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COST 340

Towards a European Intermodal Transport Network, Lessons from History

Subject: East European Transport Organizations

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East-European Transports Organizations

1. THE COUNCIL FOR MUTUAL ECONOMIC ASSISTANCE

The following countries created the Council for Mutual Economic Assistance (CMEA) in 1949: Albania, Bulgaria, Czechoslovakia, Poland, Romania, Russia and Hungary. Along CMEA's activity besides the above-mentioned founding members, also other countries gave their adhesion to this economic organization, as follows RDG.

The territory occupied by CMEA member countries was 25.4 mil. Km², the population – 470 mil. Inhabitants, 30% of the technical-scientific potential, as well as 25% of GIP, 20% of world agricultural production were assigned to these countries and 40% of the investments fund was found in this comprehensive economic organization (the source of these data is the paper "CMEA member countries: restructuring of economic collaboration" issued in Moscow in 1989).

Even from the beginning of its activity the Council, it adopted the Charter for functioning, which underwent several modifications over the time, the most important of them being of June 21 1974 and June 28 1979

The aims of CMEA were:

- to support the merged efforts of the member countries and their coordination in order to improve the economic integration;
- the planned development of their national economies;
- speeding up the technical-economic progress;
- raising the industrialization level of less developed countries;
- continuous increase of labor productivity;
- a gradual drawing together and evening out of economic development levels;
- a steady improvement in the well-being of the people of CMEA member countries.

In order to ensure and coordinate these purposes the Council set up the working bodies, as follows:

1. **Council Session**, the supreme body of the Council. The Session was made up of all prime ministers or persons with equivalent functions in CMEA member countries. As a rule the Session took place once a year, in the capitals of member countries and was led by the prime minister of the hostess country;
2. **CMEA's Executive Committee**, as a working body of CMEA Session. The Executive Committee was made up of the Permanent Representatives of CMEA member countries. As a rule, the Executive Committee used to hold meetings twice a year, of which one meeting took place before CMEA Session.
3. **CMEA Committees**. These were organized according to the main fields and activity problems, as follows:
 - planning, which had also a Work Bureau;
 - technical-material supply (procurement);
 - science and technology (standing commission for coordination of research and technology, which was set up still since 1962 was changed into a committee in 1971).

The representative in these committees used to coordinate the respective fields in their countries and held the position of vice-prime ministers in those countries.

CMEA committee for collaboration in the field of planning had also a Bureau, made up of vice-presidents of planning organs of member countries.

These committees used to hold a meeting once or twice a year, and in need whenever it was necessary. Within the Planning Committee there were examined problems of great interest, in multiple fields and of great significance in the economy of member countries. As rule, the Planning Committee examines all important collaboration problems coming from different fields of activity.

4. **Standing Commissions** of the Council. These commissions were organized according to fields of activity, namely:
 - electrical energy;
 - use of nuclear energy for peaceful aims;
 - coal extraction;
 - industry of oil and gases;
 - geology;
 - iron (ferrous metallurgy);
 - non-ferrous metallurgy;
 - machine building;
 - electronic and radio-technical industry;

- chemical industry;
- constructions;
- light industry;
- food industry;
- transport;
- civil aviation;
- post and telecommunications;
- foreign currency;
- statistics;
- defense;
- foreign trade.

5. **Conference of Representatives** coming from member countries, in the fields:

- water management;
- law problems (legal matters);
- patents;
- prices;
- labor;
- planning mechanisms.

6. **Secretariat of CMEA**, which fulfilled the following functions:

- preparation of necessary materials for the meetings of Council's bodies;
- elaboration of synthesis works for various fields of activity based on the study of materials and information received from CMEA member countries;
- preparation of proposals for different problems of the Session which were examined in the Council;
- organization of preparations and development of CMEA bodies meetings, as well as of Meetings within the council.

Appointment of CMEA Secretary and his deputies was made by CMEA Session, as well as by CMEA Executive Committee for a period of 4 years, which could be renewed (prolonged).

The working way of CMEA Secretariat may be identified with that practiced by international economic organizations, the Common Market or even United Nations, but it was a major exception - the work language was Russian language.

After CMEA was formed, it started the working out and achievement of the first developing plans of national economies and their link with action plans of the Council.

2. IMPORTANT MOMENTS IN CMEA'S ACTIVITY

1. Since 1956 it was passed on to the coordination of national plans, that became one of the main methods of planned development, of collaboration, specialization in various branches of national economy.
2. Approval by Session XXIII CMEA (1969) of the Comprehensive Program for the Further Extension and Improvement of Co-operation and the Development of socialist Integration in CMEA Member Countries Complex Program for deepening and improvement of collaboration in the development of socialist economic integration. During the process of collaboration there were difficulties and lagging behind in research and technical progress, but the planning instruments were consolidated. The problems of price establishment, financial foreign currency, as well as credit problems remained on the second level.
3. Sessions 43 and 44 (1998) approved the Collective conception of the international socialist division of labor during 1991-2005.
4. The Complex Program of technical-scientific progress of CMEA member countries until the year 2000, adopted at Session 41 CMEA of December 1985, which contained 5 priority directions of collaborations:
 - introduction of electronics;
 - complex automation of production;
 - accelerated development of nuclear energy;
 - working out new documents, adequate processing technologies;
 - development of bio-technologies.
5. Adopting of Long-term Specific Programs of Co-operation in the fields of:
 - energy, fuels, raw materials (June 1978 Bucharest- Session XXXII);
 - machine building (June 1978 Bucharest – Session XXXII);
 - agriculture and food industry (June 1978 Bucharest – Session XXXII);
 - goods widely consumed Session XXXIII);

- development of transport links (Session XXXIII).

Within CMEA various international organizations functioned, in different fields, among which, for transports:

- OSJD (Warsaw);
- Joint park of wagons (Prague);
- Office for the Joint Use of Containers (Bucharest).

But CMEA was practically dissolved at the Session in Sophia of January 1990, when Hungary, Czechoslovakia and GDR required the dissolution of this organization. This Session decided to set up a Work Commission of the Executive Committee, which should present proposals concerning the future activity of CMEA.

Session of January practically meant the collapse of a huge market and great economic losses in the member countries, which mostly turned to account their goods on CMEA market, and particularly in USSR.

In over 40 years of activity there were jointly achieved a series of bilateral and multilateral investments objectives, such as:

- Construction of oil transport pipeline –“Druzhiba”, in which participants were Hungary, GDR, Poland, Czechoslovakia and USSR. In 1964 through this pipeline it was transported 8.3 mil. Tons of oil but in 1975 it reached to 50 mil. tons;
- “Druzhiba 2” pipeline was achieved by the countries interested in it. By its construction the Soviet oil demands of CMEA partners were met;
- The gases pipeline from Orenburg until the Western border of URSS was achieved by Hungary (Orenburg-Alexandrova Gaia sector), Czechoslovakia (further on to Sohranosvki from Rostov region), Poland (from Sohranosvki to Kremenchiuga), German Democratic Republic (in Vinitzk to Bara) and Bulgaria (up to the Western border of URSS). Romania contributed to the construction of this pipeline by delivering technological equipment for the complex for gases processing from Orenburg;
- “Progress” gases pipeline from Hamburg until the Western border of URSS, which is 4605-km length. The construction was made by Bulgaria, Hungary, GDR, Poland, Romania and Czechoslovakia.

In the last period, within CMEA a significant importance was granted to the development of direct links between enterprises and set up of joint enterprises in various fields of activity.

3. STANDING CO-OPERATION COMMISSION IN THE FIELD OF TRANSPORT

It used to develop collaboration activities in the field of transport. The Commission was made up of transport ministers of the member countries and included in its structure, work groups and a technical-scientific committee according to the respective fields, as follows:

- planning of transport complex problems;
- railway;
- automotive;
- naval;
- air.

Within the commission for transport there were elaborated a series of proposals for collaboration among which we mention:

- containerization introduction in the member countries;
- elaboration of the Long Term Specific Program of Co-operation (LTSPC) in the field of the development of transport links of member countries in the transport branches:
 - railway,
 - automotive,
 - naval,
 - air,
 - by pipelines;
- Concluding of Convention Concerning International Goods Transport by Railway (OSJD);
- Establishing the transport volumes among member countries, by years and directions;
- Experience exchange in the border points;
- Measures for traffic fluidization;
- Bringing the transport lines and ways to European parameters;
- Pilots preparations for aircraft delivered within the system;
- Establishing of transport tariffs;

- Settlement of transport taxes;
- Development of transport capacities;
- Development of certain transport capacities;
- Bilateral and multilateral collaboration concerning transport by ferry-boat;
- Opening new border points;
- Road network modernization;
- Airports modernization;
- Establishing some goods flows between Cuba and Europe through Gdansk port by building certain transport-containers terminals;
- Transports statistics.

The commission elaborated the project of the Long Term Special Program of Co-operation (LTSPC) in the field of the development of transport links of member countries that mainly provided the following:

- modernization of railway on the route: Rostok-Berlin-Prague-Budapest-Bucharest-Constanta;
- modernization of railway on the route: Moscow-Kiev-Chisinau-Iasi-Bucharest-Sophia;
- achievement of motorway: Rostok-Berlin-Prague-Budapest-Bucharest-Constanta with ramification to Sophia;
- Navigability of the Danube;
- Navigability of Prut river;
- Modernization of border crossing points;
- Prolongation (extension) of the large railway gauge in some countries with very great transport volumes from to USSR.

It is mentioned that an important part of the objectives provided in the special Program are designated and they are in various stages of achievement, with the participation of European union. Thus, the corridor from Rostok to Constanta has become today corridor number IV of European transport, and the one from Moscow to Bucharest and Sophia has become corridor number IX, while the problem of Danube's navigability is being solved within corridor VII.

4. STANDING CO-OPERATION COMMISSION IN THE FIELD OF CIVIL AVIATION

The standing co-operation commission in the field of civil aviation was created based on XXIX CMEA decision of 1975.

During commission's activity there were examined and approved problems of particular importance within the collaboration of member countries, such as:

- The plan of technical-scientific collaboration of CMEA member countries in the field of civil aviation during 1976-1980;
- Regulation concerning the technical-scientific council in order to" create, introduce and improve the automated system for flight guiding, the navigation means and the landing systems for civil aviation of CMEA member countries;
- Regulation concerning the technical-scientific council in order to" elaborate the development directions of aircraft and their putting into operation";
- Regulation concerning the technical-scientific Council for the "Complex development of the airports from CMEA member countries";
- The work program in order to set up the unique annual norms of airworthiness for the civil aviation of CMEA member countries;
- Annual activities results of international airlines belonging to CMEA member countries;
- Proposals for the project of the special long term collaboration Program in the field of transport links development of CMEA member countries in the chapter related to civil aviation;
- The way of applying the collaboration Convention in operation, financial and commercial activity of aeronautic enterprises belonging to CMEA member countries;
- The results of multilateral technical-scientific collaboration in the field of civil aviation of CMEA member countries.

It is enclosed the organogram of the standing co-operation commission in the field of civil aviation.

Further, the standing co-operation commission in the field of civil aviation was dissolved. Its activity and competence was taken over by the Department of civil aviation, which is a component of standing co-operation commission in the field of transport.

5. LONG TERM SPECIFIC PROGRAM OF CO-OPERATION IN THE DEVELOPMENT OF TRANSPORT LINKS AMONG CMEA MEMBER COUNTRIES (LTSPC)

The main purpose of this program was to meet the demands (both from qualitative and quantitative point of view) economically substantiated for mutual transport, both for goods

and for passengers of the member countries, by means of a developed transport system based on modern technologies and technical means.

This program of collaboration is closely related to the other special programs of the material production field. The program provided both the development of transport links of the member countries, and their connections with the European transport network.

LTSPC was structured by 11 sub-programs, in the field of transport, of which we mention the most important actions.

In the field of railway transport it was provided to build new lines and to increase transport capacity of already existing railway lines of international importance, by using advanced technique, modern signaling systems, automated block system etc. These works were concentrated on 4 thoroughfares, from East to West, and on 4 thoroughfares from North to South.

Two main directions were provided for Romania, namely:

- Gdınia (Poland) - Rucovice (Czechoslovakia) - Budapest - Biharkerestes (Hungary) - Episcopia Bihorului - Brasov - Bucharest - Giurgiu (Romania) - Ruse - Burgas (Bulgaria)
- Bender - Chisinau - Ungheni - Socola - Bucharest - Giurgiu - Ruse - Sophia.

It was also provided in the program the increase of tonnage/train, from 3000 to 4000 tons, increase of traffic speed, at goods up to 100 km/h and at passengers 120-140 km/h. It was also provided to increase the processing capacities of border points, building some new border crossings, on normal and large gauge.

In the field of naval transport it was taken into consideration the development of this transport mode and efficiency increase, mainly by developing port operations capacities, increase of commercial fleet and improvement of transport process. The main directions included in the program were:

- development and improvement of the activity belonging to international navigation enterprise “Interlihter” for goods transport by Danube and sea taking into account the experience of Soviet - Bulgarian transport association - “Dunaitrans”;
- Further development and increase of maritime traffic efficiency by ferry-boat between Varna and Illiciovsk ports, as well as the set up of the international Soviet - Bulgarian Association - “Intermorputi”;
- Construction of hydro-energetic and navigation complex Gabcikovo - Nadymaros on the Danube (between Czechoslovakia and Hungary);
- Collaboration in order to achieve the works for maintenance of waterway in the ports of Baltic Sea;

- Collaboration for development, modernization and set up of port capacities for bulk goods and of citric fruits in Rostok port.
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In the field of road transport the program contained measures and directions both for further development of road international transport of goods and passengers, among the countries concerned and in the relationships with third countries. For this it was provided the collaboration in the field of construction and re-construction of road networks of international importance, including endowments for passenger service and for transport means maintenance. To this purpose, the countries concerned organized the joint operation for goods international transport. In the field of passenger transport there were organized new international bus lines.

For infrastructure development the efforts were directed towards the re-construction of road network with a great traffic intensity.

The program provided the re-construction of 4 international routes, of which on Romania's territory there were only 3, namely:

- Rostok - Berlin - Prague - Bratislava - Budapest - Bucharest - Constanta;
- Gdansk - Warsaw - Katowice - Bratislava - Budapest - Nadlac - Timisoara - Drobeta Turnu Severin - Craiova - Bucharest - Constanta and the branch: Craiova - Calafat - Vidin - Botevgrad - Sofia;
- Moscow - Kiev - Chisinau - Bucharest - Sophia.

In the field of air transport there were provided the following:

- Elaboration of measures for endowment of airports with mechanized and automated means
- Introduction of automated systems for flight guidance, organization of an experimental scientific center in order to determine the optimum structure of these systems
- Set up and putting into operation an interconnected automated system for booking of tickets and their selling
- Ensuring the repair of airplanes and improving the flight technique
- Development of international airports
- Joint use of certain international airlines.

In the field of containerized transport development and of the unique transport in containers. It was provided the increase of transport volume, by attracting new goods towards

this type of transport, particularly chemical and perishable ones. The main measures referred to:

- The development of technical-material base in order to produce technical means necessary to the system, including specialization and co-operation within the production process;
- Development of existing border points and construction of new border stations (points) for goods transport in containers, and set up of joint border stations;
- Increase of international routes for container transport, both on land and on waterways, as well as the constructions of container terminals on these routes, with all necessary endowments;
- Member countries should create economic, financial, juridical and organizational conditions in order to ensure the efficient use of containers and transport means, including in foreign trades.

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In the field of particularly heavy and out of gauge goods it was provided:

- Concluding a convention for the transport of this kind of goods necessary to nuclear power stations;
- Establishing measures for the transport of especially heavy and out of gauge goods, necessary to chemical, metallurgical and to the production of heavy machines.

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In the technical-scientific field, the program used to include:

- For railway transport
 - Fabrication of modern rolling stock
 - Introduction of railway lines with higher operation parameters
 - Improvement of the technology for operating railway infrastructure works
 - Introduction of automated system for the management of goods international transport by railway
 - Set up of an automated management system of joint wagon park
 - Introduction of automated work system in marshalling yards
- For naval transport
 - Improvement of maritime and river transport

- Development of technical means for endowment of maritime and river transport
 - Unification of some law norms which are applied in maritime international transport.
- For road transport
 - Achievement of new transport means types by reducing environment pollution
 - Designing modern machines for roads construction and maintenance
 - Set up of improved means in order to guide the road traffic, with a view to increasing transport safety and capacity.
- For air transport
 - Complex mechanization and automation of the production process in international airports
 - Elaboration of new technological processes in order to serve passengers, aircraft maintenance in international airports
 - Carrying out researches within the international center for research and experimenting in order to design new automated system for the management of air traffic.
- For containerized transport
 - Elaboration of technical and operation requirements for the construction of specialized containers
 - Elaboration of the technological system for the transport of perishable goods in isotherm containers
 - Improvement of management process of containerized transport
 - Improvement of equipment for container loading and storage.
 - From long-term specific program of co-operation (LTSPC) for transports there were finalized certain important actions, both bilaterally and multilaterally. Among the most important we mention:
 - Construction of hydro-energetic and navigation complex: Gabčíkovo-Nadymaros on the Danube (between Czechoslovakia and Hungary)

- Construction of an important part of the motorway: Rostok-Berlin-Prague-Bratislava
- Achievement of measures from the provisions related to containerized transport, including the set up of an Office for the joint use of containers (with the head office in Bucharest)
- Achievement of automated system for guiding and management of transport means traffic in all fields
- Re-construction and development of maritime ports.

During CMEA activity there were achieved a series of **objectives in the field of transports** of national importance such as:

- Bridge over the Danube between Giurgiu and Ruse, achieved with the participation of Romania, Bulgaria Czechoslovakia, Poland, Hungary and USSR. By putting this bridge into operation, railway transport capacity increased 10 times.
- Railway link with large gauge between Galati and Reni, by means of which there were eliminated transshipments from Reni station.
- In 1966 there were finalized the construction works of the railway line between Ciop and Kosice with 100 km length with large gauge, which enabled the more efficient operation of this line by transporting coal from Donbas and ore from Krivoi Rog at Kosice. By this work the transshipment of goods over the West USSR border was eliminated.
- Extension of the line with large gauge from Vladimir-Volanski (USSR) to Katowice (Poland), with 400 km length, thus eliminating goods transshipment and improving transport links between the two countries. According to weather forecast, Katowice complex of enterprises need in 1990, 16 mil. Tons of ore from Krivoi Rog, and meanwhile the volume of coke and sulfur was increasing from Poland to USSR.
- On December 21, 1963 some countries decided in Bucharest to create The Joint Park of Wagons (OPV). The respective countries were: Bulgaria, Romania, Poland, Hungary, GDR, Czechoslovakia, which put in this park around 4000 and 36000 wagons, so that the initial joint park came to the figure: 92700 wagons on 2 and 4 axles. By using this joint park it was reached to a use of loaded wagon travel of 70%; since July 1, 1964 it worked in Prague- OPV office.
- Set up of Interlichter enterprises with the head office in Budapest. The founding countries were Czechoslovakia, Bulgaria, Hungary and USSR. Through the adopted system there were transported by the Danube, barges of 1100 tons with tugboats up to Ismail, from where they were taken over by maritime ships (26 lihters per maritime ship). This enterprise had connections with CMEA permanent commission for transport and with the Office for ships coordination.

Bilaterally, there were created some societies in the transport field, by the member countries, as follows:

- Poland and GDR set up in 1973 the “Interport” organization, which aimed at rationally using their port capacities, as well as that for ships processing
- In 1977 the Bulgarian-Soviet association – “Dunaitrans” started to function on the Danube
- GDR and USSR set up in 1986 the ferry boat between Klaipeda and Mukran, which was endowed with 6 transport ships, which could each of them take over up to 103 wagons on 4 axles. Every part held 3 ships The distance of 506 km between the two ports was covered 6 times quicker than transport on land
- Bulgaria and USSR set up in 1978 the ferry boat between Varna and Iliciovsk, which had available 4 transport ships, with a capacity of 103 wagons per each ship. Every part held 2 ships.

6. CONCLUSIONS

CMEA activity, developed during over 40 years had good parts but also some difficult problems of collaboration, mainly generated by political factor.

CMEA member countries succeeded to obtain the necessary raw material within CMEA and especially from USSR.

Within the commercial exchanges between the member countries it was used the transferable “Rouble” (which was only account currency and barter system).

Coordination of plans, that was an important instrument in the collaboration conception in its first years of activity, determined that other fields and collaboration key factors be let aside.

Towards the end of CMEA activity there were modified the collaboration conceptions and the settling modalities, it was tried to liberalize goods traffic and services and also to pass to the use of foreign currency at settlements. It was implicitly admitted that the transferable “rouble” failed its role as a common currency.

As a result, there were created joint bilateral and multilateral enterprises and direct connections between enterprises were established.

As a rule, international economic organizations are not dissolved, but improve their activity and collaboration to the benefit of its members.

What was good in CMEA activity remained, under one form or another (see for example, the meetings of transport ministers within OSJD).

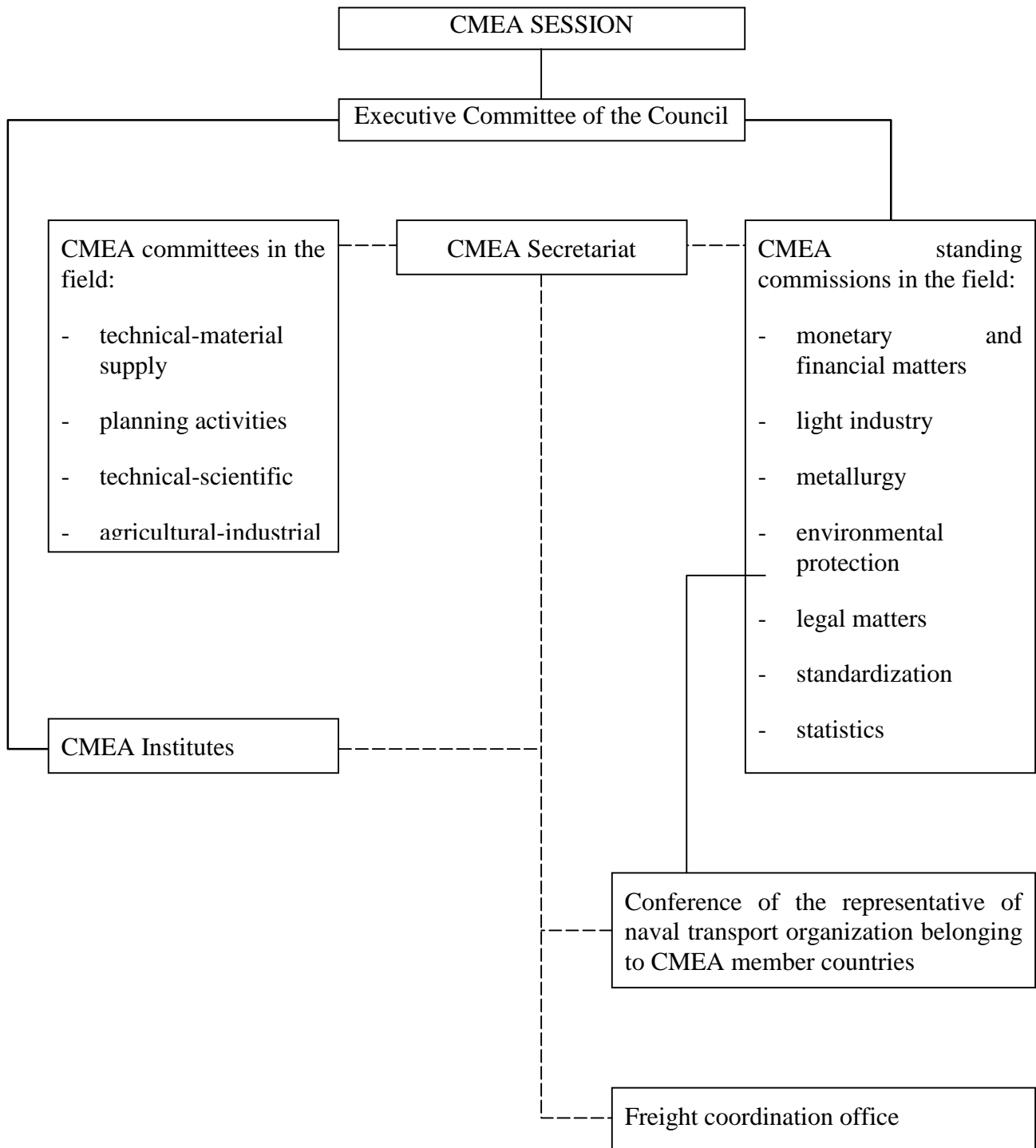
In the transport field, collaboration enabled the coordinated development of goods and passenger traffic under a quicker speed and safety. There were modernized border stations and

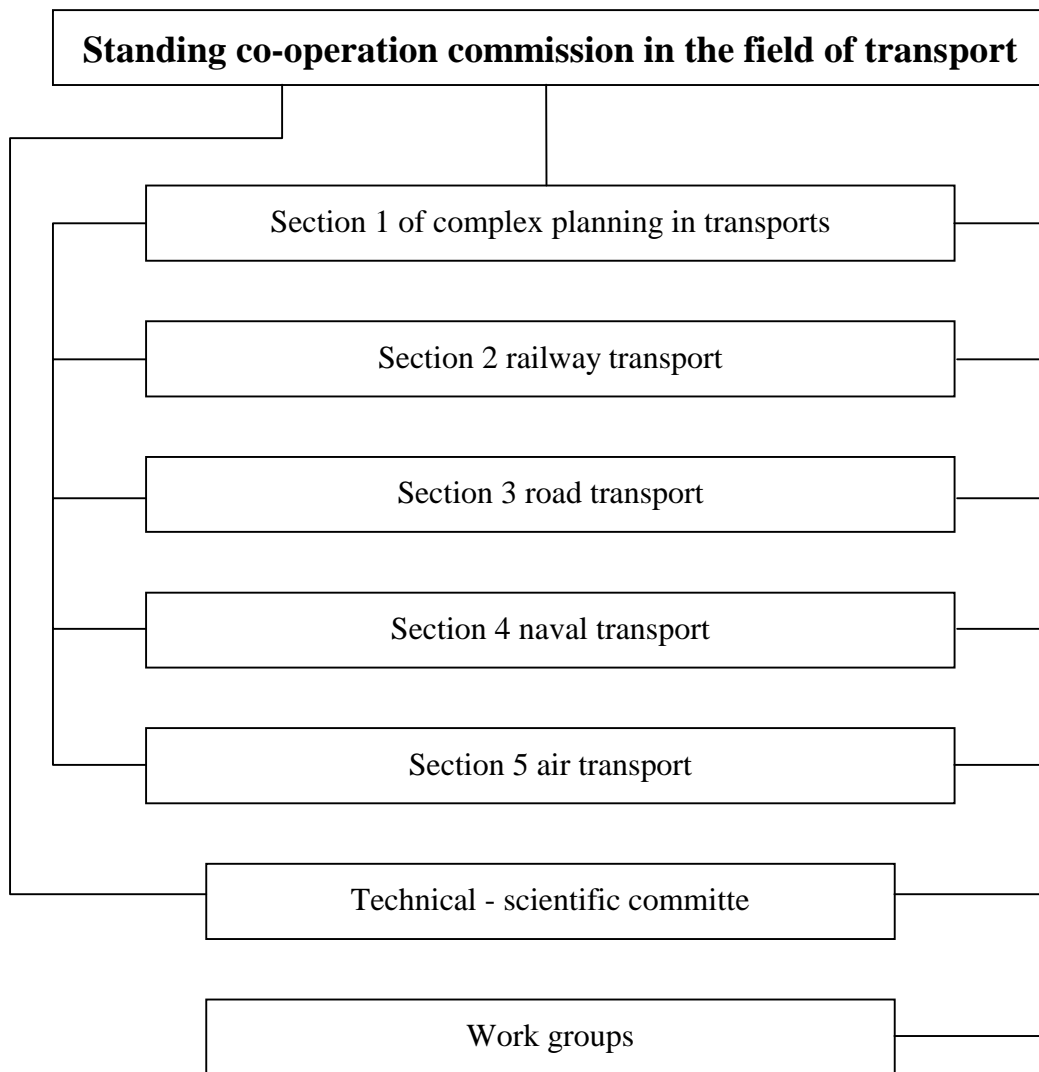
the lines to accede them. In some cases there were extended the large gauge lines up to the great metallurgical complex of enterprises of the member countries. In all transport fields it was made an experience exchange, specialization and training.

Meetings at the commission level enabled to solve the problems occurred in transport development, including the tariff, financial, investment and security problems.

At present, these problems are solved within the international profile organization, as well as bilaterally.

Council for Mutual Economic Assistance Structure





Standing collaboration commission in the field of civil aviation

Technical-scientific council

Set up, introduction and improvement of air traffic control of navigation and automated landing systems for civil aviation

Elaboration of development directions for ships and problems related to their putting into operation

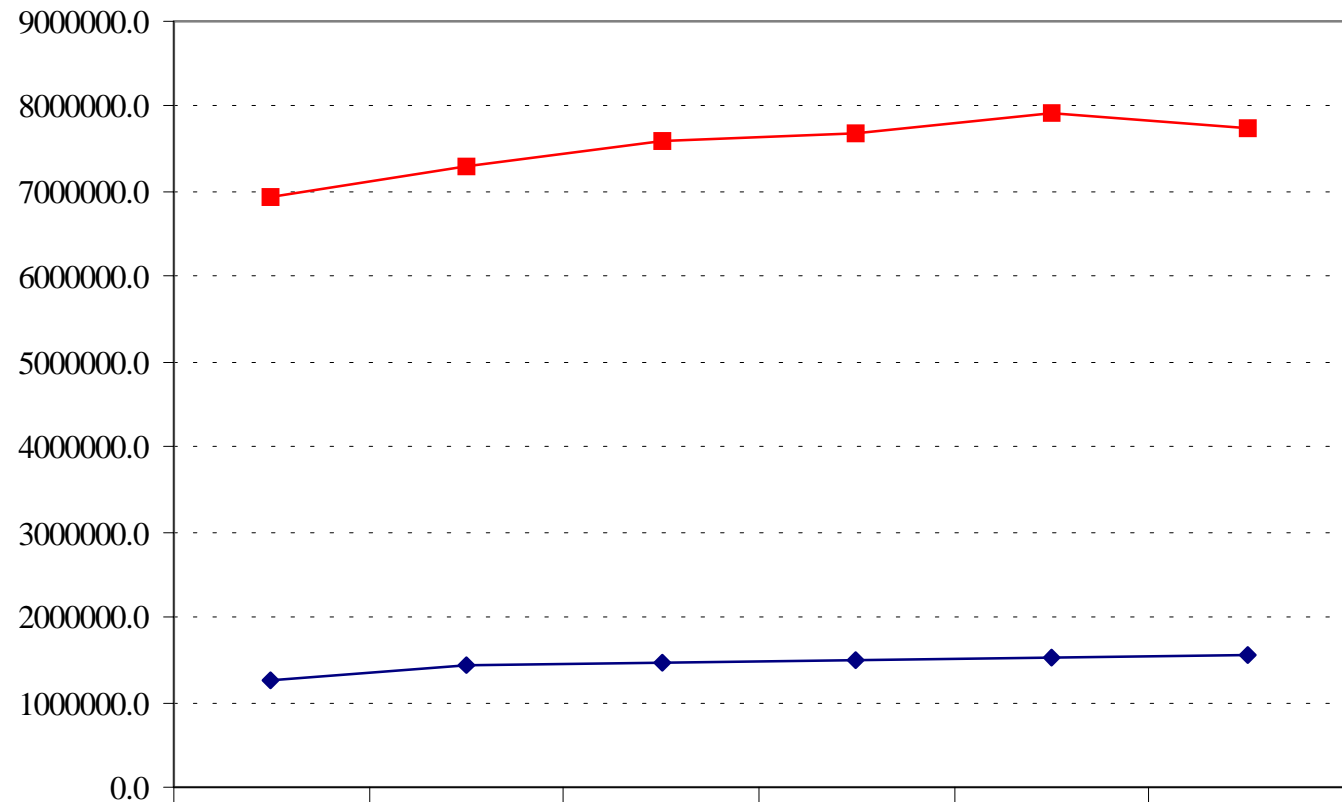
Integrated development of the airports belonging to CMEA member countries

Work groups

For flight safety

Economic problems of civil aviation development

Evolution of goods and passenger mileage in CMEA member countries



	1980	1985	1986	1987	1988	1989
—◆— Passengers (millions passengers-km)	1263734.0	1420701.6	1454748.5	1488377.8	1516750.8	1540319.9
—■— Freight (millions tons-km)	6928469.0	7303943.2	7597914.1	7677676.3	7912373.1	7753093.9

Table 1**Goods mileage by all transport modes***(millions tons-kilometer)*

	1980	1985	1986	1987	1988	1989
Bulgaria	93661	88236	91993	98434	96008	104487
Hungary	41003	40605	40559	42277	46281	45739
GDR	143762	136717	148999	165538	163297	166280
Poland	422742	324611	323474	348109	379505	351769
Romania	164615	180973	197589	196809	222913	232771
USSR (mld tkm)	5884	6342	6606	6644	6800	6651
Czechoslovakia	103323	106002	107207	104440	108918	110596

¹⁾ *without air transport**Source: Annual statistic report CMEA member countries for 1990", Moscow, 1990***Table 2****Dynamics of goods mileage by all transport modes***(1980=100)*

	1985	1986	1987	1988	1989
Bulgaria	94	98	105	103	112
Hungary	99	99	103	113	112
GDR	95	104	115	114	116
Poland	77	77	82	90	93
Romania	110	120	120	135	141
USSR	108	112	113	116	113
Czechoslovakia	103	104	101	105	107

¹⁾ *without air transport*

Source: "Annual statistic report of CmEA member countries for 1990", Moscow, 1990

Table 3

Increase rates of goods ,mileage by all transport modes

(% as compared to the previous year)

	1985	1986	1987	1988	1989
Bulgaria	-5,0	4,3	7,0	-2,5	8,8
Hungary	-2,2	-0,1	4,0	9,0	-1,8
GDR	0,6	9,0	11,1	-1,4	1,8
Poland	-6,0	-0,4	7,6	9,0	-7,3
Romania	-2,5	9,2	-0,4	13,3	4,4
USSR	-0,1	4,2	0,6	2,4	-2,2
Czechoslovakia	-1,3	1,1	-2,6	4,3	1,5

¹⁾ fără transport aerian

Source: "Annual statistic report of CMEA member countries for 1990", Moscow, 1990

Table 4

Mileage of passengers

(millions passenger-kilometer)

	1980	1985	1986	1987	1988	1989
Bulgaria	32408	36914	37655	40456	40613	39415
Hungary	37704	36450	36615	36923	36992	36383
GDR	46908	46403	46802	47468	48418	49278
Poland	103636	112227	110375	111533	119141	124090
Romania	50105	56245	57952	59882	61729	62447
URSS	901223	1017504	1057244	1085010	1116273	1127479
Czechoslovakia	53644	58665	59651	61197	61194	62041

¹⁾ *without air transport*

Source: "Annual statistic report of CMEA member countries for 1990", Moscow, 1990

Table 5**Dynamics of passenger mileage by all transport modes***(1980=100)*

	1985	1986	1987	1988	1989
Bulgaria	114	116	125	125	122
Hungary	97	97	98	98	96
GDR	99	99,8	101	103	105
Poland	108	107	108	115	120
Romania	112	116	120	123	125
USSR	113	117	120	124	125
Cehoslovakia	109	111	114	114	116

¹⁾ *without air transport**Source: "Annual statistic report of CMEA member countries for 1990", Moscow, 1990*