, glass, metal materials, electronic and telecommunication equipment, cables, household appliances, plastics, cleaning materials, cosmetics, and canned meat. /Excerpt/ /Belgrade PRIVREDNI PREGLED in Serbo-Croatian 23 Oct 85 p 12/ In the first 9 months of this year 4 billion dinars worth of goods were returned from foreign markets because of poor quality, or an amount equal to that returned in all of 1984. Most was returned by the USSR, which is not unusual since this country is also our biggest buyer. Other countries which returned goods were Guinea, Liberia, Iran, and Iraq /as well as those cited above/. /Excerpt/ /Belgrade RAD in Serbo-Croatian 1 Nov 85 p 8/ /12851

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