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MACROECONOMIC POLICY QUESTIONS: TRADE AND DEVELOPMENT

Progress report on measures designed to improve the transit
transport environment in Central Asia

Note by the Secretary-General

1. In its resolution 49/102 of 19 December 1994, the General Assembly took note of the report of the Secretary-General on transit transport systems of the newly independent and developing landlocked States in Central Asia and their transit developing neighbours (A/49/277) and invited the Secretary-General of the United Nations Conference on Trade and Development (UNCTAD) to make a comprehensive analysis and study of the transit system for Central Asian countries, paying particular attention to the development of all new, appropriate and feasible alternative transit routes and corridors, including the shortest ones. In paragraph 4 of the resolution, the Secretary-General of UNCTAD was also requested to prepare a report on the implementation of the present resolution, to be submitted to the General Assembly at its fifty-first session.
2. The Secretary-General has the honour to transmit to the General Assembly the report of the Secretary-General of UNCTAD annexed hereto, which has been prepared in response to the above resolution.

* A/51/150.



Annex

MEASURES DESIGNED TO IMPROVE THE TRANSIT TRANSPORT
ENVIRONMENT IN CENTRAL ASIA

Progress report by the UNCTAD secretariat

CONTENTS

	<u>Paragraphs</u>	<u>Page</u>
I. INTRODUCTION	1 - 5	4
II. THE NEW LANDLOCKED REALITY	6 - 13	6
III. IMPACT OF ECONOMIC CHANGE ON TRADE AND TRANSIT	14 - 29	8
A. Massive restructuring places huge strains on Central Asian economies	15 - 17	9
B. Precipitous drop in Central Asian trade with CIS republics and the change in its direction	18 - 19	9
C. The growth of foreign trade with countries outside the CIS area	20 - 24	10
D. The changing structure of transport charges in foreign trade	25 - 29	11
IV. THE MAIN ALTERNATIVE TRANSIT TRANSPORT ROUTES FOR CENTRAL ASIA	30 - 53	13
A. The traditional rail and road connections through the Russian Federation	33 - 36	14
B. Trans-Caspian ferry routes by rail and road	37 - 43	15
C. Other rail links outside the Russian Federation, to the east, west and south	44 - 51	20
D. Other road links outside the Russian Federation, to the east, west and south	52 - 53	22
V. REDUCING THE COSTS AND IMPROVING THE EFFICIENCY OF TRANSIT TRANSPORT: OBSTACLES, OPPORTUNITIES AND PROPOSALS FOR ACTION	54 - 71	23
A. Elements of a programme for improving the efficiency of the current transit environment: highlights of the recommendations of the Technical Meeting	54 - 55	23

CONTENTS (continued)

	<u>Paragraphs</u>	<u>Page</u>
B. Evaluating alternative transit transport routes ..	56 - 58	23
C. Physical infrastructure bottlenecks	59	24
D. Non-physical barriers to the more efficient use of available transit corridors	60 - 68	25
E. Towards a framework for future cooperation	69 - 71	26

List of boxes

1. The prospective Caspian oil boom and the competition for transit pipeline routes	13
2. TRACECA projects of relevance to transit transport for the Central Asian republics	17
3. Projects of the European Bank for Reconstruction and Development and the World Bank of relevance to transit transport for the Central Asian republics	18
4. Outline plan of the Economic Cooperation Organization for the development of the transport sector	21
5. Some possible elements of a transit transport framework agreement concerning Central Asian countries and their transit transport neighbours	27

Appendices

I. Basic data on the Central Asian republics: distance to the sea, area, population and GNP per capita	29
II. Maps	30
1. The internal rail and road network serving Central Asian republics, with connections to their transit neighbours	30
2. Summary of Central Asia's transit links to world markets: comparison of seven typical rail transit routes through the Russian Federation with four alternative rail routes through other transit countries	31
3. New rail link to China (and connecting roads)	32
4. Rail links to the west (via the Caucasus and Turkey) and to the south (existing, newly opened and proposed)	33
5. Road links to the south	34

I. INTRODUCTION

1. The General Assembly, in paragraph 4 of resolution 49/102 of 19 December 1994 on the Transit environment in the landlocked States in Central Asia and their transit developing neighbours, requested the Secretary-General of the United Nations Conference on Trade and Development (UNCTAD) to prepare a report on the implementation of the resolution, to be submitted to the General Assembly at its fifty-first session. The present report has been prepared in response to this request, and covers developments relevant to paragraphs 1-3 of the resolution, which are as follows:

(a) In paragraph 1, the General Assembly invited the Secretary-General of UNCTAD, in consultation with Governments, and in cooperation with the United Nations Development Programme (UNDP), the Economic and Social Commission for Asia and the Pacific (ESCAP), the Economic Commission for Europe (ECE) and relevant regional organizations, to elaborate a programme for improving the efficiency of the current transit environment in the newly independent and developing landlocked States in Central Asia and their transit developing neighbours and to make a comprehensive analysis and study of the transit system for Central Asian countries, paying particular attention to the development of all new, appropriate and feasible alternative transit routes and corridors, including the shortest ones.

(b) In paragraph 2, the General Assembly invited donor countries and multilateral financial and development institutions, within their mandates, to provide newly independent and developing landlocked States in Central Asia and their transit developing neighbours with appropriate financial and technical assistance for the improvement of the transit environment for these countries.

(c) In paragraph 3, the General Assembly requested UNCTAD, in collaboration with the relevant international and regional organizations referred to in the resolution, to study the possibility of holding, within existing financial resources, a regional symposium for the newly independent and developing landlocked States in Central Asia and their transit developing neighbours, with the participation of other interested States, on transport and transit issues in the region, upon completion of the comprehensive analysis and study requested in paragraph 1 of the resolution and before the issue was taken up by the General Assembly at its fifty-first session.

2. With respect to paragraph 1 of the resolution, a number of studies have been completed since the adoption of the resolution, and others are under way, particularly in UNCTAD, ESCAP, and the European Bank for Reconstruction and Development (EBRD), and through the European Union's TRACECA (Transport Corridor: Europe-Caucasus-Asia) project. The results of these studies already provide a substantial overview of the transit system for Central Asian countries, including detailed analysis of many of the physical bottlenecks and non-physical barriers impeding transit transport, as well as elaboration of steps for improving the efficiency of the current transit environment. These steps include the start of significant technical assistance and training efforts, the elaboration of several investment proposals to improve physical

infrastructure, and the convening of regional meetings on transit transport problems - results which are described in this progress report.

3. With respect to paragraph 2, the present report indicates the major ongoing financial and technical assistance projects of relevance to the improvement of the transit environment of the Central Asian republics and their transit developing neighbours.

4. With regard to paragraph 3, in April 1995 UNCTAD, jointly with UNDP and in cooperation with ESCAP and ECE, launched the "Central Asian External Trade and Transport Initiative", as elaborated in UNDP/UNCTAD project RER/95/001, with the aim of reducing transit costs facing the Central Asian countries, thereby promoting their external trade and bolstering their economic growth. As a first milestone in this initiative, and under the auspices of UNDP and UNCTAD, the Technical Meeting on Central Asia's Transit Transport Links with World Markets was held at Ankara in November 1995, in cooperation with the Turkish International Cooperation Agency. The documentation and agenda of the Meeting stressed the following:

(a) The comparison of alternative routes and modes and the need for more detailed analyses of present and potential costs, to ensure balanced choices of priorities;

(b) Steps to alleviate bottlenecks in physical infrastructure;

(c) The overwhelming importance of non-physical factors in improving transit efficiency, such as legal arrangements, adherence to relevant international transport conventions, arrangements regarding customs and documentation, insurance, standards, electronic control systems, institution-building, and training;

(d) The key objective of improving cooperative arrangements among all the parties and working towards a regional transit transport framework agreement, incorporating:

(i) Specific steps on adhering to common rules and standards covering the practical details of rail, road, and inland water transport and the recognition of mutual rights and obligations of all parties;

(ii) The creation of parallel national and regional institutions for coordinating and improving transit transport arrangements, monitoring progress, gathering and analysing information, and facilitating needed investments, technical assistance and training.

Participants in the meeting included representatives of the five Central Asian countries (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan), Afghanistan, Azerbaijan, China, Georgia, Iran (Islamic Republic of), Turkey (including the Turkish International Cooperation Agency), and the Russian Federation, as well as representatives of various international and regional organizations, including UNCTAD, UNDP, ESCAP, ECE and the Economic Cooperation Organization (ECO).

5. Many of the detailed studies referred to above, prepared by UNCTAD, ESCAP and EBRD, were made available to the Technical Meeting in Ankara (and many of them have been used extensively in the preparation of the present report). Among these studies and related reports are the following:

(a) Document A/49/277 entitled "Transit transport systems of the newly independent and developing landlocked States in Central Asia and their transit developing neighbours: current situation and proposals for future action: Report of the Secretary-General" (prepared by the UNCTAD secretariat).

(b) UNCTAD (1995), "Central Asia's trade links with the world: silken past, troubled present, promising future" (UNDP/UNCTAD project RER/95/001).

(c) UNCTAD (1995), "Transport systems in Central Asian republics and their neighbours" (UNDP/UNCTAD project RER/95/001).

(d) United Nations/ESCAP (1995), "Land transport linkages from Central Asia to seaports in the south and east".

(e) United Nations/ESCAP (1995), "Transport planning for landlocked countries: transit and border-crossing issues, 1994".

(f) EBRD, "Central Asia outline transport strategy: final report" (April 1995).

(g) United Nations/ECE (1995), "United Nations agreements and conventions on facilitation of international land transport and transit".

(h) UNCTAD (1995), "Report of the Symposium for Landlocked and Transit Developing Countries, held at United Nations Headquarters, New York, from 14 to 16 June 1995".

(i) UNCTAD (1995), "Report of the Second Meeting of Governmental Experts from Landlocked and Transit Developing Countries and Representatives of Donor Countries and Financial and Development Institutions, held at United Nations Headquarters, New York, from 19 to 22 June 1995".

(j) "Report of the Technical Meeting on Central Asia's Transit Transport Links with World Markets, held at Ankara from 7 to 9 November 1995" (UNCTAD/LLDC/Misc. 4, 1996).

II. THE NEW LANDLOCKED REALITY

6. One crucial new factor which must be taken into account is that, from the time of their independence in 1991, the five Central Asian republics brought the world's total number of developing landlocked countries to 29. The table in annex I to the present document provides basic data on these five countries, including the distance by surface transport to the nearest port for ocean-going vessels. Being landlocked is a condition conferred by the reality of geography. A landlocked country, by definition, has no access by surface transport from anywhere in its own territory to the world at large except by transiting the

territory of a neighbouring transit country. This reality can have enormous economic consequences.

7. A landlocked country with only one transit neighbour providing access to the sea for its exports and imports is potentially subject to the power of the transport route owners and operators, as well as to the rules, regulations and controls that the transit country's Government could impose on such matters as transport charges, sharing of costs for improvements to transport routes, and the setting of priorities for investment in new and improved routes or maintenance of old routes. Only when alternative routes are seen as potentially viable and competitive can their presence begin to influence the rates and conditions prevailing in a traditional transit country.

8. To an important degree, the new rail and road routes and other transit routes to the south of the Central Asian republics (described later in this report) may well open up trading possibilities in new directions, with benefits not only to the Central Asian republics but to all their neighbours to the north and south.

9. Much more information is needed regarding the actual and potential costs on various alternative routes available to the Central Asian republics as a basis for regional and national decisions on transport priorities for investment in infrastructure, technical assistance, training, better management and improved cooperative arrangements. More precise information, available to all parties, would result in far more effective cooperation concerning rates and conditions on existing or proposed alternative routes.

10. In collecting better data on the costs and benefits of alternative investments in transit transport routes, it is important to keep in mind the role of alternative routes as a basic insurance for landlocked countries. Keeping open the availability of additional alternative corridors for transit in an uncertain world, even at some cost, as compared with putting more resources into expanding the current most efficient single route, may be the most effective long-term investment and best insurance "policy" for landlocked countries. A careful balance must be maintained between, on the one hand, establishing priorities to make the best use of resources and avoid waste, and on the other hand the principle of adequate provision for alternatives as insurance against even the remote possibility of future political, monopoly, regulatory or efficiency difficulties on any of the main transit transport routes available to landlocked countries.

11. In negotiating with transit neighbours and with donor financing agencies for improvements in particular transit transport routes, landlocked countries will often find that cost-benefit studies, when properly done, will frequently note costs arising in one country (the transit country), with benefits allocated to more than one country (including landlocked countries). This makes transit transport improvement projects a matter best handled in a regional framework, so that the priority for the project and the financing arrangements and terms can reflect all of the benefits, as well as the repayment capacity of all of the beneficiaries.

12. One further aspect of the new landlocked reality calls for a note of caution. The five Central Asian countries to some extent all serve as transit countries for each other (see map 1). They started from a situation at the time of independence of few or no barriers at all to the flow of trade and transport among themselves. Every effort should be made, through appropriate cooperative arrangements, to avoid any spread of unnecessary border, customs or other regulatory barriers to the free movement of traffic between them. Any barriers that may already have arisen should be removed as soon as possible.

13. A positive example for landlocked countries that lie in the centre of continents is that of Switzerland and Austria, which have served as successful hosts for short-cut routes through the Alps, providing connections from northern and western Europe to southern and eastern Europe - with notable benefits to their own economies, among the world's most successful and richest. Indeed, the Eurasian continent has been slow to develop transcontinental land trade links from the Atlantic to the Pacific, except for the well-known Trans-Siberian railroad across the Russian Federation to Vladivostok, with up to four parallel rights of way. (By contrast, the North American continent, in the heyday of the railroad, had no less than nine transcontinental links - two in Canada and seven in the United States of America.) However, the broad expanse to the south of the Russian Federation in Asia has just seen the completion of the last link of a through railroad route from China to Istanbul by way of Central Asia. ESCAP, through its Asian land transport infrastructure development (ALTID) project, is seeking to bring to completion a trans-Asian railroad running through South Asia from Singapore through India to Turkey, the "Trans-Asian Railway", but some key links remain to be constructed. Indeed, the potential for trans-Eurasian rail shipment of goods by various alternative routes to and from North-East Asia was explored in an ESCAP study prepared in 1995, "Feasibility study on connecting rail networks of China, Kazakstan, Mongolia, the Russian Federation and the Korean peninsula"; ESCAP convened a meeting of policy officials from the countries concerned and international organizations at Bangkok in October 1995, to consider the report, including the possibility of transcontinental container shipments.

III. IMPACT OF ECONOMIC CHANGE ON TRADE AND TRANSIT

14. The problems of transit transport facing the Central Asian region need to be seen against the backdrop of the spectacular economic changes and accompanying hardships found all over the former Union of Soviet Socialist Republics, including especially the impact of these changes on the trade between the 12 independent republics of the Commonwealth of Independent States (CIS) and on their trade with the outside world. The transit transport network available to the Central Asian region and its efficiency in minimizing real costs will play a key role in the region's ability (a) to rebuild shattered trade flows with the other CIS republics on the basis of a new market-oriented division of labour, and especially (b) to expand direct foreign trade flows to the rest of the world. Such expanded trade may well be the engine of growth on which the economic future of Central Asia will depend, aided in strong measure by bright prospects for the region's raw materials. Given the heavy handicap of remoteness from foreign markets, the success of efforts to cut transport costs

will be crucial to overall economic progress and the well-being of the region's population.

A. Massive restructuring places huge strains on Central Asian economies

15. With the unfolding disintegration of the former Soviet Union, the individual Central Asian republics declared their independence on various dates between 31 August and 27 October 1991. Until then, they were integral parts of a closely knit political and economic union over which prevailed a system of central planning covering the entire economy. With the end of central planning and widespread efforts to adopt free market principles, the situation changed suddenly. Despite the creation of CIS, the economies of the republics quickly became substantially de-linked, resulting in huge economic dislocations and a consequential sharp fall in economic activity and income, plus soaring inflation.

16. For the Central Asian republics, the dislocations have been quite marked. Real gross domestic product (GDP) fell by one half or more in Tajikistan, Kyrgyzstan and Kazakstan between 1990 (the last full year of the Union) and 1994. The declines were considerably more moderate, however, for Turkmenistan and Uzbekistan (down 17 per cent). Declines in GDP slowed somewhat in 1995, except for Tajikistan; on the other hand, Uzbekistan has shown almost no further decline and thus continues to maintain a higher relative level of economic activity than any of the other Central Asian republics. The dislocations have also been accompanied by budgetary deficits and a sharp rise in inflation, averaging over 1,000 per cent per annum for four of the five Central Asian republics from 1992 to 1994. Data for 1995 show a very marked slowdown in inflation from the extremely high earlier rates, with Kyrgyzstan dropping to a modest (relatively speaking) 50 per cent annual rate.

17. One direct effect of the disintegrating economic environment has been a very sharp collapse in freight traffic volumes, as reported by three of the Central Asian republics for the period 1990-1993. In Kazakstan and Turkmenistan, total traffic tonnage dropped by more than half, while in Kyrgyzstan the fall was by three quarters. This, of course, means that basic transport capacity is likely to be more than ample for some time to come, though the budget crunch has also meant extremely low funding for maintenance and repairs, with the prospect of severe erosion of the quality of transport infrastructure.

B. Precipitous drop in Central Asian trade with CIS republics and the change in its direction

18. The collapse of traffic volumes is the result mainly of the breakdown of trade flows between the republics that made up the former Soviet Union. Such inter-republic flows accounted for 90 per cent of the total trade of the Central Asian countries as late as 1991. Between 1991 and 1994, the overall value of inter-republic trade (rough estimates in United States dollars using applicable exchange rates for the rouble) plummeted by 42 per cent for Turkmenistan,

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50 per cent for Kazakstan, 72 per cent for Uzbekistan, 78 per cent for Kyrgyzstan and 88 per cent for Tajikistan.

19. As a share of total exports to CIS republics, the direction of exports from the individual Central Asian countries changed considerably from 1991 to 1994 (according to rough estimates by the World Bank), with the share going to the Russian Federation generally declining by about 10 percentage points and that directed to intra-trade among the Central Asian republics themselves generally rising by about 10 percentage points. In 1994, the estimated share of exports to the Russian Federation in total inter-republic exports was highest for Kazakstan (70 per cent), followed by Kyrgyzstan and Uzbekistan (56 per cent), Turkmenistan (40 per cent) and Tajikistan (34 per cent). On the other hand, in 1994 the share of intra-Central Asia trade was highest for Tajikistan (64 per cent), followed by Kyrgyzstan (38 per cent), Uzbekistan (37 per cent), Turkmenistan (27 per cent), and Kazakstan (23 per cent).

C. The growth of foreign trade with countries outside the CIS area

20. Because of difficulties facing the Central Asian republics and other CIS countries in recording and reporting trade with foreign countries, it is useful to look at mirror-image trade data from countries outside the CIS area that report their data to the United Nations commodity statistics database. In using mirror data, two caveats are important. Export values, since they are based on the import data of the reporting foreign countries, include the costs of insurance and freight and are therefore higher than the actual export revenues received by Central Asian exporters. Similarly, import values are on a free on board (f.o.b.) basis and do not include the costs of insurance and freight which Central Asian importers have had to pay to obtain the goods reported.

21. A clearly positive sign is the growth of exports to foreign countries (other than CIS countries). In fact, Central Asian exports to these countries had more than tripled in relation to their 1992 level by 1994, reaching a level of US\$ 3.0 billion. This trend is further underscored by data from 13 "early reporting" foreign countries (which accounted for 60 per cent of Central Asian non-CIS foreign exports in 1994) and which have already reported their 1995 trade; Central Asian country exports to these 13 countries grew by a further 11 per cent in 1995. Imports of the Central Asian republics from non-CIS foreign countries also more than tripled between 1992 and 1994, reaching US\$ 3.5 billion. However, 13 early reporting countries (which accounted for 73 per cent of all Central Asian country imports in 1994) showed a drop of almost 10 per cent in 1995.

22. The seven leading non-CIS export markets for Central Asian products are China (which soared to more than US\$ 550 million in 1995), followed by Germany, Italy, Turkey, France, the Republic of Korea and the United States. The seven leading non-CIS import sources for Central Asian countries are in fact the same countries as for exports, but in a different order: Germany remains the largest source of imports (even though it dropped from US\$ 948 million in 1994 to US\$ 781 million in 1995); in second place is Turkey, followed by the Republic of Korea, China, the United States, Italy and France. It may be noted that three

of these trade partners, China, Turkey and the Republic of Korea, are more directly accessible in terms of overland distances to the Central Asian republics by some of the recently opened or proposed routes through China, the Islamic Republic of Iran or the Caucasus than by more northerly routes, assuming that the new routes can become competitive in terms of cost, reliability and efficiency.

23. While resource-based raw materials always played a leading role in the exports of the Central Asian republics, a range of manufactured goods, including heavy machinery, transport equipment and other engineering goods, also figured importantly in these exports. Exports to non-CIS foreign countries, however, have tended to be dominated more by resource-based raw materials in three of the Central Asian countries. For example, in the case of Turkmenistan, two products, cotton fibre and petroleum (crude and refined), made up 95 per cent of foreign exports in 1993; in Uzbekistan, two products, cotton fibre and gold, accounted for 90 per cent of foreign exports; and in Tajikistan, two products, cotton and aluminium, accounted for 79 per cent of foreign exports. On balance, with the growing importance of foreign relative to inter-republic trade, the composition of exports may be shifting towards a greater relative importance of resource-based products. However, in Kazakstan only about half of foreign exports are in the form of raw materials (such as copper and other metals and crude petroleum), the rest being various manufactures (though often based on processed raw materials); Kyrgyzstan's foreign exports are predominately manufactures (such as iron and steel products).

24. The overall profile of the five Central Asian republics' exports to and imports from foreign (non-CIS) countries, by leading commodity for 1994, shows cotton accounting for almost half of exports, and wheat the largest import with 5 per cent of the total; wheat declined in importance from 10 per cent of the total in 1993 and is likely to be less than 2 per cent for 1995, apparently reflecting the shrinking of food aid to these countries.

D. The changing structure of transport charges
in foreign trade

25. In the former Soviet Union, rail was the most widely used mode for goods traffic, accounting (if pipelines are excluded) for nearly 70 per cent of total freight (ton km). Data for Kazakstan and Turkmenistan show an even higher dependence on rail - 90 per cent in 1990. (However, Kyrgyzstan shows a much lower dependence on rail (30 per cent), reflecting the limited scope for rail in that mountainous country.) Since the policy had been to make railways the principal means of transport, tariffs were kept low in terms of the prevailing price structures and thus encouraged the use of rail for low-value, bulky raw-material-based products important in the trade of the Central Asian countries.

26. With the end of the Union, the rail network was formally broken up, the administration decentralized and the rolling stock divided up among the republics. In line with free market principles and cost-based pricing, the trend has been towards significant increases in rail tariffs. Furthermore, the centralized system of payments for railway services was abandoned and, effective

1 May 1994, all payments for inter-republic railway services have to be paid in advance in hard currency. This clearly places a heavy burden on users, while adding considerably to the real cost of transport. Nevertheless, railway tariffs and ancillary charges continue to be common for all CIS countries and are agreed annually for the year ahead by the Fares and Rates Conference of the Railway Carriers of CIS countries. Tariffs are fixed in Swiss francs, except for container transport on the Trans-Siberian Railway, where the fares and rates are set in United States dollars.

27. A look at the actual transport charges currently confronting the five Central Asian countries for their leading export (cotton) and their leading import (wheat) illustrates the size of transport costs in relation to the total value of the products concerned. Raw cotton is a relatively high-value product, despite being a raw material. Exports to foreign countries in 1993 (partner country data) came to US\$ 714 million, cost, insurance, freight (c.i.f.) value (that is, including charges for freight and insurance); the volume of cotton thus shipped abroad totalled 594,000 tons, or an average of US\$ 1,200 per ton c.i.f. value. The cost of shipping a ton of cotton in 1994 by rail from Tashkent in Uzbekistan to the major transfer points for foreign trade shipments on the edge of the CIS area varied from as little as US\$ 36.30 for the port of Novorossiysk on the Black Sea to as much as US\$ 76.90 for the port of Vladivostok on the Pacific Ocean. Thus, these official charges for transport of raw cotton within the CIS area amounted to as little as 3 per cent and to no more than 6 per cent of the value of the product.

28. The situation is very different in the case of wheat (and may be even more extreme in the case of lower-value raw material shipments). The value, f.o.b. (that is, excluding insurance and freight charges), of wheat imports (again based on reports from partner countries) came to US\$ 260 million in 1993, comprising 2.3 million tons for an average f.o.b. value per ton of US\$ 113.00.

29. The rail shipping charges per ton of wheat from a transfer point on the edge of the CIS area to Tashkent in Uzbekistan varied in 1994 from as little as US\$ 39.40 (from Novorossiysk on the Black Sea) to as much as US\$ 83.40 (from Vladivostok on the Pacific). These rail charges amounted to at least 35 per cent of the purchase price abroad of the wheat and as much as 74 per cent. If account is taken of the additional shipping charges from the foreign source for wheat to the edge of the CIS area, it is clear that transport costs may make up one half or more of the value of wheat delivered in Central Asia - a mark-up of a quarter of a billion dollars per year over the original purchase price (f.o.b.) abroad for this major standard product. And this cost picture is still not complete - a host of additional informal or even illegal payments may often be required to make cargo move. There are also the indirect additional charges associated with unreliable transport conditions and the high costs of delay and uncertainty for individuals, firms and the whole economy. It will be critically important, in comparing alternative transit transport routes and modes, to have estimates of all these factors as a guide to the most costly bottlenecks and the highest priority targets for improvement. Steps to cut total transport costs will be of real significance to the growth of the Central Asian economies, whether they come about by developing new alternative routes, increasing competition on all routes, improving the quality and efficiency of transport infrastructure and services, or cooperative efforts to reduce waste

and inefficiency by installing the most advanced international concepts of transit transport facilitation.

IV. THE MAIN ALTERNATIVE TRANSIT TRANSPORT ROUTES FOR CENTRAL ASIA

30. As a result of several initiatives in recent years, the Central Asian republics have a growing number of transit transport options. The discussion here focuses primarily on the transport of goods, rather than passenger traffic, and moreover primarily on surface transport by rail or road (with incidental use of inland waterways) rather than on air freight or pipelines or broader questions of inland waterways development - all of which are also of great importance for the growth of Central Asian trade (see box 1).

Box 1

THE PROSPECTIVE CASPIAN OIL BOOM AND THE COMPETITION FOR TRANSIT PIPELINE ROUTES

The development of new petroleum sources in the Caspian Sea and the countries bordering on it has already led to intense negotiations among the international oil companies and the Governments concerned as to the routes for prospective pipelines that will need to be built or expanded to handle the huge new outflow. The first "early oil" flow will come from the Shakh Deniz field off the coast of Azerbaijan, and later, over the next 10 or 15 years, an even larger flow will come on line from the Tengiz field off the coast of Kazakstan. The total potential reserves in the Caspian fields may approach 200 billion barrels - almost as large as total potential Saudi Arabian reserves. Part of this oil is expected to move by pipeline to Russian ports on the Black Sea and part by pipeline to Georgian ports on the Black Sea. Turkey has proposed a pipeline from the Caucasus across Turkey to its Mediterranean port of Ceyhan - in order to bypass the Bosphorus, where the prospect of expanded traffic in petroleum has raised serious environmental concerns. Kazakstan and the Islamic Republic of Iran have recently agreed to a swap arrangement whereby some Kazakstan crude oil would be delivered to refineries in northern Islamic Republic of Iran in exchange for equal amounts of crude to be picked up directly from Persian Gulf ports for shipment as Kazakstan exports to world markets.

31. Map 1 presents the main elements of the internal rail and road network serving the Central Asian republics. It shows the extent of transit transport involved in any trade between the five Central Asian republics themselves. Moreover, the map indicates the main traditional connection points to the Russian Federation for direct trade there or for further trans-shipment to the other CIS States and beyond to foreign trade sources or destinations all over the world. The map also shows existing connection points for rail and road for

transit routes through neighbouring countries other than the Russian Federation, China, Afghanistan, the Islamic Republic of Iran and Azerbaijan (via the Caspian ferry).

32. As a schematic summary of the main existing and alternative rail routes, map 2 shows:

(a) First, rail distances in kilometres from Tashkent, deep in the Central Asian region, by seven different but representative traditional routes through the Russian Federation to ports or to rail transfer points at the edge of the CIS area (that is, the area where the Council on Railway Transport of CIS continues to coordinate the various independent railway administrations of the 12 CIS countries).

(b) Second, for comparison, four alternative rail routes through other neighbouring countries, showing rail distances from Tashkent, as a typical city in Central Asia: (i) via the trans-Caspian ferry through Azerbaijan to the port of Batumi, Georgia, on the Black Sea; (ii) via the new (opened in 1992) route to a port in China; (iii) via the new route (opened in 1996) through the Islamic Republic of Iran to the port of Bandar Abbas; and (iv) via the same new route through the Islamic Republic of Iran to the port of Istanbul, Turkey. (Other proposed alternatives are indicated in the discussion below).

A. The traditional rail and road connections through the Russian Federation

33. The railroad has been the traditional means of transport of goods, particularly for longer distances, since rails were laid in Central Asia over a century ago. Railroads have been supplemented with a sizeable road network, with linkage particularly to the adjoining Russian Federation. Given the overwhelming preponderance of inter-republic trade under the Soviet Union and the predominance of transit routes through the Russian Federation, even for foreign trade, it is not surprising that the great bulk of surface freight continues to move using the traditional links to and through the Russian Federation.

1. Rail links through the Russian Federation

34. Three of the main rail routes parallel to the Trans-Siberian Railroad pass across northern Kazakhstan (through Petropavlovsk, Kokshetau and Aqmola (see map 1). This major set of corridors (west to Moscow, the Baltic and western Europe and east to Vladivostok and the Pacific) can be accessed through three major north-south rail connections from Kazakhstan: one, entering the Russian Federation near Orenburg to the west, another near Semipalatinsk to the east, and the third direct rail line north from Tashkent or Almaty to Aqmola. A fourth major north-south line runs along the western side of the Central Asian republics, from Charjew in Turkmenistan, through Uzbekistan and Kazakhstan, to the Russian Federation at Astrakhan, on the Caspian Sea, and thus to the rail links westward to the Black Sea.

35. The continuing convenience of these traditional rail connections stems from the fact that the Central Asian rail lines had been part of the single rail system of the former Soviet Union (which, in many operating respects, such as scheduling of through trains and the setting of tariffs, continues to function as a coordinated system) and the fact that the use of some alternative routes has been constricted because of political unrest and because other newer options are only beginning to come on line.

2. Road links through the Russian Federation

36. The road network within the former Soviet Union, while fairly well developed, never played a major role in the transport of goods owing to the long distances involved and the official priority given to railways. For bulky raw material products, the railway would seem to be the logical choice. But rail tariffs have increased considerably (in relative terms) recently, and may well increase even further as subsidy elements in past pricing are eliminated or if non-competitive pricing policies come to be pursued - all of which would encourage the use of alternative modes (or routes) of transport. This is especially relevant for Central Asian countries which must now pay in hard currency for the use of the existing long railway transit corridors. For these Central Asian republics, the alternative of using road vehicles owned and operated by themselves and therefore involving only minimal foreign exchange outlays (for fuel en route, etc.) would surely seem increasingly attractive if the problem of security en route and of extra informal payments to move goods could be overcome. Now, all too often it seems necessary for road cargo vehicles to be accompanied by armed guards, which also adds to the cost of transport.

B. Trans-Caspian ferry routes by rail and road

1. Existing route: Turkmenbashi-Baki-Black Sea and proposals for its rehabilitation and extension to Turkey and Europe

37. The shortest link from the Central Asian republics to an ocean-going seaport is the one by rail through Turkmenistan to the Caspian Sea port of Turkmenbashi (formerly Krasnovodsk), then by rail ferry to the port of Baki (formerly Baku) in Azerbaijan, and finally by rail to the Black Sea ports of Batumi or Poti in Georgia (see map 4). Political unrest and hostilities in the Caucasus (affecting Armenia and Azerbaijan starting in 1989 and Georgia beginning in 1992) have reduced the use of this route, in addition to the decline in rail traffic resulting from economic restructuring. Only about 1 million tons per year appear to have been shipped through the ports of Baki and Batumi in recent years (in part related to food aid shipments), as compared with a former flow of 5 million tons annually. Some recent reports indicate that at most one ferry a day operates between Turkmenbashi and Baki, compared with the former seven ferries per day. Port facilities in Turkmenbashi need rehabilitation (as do those in the Kazakstan port of Aktau), and there has been damage from a long-term rise in the Caspian Sea level (2 metres since 1977). The only rail connection to Turkey on this route had been from Tbilisi, the

capital of Georgia, through Armenia (Gyumri) to Kars on the Turkish rail network, but this route was closed by Turkey with the outbreak of hostilities between Armenia and Azerbaijan.

38. The trans-Caspian ferry service handles road vehicles as well as rail cars, so that through traffic from Central Asia to and from Black Sea ports has been possible. There is also a road connection south from Batumi in Georgia to the Turkish road network.

39. At the UNCTAD/UNDP Technical Meeting held in Ankara in November 1995 (see para. 4 above), the representatives of the Governments of Turkey and Georgia put forward proposals: (a) to rehabilitate existing transit routes, both rail and road, from Baki on the Caspian Sea through Azerbaijan and Georgia to the ports of Batumi and Poti on the Black Sea; (b) to renovate the ports of Turkmenbashi and Baki and the trans-Caspian ferry service between them; (c) to build a new direct rail link between Turkey and Georgia; and (d) to seek to provide rail ferry services across the Black Sea to Ukraine, Bulgaria and Romania from the ports of Poti (in Georgia) or Samsun (in Turkey).

40. The proposed new rail link would have a capacity of 5 million tons per year and would be built from Kars in Turkey to Vale and Akhaltsikhe in Georgia. Preliminary engineering plans to establish a route and rough calculations of cost have been made, but the feasibility of the project in terms of costs and benefits in the light of realistic projections of traffic volumes has yet to be established. The 92.5 km distance in Turkey would cost about \$140 million, with an additional 35 km to be built in Georgia. A change of gauge would be required at the border - from 1,435 mm on the Turkish side to 1,520 on the Georgia side. (The reopening of the old rail route - should political conditions permit it - from Kars in Turkey to Gyumri in Armenia, and then connecting to Georgia, remains a theoretical possibility; in fact, the Turkish authorities have applied to ECE to upgrade this old route to qualify for treatment under the European Agreement on Important International Combined Transport Lines and Related Installations, and this proposal was accepted by the ECE Working Party on Combined Transport on 26 March 1996 and will be submitted to the United Nations Legal Office; it may be expected to come into force, legally speaking, in the second half of 1997.)

41. This initiative by Turkey and Georgia on the Caspian-Black Sea corridor has the broader aim of making the newly refurbished corridor one of the major conduits for Central Asian trade with Europe, by both rail and road. On the basis of a rough preliminary calculation by the Turkish authorities, fulfilling this broader aim would call for an expenditure of \$5 billion over five years to upgrade rail and road links from Almaty, Bishkek, Tashkent, Dushanbe and Ashgabat to Turkmenistan, as well as to make the improvements in the trans-Caspian-Black Sea-Turkey-Europe route mentioned earlier.

42. The European Union's Transport Corridor: Europe-Caucasus-Asia (TRACECA) programme contains a number of technical assistance projects, now under way, in support of the Central Asian transit transport environment, with special emphasis on improving Central Asian access to and use of the trans-Caspian and trans-Caucasus routes. A list of these projects is shown in box 2. An example of one result of these efforts is a move to ship Central Asian cotton to Europe

Box 2

TRACECA* PROJECTS OF RELEVANCE TO TRANSIT TRANSPORT FOR
 THE CENTRAL ASIAN REPUBLICS

<u>Number</u>	<u>Title</u>	<u>Budget</u> (Thousands of European Currency units)	<u>Completion</u> <u>target date</u>
1	Transfer/legal framework	300	Dec. 1994
2 and 3	Information systems: East-West and West-East	600	Dec. 1994
4	Rising level Caspian Sea	250	July 1995
5	Human resources: railways training	250	Dec. 1995
6	Road vehicle spare parts	300	Sept. 1996
7	Rail tracker freight monitoring system	850	Jan. 1998
8	Road transport services (Caucasus)	250	Nov. 1996
9	Intermodal transport	500	Jan. 1997
10	Human resources: transport management training	900	July 1997
11	Regional traffic forecasting model	700	Apr. 1997
12	Transport legal and regulatory framework	1 500	Jan. 1998
13	Implementation of pavement management systems	1 000	Mar. 1997
14	Human resources: maritime training	700	May 1997
15	Rolling stock maintenance	700	Feb. 1997
16	TRACECA trade facilitation	800	Feb. 1997
17	Railways infrastructure maintenance (Caucasus)	1 200	Mar. 1997
18	Road transport services (Central Asia)	600	Jan. 1997
19	Railways infrastructure maintenance (Central Asia)	1 200	Jan. 1997
20	Ferry terminals: Baki and Krasnovodsk	800	Feb. 1997
21	Technical assistance for Aktau port	1 500	Dec. 1997
22	Legal advice - Poti grain terminal	250	July 1996
	Total	15 150	

* Transport Corridor: Europe-Caucasus-Asia.

via the Caspian-Caucasus route, starting with trial shipments of 60,000 tons, but with the expectation that this might lead to a flow of 3 million tons per year by this route. The World Bank is supporting a project for the rehabilitation of road and rail routes in Georgia, and the World Bank and EBRD are financing a road maintenance and rehabilitation project in Armenia (see box 3).

Box 3

PROJECTS OF THE EUROPEAN BANK FOR RECONSTRUCTION AND DEVELOPMENT
AND THE WORLD BANK OF RELEVANCE TO TRANSIT TRANSPORT FOR THE
CENTRAL ASIAN REPUBLICS

A. European Bank for Reconstruction and Development

EBRD financed a regional transport sector study, "Central Asia outline transport strategy". The purpose of the study was to prepare an outline strategy for the development of major arteries of interregional, international and associated domestic trade and transport in, through and between the countries. The study was completed in 1995.

The following is a list of the project and ongoing technical cooperation projects in Central Asia and the Caucasus, all of which are related to actual or proposed EBRD loan projects:

- Turkmenistan: Preparation of a road improvement project (Ashgabat-Mary); study of Turmenbashi port development project.
- Armenia: Assistance related to the proposed road improvement project (to be co-financed with the World Bank).
- Azerbaijan: Assistance related to a proposed road improvement project.
- Georgia: Grain terminal (Poti port) project: economic and technical assessment, environmental assessment, tender preparation and implementation, and recommendation for legal structures within the context of structuring and instituting a concession.
- Kazakstan: Aktau port reconstruction project: financial and institutional advisory services, preparation of detailed designs and tender documents, and institutional development of Aktau port.

In addition to the loan projects already indicated above, EBRD is considering railway rehabilitation projects for Kazakstan and for Turkmenistan, a transport distribution centre project for Azerbaijan, and the Bishkek-Osh road project for Kyrgyzstan.

As to the Aktau port project EBRD is providing some \$54 million (out of a total project cost of about \$76 million) for improvements in the port, involving the raising of the level of several berth facilities by 2 metres, including one specialized grain facility and one general cargo facility, as well as raising the level of some pipes on the breakwater. The project document was signed in April 1996, and is regarded as phase 1, covering the most immediate requirements.

B. World Bank

In September 1995, the World Bank approved a road maintenance and rehabilitation project for Armenia, totalling \$35 million (of which \$16 million would be provided by the World Bank) - with co-financing by France, Kuwait and EBRD.

In March 1996, the World Bank approved a transport rehabilitation project, covering both road and rail, for Georgia - with a project total of \$20 million (of which about \$10 million would be provided by the World Bank).

The World Bank is also actively considering financing a US\$ 100 million highway maintenance and rehabilitation project for priority sections of international road corridors in Kazakstan. The financing would provide some 1,500 km of maintenance and 250 km of rehabilitation.

2. Other suggested Caspian Sea alternative routes

43. There have been many suggestions for other routes based on ferry service across the Caspian Sea. These include: (a) a route from Turkmenbashi to Astrakhan in the Russian Federation; (b) similar routes from Kazakstan ports (such as Aktau) to possible ports in the Islamic Republic of Iran, as well as to Baki or Astrakhan; (c) the possibility of a rail line along parts of the east shore of the Caspian Sea (from Bandar-e Torkeman to Turkmenbashi, or even on to Aktau), with connecting ferry service to Astrakhan, to provide a more direct link between the Islamic Republic of Iran and the Russian Federation. Most of these ideas remain at a preliminary stage, though capital improvements in the port of Aktau are being financed by EBRD and are supported by technical assistance from TRACECA (see boxes 2 and 3). Furthermore, in the Islamic Republic of Iran, a new 20 km rail line is under construction from the port of Amirabad on the south shore of the Caspian Sea to the main rail network and thus ports on the Persian Gulf.

C. Other rail links outside the Russian Federation, to the east, west and south

1. The new rail link (1992) to China

44. A new rail link from Kazakhstan (Druzhba) to China (Urumqi) was completed in 1992, thus permitting through traffic all the way to the Pacific coast of China (see map 3). Trans-shipment capacity at Druzhba is currently limited to about 1 million tons annually, a capacity still not reached in 1994. Since the opening of the link, the volume of goods traffic between Kazakhstan and China has remained relatively low: 726,000 tons in 1992, 571,000 tons in 1993, and 525,000 tons in 1994. One reason for the modest level of cargo may be that rail tariffs across China to the port of Lianyungang were 30 per cent higher than for the alternative route through the Russian Federation to Vladivostok - even though the latter route is 1,500 km longer and many operating costs in China were lower than in the Russian Federation. Kazakhstan railways have plans to increase their trans-shipment capacity to 12 million tons per year but have only very limited funds for this purpose. (There is a gauge change at Druzhba from tracks with a width of 1,435 mm on the Chinese side to 1,520 mm on the Kazakhstan (CIS) side.)

2. The new rail link (1996) into the Islamic Republic of Iran to the Persian Gulf and Turkey

45. With the link to China already a reality, the last elements of a rail route reconstituting the old silk route finally fell into place in 1996. Work was completed in April 1996 on the last link between the rail network of Central Asia, at Tejen in Turkmenistan, and that of the Islamic Republic of Iran at Mashhad (see map 4), with the two sides having built towards the border station at Sarakhs in Turkmenistan (where there is a track gauge change from the CIS standard of 1,520 mm to the European standard of 1,435 mm). The new link thus makes possible service between Persian Gulf ports and the Central Asian republics, as well as between Istanbul and the Central Asian republics - with onward rail connections feasible all the way to China.

46. The historic north-south rail connection was agreed upon in 1989 (based on designs done in 1977-1978), with actual construction beginning in 1991. The 164 km stretch from Mashhad to Sarakhs cost \$171 million, while the 132 km Tejen-Sarakhs link cost \$45 million. Initial operation of the border station at Sarakhs was expected to start at 1 million tons of goods per year, with 11 freight trains per day, each of 45-50 wagons, and 2 passenger trains, each of 10 cars. The dispatch of freight trains through the station was expected to take 4 hours, and passenger trains 80 minutes. Present capacity is about 5 million tons per year. With further investment, the design capacity of the station of 10 million tons of goods per year could be achieved in a few years.

47. The route opened on 13 May 1996 with great fanfare, starting with an opening ceremony in Mashhad attended by officials from more than 50 countries, including 12 heads of State. Participants travelled by a special train called "Pride" along the new rail line, with further ceremonies at the border at Sarakhs, and then proceeded to Ashgabat, the capital of Turkmenistan, for a

summit meeting on 14 May of the 10 members of ECO - the Islamic Republic of Iran, Pakistan, and Turkey, plus the five Central Asian republics, and Azerbaijan and Afghanistan - at which further improvements in transport and trade ties for the region were to be discussed (see also box 4).

Box 4

OUTLINE PLAN OF THE ECONOMIC COOPERATION ORGANIZATION
FOR THE DEVELOPMENT OF THE TRANSPORT SECTOR

The Economic Cooperation Organization (ECO) comprises the five Central Asian Republics, Afghanistan, Azerbaijan, Iran (Islamic Republic of), Pakistan and Turkey). The meeting of transport ministers of ECO held at Almaty in October 1993 adopted an outline plan for the development of the transport sector in the ECO region. Its aims and objectives included the following:

1. To enable trucks to travel from one end of the region to the other in accordance with international accepted standards and by routes prescribed by member States.
2. To expand and integrate national railway networks to permit transport by rail from one end of the region to the other.
3. To expand air connections so as to provide air connection between capitals and major cities of each of the ECO countries at least once a week.
4. To expand port facilities to handle the seaborne trade of the region.
5. To conclude bilateral or multilateral agreements within or beyond the region that may be necessary to facilitate such transport, including access through new border and customs posts that may be established.

A high-level expert group meeting on the implementation of the outline plan was held at Almaty in July 1995. The recommendations of the group, concerning additions and improvements to the rail and road networks in the region, are reflected later in the present report and in maps 3 and 4.

48. Much work has been done, and more is planned, within the Islamic Republic of Iran on extending its rail network in the south to its modernized port of Bandar-e Abbas at the Strait of Hormuz at the mouth of the Persian Gulf. The final connection between Mashhad, by way of Tehran, to Bandar Abbas (i.e. from Bafq to the port) was officially opened on 18 March 1995. A more direct route from Mashhad to the same port is expected to be built across the desert directly from Mashhad to Bafq (790 km) in the next few years (perhaps by 2000), thereby considerably shortening (by more than 900 km) the distance for access to the Persian Gulf from Central Asia (see map 4). For most of the Central Asian

region, this new shorter rail link to the south would then be about the same length as the trans-Caspian route to Batumi - about 2,950 km from Tashkent.

49. The rail link from the Islamic Republic of Iran into Turkey, now accessible to Central Asian republics, has one physical bottleneck limiting through capacity to Istanbul, that is, the 96 km rail ferry crossing of Lake Van in eastern Turkey. Two ferries able to carry 16 railway wagons each make three round trips per day - with a total annual capacity of 500,000 to 600,000 tons. A 250 km railway bypass in mountainous terrain around the northern side of the lake, which could increase capacity to 4 million tons of goods per year, is under consideration. Aside from physical bottlenecks, the basic problem of obtaining agreement on simplified unified documents covering through shipment of goods between the CIS area and Western European countries has not yet been resolved, adding greatly to the complications, costs and risks of using a through rail route to Europe.

3. Possible rail connections to Karachi

50. The first connection by rail from the Islamic Republic of Iran to Pakistan requires the closing of one gap, and this has been under active consideration; indeed, the building of a new railroad (545 km) from Zahedan to Kerman within the Islamic Republic of Iran has begun; when completed, rail service would thus be available from Central Asia to Karachi, via the Islamic Republic of Iran (with an additional gauge change for the Pakistan railways to 1,676 mm) (see map 4).

51. A much shorter rail connection to Karachi would be possible from the Central Asian republics if either one of two proposed rail routes through Afghanistan were built (see map 4).

D. Other road links outside the Russian Federation, to the east, west and south

1. Road links to China

52. Map 3 also shows the road connections from the Central Asian republics into China, which might permit additional access by road vehicles to the new rail route from Druzhba in Kazakstan to Urumqi and Lanzhou inside China. In all of China, there are perhaps only 1,000 or so miles of paved road, so that through truck traffic by modern highway routes must await the future. In the meantime, container trains could link rail lines to more modern highways in the Central Asian republics and beyond.

2. Road links to Turkey, the Islamic Republic of Iran, Pakistan and India

53. Map 5 shows the road links from the Central Asian republics to the Islamic Republic of Iran, Turkey, Afghanistan, Pakistan (including the high mountain route through Kashgar in China) and India. This network of roads has been designated by ECO and ESCAP as being already able to support international transport. Of particular interest is the Almaty-Istanbul highway, shown on map 5, which is considered the backbone of an east-west highway ultimately intended to provide a road link between China and Turkey. The importance of this route has been recognized and was reaffirmed in 1992 through an agreement among seven ECO member countries. The design, construction and reconstruction of some sections are under way; when finished, this Almaty-Istanbul highway is intended to meet the high technical standards required for efficient international through traffic (see also box 4).

V. REDUCING THE COSTS AND IMPROVING THE EFFICIENCY OF
TRANSIT TRANSPORT: OBSTACLES, OPPORTUNITIES AND
PROPOSALS FOR ACTION

A. Elements of a programme for improving the efficiency of
the current transit environment: highlights of the
recommendations of the Technical Meeting

54. The present report has stressed the greatly expanded role that trade with foreign countries will play in the growth and well-being of the Central Asian countries, and therefore the critical importance of transit transport, given the remoteness from most world markets and the landlocked status of these countries. Thus, the UNCTAD/UNDP-sponsored Technical Meeting, held at Ankara in November 1995 (para. 4 above), had before it matters of great consequence for the future prosperity of the Central Asian republics and their transit partners.

55. Given the rich variety of existing transit routes, the new routes that have just opened, and the many suggestions for other possible routes, the region is in the process of evaluating where it now stands in respect of transit transport, seeking to take immediate steps to make some of these routes viable and searching for the best options for future emphasis. The Technical Meeting sought to move this evaluation process forward, giving emphasis to the necessary immediate and longer-term actions by focusing on four areas: evaluating alternative routes and their comparative costs; considering bottlenecks in physical infrastructure and ways to remove them; assessing non-physical barriers to the efficient use of the available transit transport corridors and steps to remove them; and finally moving towards a framework for future cooperation.

B. Evaluating alternative transit transport routes

56. The Technical Meeting concluded that:

(a) The trans-Caucasian corridor, by rail and by road, proposed by Georgia and Turkey held great promise for shortening the transport distances to the

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Black Sea and Mediterranean ports and overland routes to Europe; the Meeting recommended that donors give special attention to the most urgent bottlenecks on the route, that is, to the need to construct the Kars/Vale rail segment with bogie-changing facilities and the need to improve the port and ferry facilities in Turkmenbashi and Baki;

(b) The newly opened corridor from Central Asia through Sarakhs provided the shortest access to the Indian Ocean and also access to Europe via Turkey, and recommended that donors give special attention to the most urgent bottlenecks on the route, that is to expansion of the capacity of the border-crossing gauge change station at Sarakhs to its full design capacity of 10 million tons per year, and construction of the 250 km rail bypass around Lake Van in Turkey.

57. The Technical Meeting concluded that there was a strong need for better information on the real costs of the use of existing transit transport routes and the probable costs associated with new or improved alternative routes. Such information was important for Governments, exporters, importers, freight forwarders and investors. In order for the calculation to be useful, it must also include the costs of delay, risk and insurance, of maintaining security, and of formal and informal payments along the route. The task was difficult, and some first practical steps were needed.

58. The Meeting recommended that arrangements should be proposed for collecting comparative data on real transit transport costs and for upgrading such data on a regular basis. As a first step, UNCTAD was requested to collect available information and to estimate the real costs of using selected existing and proposed transit transport corridors and routes and to make a comparative analysis of those costs.

C. Physical infrastructure bottlenecks

59. Many serious technical problems have been noted in the use of physical infrastructure, such as outdated vehicles and rolling stock, lack of repair facilities, lack of financial means to buy new vehicles, problems of break gauge, bogie change and axle load on railroads, and problems of CIS brake systems and automatic coupling (SA-3), which are not compatible with the wagons and trains of non-CIS countries. These bottlenecks merit urgent attention so that solutions might be found. The Technical Meeting: (a) invited Governments to establish temporary special technical conditions to permit the movement of road vehicles not fully corresponding to international standards; (b) encouraged the production of motor vehicles corresponding to international technical standards within the region, if feasible; (c) encouraged producers (and sales agencies) of high-standard road vehicles in developed countries to explore the possibility of selling their used vehicles to the region; and (d) invited donors to provide financial assistance for the countries of the region in order to upgrade road-transport vehicles to international standards.

D. Non-physical barriers to the more efficient use of available transit corridors

60. The greatest pay-off in terms of increases in efficiency and lowered real costs of transport is likely to come about from a full-scale effort to improve a whole range of institutional, procedural, regulatory, managerial and other non-physical aspects of vital importance to the actual movement of goods to and from markets in the region or abroad. This range of issues has been addressed internationally by the development of a whole series of sophisticated techniques for facilitating trade movements and customs procedures and for simplifying documentation requirements. International agencies such as UNCTAD are able to provide technical cooperation support to enable countries like the Central Asian republics and their transit neighbours to obtain sophisticated and effective procedural and data-handling enhancements of the modern kind to facilitate their trade, as well as training programmes to make them work.

61. With respect to rail transport harmonization, the Technical Meeting noted that differences in legal regimes between members of CIS and its neighbours outside the region hampered the uniform application of liability regimes. It recommended that all countries should work towards becoming members of the Convention concerning International Carriage by Rail and the International Convention concerning the Carriage of Goods by Rail, both developed in Western Europe, and possibly consider being members of both conventions and the Agreement on International Goods Traffic by Rail, which was now the standard for CIS countries. It also urged the governing bodies for the two sets of standards to work towards harmonization of their respective conventions.

62. There is a need to manage rolling stock and to install modern train management schemes. The Meeting recommended that countries consider introducing modern, compatible PC-based wagon-tracking systems, such as the Advance Cargo Information System (ACIS) (UNCTAD), to maximize the use of rolling stock, provide planned maintenance and allow production of railway statistical information.

63. With respect to road transport, the Meeting recommended that all countries should accede to the Customs Convention on the International Transport of Goods under Cover of TIR Carnets (TIR Convention) of 1959, that all road transport associations within the region should join the International Road Transport Union (IRU), and that a guaranteeing organization to back up the issuance of TIR Carnets should be established in each country. Furthermore, bilateral or multilateral efforts should be made for the mutual recognition of national drivers' licences and road-transport permits, road-user charges should be harmonized between countries, and a scheme for motor vehicle third party insurance should be adopted.

64. With respect to transport legislation, the Meeting recommended that countries organize exchanges of information in order to harmonize rules and procedures, with the possible collaboration of regional and/or international organizations, and that countries of the region adopt a harmonized approach to the development of transport legislation and consider adopting multimodal transport legislation.

65. The Meeting also recommended the strengthening of national trade and transport facilitation bodies, as well as regional forums that would coordinate common approaches and solutions to transport problems.

66. It recommended that the application of electronic data interchange (EDI) should be encouraged throughout the region, and that when EDI was being introduced, United Nations Rules for Electronic Data Interchange for Administration, Commerce and Transport (UN/EDIFACT) standards should be used whenever appropriate.

67. Customs procedures are applied or interpreted differently in various parts of the region. Furthermore, lack of correct documents at border crossings and lack of standardization of documents and of the procedures to complete them have been found to be a major impediment to timely customs clearance. The Meeting recommended: (a) that customs procedures be harmonized, and agreed common clearance procedures introduced on the basis of the World Customs Organization (WCO) instruments; (b) that trade and related transport documents should be standardized and harmonized following the United Nations layout key, where appropriate; (c) that customs authorities should be encouraged to introduce customs clearance software packages providing for UN/EDIFACT standards for communications purposes, and should consider computerization of customs procedures using the Automated System for Customs Data (ASYCUDA) developed by UNCTAD; and (d) that ports and cross-border cooperation groups to solve common local problems should be established or strengthened.

68. There is an important need for training, at both the regional and the national levels, for both public and private organizations (both users and providers) dealing with trade and transport, and a particular need for training in the field of implementation of a number of trade- and transport-related international conventions and agreements. In particular, the following subjects for training need to be addressed: (a) awareness of TIR and other international conventions and agreements in the fields of customs, trade and transport; (b) practical implementation of such international conventions and agreements; (c) application of internationally recognized carrier-liability regimes; (d) day-to-day operations in respect of procedures and documents; (e) complicated procedures causing bottlenecks in the transport chain; (f) use of modern trade terms (INCOTERMS); (g) use of the International Chamber of Commerce (ICC) Uniform Customs and Practices for Documentary Credits; (h) customs procedures for both officials and users from the private sector; (i) awareness of intellectual property rights issues; and (j) multimodal transport issues.

E. Towards a framework for future cooperation

69. With respect to both physical and non-physical standards, there has been international cooperation on the legal and regulatory framework for transport between countries for the past half century; this cooperation has advanced under the auspices particularly of ECE, which has elaborated 50 different international transport agreements and conventions, dating from 1949 to 1994. The efficiency questions that these conventions address go to the heart of regional cooperation. If two adjoining countries do not agree on a set of

common rules on how goods passing through each other's territory will be treated, then national law will prevail in each case, and a motor vehicle, for example, might be subject to multiple unnecessary inspections, might require different insurance coverage, might be subject to special license requirements, etc. The potential effect of driving through a series of countries without standard rules quickly leads to chaos and to a stop in transit traffic in goods. Modern transit agreements are indeed a prerequisite for efficient international transport.

70. Consideration of the legal requirements for transit transport cooperation within a particular region has led to the recognition of the need to develop, in appropriate circumstances, a transit transport framework agreement, and the time may soon be ripe for such an agreement for the Central Asian republics and their transit neighbours. The agreement would need to be sensitive to the differing degrees to which individual countries have already adapted to modern international models of transit transport cooperation. Some possible elements that might be included in a transit transport framework agreement are shown in box 5.

Box 5

SOME POSSIBLE ELEMENTS OF A TRANSIT TRANSPORT FRAMEWORK
AGREEMENT CONCERNING CENTRAL ASIAN COUNTRIES AND THEIR
TRANSIT TRANSPORT NEIGHBOURS

The basic thrust behind the move towards a transit transport framework agreement is the recognition that transit transport cannot occur efficiently without agreement on a common set of rules among all the countries concerned. Without such agreement, there is often chaos. Transporters are forced to adjust to totally different practical and legal requirements in each country they pass through, with repeated and wasteful delays, inspections and formalities that make transport a nightmare and result in astronomical costs. It is in everyone's interest to avoid such anarchy. The subjects on which agreements are needed are manifold. A framework agreement can set forth the subjects on which agreements are to be reached, giving priority to items that must be decided first but putting in place an ongoing mechanism for continuing to improve conditions and setting a time-frame for meeting higher standards of safety, security, and infrastructure quality from which all users will ultimately benefit.

Thus a framework agreement might include: (a) provisions for freedom of transit, including non-discrimination against goods of any origin or destination, avoidance of unnecessary delays and exemption from any charges other than those to meet the administrative costs of transit; (b) designation of transit transport corridors, including rail, road, and inland waterways, and including provision of adequate frontier facilities and services

(terminals, border-crossing points, gauge interchange stations, ferry-link ports and navigational aids), and further including measures to expedite clearance of traffic, ensure the safety of traffic in transit, permit transport companies to establish offices in transit countries and obtain multiple visa entry; (c) maritime ports and facilities to be provided for the use of transit traffic; (d) general conditions for road transport, including the use of appropriate traffic regulations, freedom to select the best means of transport, requirement for approval of any carriage of internal traffic by a transiting carrier, permission for carriers to remain in the transit country as long as necessary, provisions regarding road transport permits, technical requirements for vehicles, provision of fuel and lubricants, mutual recognition of driving permits and of certificates of roadworthiness, motor vehicle third party insurance provisions, and requirement of equal treatment of national and transit companies regarding charges and financial obligations; (e) general conditions for rail transport, including designated interchange stations at borders and arrangements for technical inspections; (f) general conditions for inland water transport, including navigation aids, maximum loads, ship papers, vessel registration, and certificates of seaworthiness; (g) the contract of carriage of goods in transit, including consignment notes, passenger tickets, luggage registration, liability of the carrier, liability for delay, liability for personal injury, liability for loss or damage to luggage, compensation for loss of goods, combined responsibility of carriers, and compensation for injury or death; (h) customs control, including minimizing controls, joint inspections, and the establishment of a customs transit system; (i) documentation and procedures, including limit on number of documents and alignment and harmonization with international standards; (j) miscellaneous provisions, including special rules on the transport of dangerous goods, agreement to establish a "Transit Transport Coordination Authority" with decision authority over disputes and authority to propose amendments to the agreement, and arrangements for the arbitration of disputes.

71. The Technical Meeting considered appropriate next steps towards a transit transport framework agreement. It urged countries to accede to the most important agreements and conventions and also to make the needed bilateral agreements to facilitate transit transport. It called for an effective regional institutional mechanism to provide for a harmonized approach to transit transport matters, and it urged all concerned international and regional organizations to strengthen their activities which promoted regionally adopted legal and administrative solutions that facilitated regional and international transport and trade.

Appendix IBASIC DATA ON THE CENTRAL ASIAN REPUBLICS: DISTANCE TO THE
SEA, AREA, POPULATION AND GNP PER CAPITA

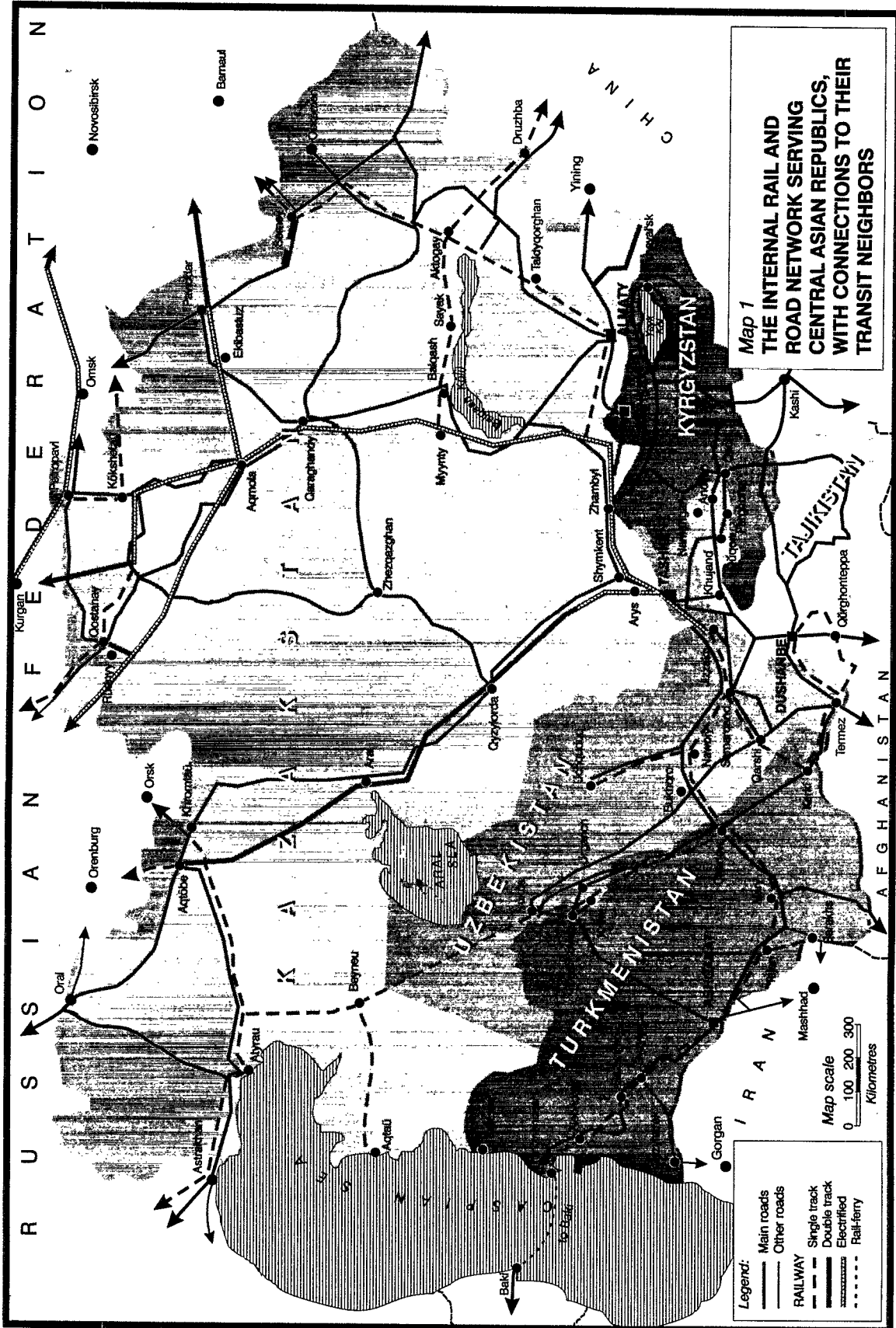
Central Asian republics	Distance to sea <u>a/</u>	<u>Area</u> (thousands of sq km)	<u>Population b/</u> (millions)	<u>GNP per capita c/</u> (US dollars)
Kazakstan	3 700	2 717	16.7	1 680
Kyrgyzstan	3 400	199	4.5	820
Tajikistan	3 300	143	5.8	490
Turkmenistan	1 700	488	4.4	1 230
Uzbekistan	3 000	450	22.6	850
Total	-	3 997	54.0	-

a/ Estimated shortest distance by surface route from each country's capital through one or more transit countries, to the nearest port for ocean-going vessels.

b/ 1994 estimates at year end (Statistical Committee of CIS).

c/ World Bank estimates for 1992.

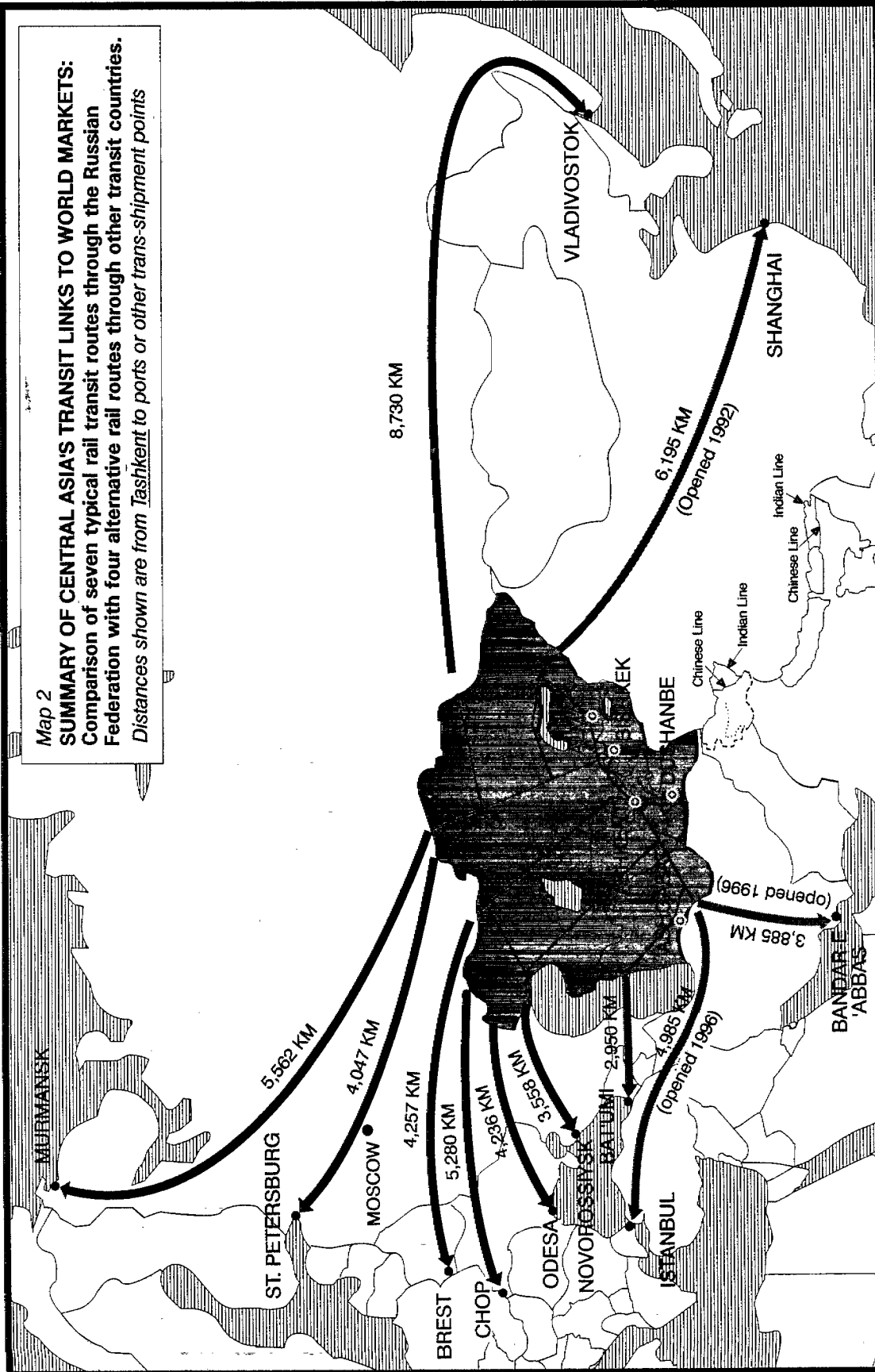
Appendix II



The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

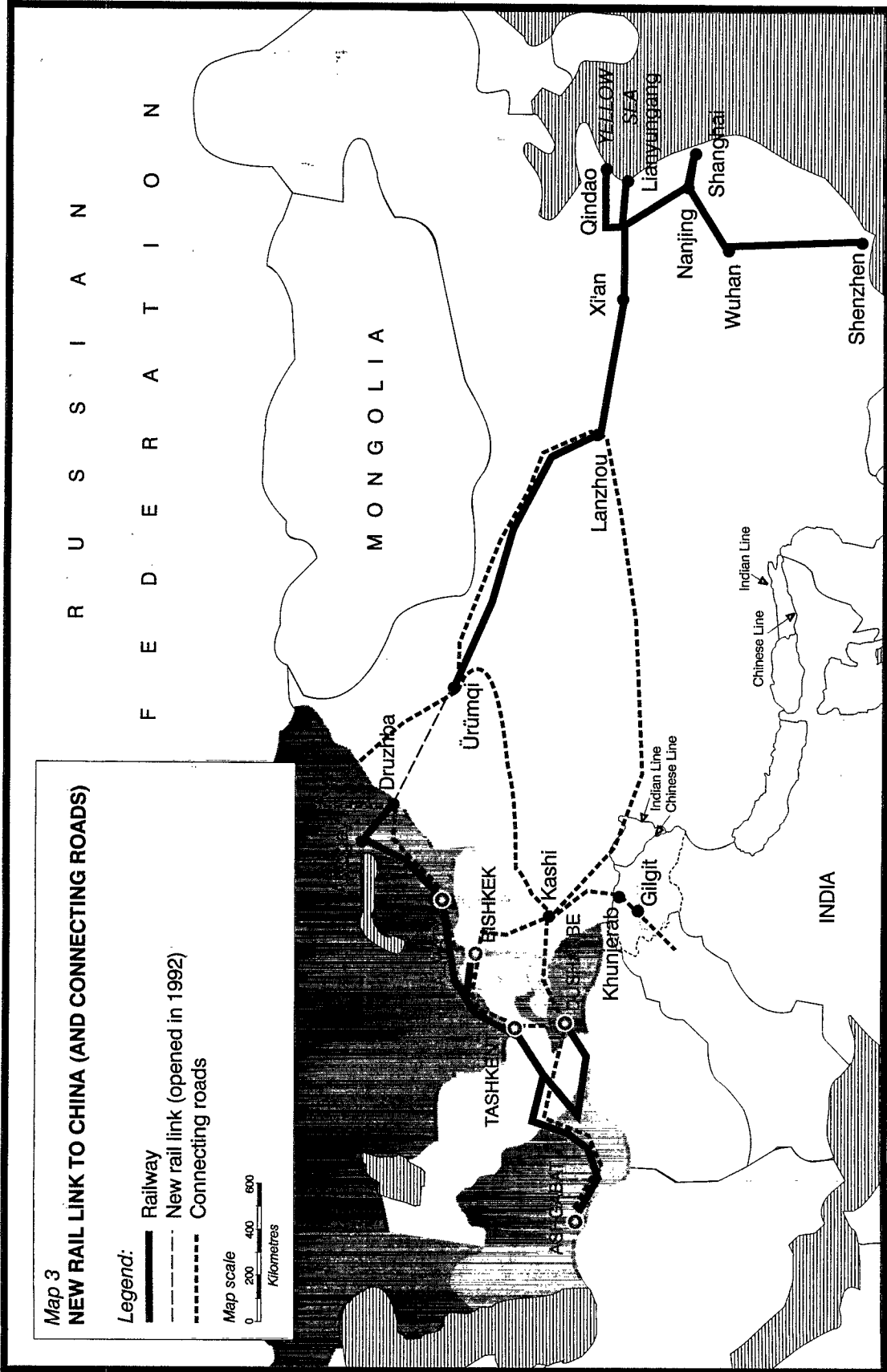
Map 2

SUMMARY OF CENTRAL ASIA'S TRANSIT LINKS TO WORLD MARKETS:
 Comparison of seven typical rail transit routes through the Russian Federation with four alternative rail routes through other transit countries.
 Distances shown are from *Tashkent* to ports or other trans-shipment points



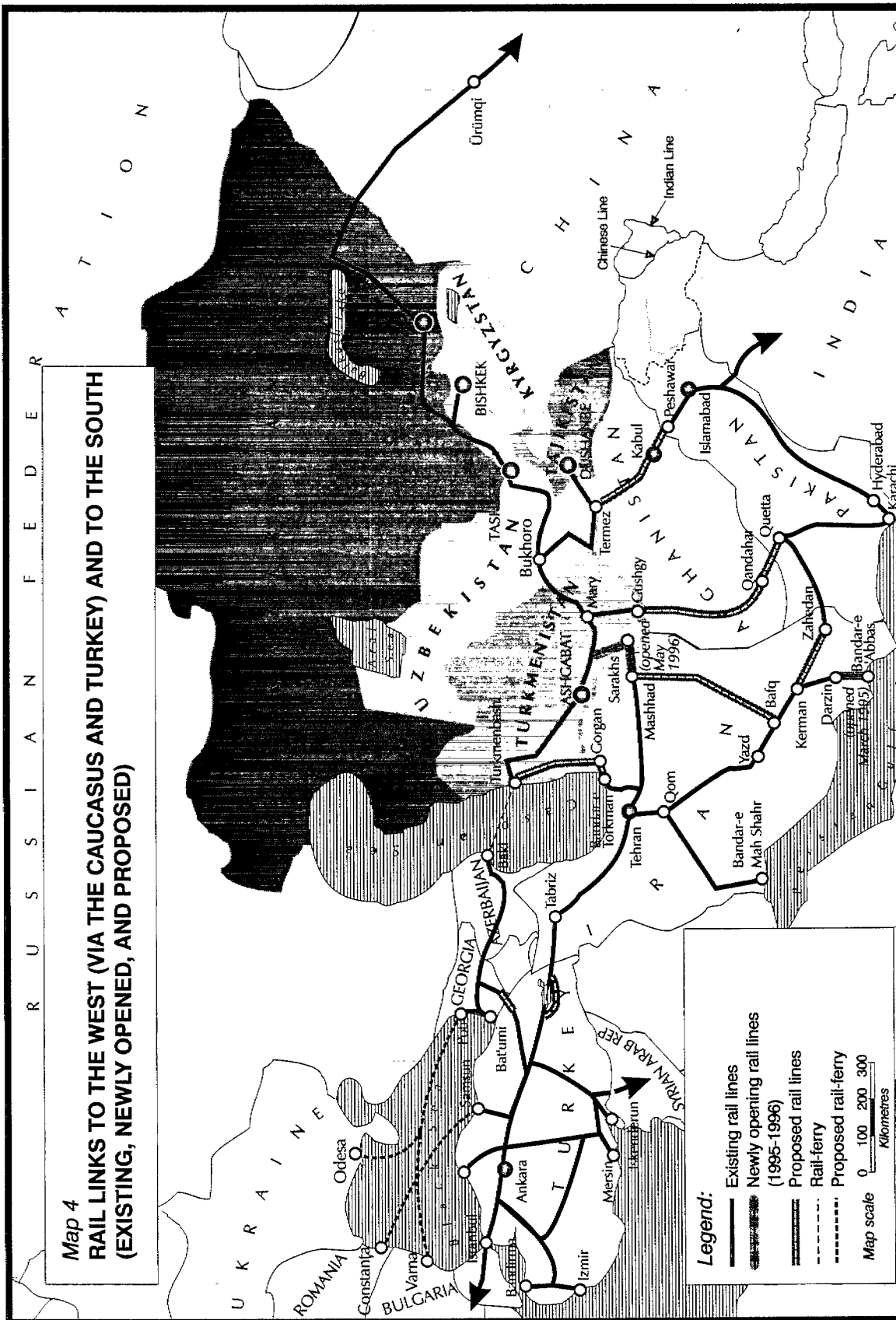
The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties.



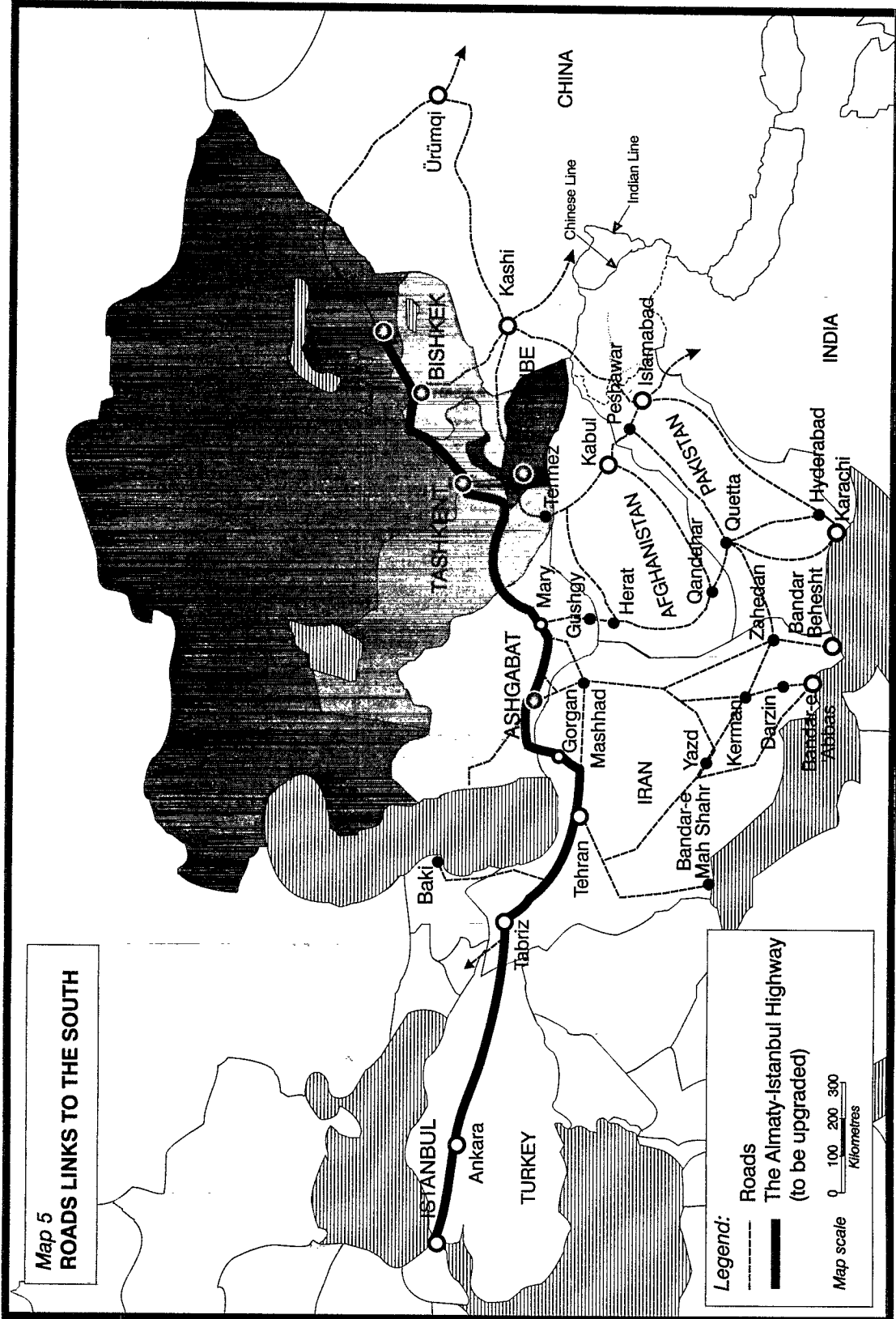
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Sources of the maps

1. Adapted from the report of the European Bank for Reconstruction and Development, "Central Asia Outline Transport Strategy: Final report", April 1995.

2-5. Adapted from the study, Land Transport Linkages from Central Asia to seaports in the south and east (ST/ESCAP/1560), and from statements by Georgia, Iran (Islamic Republic of), and Turkey at the Technical Meeting on Central Asia's Transit Transport Links with World Markets, Ankara, November 1995.
