

EUROPEAN UNION - TACIS

TACIS TRACECA PROGRAMME

Terms of Reference

for

**FEASIBILITY STUDY OF NEW TERMINAL FACILITIES IN THE
GEORGIAN PORTS OF POTI AND BATUMI, AND THEIR LINKS
TO THE TRANS EUROPEAN NETWORK**

Final Recipients:

MINISTRY OF TRANSPORT OF GEORGIA

Table of contents

1. Background
 - 1.1 Needs of Beneficiaries
 - 1.2 Problems to be addressed
 - 1.3 Relation to past and present Tacis projects
 - 1.4 Co-ordination with other donors
2. Rationale and objectives
 - 2.1 Overall objectives
 - 2.2 Project purpose
 - 2.3 Results
3. Risks and Assumptions
 - 3.1 Assumptions
 - 3.2 Risks
- 4 Main Components
 - 4.1 Tasks
 - 4.2 Outline of implementation procedures
 - 4.3 Rough timetable
 - 4.4 Global budget
5. Reporting
 - 5.1 Reporting
6. Factors assuring sustainability
 - 6.1 Institutional appraisal
 - 6.2 Economic and financial appraisal
 - 6.3 Political environment
7. Environmental Impact
8. Monitoring and Evaluation

1. BACKGROUND

The Beneficiary of this project is the Ministry of Transport of Georgia.

1.1 NEEDS OF BENEFICIARY.

During May 1993 a conference was held in Brussels organised by the European Commission and attended by authorities of the eight Republics of the south of the former USSR:

Armenia,
Azerbaijan,
Georgia,
Kazakstan,

Kyrgyzstan,
Tadjikistan,
Turkmenistan,
Uzbekistan.

They are the Beneficiary States of this programme.

The objectives of the conference were :

- to stimulate co-operation among the participating Republics in all matters pertaining to the development and improvement of trade within the Region
- to promote the Central Asian - Trans Caucasian - Europe Transport Corridor
- to identify problems and deficiencies in the Region's trade and transport systems
- to define, in terms of contents and timing a Technical Assistance Programme to be financed by the European Union (EU).

TRACECA (Transport Corridor Europe Caucasus Asia) was thence created as a component of the TACIS interstate programme.

1.1.2 The broad aim of the project would be to help Georgia and its hinterland countries to diversify and improve their access to international markets. The region has rich oil, natural gas reserves and minerals. It grows significant amounts of cotton and has the potential to produce and export other agriculture products. Other planned and ongoing technical assistance and investment projects in the region aim to safeguard the transit capacity throughout the Traceca Corridor.

1.1.3 Three Crete corridors of TEN (Trans European Network) have outlets at the Black Sea ports of Odessa, Varna and Constanza. The inland waterway system of the Rhine Main Danube is a potential link to the EU, as are the sea routes into and through the Mediteranean. The increasing amount of traffic between Europe and the Caucasus and Central Asia results in an urgent need for an investment programme for the Georgian ports of Poti and Batumi, especially for the upgrading and construction of terminals which would ensure efficient connections with other Black Sea ports, and of full port support facilities.

1.1.4 In order to have a general picture of the maritime trade flows from Europe to the Caucasus all important maritime links have to be examined, and their potential established. These would include links with Mediterranean ports (Greece, France, Italy and Spain), North Sea ports (France, Belgium, Holland, Germany and Denmark), the Black Sea Ports and the inland water network of Europe via the Danube.

Thereafter a feasibility study should point out which kind of general cargo facilities are required (product related) including the necessary sheds for cotton transit flow.

1.1.5 Discussions are going on between Ukraine and Georgia to establish a rail ferry service between the port of Ilyichevsk near Odessa and a Georgian port. This service would extend the existing service between Ilyichevsk and Varna. In Varna and in Ilyichevsk, a rail ferry terminal has reportedly been established and is used for the Varna-Ilyichevsk service. This service could be extended to the Georgian ports.

Two Ukraine ferries and two Bulgarian ferries are reportedly available and are used for the service. The ships have a capacity of 108 rail wagons. These ferry boats can carry rail wagons and motor cars and trucks. The gauge difference between the FSU and other European systems is an obvious complication to the wide extension of such services.

Discussions about a new terminal have been held between Ukraine officials and port and town officials of Poti. In some government documents Poti is mentioned as the candidate for the terminal. A rail ferry terminal and a Ro-Ro terminal are foreseen in the general master plan of reconstruction of Poti port. Discussions are also going on between the Government of Romania and the Port Authority of Poti in order to develop a Ro-Ro and / or Ferry link between Costanza and Poti. The construction of these terminals has not started for lack of funds.

The port of Batumi is also candidate to host a new terminal. Discussions similar to those in Poti have taken place. The pre-project of a terminal in Batumi is ready. It is claimed that the company, operating the Ilyichevsk-Varna ferry service, with the assistance of the Maritime Institute of Odessa has prepared a detailed design for a terminal in Batumi including a cost-estimate. In the port, preparatory work was started by site clearing and demolition. For the construction of the terminal and rail sidings, outside investment is sought.

The status, technical viability of these different plans and credibility of reported intentions need to be established early in the project.

1.2 PROBLEMS TO BE ADDRESSED.

The TRACECA programme has addressed a number of bottlenecks along the route through to Central Asia, but there is at present no finely defined strategy to link the route to the TEN, excepting the obvious fact that the Georgian ports of Poti and Batoumi must play a key role. By implication, the shipping routes to Europe, and indeed to other destinations, must be closely studied.

The lack of regular modern shipping services to the Georgian ports, for whatever reasons, must be overcome. Forwarders and traders are not overly attracted to use the ports. Rival routings also have problems, but the Georgian ports are not taking full advantage of the opportunities present. The present usage is somewhat captive, and the ports are not truly competitive.

The certain growth of the petroleum industry around the Caspian Sea imposes evolution and development of the ports. There is a risk that they will become restrictive bottlenecks on the hinterland development, rather than the poles of growth which their geographic position allows.

Masterplans are needed for the long term development of both ports involving the port areas themselves and, possibly outside related sites where developments are feasible and economically and financially justified.

This involves an extensive examination of the present adverse conditions and organisation of shipping to serve the ports, traffic forecasts by class, and realistic estimation of the costs. These expenses should be estimated per handled ton of cargo. The final cost of transportation and handling should allow the cargo to be competitive on the International markets. The speed and reliability of port services provided should match clients needs. Evidently such development also requires consideration of Customs regulations, security and insurance, to provide a convivial environment for traffic growth. The institutional structure of the ports must certainly evolve.

The subsequent problem is to determine and advise on which of the two Ports will be the most appropriate to host the expected future traffic. Factors to consider include existing facilities, traditional trades, accessibility and possible draft problems in the ports and in the approach channels. The ideal complementarity of the two ports needs to be established, in terms of national economic interest.

Specific problems concerned are the necessity to use the Ports potential storage capacity for export and import products such as cotton, ore, forest products, etc. The Ports should function as transit space for these products, and as opportunity allows, to support trading and value adding activities within and close by.

The physical infrastructure requires rehabilitated and should be adapted to meet the requirements of present and future.

Present deficiencies include:

- conditions for navigation
- the quay walls
- the quay aprons
- the crane rails and electrical supply
- the stacking areas
- the storage facilities
- the maintenance facilities
- the offices
- the existing cranes and cargo handling equipment
- the service fleet and navigational aids.

New facilities permitting modern transport methods and technologies should be introduced, possibly including:

- ferry terminal development
- stacking areas for unit loads and Project Cargo and related equipment such as heavy lift cranes, trailers forklifts etc.
- containers stacking areas with handling gear
- possible wagon cleaning/washing installations, etc.

1.3 RELATION TO PAST AND PRESENT TACIS PROJECTS.

Much highly relevant detailed study work has already been performed, and will be made available to the successful tenderer (but not before award of the contract).

The Commission of the European Communities financed a study on "Port of Poti Development and Freight Traffic Re-organisation in Georgia". This study was executed by Rogge Marine Consulting GmbH. The final report dates from July 1993.

G.T.Z. financed the "Optimising and Reorganisation Study for the Ports of Poti and Batumi. The work was carried out by HPC Hamburg Port Consulting GmbH.

TACIS/EBRD are promoting development of a possible privatised grain terminal in Georgia, under construction in Poti.

A TACIS project has reportedly prepared a master plan for the port of Odessa.

PHARE has commissioned several studies of the Romanian and Bulgarian ports, of the Balkans region, and the Rhine Main Danube corridor. The consultant will be required to obtain the final reports for these projects for assimilation in the present project.

A TRACECA project "Traffic Forecasting" is carrying out comprehensive data collection and modelling of traffic on the TRACECA networks. This provides a data base of customs declared commodities moved throughout the TRACECA region and to external destinations (21 commodity groups), details of costing and times on the land side transport, existing traffic flows calibrated to the commodity flows, and future projections of traffic. Detailed flows of traffic within the Black Sea and the Mediterranean are not included in this study.

A TRACECA Trade Facilitation project has developed detailed recommendations for Customs procedures throughout the region, including ports. This project has also considered in some detail the cotton trade, which is an important potential cargo source, and the problems encountered by that trade in the use of Poti port.

In 1994, the Designing Institute "Georgiaproject" of Tbilisi prepared for the account of the Ministry Cabinet of the Georgian Republic a "Technical and Economical Subsidiation" study for the Reconstruction of the Commercial Sea Port of Poti. Some estimates by FSU researchers forecast high levels of traffic.

All these projects should be taken into account by the Consultant. Particularly all TACIS and PHARE past, present and planned investment and development projects concerning Ports on the Black Sea. Traffic forecasts between these ports should be evaluated and duplication of work avoided. It is to be noted however that field visits to Black Sea and possibly to other ports will probably be necessary.

1.4 CO-ORDINATION WITH OTHER DONORS.

The European Bank for Reconstruction and Development (EBRD) is seriously considering financing port rehabilitation in Georgia. This project has been developed in close collaboration with the EBRD and the consultant will be required to liaise closely with that bank's officials.

The World Bank is providing support to the transport sector in Georgia, though not as far as is known, to ports.

GTZ has been active in support of the Georgian transport sector. Other EU states are considering provision of bi-lateral aid.

Divers private investors, including Sealand, the petroleum industry, and FSU companies are demonstrating interest in the Georgian ports, and the project may be carried out in an environment of competing interests.

It is the policy of TRACECA to collaborate very closely with other donors/investors, and indeed to actively promote such collaboration where it may be absent. Also other TRACECA projects will run concurrently with this one, and the consultant will therefore be required to exchange data, and to attend regular co-ordination meetings, with other consultants and agencies.

2. RATIONAL AND OBJECTIVES

2.1 OVERALL OBJECTIVES

The ultimate objective of this project is to foster the realisation of modern cargo terminals in the Georgian ports. The two ports should be able to provide services which:

- attract trade from the TRACECA hinterland and elsewhere
- promote regular fast shipping links to the worlds markets by whatever specialised vessels that trade requires

The project should define and justify the physical improvements and the organisational transformations necessary.

2.2. PURPOSE OF THE PROJECT.

Long-term development recommendations are to be prepared, taking into account the traffic growth forecast to and from other Black Sea ports, Mediterranean ports, North Sea ports (detailed links to the TEN), and world wide (overview). Special emphasis should be paid to the container traffic development.

Over and above the needs of the ports, the study must also identify the present constraints on traffic with Europe, be they in the ports themselves, the organisation of the shipping lines, commercial traditions, or elsewhere, and define remedies to lift those constraints.

Undoubtedly the present general conditions of the Ports do not attract cargo, though latent demand is present. This applies not only to the equipment such as cranes, forklifts, stacking areas, sheds and power supply, but also to the organisation and management of the cargo handling activities.

At present due to these restrictions in equipment availability and low productivity, the Black Sea shippers do not send modern and efficient vessels to the ports. This, in turn, reduces productivity and increases overall cost. Normally, if the Ports were able to handle cargo properly with high productivity equipment, the shippers would follow call with modern vessels. This implies the necessity to analyse the future needs of accessibility to the Ports and eventual draft problems in the Ports and in the Channels.

A particular concern is the adaptation of ports to the cotton trade, which has a high potential but is under-served, particularly by the storage facilities.

A feasibility study is to be carried out in parallel for the Port of Poti and for the Port of Batumi. The Consultant shall report to the Georgian Ministry of Transport if the feasibility study shows that the construction of a specific facility in one of the Georgian ports has major economic advantages above its location in the other port. The consultants recommendations for the location of each specific facility shall be based on national economic interest.

2.3 RESULTS.

The study is to be divided into 4 phases. Each phase will be followed by a "break point" and a period during which the results of the phase will be reviewed by the Owner, Tacis and the EBRD. A decision will be taken whether to proceed with the next phase or not and the scope of work for this phase will be confirmed or amended in the light of the findings of the preceding phase. The phase outputs are as follows.

Phase 1

1. Review of the present pattern and trends of shipping in the Black Sea, and services to destinations in the Mediterranean and world-wide.
2. Review of the present technical facilities, strengths and weaknesses of the Black Sea ports, the potential direct service correspondencies for the Georgian ports, the technologies for those connections (RoRo, containerisation,...).
3. Definition of the principal traffic for which the Georgian ports are to be developed and the probable range of volumes of such traffic.
4. Recommendations on the most viable route connections between TRACECA and the TEN.
5. Establishment of the total unit transport cost that the various commodities transiting through Georgian ports could be expected to sustain while remaining competitive in world markets.
6. An outline review of the present Georgian port facilities and existing development projects identified during the Inception Period.
7. Definition of the functional requirements of the ports.
8. Proposals to develop the cotton storage facilities in one or both ports
9. Preliminary data collection for the environmental assessment.

Phase 2

1. Master Plans for the two ports;
2. Phased development plans for specific priority investments relating the costs to traffic capacity, growth and revenue;
3. Cash flow forecast for the priority investment as assumed above considering a maximum term of ten years including the construction period.
4. Economic and financial analysis of the recommended development. Before testing feasibility of the investment, the basic outline of the project structure should be proposed and discussed;
5. Environmental assessment of the development and subsequent port operations;
6. Recommendations for any improvements in management structure and systems;
7. Analytical review of possible options to introduce and facilitate the entry of private investment in parts of the envisaged port infrastructure development (e.g. build-and-transfer; build-operate-and-transfer; rehabilitate-operate-and-transfer, etc.);

Phase 3

1. Preliminary engineering designs and outline specifications for the principal components of the first phase of the recommended development;
2. Assessment of the Beneficiary's credit worthiness for a possible Bank loan and of possible other project finance arrangements by private investors.
3. Assistance in preparation of the relevant legal documents (which might include concession, project guarantees, etc.)
4. Should the preceding work indicate the need and opportunity for a private sector investor and recommend his selection by tender process, the Consultant will prepare tender documentation for the selection of a private partner and assist in tender process finalisation.

Phase 4

1. Tender Documents for the construction works and supply of equipment (if appropriate) of the planned first phase of development, and assistance in tender finalisation process, to the beneficiaries and to the EBRD.
2. Assist with inviting tenders for the development, selecting contractors and placing contracts.
3. RISKS AND ASSUMPTIONS.

3.1 Assumptions.

It is assumed that free market forces will not respond quickly and cohesively enough to permit the timely and orderly development of the two Georgian ports. In fact there is private investor interest in certain facilities, but the strength of that interest appears amorphous. It is assumed that the intervention of TRACECA technical assistance to enable EBRD investment will provide a lead, by which the ports will become viable commercial entities serving the TRACECA hinterland and its links to the EU.

3.2 Risks.

Risks to the implementation of the project are several and may for example originate in:

- government decisions concerning the ownership of the naval base of Poti
- municipal authorities decisions concerning the ownership of certain land in the close vicinity of the Ports
- conditions imposed by the investing banks which must be accepted and fulfilled by the port authorities and the Beneficiary
- possible political or social instability
- possible social objectives which could too strongly influence the authorities decision making process, overwhelming technical and economic factors.

The above mentioned risks and others should be taken into consideration, and alternative solutions should be found, where possible.

4. MAIN COMPONENTS.

4.1 Tasks

The Consultant must remain in close contact, throughout the project, with the the two port authorities. All the documents which the Consultant has to prepare for this project, need the approval of the Beneficiary, Tacis and the EBRD. The feasibility study is carried out in parallel for the Port of Poti and for the Port of Batumi.

4.1.1 Phase 1

4.1.1.1 Review of previous studies, and of ports and shipping in the Black Sea.

The consultant will procure and review all previous pertinent studies, including those by TACIS and PHARE (see Section 1.3), trade journal reviews, and conference papers.

He will validate findings and verify conditions by site visits as may be necessary.

He will interview representatives of shipping lines, freight forwarders, major clients, and any other agencies who are familiar with the conditions for international transport in the Black sea ring, to determine the wider patterns for traffic in the region, the logic of the present feeder and liner services and the competitive environment in which the ports of Poti and Batumi must survive.

4.1.1.2 Definition of Traffic

The study is then to focus on the major traffic on which the viability of the ports is likely to depend. Data sources should include a review and analysis of historic traffic through the ports, characterised by origin, destination, sizes and types of ships, mode of preceding or onward transport and any pronounced seasonal trends. This review should cover all parts of the ports, including the oil jetties. The product categories should correspond with those of the TRACECA Traffic Forecasting project (21 commodities) and the reports of the Forecasting project may be used as basic input data. However the consultant will be required to refresh this data locally, and to develop it on the basis of commercial potential which the consultant will be best able to determine.

In addition to the ports' traditional traffic, specific attention must be given to the potential for new trade, for example, export of cotton from the hinterland countries and project cargoes for oil related and other industrial developments. The historic data should be supplemented by an analysis of economic activity in the area of influence (hinterland) of the ports and of the present and future transportation systems serving it. The Consultant should also consider the gateway role that the ports may play for Central Asian transit traffic. Further structured interviews should be undertaken with major existing and potential shippers both in the public and private sectors. The Consultant should provide a review of all the main exportable commodities in the hinterland countries for which the ports could be used and also identify any promising import cargoes. (N.B. posted or faxed questionnaires are not to be considered as an adequate investigative tool for this task).

Specific Project Cargo related to, for example oil-field developments, should be investigated.

A review should be made of the availability of shipping to support the potential traffic in general, and the criteria for operators to service the Georgian ports with modern vessels.

Special attention will be paid to the use of containers, and to other forms of unitisation or neo-bulk, which might be introduced in the future.

The results of these studies should be presented as short, medium and long term forecasts over a period of 15 years. Each item of identified traffic should include the following information:

- The possible origins and destinations and linking trade routes;
- The constraints, conditions or qualifications on the development of the traffic; and
- Assessments of the probability of the development of the traffic and the possible variations in the volumes.

4.1.1.4 Estimates of Unit Transport Costs

The purpose of this part of the study is to set approximate yardsticks for the scale of the development that could reasonably be contemplated for each item of traffic. From the data established, the Consultant should estimate the total transport costs of foreign currency earning commodities from their source to their ultimate destination by each of the alternative routes and relate these to the current competitive market price of the commodity. In turn, he should then estimate the proportion of the total transport cost that could be allocated for port handling.

4.1.1.5 Present Port Facilities and Operations

This part of the study comprises for each of the two Georgian ports a review and engineering evaluation of the present port facilities and an appreciation of the operations. Its purpose is to establish the needs and possibilities for rehabilitation and development of the ports. It should include but not be limited to the components listed below.

The 1993 Rogge-Marine Report together with GTZ Report could be used as base document.

1. A topographical survey of the main part of the ports. This survey should cover the outline of the ports, the inland boundaries and the connecting road and rail links, marshalling and parking areas, as far as they may eventually need to be modified to improve port efficiency. Accurate benchmarks should be established on which further detailed survey work can be based. A plan should be produced to a 1 /2500 scale or finer;
2. An inventory of all existing port infrastructure, major items of equipment and port craft;
3. An engineering evaluation of the condition of the existing facilities, such as quays, pavements, buildings and equipment;
4. An appraisal of the adequacy of the existing utilities, including any external services on which the port is dependent;
5. Estimates of the productivity of the port, in terms of cargo handling rates and turnaround times etc. This should include identification of any capacity constraints imposed by shed and open storage space limitations, inefficient layouts, rail wagon availability or the like;
6. An evaluation of the organisational structure and the capability, qualifications and experience of the current port operations staff and administrative personnel;
7. A commentary on financial reporting procedures and controls, maintenance of traffic statistics and general planning data.
8. A review of the navigational conditions. This will include maintenance dredging and navigation aids;

Also, the consultant will visit the ports of Odessa and Ilyichevsk and appraise the viability of the rail ferry link, its infrastructure and equipment, which is reported to operate from there.

4.1.1.5 Functional Requirements of Ports

Based on the results of the Phase 1 work, the functional requirements of the ports necessary to handle the various types and quantities of traffic should be set out in detail. The requirements will be expressed in numbers, types and capacities of the various facilities. This should include the operating assumptions on which the estimates have been made, such as numbers of ships, average consignments, berth occupancies, handling rates, stacking densities, seasonal and peaking factors. The requirements should include external infrastructure needs and additional land area if necessary.

4.1.1.6 Cotton Storage

Cotton storage in the Georgian ports is a priority problem since there is a political will and a multi-state concessionary rail tariff agreement to encourage the shipment of Central Asian cotton through Poti. New facilities should be foreseen to modern standards in respect of size, use of handling equipment, protection against moisture and dirt, ventilation, accesses, fire prevention and protection, and construction materials used.

4.1.1.7 Preparation of an outline for the environmental assessment

The Consultant should identify at this stage any environmental factors which might eventually constrain the ports' development (see Section 3.2.4).

4.1.1.8 Phase 1 Report

The Phase 1 report should cover the Consultant's recommendations:

- on the links between TRACECA and the TEN, forcibly maritime
- the development options for the two Georgian ports, and the orientation of further work in Phase 2 (which port, which type of cargo, timing).

The consultant will propose a development programme for the TRACECA-TEN links. This will inventory and analyse the advantages and disadvantages of specific routes and technologies (Odessa, Rhine-Main-Danube, Southern Mediterranean Ports....RoRo, container facilities,...Cost, time, reliability, image,...). In conclusion it will recommend actions that could be taken, complementary to those at Georgian Ports, to reinforce those links and render them more commercially attractive. The development of the Georgian Ports will be dealt with in detail by the remainder of the project.

It could be apparent at this stage that the level of near term investment justified in one of ports (or conceivably both) is relatively low, and that the Consultants further services should be reallocated to provide greater assistance with actual implementation of commercialisation, fostering links with commercial partners, institutional reform, management support, restructuring, training, and similar activities.

The effects of whatever development may take place at any one Georgian port will inevitably impact the other, and rivalry may be aggravated. The consultants recommendations are to be explained in terms of national economic interest. The two ports are to be fully implicated in the project, and if one is much more favourably placed to receive investment, then an appropriate restructuring plan is in any case to be developed for the other.

4.1.2 PHASE 2

4.1.2.1 Physical Master Plans

A conceptual long-term Master Plan for each port should be prepared to meet the identified functional requirements in the most efficient manner. The plans should consider and include: i) recommended zoning for land use; ii) the access and circulation patterns for maritime, road and rail traffic; iii) the locations and conceptual outlines of proposed port installations and facilities; and, iv) recommendations to reduce any negative impact of port-related activities on the environment. In designing the Master Plans, the Consultant should consider what scope there is for each port to continue to handle cargoes while the development works are undertaken. The plans should also provide guidelines to reserve the shoreline for port use and zone the land between the shoreline and the town/railway trunk lines for port related activities and industries. (The Town Administrations will be advised to stop any development in this area until the Master Plans has been agreed and adopted).

Possible installation of a wagon-cleaning facility should be proposed. This refers to cleaning of bulk wagons, oil tank wagons and eventually containers. Environmental impact of such a facility should be assessed.

4.1.2.2 Phased Development Plans

The development of the ports according to the Master Plans should be divided into phases, taking account of the following criteria:

- Each phase of the development should be homogenous and capable of realisation as a discrete unit;
- Each phase should ideally provide capacity for its foreseen traffic with minimum capital expenditure, and maximum utilisation of under-utilised facilities;
- Commissioning of the first phase of cargo handling facilities should be effected as soon as possible.

Detailed capital cost estimates will be made for the first phase of the development on the basis of outline engineering concepts.

Specific priority investments shall be identified.

A cash flow forecast should demonstrate the financial feasibility of the projects considered over a maximum of ten years including the construction period. This may serve to attract involvement of the private sector in such projects.

The EBRD should be consulted during the preparation of these cash flow forecasts.

4.1.2.3 Public Participation

The consultant shall identify any requirement for public participation associated with the project and make recommendations as to how these requirements should be met. If no formal requirements are identified, measures to be taken to achieve adequate public participation will be suggested.

4.1.2.4 Management Structure and Systems

The purpose of this part of the study will determine the probable nature of, and costs associated with, necessary institutional improvements in the port operations. The Consultant shall analyse the existing port management structures in both ports and the permanent staff and recommend what changes are required to make the Owners and Port Management functions more efficiently. If appropriate, the Consultant shall recommend ways to increase the involvement of the private sector in port activities and identify the legal, regulatory and fiscal pre-requisites which need to be established to attract private entrepreneurship and investment. Specific recommendations shall also be made with respect to financial and credit controls and to improving the ports' approach to the marketing of their services.

The maintenance problems of infrastructure and equipment are an important consideration. In the management structure organisational recommendations should be given to implement an efficient maintenance policy in the Ports.

Statistics and costing methodology should be based on common standards, to assist in comparison of the performance of the ports.

Recommendations should be formulated for customs procedures (and physical facilities for customs services, as well as other ancillary services).

4.1.2.5 Economic and Financial Analysis

An economic cost/benefit analysis of the recommended development will be conducted focusing on the costs and benefits to the national economy and identifying potential project risks. Cost estimates for the economic and financial analyses should be comprehensive and include all costs that would be necessary for the development, such as handling equipment, port labour, debt servicing, environmental mitigation measures etc. Operating costs should be similarly comprehensive and include, for example, dredging, pilotage and tugs, stevedoring and all other operating expenses.

The economic analysis should be carried out based on discounted flows of costs and benefits over 15 years, leading to reporting of the common economic indicators (NPV,...). Benefits of the project are likely to be reduced transport costs for the key commodities and revenues from traffic that could otherwise not be handled and would be turned away without the proposed development. Sensitivity analyses should be carried out for all significant variables, including the cost of capital.

The financial analysis carried out for the recommended development should cover the construction period and the first five years of operation. Assumptions made to estimate cost and revenue flows should be stated, including port tariffs, loan conditions, depreciation schedules and operating costs. The results of the analysis should be reported in terms of net cash flow, profitability and financial rate of return. Sensitivity tests should be carried out on the significant variables.

4.1.2.6 Environmental Assessment

Based on preliminary environmental information obtained in Phase 1, the Consultant shall conduct an Environmental Assessment (EA) using the format outlined in Annex 5 of the EBRD's "Environmental Procedures".

Anticipated adverse environmental impacts associated with both the construction and operation stages of the port facilities shall be evaluated. Recommendations shall be made for needed mitigation measures. The need for disposal of all waste products (such as waste water, sewage, garbage, dirty ballast) shall be considered and treatment of other disposal facilities shall be included as components for the development. Attention should also be given to measures needed in order to ensure the compliance with MARPOL and the handling of the IMCO cargo (International Treaty, governing the environmental management of ports).

The Consultant shall define the scope of exceptional additional surveys or investigations that may be required, and quantify any costs associated with environmental mitigation measures.

4.1.2.7 Introduction of private investors in new port infrastructures.

The Consultant should produce an assessment of possible options to introduce and facilitate the introduction of private investment in parts of the envisaged ports on associated infrastructure development (e.g. build-and-transfer; build-operate-and-transfer; rehabilitate-operate-and-transfer, etc.)

4.1.2.8 Phase 2 Report

The port Master Plans should be issued as the Phase 2 reports. The format of issue, in one or separate volumes will be discussed with TACIS.

The recommendations should be supported by the detailed results of the preceding work, particularly the economic and financial analyses, the conclusions drawn from the sensitivity tests and a commentary on the assessed risks to the success of the development.

The cash flow analysis and the economic and financial feasibility should deal with discrete facilities which could eventually be developed privately, should interest be forthcoming.

The Phase 2 report will prioritise the investments necessary and be used for discussion with the EBRD and/or other investors, of which physical components should be the subject of further detailed work within the study.

4.1.3 PHASE 3

4.1.3.1 Preliminary Engineering Designs

The purpose of this part of the study is to carry out preliminary engineering for the selected development to such level that all items of the project are fully identified with outline specifications and shown on key drawings. The Consultant should carry out further topographical surveys and, if necessary, hydrographic surveys to the detail required for eventual design drawings, together with detailed inventories of utilities. It is not intended that geotechnical or hydrographic surveys should be undertaken at this stage unless crucial to decisions required (they should eventually be included in Phase 4). Cost estimates will be detailed more fully and refined on the basis of the preliminary engineering.

The output from this work should be presented as a Design Report, together with general arrangement drawings and cost tables. This report should provide a brief for subsequent production of detailed designs, tender drawings and Bills of Quantities. The report should be suitable for adoption if required as a brief for design-and-build or build, operate and transfer (BOT) contracts.

4.1.3.2 Assessment of Owner's Credit Worthiness

The Consultant will amplify and extend the financial analysis prepared in Phase 2 to present financial accounts for each port (balance sheet, P & L account, source and application of funds etc.). These accounts should originate from an analysis of the balance sheets and other accounting documents of the last three years and be extended for a further 15 years. Revenues will be based on defined cargo categories and tariffs and working capital requirements will be identified.

In the course of this work, the Consultant will review the tariff, fee and rental structure of the ports and make recommendations for changes. He will also propose methods for collecting and analysing statistical information on port operations. An organisational restructuring plan together with any new personnel requirements and an appropriate training programme will be prepared and presented to the Owner.

4.1.3.3 Legal Documents.

Should earlier phases indicate the need and opportunity for private investment by concession or any other mechanism the the Consultant should prepare the full documentation for the introduction of the tender documents. This covers, for example, the necessary ownership for any proposed land acquisition or renting, possible ownership exchange, the preparation of contracts with the possible private operators or investors; the concession documentation and the financial approach to the privatisation.

The legal status of the ports presently, during and after restructuring, will in any eventuality need to be established by the consultant.

Agreements will be required between different authorities concerned with the future developments of the ports, also covering the very long-term development projects. This includes to start developing agreements with the land owners and governmental bodies concerned with the country development plans.

4.1.4 PHASE 4

4.1.4.1 Preparation of Tender Documents

On the basis of the Design Report prepared from the Feasibility Studies, the Consultant shall carry out detailed designs for all components of the first phase of development and prepare tender documents for international competitive bidding for the civil construction works and the supply of any equipment to be included in the development, either as one or several contracts as may be recommended in the Design Report or agreed with the EBRD, Tacis and the beneficiary. The documents will be prepared in accordance with EBRD's Procurement Rules and Policies and the construction contract will normally be based on FIDIC standard documents unless otherwise agreed in discussion with the EBRD and the beneficiary.

The scope of the procurement necessary may be comprehensive, to support the development objectives and purposes of Sections 1&2 of these TOR.

4.1.4.2 Assistance with Contracts

The Consultant's advice and assistance to the Owner in contract procurement shall include but not be limited to the following.

1. Advising on and drawing up a procurement programme.
2. Preparing and issuing Pre-qualification Documents to interested contractors responding to the EBRD's Procurement Notices.
3. Evaluating the Pre-qualification submissions and making recommendations to the Owner on the suitability of contractors for tender listing.
4. Preparing an Engineer's estimate and disbursement schedule for the contract works.
5. Preparing and issuing tender documents to selected bidders.
6. Arranging tender visits and answering tenderer's enquiries on behalf of the Owner.
7. Evaluating tenders and making recommendations to the Beneficiary on the selection of contractors.
8. Advising the Beneficiary on formal contract notices and procedures that may be necessary prior to commencement of the works and during the construction phase until completion, provisional and final acceptance of these works. Responsibility of the contractor during guarantee time should be clearly mentioned.
9. If the contract concerns the supply of equipment, the Consultant should also describe the spare parts to be delivered, the after-sale service requirements and the maintenance activity training of the future user of this equipment.

4. 2 OUTLINE OF IMPLEMENTATION PROCEDURE.

The substantial technical steps required for project implementation have been integrated into the work packages.

The Consultant will carry out the assignment in close co-operation with the management of both ports and the Ministry of Transport of Georgia.

Counterparts will be expected to provide freely time for discussion, attendance at seminars, existing feasibility studies, documentation etc. An initial kick-off seminar should be foreseen early in Phase 1 of the project to widely diffuse the project programme, to prepare for broad channels of communication with local authorities, and decide the formal interfaces with counterparts.

Local counterparts will not be expected to provide routine data collection, processing or logistic support services. Local experts or Institutions must be engaged as staff by the consultant for such tasks. The evaluation of tenderers proposals will be based in part on the amplitude and credibility of their dispositions to work with local entities. Time allocated to local staff (as distinct from Counterpart staff) must be clearly shown in the proposal.

EU consultants must spend a maximum of working time in the region. After no later than completion of Phase 1 of the project, the consultants Team Leader and key personnel should be permanently based in either Poti or Batumi and have permanent representation by local staff in both.

Any assemblies of counterparts or local experts within the NIS are to be arranged entirely at the expense of the consultant, including travel and accommodation of participants. Likewise office space, interpretation, secretarial services, and all other inputs required for the purposes of the work

are to be provided by the consultant. Telecommunications in the region are poor and the consultant must foresee whatever dispositions are necessary to overcome such difficulties.

The consultant will be required to attend regular Co-ordination meetings in the region, to collaborate fully with the TRACECA co-ordination structure, and to attend occasional co-ordination meetings in Brussels.

4.3 ROUGH TIMETABLE.

The time anticipated for the execution of the project is 12 months from inception till the submission of the draft tender documents. The Consultant will be expected to mobilise his team and start work within two weeks after contract signing. An initial planning meeting will be held with TACIS and the EBRD.

The reports at the end of each phase should be submitted as drafts. TACIS, the EBRD and the beneficiary will respond to the reports and give their instructions concerning further work within one month of the receipt of the reports. Following these comments the reports will be amended if necessary and reissued in final versions.

If it is decided, even before the submission of the reports of each phase to continue or to modify the project, the Consultant will be advised in due time in order to avoid time loss in the start of the next phase of the project.

The project schedule is as follows (key dates are at the end of the months):

Contract signing	0
Inception Report	1,5
Phase 1 report submitted	3
Phase 2 report submitted	6
Phase 3 Final report submitted	9
Draft tender documents	12

Subsequent activities such as prequalification and finalising of the tender documents after the receipt of comments from the Owner, TACIS and EBRD will proceed in accordance with the agreed procurement schedule. This may imply an extension to the contract duration to allow for negotiations between the beneficiary and the EBRD.

The Consultant may propose the alternative schedule provided that the overall time from contract signing till the submission of the draft tender documents is not increased and the review times for the Owner, TACIS and EBRD are not reduced.

4.4 GLOBAL BUDGET.

The total budget available for this project is 1.500.000 ECU.

At least 10% of the budget should be foreseen for local expert input.

The consultants technical proposal should clearly indicate the individual allocation of time to his proposed experts, and the proportion of time that each expert will spend on-site and at the home office.

5. REPORTING

All reports, tender documents and other deliverables are to be distributed in the numbers, languages and locations as follows:

	Bound		Loose-leaf		Diskette (Eng.+Rus)
	English	Russian	English	Russian	
TACIS Brussels	2	1	0	0	0
TRACECA Co-ordinating Team Brussels	5	1	1	1	1
TRACECA Co-ordinating Team Tbilisi	5	5	1	1	0
TRACECA CU Tbilisi	1	5	1	1	0
Poit Port	1	5	0	1	0
Batumi Port	1	5	0	1	0
EBRD	2	0	1	0	0

The word processing programme to be used will be agreed with TACIS.

The importance of high quality Russian texts, delivered on time, cannot be overemphasised..

Reporting is to be in accordance with standard TACIS Guidelines.

Additionally the consultant will be required to provide documentation to support the EBRD project development cycle which is:

Concept Clearance

Initial Revue

Final revue

6. FACTORS ENSURING SUSTAINABILITY.

6.1 Institutional Appraisal.

The Institutions involved are not strong and do not possess adequate resources even for their own administrative needs.

The Georgian Ministry of Transport is a new organisation which regroups previously separate entities responsible for the various transport modes.

The port authorities operate under extremely difficult technical and commercial conditions.

6.2 Economic and Financial Appraisal.

The port authorities have relatively small financial revenues and could not themselves provide investment follow-up to the project recommendations. Only the presence of the EBRD assures any realistic hope of the project objectives being achieved.

6.3 Political Environment.

The political situation in Georgia is among the most complex in the FSU, and this extends to the relationship between the ports, local and central government.

7. ENVIRONMENTAL IMPACT.

The Consultant shall identify the impact of the investments, developments changes in trade or modification to the existing installations and equipment. In the development of installations the Consultant should refer to the regulations applicable in the country, and the International regulations of MARPOL. In the development of container facilities, emphasis should be given to the safety regulations applicable for separation of containers, containing dangerous goods as described in the IMCO code. Special attention should be paid to fire safety and possible impact on the environment.

8. MONITORING AND EVALUATION.

Indicators of satisfactory progress and completion will be:

Production of the four phased progress reports and related documents, including the Master Plans and Tender Documents

Procurement and assimilation of previous studies

Establishment of adequate local offices at the ports

Engagement of sufficient and adequately qualified local personnel

Establishment of correct interfaces with beneficiary management staff at the two ports and the Ministry of Transport

Establishment of correct working relations with the EBRD, and support to their project development cycle.