Tacis

Feasibility Study of New Terminal Facilities of the Georgian Ports Plan

Annexes - Phase I

30 October 1997

Volume II - Annex

Questionnaire

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Part I General Questions

Port management	☐ Use part II of questionnaire
Shipping agencies	☐ Use part III of questionnaire
Shipping lines/Container operators*	☐ Use part IV of questionnaire
Forwarder/Integrator*	☐ Use part V of questionnaire
Shipper*	☐ Use part V of questionnaire
Consignee*	☐ Use part V of questionnaire

* Are you partly or in total the decision maker about the cargo routing?

☐ yes ☐ no

When yes, which part ?

_____

_____

Name and address of company

_____

_____

_____

Name of interview partner

_____

Position of interview partner (Sales oriented ?) ☐ yes ☐ no

_____

Communication links

Telephone _____

Fax _____

Telex _____

e-mail _____

Date of visit _____

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Part II Port management

A Common interest with Georgian Ports

1 Do you know what is TACIS/Traceca ?

☐ yes ☐ no (Explanation by interviewer)

2 Do you have already connections within the Traceca routes ?

☐ yes ☐ no (if no, next question)

If yes: Description of used Traceca routes

_____

_____

3 Do you think it is realistic, that your port could be a transhipment point between the Trans European Networks (TEN) and the Traceca routes ?

☐ yes ☐ no

Additional Comments:

_____

_____

4 Could you imagine to make advertising together with other transhipment ports on the before mentioned routes ?

☐ yes ☐ no

Additional Comments:

_____

_____

5 Do you have any comments to the existing possibilities ?

_____

_____

_____

_____

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6 What could be improved ?

7 What is a hindrance ?

8 What kind of day today problems you know about ?

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B Technical facilities for different kinds of cargo handling

1 Container facilities

1.1 What are the numbers of the container berths ?

_____

1.2 What is the storage capacity of containers in the port ? (stated in TEUs)

_____

_____

1.3 What are the permissible dimensions for container vessels ?

container berth No	length in m	maximum length of vessels	maximum draft of vessels	maximum permissible airdraft of deckcargo
1				
2				
3				
4				

1.4 How many container vessels are in- and outbound ? (per year by size)

less than 500 TEUs	500-1000 TEUs	1000- 2000 TEUs	2000-3000 TEUs	above 3000 TEUs

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1.5 Please specify the type of container handling equipment ?

Ship to shore:

_____

_____

_____

_____

[State Nos and type of equipment .Whether container gantry crane, stuffing crane, mobile crane or other Mobile Handling Equipment (MHE), % lifting capacities under spreader and under the hook]

System used for lateral movements:

_____

_____

_____

_____

[Direct transfer and stacking by Straddle Carrier (Vancarrier),
Lateral movements to/from stacking areas by trucks and trailers.
Lateral movements to/from stacking area by Reach stacker,
Lateral movements to/from stacking area by Forklifttruck (FLT)]

Stacking mode

_____

_____

_____

_____

[by Straddle Carrier (VC), by Forklifttruck (FLT), Railmounted Gantry (RMG), Rubbertired Gantry (RTG), by Reach Stacker]

1.6 Is your terminal equipped with CFS ?

☐ no ☐ yes

If yes, please specify estimated storage capacity ml/mtons & general cargo:

_____

1.7 Please specify your number of reefer points:

_____

1.8 Do you have special facilities for the storage and handling of containers with IMDG goods ?

_____

_____

_____

_____

1.9 What are your future development plans of container handling facilities in brief ?

_____

_____

_____

_____

1.10 Which backup services are available in your port ?

☐ Container repair

☐ Lashing & securing of cargo in containers

1.11 What are the main strength of the container facilities of your port ?

☐ gantry cranes

☐ mobile handling equipment

☐ fast dispatch

☐ geographical location

☐ flexibility of custom procedures

☐ transit & transhipment

☐ competitiveness of tariffs

☐ quality of road- and rail infrastructure for transport to potential hinterlands

☐ security aspects

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2 RoRo Facilities

2.1 What is the number of dedicated RoRo facilities ?

(Equipped with ramps - fixed or adjustable)

2.2 Please specify the suitability of RoRo facilities ?

Facility	Trucks & Trailers	Railway	Multipurpose
1			
2			
3			
4			

2.3 Please specify the permissible dimensions for vessels and cargo ?

RoRo berth number	maximum length of vessels	maximum draft of vessels	maximum permissible axle loads for ramp
1			
2			
3			
4			
5			

2.4 What are the prevailing rail gauges for shorebound RoRo Cargo ?

2.5 What are the dominating rail gauge for seabound RoRo Cargo ?

_____

2.6 Are facilities to change bogies (as the need may appear in order to avoid unloading of railwagons) ?

_____

2.7 Are there any plans of major railcompanies and/or ports to provide facilities as e.g. at Mukran in this respect ?

_____

_____

2.8 Are there any known plans to invent adjustable bogies (Existing between France and Spain)?

_____

_____

2.9 What are your future development plans of RoRo facilities in brief ?

_____

_____

_____

_____

2.10 What are the main strength of the RoRo facilities of your port ?

- ☐ ramps
- ☐ mobile handling equipment
- ☐ geographical location
- ☐ flexibility of custom
- ☐ procedures view transit & transhipment
- ☐ competitiveness of tariffs
- ☐ quality of road- and rail infrastructure for transport to potential hinterland
- ☐ security aspects

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C **Volumes of cargo handled**

1 Do you have already cargoes with origin/destination to Caucasian and Central Asian Republics ?

☐ yes ☐ no (if yes, fill in data in tableau 1 and 2)

2 What is your container throughput ?

numbers of containers	total nos. of TEUs	20 '	40'	45'

3 What is the final destination of the containers (in TEU) ?

Russia	Turkey	Ukraine	Georgia	Central Europe	Central Asia

4 What is the number of containers in transit from/to Georgian ports ?

To Central Europe	To Central Asia

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Volume of freight transport

Tableau 1: Inbound freight

commodity	volume tons/year	origin/destination	mode of transport				
			road	rail	ship	size of ship	kind of ship

Which commodities are due to seasonal differences in volume ?
What does it means monthly wise ?

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Volume of freight transport

Tableau 2: Outbound freight

commodity	volume tons/year	origin/destination	mode of transport				
			road	rail	ship	size of ship	kind of ship

Which commodities are due to seasonal differences in volume ?
What does it means monthly wise ?

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D Expectations

1 What do you think will have an impact to improve cargo volume to and from the Caucasian/Central Asian Republics ?

2 Could you quantify this improvement:

2.1 by commodities ?

2.2 by volumes ?

2.3 by containers ?

2.4 by time ?

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3 What is your opinion about the future development in the years 2002, 2007 and in 2012 ?

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Part III Shipping agencies

A Common interest with Georgian Ports

1 Do you know what is TACIS/Traceca ?

☐ yes ☐ no (Explanation by interviewer)

2 Do you have already connections within the Traceca routes ?

☐ yes ☐ no (if no, next question)

If yes: Description of used Traceca routes

_____

_____

3 Do you think it is realistic, that your port could be a transhipment point between the Trans European Networks (TEN) and the Traceca routes ?

☐ yes ☐ no

Additional Comments:

_____

_____

4 Do you have any comments to the existing possibilities ?

_____

_____

_____

_____

5 What could be improved ?

_____

_____

_____

_____

Tacis

6 What is a hindrance ?

7 What kind of day today problems you know about ?

B Services of shipping agencies

1 Which lines are you representing ?

2 How many liner services you have ?

3 What is the frequency of your liner services ?

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4 How many vessel you are handling to Georgian ports ?

Month	Vessels to Poti	Vessels to Batumi
January		
February		
March		
April		
May		
June		
July		
August		
September		
October		
November		
December		

5 How many vessels are going in regular liner service ?

C **Expectations**

1 What do you think will have an impact to improve cargo volume to and from the Caucasian/Central Asian Republics ?

2 Could you quantify this improvement:

2.1 by commodities ?

2.2 by volumes ?

2.3 by containers ?

2.4 by time ?

3 What is your opinion about the future development in the years 2002, 2007 and in 2012 ?

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Part IV Shipping lines/Container operators

A Common interest with Georgian Ports

1 Do you know what is TACIS/Traceca ?

☐ yes ☐ no (Explanation by interviewer)

2 Do you have already connections within the Traceca routes ?

☐ yes ☐ no (if no, next question)

If yes: Description of used Traceca routes

_____

_____

3 Do you think it is realistic, that this port could be a transhipment point between the Trans European Networks (TEN) and the Traceca routes ?

☐ yes ☐ no

Additional Comments:

_____

_____

4 Do you have any comments to the existing possibilities ?

_____

_____

_____

_____

5 What could be improved ?

_____

_____

_____

_____

6 What is a hindrance ?

7 What kind of day today problems you know about ?

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B Services of Shipping lines/Container operators

1 Do you call Georgian Ports directly or via Feeder Services ?

☐ no ☐ yes → ☐ directly ☐ Feeder Services

(If the answer is no, question No. 2)

2 Do you intend to have services via Georgian Ports ?

_____

_____

_____

_____

3 What kind of services you are requiring from the Georgian Ports ?

_____

_____

_____

_____

4 When you will start such services ?

_____

5 What do you expect from a Port service (i.e. round the container, communication etc.) ?

_____

_____

_____

_____

C **Volumes of cargo handled** (only, when question B1 was yes)

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Volume of freight transport

Tableau 1: Freight to Georgian ports

commodity	volume tons/year	origin/destination	ships		
			size of ship	kind of ship	No. of containers in TEU

Which commodities are due to seasonal differences in volume ?
What does it means monthly wise ?

Volume of freight transport

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Tableau 2: Freight from Georgian ports

commodity	volume tons/year	origin/destination	ships		
			size of ship	kind of ship	No. of containers in TEU

Which commodities are due to seasonal differences in volume ?
What does it means monthly wise ?

Tacis

D Expectations

1 What do you think will have an impact to improve cargo volume to and from the Caucasian/Central Asian Republics ?

2 Could you quantify this improvement:

2.1 by commodities ?

2.2 by volumes ?

2.3 by containers ?

2.4 by time ?

3 What is your opinion about the future development in the years 2002, 2007 and in 2012 ?

Volume III

Annexes

Annex 1

Present Internal Organisation of the Two Ports

The Port Manager[2)]

As the external organization is in the process of radical changes, it is quite difficult to define the exact position of the port manager. Especially the factual and the legal position differ from each other. Therefore, the Consultants based their findings mainly on the interviews held and on the present situation and not so much on the legal position.

The port manager represents the port to all outside bodies. With respect to the owner, namely the government, he is responsible for the ports "technical" and economic results. In detail, the port manager

- is in charge of the internal organization of the port's workload. He organizes the different departments and appoints the department chiefs. Legally, the Marine Department could interfere in this process. Practically, it just wants to be informed on the personnel decisions.

- concludes contracts with the port clients. For contracts with international donor organizations, which account for about 80% of the cargo, he has to follow the official tariff and the performance indicators set by the Marine Department.

- decides on investments.

- distributes the port's profits.

- represents the port in all discussions with other governmental bodies like the State Property Fund, the customs, etc.

- concludes contracts with third parties such as the railways and truck companies.

- negotiates with municipality representatives on permissions and any other questions which may arise.

- of the port of Poti is a member of the ports supervisory board.

- keeps the Marine Department informed about the port's cargo throughput and other statistical figures.

2) Unfortunately, the Consultants were not able to interview the port managers themselves in detail about their jobs in the first phase. However, interviews were held with the deputies, the chief of the Economic Department in Batumi (28/07/95) and with the chief of the Commercial Division in Poti (30/07/95).

There is one port manager for each port (about 1,000 employees in Batumi and 2,000 employees in Poti). He is in charge of the department managers (deputy port managers) who have to keep him informed on things happening inside the port. The port manager gives general orders and is in a position to intervene into the day-to-day business. As a result, the internal structure itself is strongly centralized. In case more then two departments are involved in a specific question, the port manager takes the final decision.

Figures 1.5 and 1.6 overleaf depict the first level of the two ports' internal organization.

Figure 1.5: Internal organization of the port of Batumi - first level

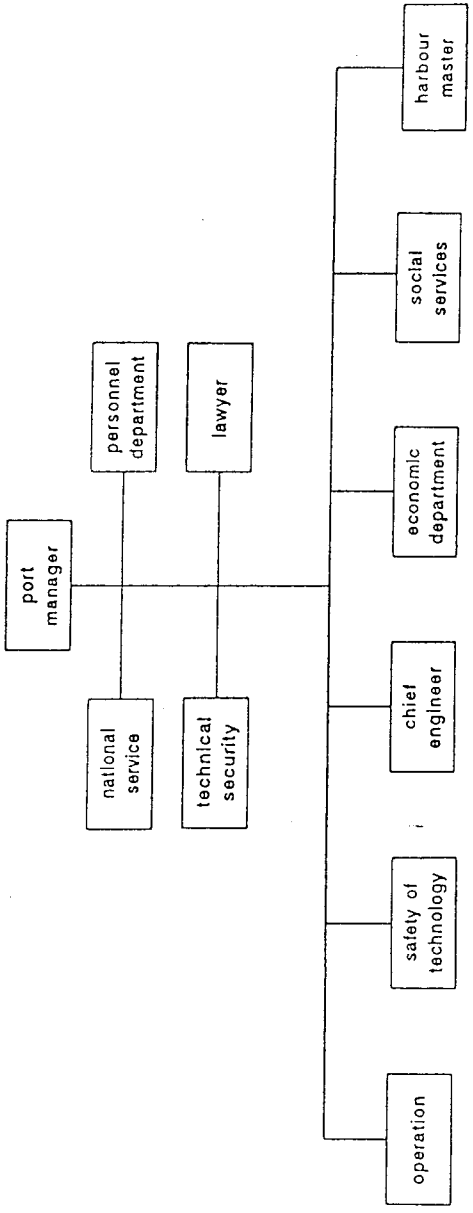
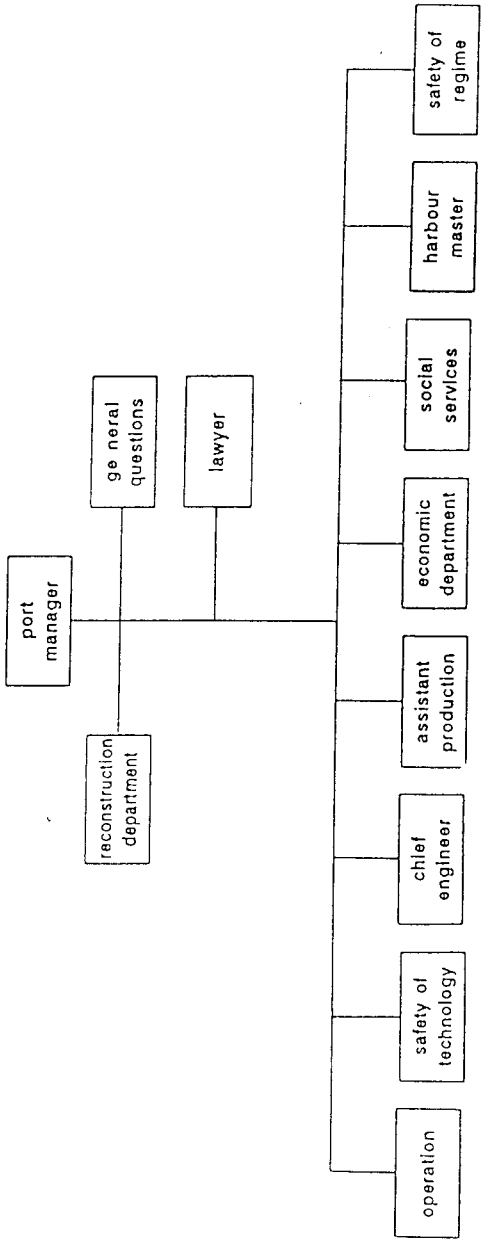


Figure 1.6: Internal organization of the port of Poti - first level



Staff Positions[3]

The judiciary division (lawyer) of the port in its current form has been existing for three years now. Dealing with outside corporates, its main task is to protect the ports' interests in all legal aspects. This includes all cases of arbitrage, labour law, civil law, marine law, railway transportation, negotiations with administrative bodies, etc. Inside the port, they advise the port manager and the departments in all questions regarding law subjects.

The judiciary division gathers all orders of the Marine Department, decrees of the Cabinet of Ministers, the Ministry of Finance, the Ministry of Transport as well as cargo handling tariffs, which are to be approved by the Cabinet of Ministers. The division chief is in charge of three employees.

The biggest problem they face is the legal uncertainty. Most of the new rules are not yet in force, and there is a considerable lack of information. In earlier times, they were better informed and were subscribers to a lot of magazines, news letters and documents sent from Moscow. Today, most of the rules applicable in transport matters are just temporary.

The port of Poti has a Department for Reconstruction and Development[4] which handles engineering and construction works inside the port. The Chief Engineering Department is a separate unit (see figure 1.6). The main difference is that the latter deals with the maintenance and repair of the existing equipment and buildings, while the Department of Reconstruction and Development is responsible for new-buildings and installations. It currently deals with

- a new grain terminal
- new warehouses
- the oil terminal
- a complete reconstruction of Poti Port.

The projects comprise the planning of technical details as well as the setting up of future development scenarios for the whole port.

[3] Interview held on 29/07/95 in Poti; the port of Batumi has the same position

[4] Interview held on 15/06/95 in Poti; in Batumi this is the task of the chief engineer

The Personnel Department[5] in Batumi consists of the department head and six employees and is in charge of all matters related to the port's personnel. The department works out the form and clauses of the employment contracts.

Even today, salaries are fixed by the Department of Labour and Salary, a sub-department to the Economic Department (of the government), which indicates that salaries do still depend on the old productivity standards.

For the employment of new personnel, the different department heads place respective requests with the Personnel Department, sometimes already suggesting a particular person. The final decision lies with the personnel department.

It is also involved in carrying out some social services for the employees. In former times, it was common for companies to offer comprehensive social services to their staff, e.g. company-owned flats or kindergarten places for their children.

Another task of this department is to work out staff training programmes and examinations. There are four different classes for workers, the kind of job and the salary they get depending on the class they have passed. (E.g. a worker needs to pass three classes to be allowed to drive a forklift.)

To some extent, the Personnel Department deals with the disposition of personnel. The staff usually work for a single department. However, it is possible to shift them to other departments if they are skilled to do various jobs. Respective training measures are held by the Personnel Department.

For dismissals, the chief of the respective department needs the permission of the port manager. He will also hand this request to the Personnel Department which has to give the employee and the trade union two months' notice. The trade union must agree to the dismissal.

The Personnel Department is responsible for checking the employees' presence. Inside the administration, this is done by the department heads themselves.

[5] Interviews held with the department chiefs on 20/06/95 in Batumi and 15/06/95 in Poti

What has been said so far for the personnel department in Batumi, is mainly valid for Poti[6] as well. However, there are some differences:

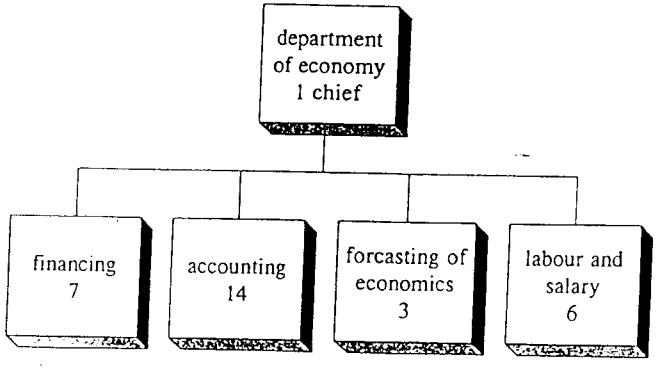
First of all, the department dealing with personnel matters is called "General Questions Division". In addition to staff and training aspects, it handles administration and revision. Administration comprises cleaning of buildings, checking of the workers' attendance, registering and sending the mail. This work is done by six persons. The Revision Division organizes and controls any economic activities in the port, i.e. whether there are irregularities regarding the governmental or internal rules and regulations. At present, this division has four staff members.

The National Service in Batumi deals with the civil security inside the port, informing the employees on different signals and their meaning and instructing them on what has to be done in case of any event.

1.1.2.4 The Economic Department[7]

The Economic Department includes four divisions. The head of the Economic Department directly reports to the port manager. The department's organization is shown in figure 1.7 below:

Figure 1.7: Organization of the Economic Department[8]



[6] Interview held on 15/06/95

[7] Interviews held on 13/06/95 (Batumi), 16/06/95 (Poti) and 23/06/95 (Batumi)

[8] The chart shows the organization in the port of Batumi which is quite similar to the one in Poti.

The tasks of the different divisions are described in the following. The position of the entire department within the port structure has been shown in figure 1.5.

The Division for Labour and Salary develops employment and working schedules for the port staff and recommends on the salary to be paid to the different groups of employed personnel. A part of this work is also to elaborate detailed job descriptions which determine all rights and duties, responsibilities and competences for each worker.

The working schedule and the salary classification are then the basis for the cargo handling tariffs and the cost calculation.

The Division for Forecasting Economics provides the management with relevant information on the planning process. This division forecasts the cargo flows for the next years, duly considering the main factors influencing the port in future. On this basis, the future capacity is estimated. The results of the estimation again form the basis for income and cost development for the next years.

Batumi port plans to make the division of forecasting a centre for management information to support further future decisions.

The Accounting Division with its 14 employees is the largest division of the Economic Department. They do the book-keeping and set up the balance sheet and the profit-and-loss account. The work is not yet computerized, and all the bookings are effected manually.

This financial accounting is one of the main information sources for the management. A cost accounting does not exist.

The work effected by the Accounting Division is still based on the Soviet accounting rules. The system has not yet been adjusted to the new Georgian company law. Especially the evaluation of assets and the methods of depreciation are not in line with the new Georgian rules for orderly book-keeping. The main differences between the old and the new system, according to international standards, will result from the different evaluation of the assets.

The Accounting Division does not maintain direct relations to outside bodies. It gets the information (vouchers) relevant for bookings from the Commercial Division, which writes all the bills, from the Salary and Cargo Norms Division and from the Central Purchasing Division, which pays for services and materials bought from

outside, and from the Financial Division, which checks the bank accounts and money transfers.

The Financing Division is responsible for the port's bank accounts and sets up financial plans. It checks whether the port is able to meet its financial obligations and whether the liquidity will be sufficient for the near future.

On the one hand, these calculations are based on all the bills the commercial department made up or expects to make up and, on the other hand, on obligations related to buying activities and to salaries.

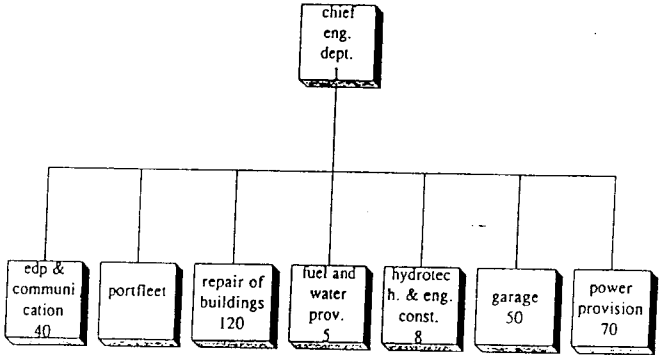
1.2.5 The Chief Engineer's Department[9]

In the Chief Engineer's Department the ports of Batumi and Poti differ from each other. Therefore the Consultants describe each department separately.

Poti

In Poti, the department includes seven sub-divisions as shown in figure 1.8 below:

Figure 1.8: Chief Engineer's Department; Poti



The principal idea of the department's separation into sub-divisions is that it has to deal with many different subjects. In this respect, the names of the divisions are self-explanatory.

[9] Interview held on 15/06/1995

The department's task is to render technical services to the different port facilities and equipment, e.g. the fleet, buildings, workshops, etc. The technical condition has to be controlled and necessary maintenance and repair works carried out.

Moreover, the department gets a list of the equipment needed for cargo operations to be carried out on the next ship to call the port. This list is provided by the dispatch office. The operating department/dispatchers then have to be informed in case the required equipment is not in a workable condition and repairs cannot be carried out in time.

The Chief Engineer's Department also closely cooperates with the Department for Safety of Technology which checks the safety of the technical equipment.

The department plans future spare parts requirements, determining the number and specification of the needed spare parts.

According to the Chief Engineer, cargo operations are only rarely delayed by technical faults, but more often by the lack of electrical power constituting the main problem in the port of Poti.

In general, the port has all equipment and facilities repaired and maintained with by its own personnel, and only in a few cases, a company from outside has to be hired.

To point out the difference between the ports of Batumi and Poti, it has to be mentioned that two tasks, which are with the Chief Engineers' Department in Batumi, are not dealt with in the respective department in Poti, namely

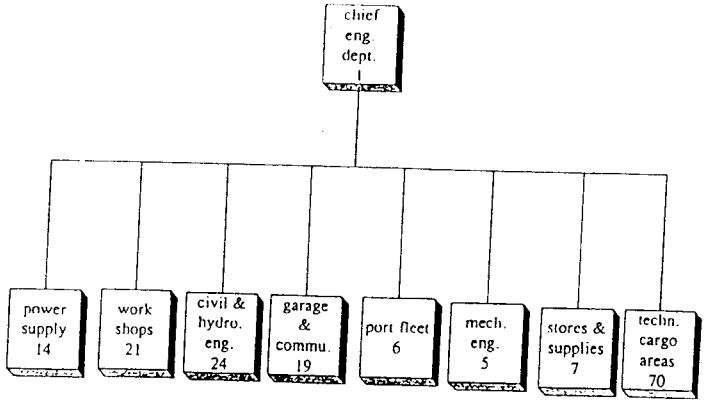
- central workshop carrying out mechanical repairs and
- maintenance and repair of cranes.

Batumi[10]

The Chief Engineer's Department in Batumi includes eight divisions as shown in figure 1.9:

[10] Interview held on 20/06/95

Figure 1.9: Chief Engineer's Department in Batumi



1) Division of Power Supply

Since public power supply is not reliable (just one supply line from outside the port), two diesel generators were installed inside the port so as to become independent from the public net and to avoid numerous power cuts, especially during winter time, strongly hampering port operations. The division's task is to operate, maintain and repair the generators, power lines and plugs.

2) Division of Workshops

The workshop mainly provides mechanical works and repairs (e.g. welding). Civil works or road repairs are not included in its tasks. The workshop services are either directly required by other departments or carried out according to a maintenance plan. In case of capacity shortages, the Chief Engineer determines the schedule of works.

3) Division of Civil- and Hydro-Technical Engineering

This division is responsible for the buildings, berths, roads and crane rails. It carries out most of the maintenance works and some of the repairs. They do also participating in the planning of new buildings. However, for special jobs such as the construction of quay walls or their repair, external companies are hired. The same applies in (the rare) case the workshop cannot cope with the workload itself.

4) Division of Garage and Communication

The port of Batumi has some busses and cars for staff transportation and for other port services. As there are no repair facilities available in the town, the division maintains its own garage for these vehicles. The disposition of the vehicles, however, is done by the Dispatch Office.

Another task of this department is the maintenance of all telephone lines within the port.

5) Division of Port Fleet

This division is in charge of maintaining and repairing (as far as possible) the fleet's boats, e.g. the pilot boat and tugs.

6) Division of Mechanical Engineering[11]

The division mainly carries out technical controls and gives repair orders where necessary. It also works out maintenance schedules for all the machines and technical equipment inside the port. These schedules are handed to the Chief Engineer who passes it to the workshop for realisation.

7) Division of Material Supply

This division is in charge of the procurement of materials for the port and of all purchasing procedures involved (demand for offers, placing orders, etc.). Usually, each department of the port give direct purchasing orders to the division, giving exact specifications for the required items. If the purchasing value exceeds a defined amount, the permission of the Port Manager is necessary.

[11] In Poti, the following divisions are part of the Production Department

3. Division of Technicians of Cargo Areas

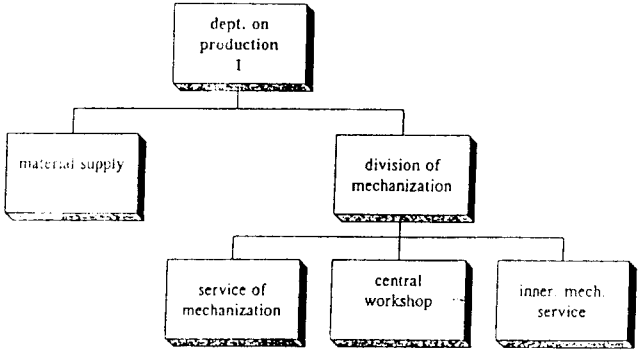
A number of electricians and mechanics on the yard are responsible for technical support of the following equipment:

- 7 Ganz cranes
- 5 Takraf cranes
- 2 Hardtmann suction unloaders
- 12 forklifts
- 2 excavators

1.1.2.6 Production Department, Poti[12]

This department has been established only recently. It was separated from the former Chief Engineer's Department in Poti and includes the following divisions:

Figure 1.10: The Production Department



The main task of this department is the material supply for the whole port, i.e. procurement of materials and spare parts needed, ranging from crane parts to office supplies.

[12] Interview held on 22/06/95; in Batumi these functions belong to the Chief Engineer's Department.

The department is also in charge of the port of Poti's central workshop where mechanical repairs, welding and grinding, etc. are carried out.

The Division of Port Mechanization is responsible for all the cranes inside the port, while the Service of Mechanization Industry Division elaborates maintenance schemes for the port equipment and checks whether these schemes are applied to.

1.1.2.7 Department of Safety and Technology[13]

Normally, the Consultants would consider this department to be a staff position. But in the actual organization, the department's head is at the same time the Deputy Port Manager.

He is responsible for the technical safety of loading/unloading operations and develops general operation plans and maintenance schemes for all the technical equipment to ensure safety of work. Moreover, he has to regularly check the equipment.

The a.m. plans and schemes must be agreed and signed by the Chief Engineer and are then handed over to the workshop. The chief of the Safety and Technology Department directly supervises whether the maintenance and repair works are carried out according to his plans and orders.

An engineer has to check the cranes and forklifts every three months. Once a year, every crane is carefully inspected in the presence of a member of the Department of Safety and Technology, which is also obligatory for the static and dynamic crane inspection taking place every three years.

Moreover, the crane is checked once a year by the State's Technical Supervision.

1.1.2.8 The Operations Department[14]

This department is in charge of carrying out cargo handling operations in the port, i.e. loading/discharging procedures from road/rail to ship and vice versa. It controls stevedoring activities in the port and the necessary transhipment-related information flow. The technical equipment and other supplies such as fuel, power, etc., are provided by other departments.

[13] Interview held on 15/06/95 in Poti; this department's structure is similar in Batumi

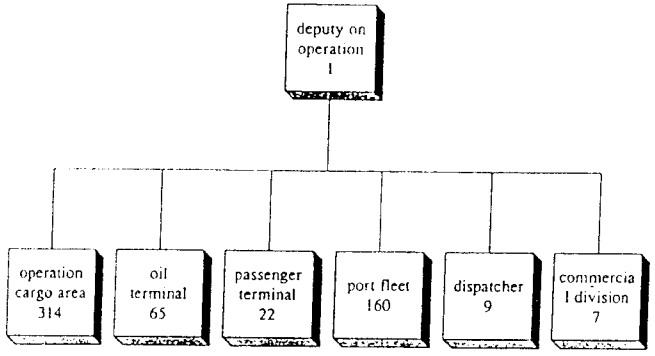
[14] Interviews held on 13, 15, 16, 22 and 23/06/95

The tasks of the Operation Department are more or less the same in the two ports, even if the structure differs just a little bit

Batumi

To cope with its main tasks, the Operations Department is divided into different divisions as shown in the following figure:

Figure 1.11: Organization of the Operations Department in Batumi



While operations on the cargo operations area as well as on the oil and passenger terminals comprise more or less all the stevedoring activities, the port fleet offers auxiliary services to the shipping companies. The commercial division together with the dispatch office handle the flow of documents and information.

Cargo Operations Division (Stevedoring)

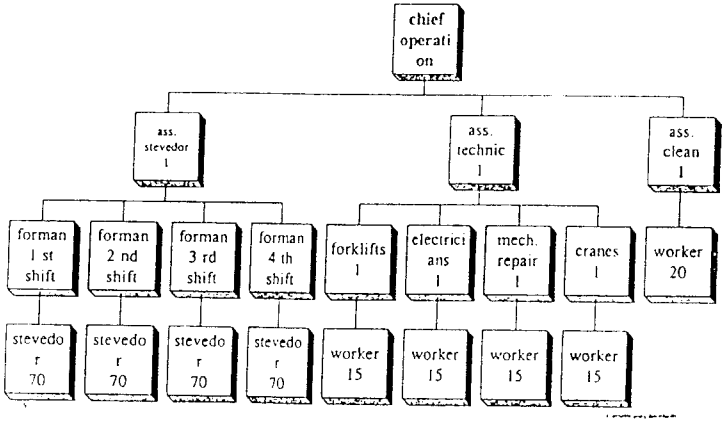
The Cargo Operations Division mainly deals with the direct discharging and loading of dry bulk and general cargo from/onto the ships as well as from/onto railway waggons and trucks. Due to the system of direct delivery, there are only a few warehouses and very restricted areas for open storage. Cargo storage operations are carried out by the stevedores, too.

The division provides the ships' gangs, crane and forklift drivers and all other equipment operators. Moreover, it has electricians and technicians carrying out necessary maintenance and smaller repair works to keep the equipment operational. More extensive repair works, however, are under the responsibility of the Chief Engineer's Department.

Other tasks of the division comprise the cleaning of dressing rooms, toilets, etc. and the looking after the working clothes.

The division's main tasks are also reflected in the personnel structure which is shown in the following figure:

Figure 1.12: Structure of the Operations Division



Within the Cargo Operations Division, works are distributed as follows:

First assistant: stevedoring activities (ship-to-shore operations and warehouses)

Second assistant: technical maintenance and short-term repairs

Third assistant: cleaning

While the staff subordinate to the first assistant works in shifts, the second and third assistants' groups have regular working times.

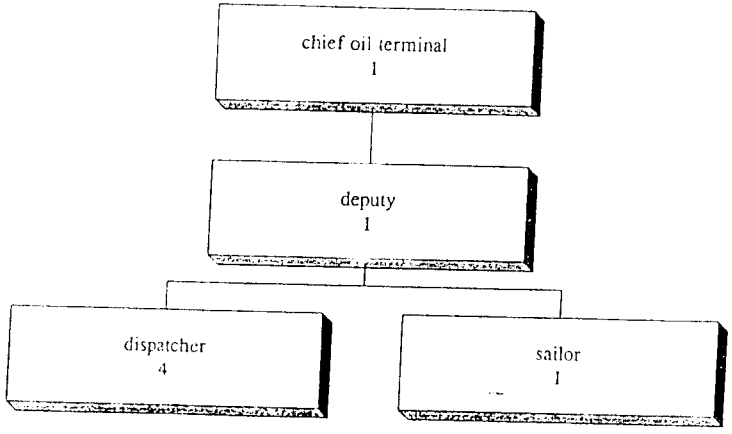
Oil Terminal

While the Oil Terminal provides the facilities such as mooring buoys, berths, bollards, etc. and is responsible for the safety of operations, the cargo handling at the oil berth is effected by the refinery with its own equipment, e.g. hoses, pipes, etc.

The oil berth is also used for some other port equipment. There are barges for bunker, garbage, technical supplies and tank washing. But this business has not yet been fully established. Especially the tank washing cannot be done without assistance from the refinery.

The organization of the Oil Terminal is depicted in Figure 1.13 below:

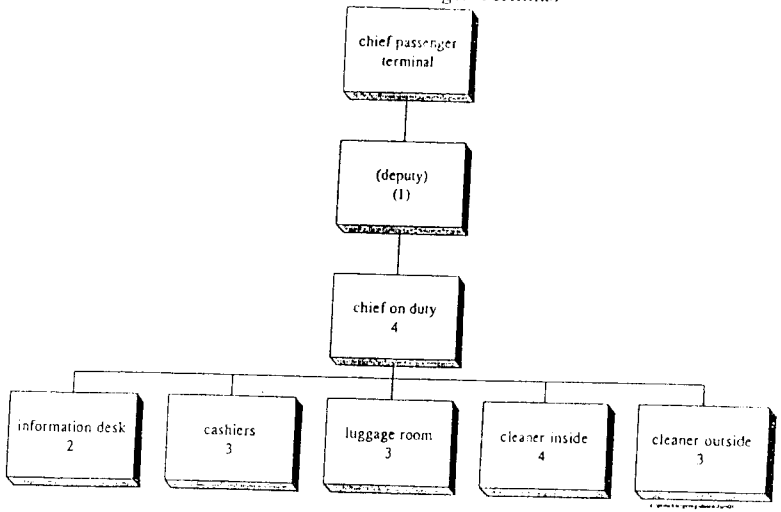
Figure 1.13: Organization of the Oil Terminal



Passenger Terminal

Since the latest political unrest in 1994, the services of the Passenger Terminal have not been used.

Figure 1.14: Organization of the Passenger Terminal



Port Fleet Division

The Port Fleet Division offers auxiliary services to the shipping companies, i.e. operations of tug boats, a pilot boat, water and garbage barges.

Some of the necessary maintenance and repair works are carried out by the division itself, however, under the supervision of the Chief Engineer's Department.

Dispatchers' Office

The Dispatchers' Office (9 staff members) is responsible for the information flow necessary to ensure port operations. Its main tasks are:

Inside the port
- berth planning
- informing pilots, tugs, mooring men on ship movements
- setting up working plans
- planning of discharging/loading operations
- maintaining contacts to the technical departments as to the technical condition of the handling equipment used
- passing on ships' data and information on works to be carried out to the Commercial Division (and receipt of data on contracts signed)

Outside the port

- regular orders to the railways for type and number of waggons needed
- contact to the agents and shipping companies
- contact to the truck companies

Commercial Division

As part of the Operations Department, this division works out all contracts and agreements with the port's clients. However, it is not involved in any marketing activities (seeking new clients, etc.). The port's tariffs are more or less fixed. Details of the contracts and agreements, such as performance rates and the like, are passed over to the dispatch office.

The Commercial Division calculates the ships' laytime in the port, port dues and cargo handling charges, etc. and makes out invoices.

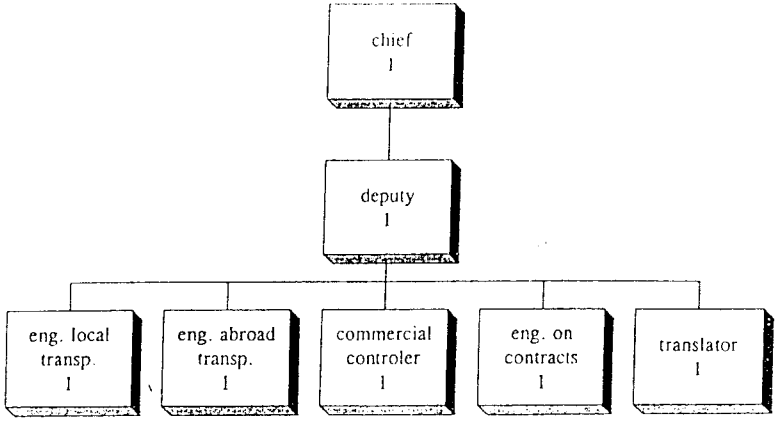
The information from the contracts and the invoices are handed over to the Accounting and to the Financial Division to enable them to settle the accounts properly and to check whether the clients' payments were made.

The division also handles possible claims of the clients and has thus to check whether the railway waggons were sent as ordered and whether the clients themselves have fulfilled their obligations.

In addition, the division controls the warehouses, checking the quantity and condition of the cargo entering the warehouses and recording the stowage positions.

The structure of the Commercial Division is shown in figure 1.15 overleaf.

Figure 1.15: Organization of the Commercial Division



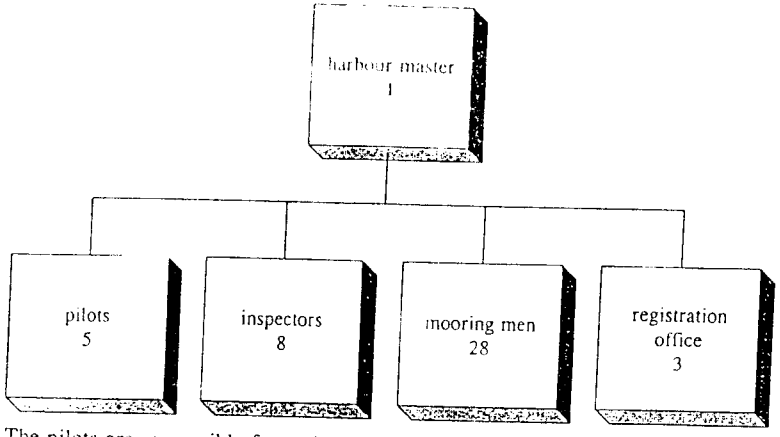
1.1.2.9 The Harbour Master's Department[15]

Being officially employed by the port, the Harbour Master is subordinate both to the Port Manager and to the Marine Department. This double subordination indicates that his tasks are part of the port's commercial business and of the governmental controlling functions as well.

The Harbour Master is responsible for the navigational safety of all ships entering, staying in and leaving the port. He is in charge of the pilots and the mooring service as well as of an inspecting team and the registration office. The internal structure is shown by the following figure:

[15] Interview held on 13/06/95

Figure 1.16: Organization of the Harbour Master's Department



The pilots are responsible for assisting ships entering or leaving the port.

The inspectors deal with the papers necessary for the ships' safety according to international conventions. They control the ships' documents as to completeness and validity. Moreover, they check the ships' safety equipment.

The mooring men assist in mooring/unmooring operations or in shifting the ships inside the port.

The task of issuing certificates of deployment and seaman's books is executed by the registration office.

1.1.2.10 The Social Services Department[16]

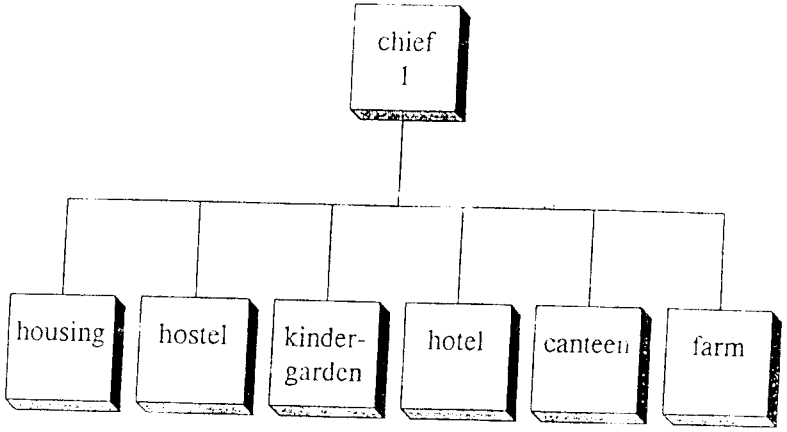
In the former Soviet system, it was common use that the companies did not only pay the salaries to their employees but also provided them with food supplies, social services like kindergarten, medical aid, flats, telephone, etc. This is still reflected in the port's current organization and dealt with by the Department for Social Affairs.

The staff members may apply for these services with the Personnel Department, which, together with the Port Manager and the trade union, decides on whether to come up the request or not.

[16] Interview held on 21/06/95

The following figure shows the different divisions of this department.

Figure 1.17: Organization of the Department of Social Affairs



1.2 Operational Procedures

1.2.1 Comments on Operational Procedures

In this chapter, the Consultants concentrate on the analysis of the operational situation and the main bottlenecks existing in both ports.

At present, both ports are working far below their cargo handling capacities. This is the result of the poor economic situation in the region and the steady decrease in cargo turnover since the late eighties.

Despite the fact that the port activities have continuously declined in recent years, the ports have maintained their capacities as to

- length of berths
- overall port area
- number and type of equipment
- number of workers

The reasons for which the ports have not yet adapted to the new situation can be summarized as follows:

Belief that the present decline in port activities is of temporary nature only and that the economic situation of the country will improve very soon.

Labour costs are that low that personnel costs do not constitute an important cost factor.

- The government hopes that Georgia, due to its strategic location, will play an important role in transports to and from the Caucasian region and further on to Inner Asia. The ports will be the gates to that transport route.

Due to the present over-capacities in all operational aspects of cargo handling, many of the operational bottlenecks are not clearly recognizable.

The ports still work at the same technical and operational level and efficiency as during the last 20 to 30 years and do thus not yet come up to modern cargo handling standards, including e.g. sufficient container handling facilities, RoRo-services, etc., or only to a very limited extent. At present, about 80% to 90% of the cargo handled in Poti and Batumi consists of grain imports financed by international donor organizations.

1.2.2 Commercial Aspects

In general, it can be stated that the decision-making processes in the ports often lack a commercial basis. Decisions are made by merely relying on technical aspects, i.e. whether the port is technically/operationally prepared to execute a specific job, while any aspects dealing with prices, cost-benefit ratio, etc. - essential according to a modern, market-orientated understanding - are hardly considered.

Even the ports' cost accounting departments do officially calculate only the operational costs. Terms like "total costs", "general costs" or "overhead costs" are practically unknown.

The reasons for this uneconomical system within the ports are that

- the government/Marine Department determines cargo handling rates;
- the ports are not allowed to set their own port tariffs;
- the ports are just acting as advisors to the Marine Department as to the determination of rates;

- price calculation procedures are a "black box" even for the ports' commercial staff and that, as a consequence,
- the ports have no influence on their own income;
- the decision-makers in the port are neither liable to any losses occurring nor do they benefit from profits;
- the possibilities of reducing costs are very limited as
  - -- manpower development strongly depends on the country's general economic situation;
  - -- cargo handling procedures are based on fixed norms to be strictly applied to. These norms determine the number of workers and number and type of equipment;
  - -- according to the official governmental rules, technical equipment still having a book value is practically not allowed to be scrapped;
  - -- the difference between technical and economic lifespan is generally unknown.

All these reasons show that, under the present organisational structures, the ports do hardly have any possibility of influencing prices and costs. Aspects related to profit-making and cost reduction have been of minor importance so far. As a consequence, decision-makers lack respective experience.

The same applies to turnover. Under the Soviet regime, the cargo flows were directed by the central government in Moscow, who instructed the ship owners where to go and which port to call. The ports had to accept these decisions.

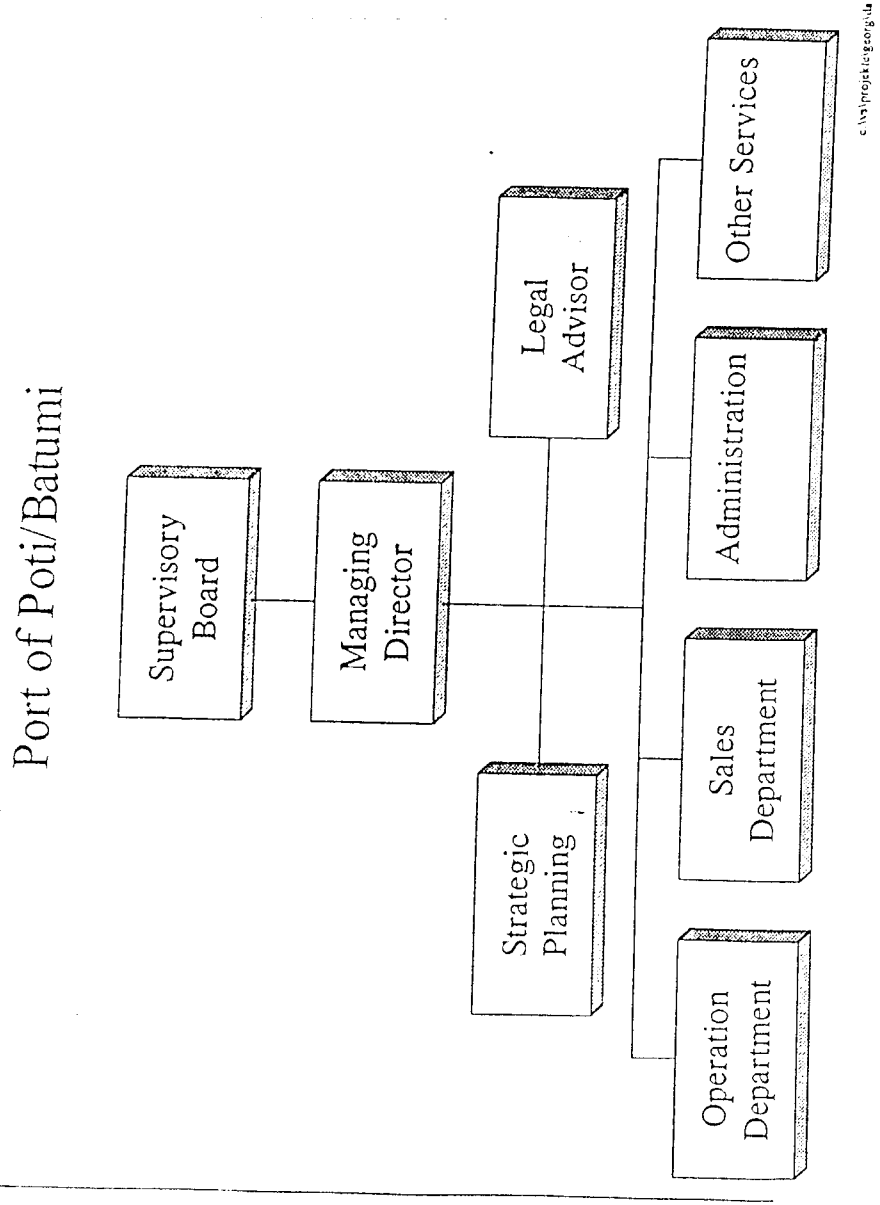
Today, the situation is still the same. The Marine Department decides where the ships carrying humanitarian-aid cargo are to go, this kind of cargo constituting the great majority of the amount currently handled in Georgian ports.

As a result of this central "guidance", the ports have never made real efforts in marketing, attracting new customers and struggling for their own benefits. Still the opinion is wide-spread that "the government will tell us what to do". Basic knowledge in business administration is missing everywhere in the ports.

Annex 2

Proposed New Organisational Structures of the Port

Figure 2.13: Organization of the Port Operating Company



The main tasks of the **supervisory board** will be:

- control and supervision of the general manager
- definition of the working contract with the general manager
- general definition of the company's strategic goals
- decision on how to distribute profits.

According to worldwide practice the general manager's working contract should be limited to a period of five years. The contract may be prolonged for another five years each.

The next management level should consist of four departments, namely:

- operation
- sales
- administration
- other services.

This small number of departments is also based on the experience of successful company management saying, that a well organized company should not have less than three or more than five departments directly supervised by the general manager.

Beside the mentioned four departments, there should be two staff positions directly subordinate to the general manager, i.e. strategic planning and legal advisor.

The **strategic planning** is responsible for the elaboration of future development models of the company.

Their work includes:

- setting up of new organizational schemes
- port development regarding new constructions and new installations
- specification of new market activities
- elaboration of business plans.

This department should act as assistant to the general manager and not be involved in day-to-day business. The other departments are obliged to support the strategic planning with all required information and personnel if necessary.

The second staff position will be the **legal advisor**. He will assist the management in all legal affairs, especially in the specification of contracts and in legal disputes of different kinds. The legal adviser is appointed as direct supervisor of the general manager.

This organizational structure as compared to the present ones, comprises the following general improvements as compared to the present ones:

- only four departments instead of eight to twelve
- one deputy per department only. The staff positions do not have the same managerial standing as the department heads.
- less personnel costs
- less office spaces and equipment needed
- increase in efficiency due to better transparency and improved supervision
- clear responsibility on all levels
- improved information flow due to clear responsibilities and a decreased number of departments.

It must be stressed that such a new organization is the precondition for market orientation and future privatization. Without an efficient organization, no private investor can be attracted. Therefore, the proposed organization must be considered as an absolute precondition for private investment in the ports.

For the general manager this revised structure includes the following improvements:

He is the only person who determines the company's policy within the (normally very wide) scope given by the supervisory board.

He is (in general) fully responsible for loss and profit.

He has to control and to supervise four departments only. According to world-wide management experience, an efficient supervision of more than five departments is practically impossible and would result in decreased transparency and efficiency.

Better concentration on his main task of managing the company. If there are more departments, an efficient supervision is more and more difficult, and the general manager has to deal with too many little day-to-day problems, which do not leave any room for "real management".

2.2.3 Responsibility, Information and Supervision

Basic principles

Apart from the required modifications in the management structure, it is necessary that the managers in charge change their attitude, too. This reflects some of the main tasks of management:

- dealing with responsibility
- supervision
- flow of information.

Some of these main ideas shall be explained in this chapter:

- The tasks, duties and responsibilities must be clearly defined for each person/ division/department.
- Each manager/deputy/foreman/person is responsible for his department/ division/area or job.
- Supervision to be carried out from "top to the bottom", i.e. each manager controls the level directly below him

Information functions from "bottom to the top", meaning that the lower level reports to the higher one.

These principles must be followed by everyone, exceptions can only be accepted in very well founded cases.

- The evaluation of work should be based on the results such as e.g. throughput figures (tons per shift), unit costs, satisfaction of the customers, etc. This is an easy method of supervision and helps motivate the staff to look for new ways, of improving the results of their work. Wages should be used to give incentives.

- A person in charge must always be available. If somebody is responsible for a certain job, his subordinators, the superiors and the customers must have the possibility to contact him whenever it is needed. It must be ensured that the availability of staff is always sufficient, i.e. by naming deputies in case of illness, vacation, etc.

Delegation of responsibilities

One of the most important tools in efficient management is the functioning delegation of responsibility. The following principles should be obeyed:

- If there are any doubts on how certain things should be dealt with, the delegating person should give clear working instructions, if necessary in writing.

- Never bypass your direct subordinate when giving working instructions, otherwise heavy frustrations will be the result.

- There should be a smooth flow of relevant information from the bottom to the top and vice versa to avoid e.g. frustration and that the same work is done twice.

- Interference in daily works should be kept as low as possible.

- Superiors should be able to motivate their staff so as to encourage them to act in a responsible way.

These rules are very simple, but they are presently realized only to a very little extent in the ports.

2.2.4 Organization of the Different Departments

As shown in Figure 2.14 before, both ports should be structured into four different departments. In the following, the internal organization of these departments and a short description of the tasks involved are given.

2.2.4.1 Operation Department

The operation department in each port should consist of

- different terminals (s. diagrams)
- a technical division
- a division for the disposition of personnel and equipment.

As a general rule, the number of areas should be minimized. The cargo areas should only be divided, if the different kinds of cargo require different installations and a completely different manner of handling. If not, the cargo handling area should remain undivided. The Consultants propose to structure the operation departments as shown in the diagrams on the following pages.

The dry cargo at Batumi and the general cargo/RoRo/container area at Poti should not be split any further as, at present,

- handling procedures are similar and
- the amount of cargo does not (yet) justify specialised terminals.

In general, the tasks and duties of the operation department can be described as follows:

- organization and execution of all cargo handling activities
- responsibility for efficient and safe cargo handling

- provision of all technical matters of the company
- responsibility for all technical matters of the company
- disposition of personnel and equipment according to operational needs.

This operational organization is based on the idea, that all operational requirements such as

- installations, handling facilities and storage areas
- handling equipment
- personnel
- maintenance

are concentrated in one hand under one responsibility. The technical division is an auxiliary division for the execution of cargo operations.

The advantages of this organizational structure can be summarized as follows:

- all operational activities are concentrated in one department
- operation department is responsible for all operational costs
- improved flexibility in cargo operations
- no separate planning department
- no separate despatch division
- technical division is subordinate to the operation department (clear responsibilities)
- technical services work according to operational needs
- engineering services are supervised by the operation department
- central disposition enables to establish competent controls of efficient staff and equipment use.

Figure 2.14. Organization of the Port Operation Company (Batumi)

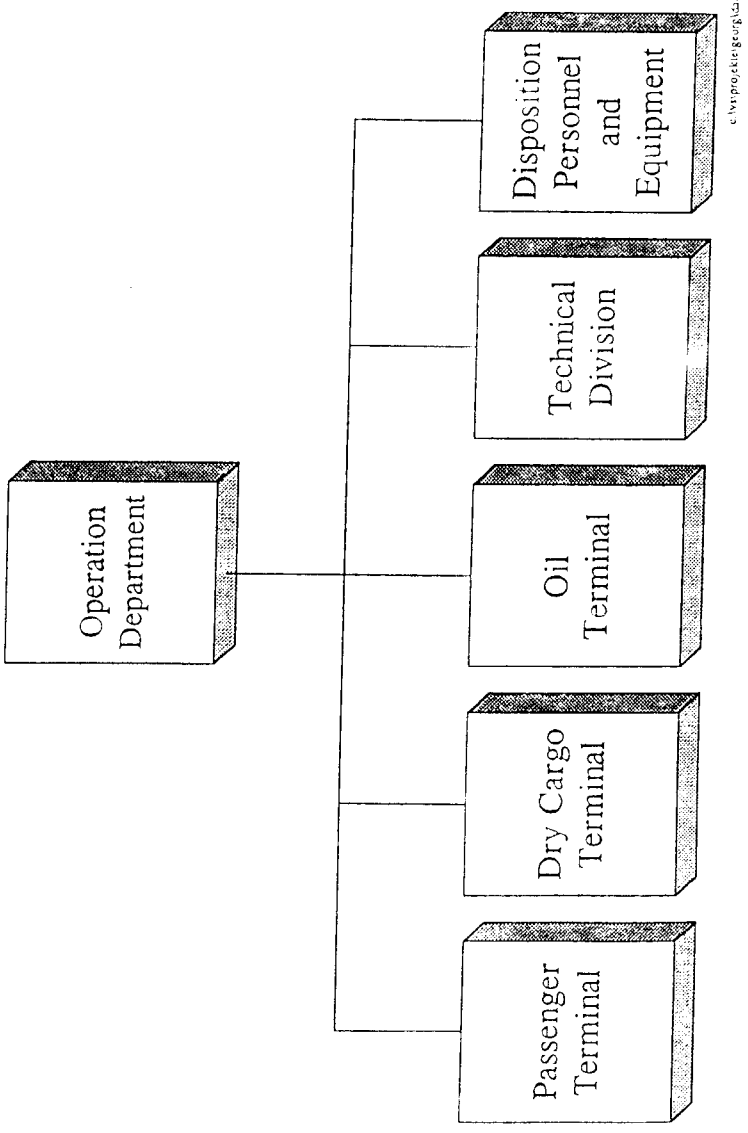


Figure 2.15: Organization of the Port Operation Company (Poti), Operation Department

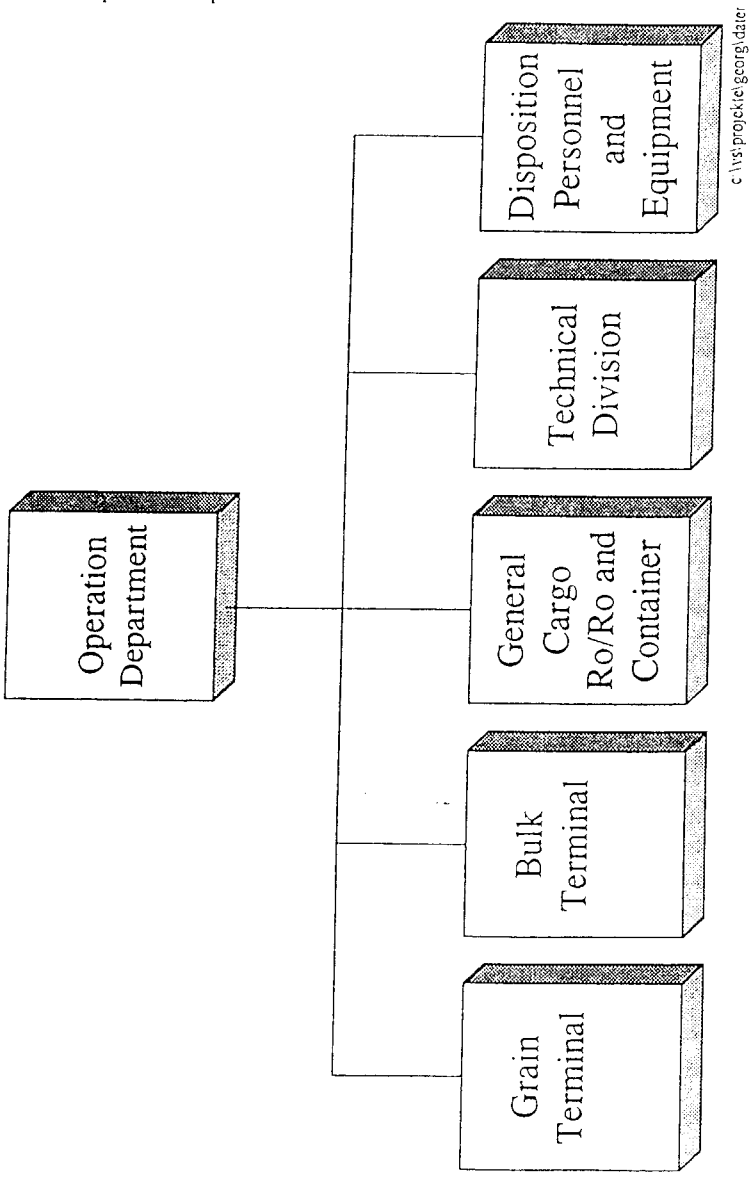


Figure 2.16: Organization of the Port Operation Company/3rd level

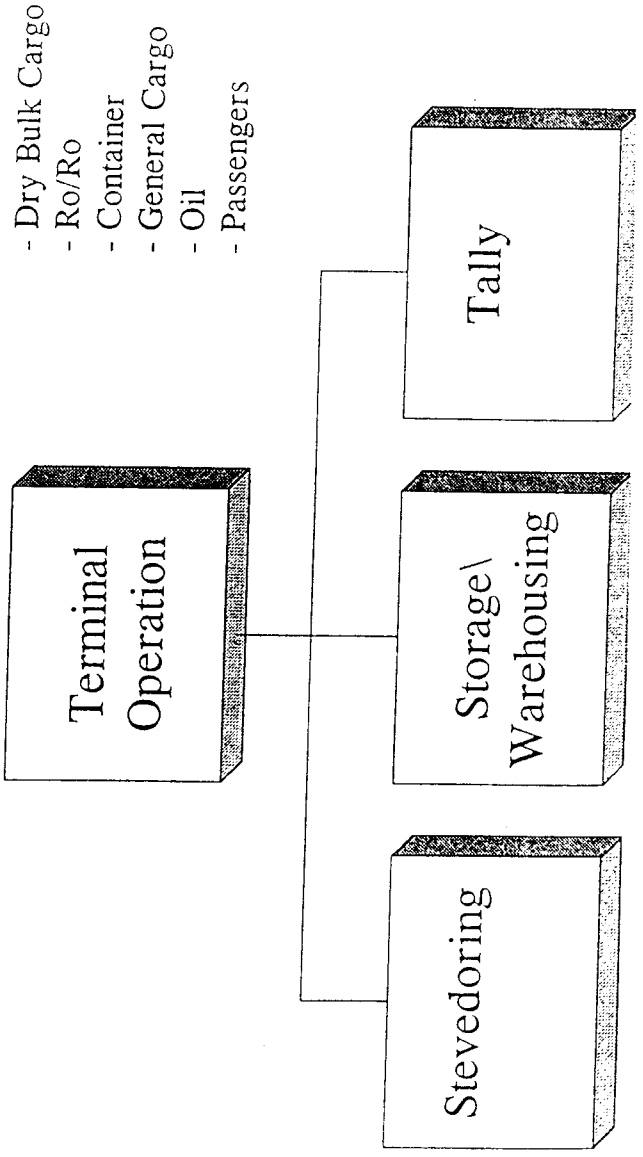


Figure 2.17: Organization of the Port Operation Company/3rd level

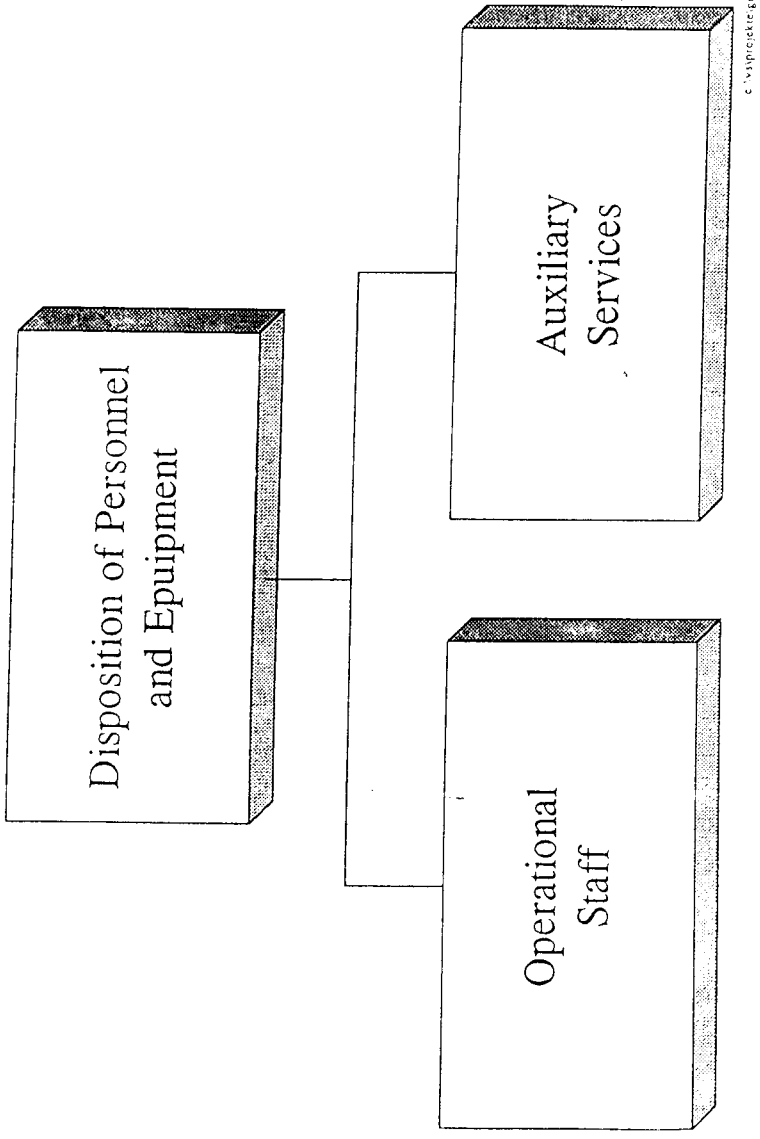
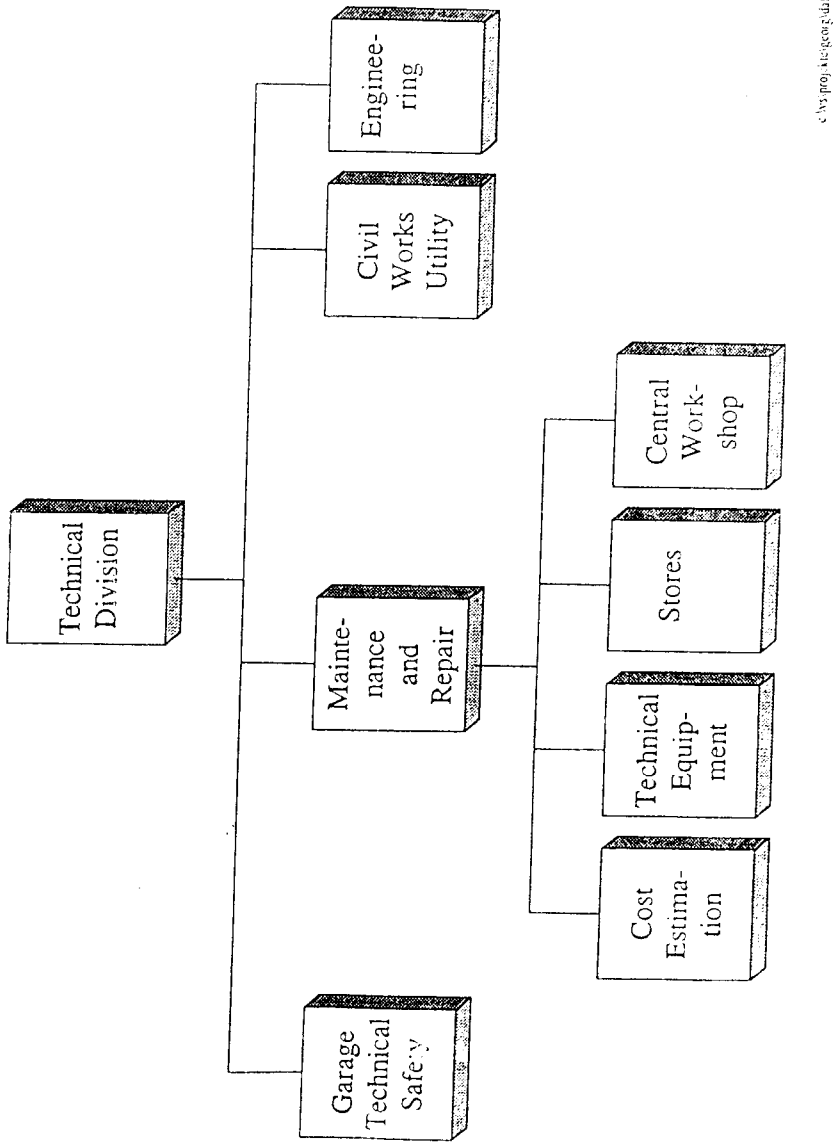


Figure 2.18: Organization of the Port Operation Company/3rd level



Terminal operation

The works implied in terminal operation can be subdivided into three groups:

- stevedoring;
  - -- including loading, unloading and lashing of cargo

- storage/warehousing;
  - -- cargo activities ashore
  - -- receipt of import cargo from the vessel
  - -- intermediate storage and
  - -- delivery of cargo to the hinterland transport vehicles

- tally;
  - -- checking of condition and number of cargo
  - -- recording of condition and number of cargo
  - -- preparation of tally reports per shift/day and vessel
  - -- stating of any losses, damages and other deficiencies
  - -- preparation of tally reports for clients
  - -- preparation of cargo stowage plans for vessels
  - -- inform the management regarding cargo movements and the cargo situation in the port.

This is the standard organizational scheme on which most modern cargo terminals around the world operate. The details of the cargo operation on different areas depend very much on the handled commodities and the specific demands of the customers. As it is not yet clear, what kind of cargoes will be handled at what time in which port, the Consultants restrain from describing the future operational procedures in detail.

The main benefit of this organization is the elimination of the former, independent department for planning and despatch. All responsibilities will be in the hands of the respective terminal managers. They will decide according to their experience on how many workers and equipment will be needed to carry out required tasks. The old norms will not longer be needed.

The managers/chiefs are responsible for the efficiency of works. This system of personal responsibility guarantees a maximum of flexibility and efficiency. The works of the former dispatch department will be carried out by a single person under direct supervision of the terminal manager.

Technical division

The general tasks and duties of the technical division can be described as follows:

- responsibility for all technical aspects
- provision of equipment on request of the operator
- elaboration of maintenance programmes
- maintenance and repair of equipment as per operational requests
- maintenance of infrastructure
- planning of major engineering projects
- reporting to the operation manager.

All technical matters will be centralized in this division under supervision of the operation manager. The following improvements will result from this organizational scheme

- no conflict of interest between operation and engineering
- all technical question concentrated in one department
- technical department is supervised by the user (operations department)
- flexibility of staff and equipment disposition.

The technical division will be separated into four subdivisions with the following tasks and duties:

Garage and technical safety

Tasks and duties:

- regular checks of the technical condition of all port handling equipment

  execution of minor garage activities
  - -- filling up of gasoline and water

-- checking of battery-driven engines and change of batteries
that means all tasks, which are essential to daily operation of the equipment but cannot be considered as maintenance and repair

- information of the personnel and equipment disposition on the kind and number of equipment which is in working condition or out of order.

This division for setting and checking of safety standards is intentionally separated from the M+R section to achieve an automatic control of the execution of the repairs within the technical division without establishing an independent supervision department. This is an important step to improve the safety of equipment without increasing hampering administration.

Maintenance and repair

Tasks and duties:

- cost estimation
  -- detailed specification of maintenance and repair work
  -- evaluation of repair and maintenance
  -- proposals for "make-or-buy" decisions

- technical equipment
  -- repairs of technical equipment
  -- preventive maintenance
  -- elaboration of repair and maintenance schemes

This subdivision is responsible for the execution of repairs on spot.

Central workshop

Tasks and duties:

- repairs of technical equipment

All workshop activities will be centralized. Different workshops carrying out various tasks on different terminals should no longer be accepted.

- Store-keeping
  -- specification of needed spare parts and consumables
  -- purchase of required items (via central purchase department)
  -- administration of stores
  -- recording of consumption
  -- inventory of stores

The central workshop will manage all stores, either a centralized one or several decentralized ones according to operational requirements.

Civil works/utility

Tasks and duties:

- responsibility for repair and maintenance of all infra- and superstructure like
  -- quay walls
  -- roads
  -- storage areas
  -- gate and fences
  -- warehouses
  -- administration building

- execution of civil works

- specification of repair works

- out sourcing of repair and maintenance work

- "make-or-buy" decision for all civil works

As this subdivision is responsible for the well functioning of all infrastructure installations, it has to decide whether to carry out a task in the port or to hand the job to outside specialised companies. This division will have only a very limited working capacity at its own disposal. All technical workforce for the civil works should be rendered by the maintenance and repair division.

Engineering

This subdivision is responsible for the planning and specification of all new technical projects. It should cooperate very closely with the staff position "strategic planning" as mentioned in chapter 2.2.2. It should also elaborate proposals for repair or purchase decisions to be made for larger technical installations like cranes, locomotives, generators, etc. This subdivision must be considered as a kind of staff position to the technical manager.

Disposition of personnel and equipment

The objective of any commercially operating company must be to carry out their work with a minimum of personnel and equipment. As in port business, the utilisation of these resources is changing daily on each terminal, each port needs a division in charge of coordinating the utilisation of personnel and equipment to avoid lacks and over capacities as far as possible. The staff to be dispositioned should be divided into two groups

- operational staff; all persons directly involved in cargo operations either on board the vessels, in the storage areas or as tally clerks

- auxiliary services; all persons not directly involved in cargo handling like
  -- gate personnel
  -- watchmen
  -- bus service, etc.

Only employees with alternating working times (shift workers) will be at the disposal of the dispositioning division. Persons with regular working time are excluded from the responsibility of this subdivision. Its tasks and duties can be described as follows:

- checking of the presence or absence of operational staff

- keeping records of the available staff
  -- per day
  -- per shift

checking the operation manager's demand for number and kind of staff
  -- per day and
  -- per shift

- adjusting demand and availability of personnel

  assignment of workers to their job
  -- per shift
  -- per gang
  -- per ship/warehouse

- shifting of workers in case of need
  -- from one area to another
  -- from one shift to another

- information of workers on their assignments/shifts duly in advance

- recording of overtime work

- informing of salary department on working hours

- checking the availability of equipment

- allocation of equipment to the workers

The establishment of such a division would have the following advantages:

- record-keeping of utilisation so that overmanning and overcapacity of equipment are clearly recognisable and be avoided
- best possible use of capacities
- very simple checking of missing workers and equipment
- utilisation figures are an excellent basis for future planning
- data will be used for controlling and cost calculation
- simplified method for salary payment.

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- best possible use of capacities
- very simple checking of missing workers and equipment
- utilisation figures are an excellent basis for future planning
- data will be used for controlling and cost calculation
- simplified method for salary payment.

2.2.4.2 Sales Department

The most important organizational change towards a market-oriented company is the establishment of a sales department. Under the new competitive situation the port will be forced to attract clients. It has to convince the customers that a good quality is offered at favourable prices. This and all related activities will be carried out by the sales department.

Tasks and duties:

- elaboration of a marketing strategy
  - -- who are the potential customers
    - o importers/exporters
    - o shippers/forwarders
    - o shipping lines
    - o agencies
  - -- how to contact whom
    - o visits
    - o correspondence
    - o advertisements
    - o exhibitions
- elaboration of port tariffs
- evaluation of inquiries
- contract negotiations
  - -- price
  - -- productivity
  - -- laytime
  - -- other port services
  - -- demurrage/despatch money
- signing of contracts

information to other departments
  - -- operation
  - -- invoice
- definition of new activities

The improvement as compared to the present situation (no sales department) can be summarized as follows:

With a sales department established, the ports
- are responsible for their income/turnover
- can keep close contact to their customers and thus know about their requirements
- are able to attract customers (directly)
- are able to react according to the customers' request
- can specify his technical and operational needs
- is informed about future developments in shipping and transport and handling technology

2.2.4.3 Administration

The third department within the new structure is the administration. This department is divided into five divisions as shown in the sketch overleaf.

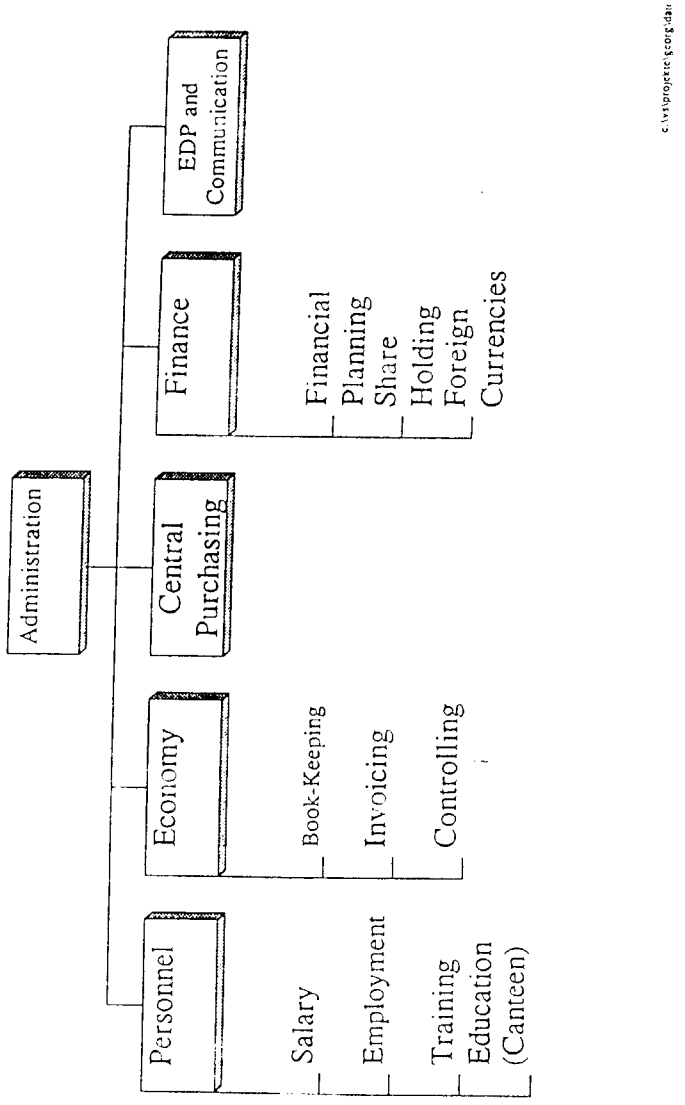
Personnel

This division acts in close cooperation with all other departments.

Tasks and duties:

employment and dismissal of staff
- elaboration of standard working contracts
- keeping of personnel records
- payment of salaries

Figure 2.19 Organization of the Port Operating Company/2nd level



- organization of training programmes for all employees according to the needs specified by other departments

initial organization of canteen services; this part should be out sourced as soon as feasible

Economy

In this division the following activities will be carried out

- book-keeping
- cost accounting
- invoicing
- controlling

The invoicing is separated from the sales department to achieve an automatic supervision of the prices charged by the sales department. Controlling in this context does not mean checking/supervision but leading/steering of all company activities. It shall enable the management to trace the weaknesses of the company and to adjust management policy accordingly.

Central Purchasing Division

The central purchasing division collects the purchase requirements from all departments and procures the items as specified. The purchasing division will send out inquiries, compares prices and supply conditions on receipt of respective quotations, and makes the final procurement decision.

This separation between specification of needs and final purchasing

- implies an automatic control of purchase demands from the different departments
- ensures the achievement of best prices and conditions
- ensures the best possible combination of technical requirements and financial possibilities of the company

- helps change the port staff's attitude from technical to commercial terms.

Finance

Tasks and duties:

- financial planning for the entire company and for each department

- administration and evaluation of any shares held from other companies in Georgia or abroad

- dealing with foreign currencies
  - -- transfer and exchange of national and foreign currency
  - -- keeping of foreign currency accounts in Georgia
  - -- keeping of bank accounts in Georgia and abroad.

EDP and Communication
(See Part D)

These activities should be subordinate to the administration department because

- the computerisation of the port will start in the administration, in the economy division

- as EDP installations have to be adjusted to the needs of the whole company, the respective requirements should be specified by each department with the assistance of EDP-experts.

2.2.4.4 Other Services

This department will deal with activities that do not touch the company's core business, as for example:

- houses and apartments for employees and non-employees
- hotels and guest houses
- shopping facilities for employees
- social services like medical care and holiday arrangements, etc.

These activities should be gradually reduced to the lowest possible extent with the objective to dissolve this department or to transfer its tasks to the administration department/personnel division.

2.2.4.5 Port Service Company

As described in chapter 2.1, the port service company will be established as a legally independent company with its shares fully owned by the operation company. This service company will carry out all tasks necessary for the vessel on entering and leaving the ports, but which are not directly connected to cargo operations. This company should be structured as follows:

General manager

The general manager is responsible for all economic, operational and administrative procedures of the company. In general, the tasks and duties do not differ from those of the manager of the port operation company.

The other activities should be allocated to four departments:

Port traffic

Tasks and duties:

- rendering of pilot services to the vessels

- organization of berth allocation in close cooperation with the port operating company

- organization of the traffic service according to the rules set by the Marine Department
  - -- radio communication with the vessels
  - -- information of ship management regarding anchorage and berthing place
  - -- supervision of ship traffic in the port, at the berths and in the access channel

- navigational aids
  - technical and operational supervision of all navigational aids (such as buoys, etc.)
  - maintenance and repair of navigational aids according to official standards
  - new installations of navigational aids if required by the Marine Department
  - information of Marine Department regarding executed services to navigational aids.

These services can be carried out either by the company's own staff and equipment or by subcontractors.

Assistance to ships

This department deals with any activities related to floating equipment

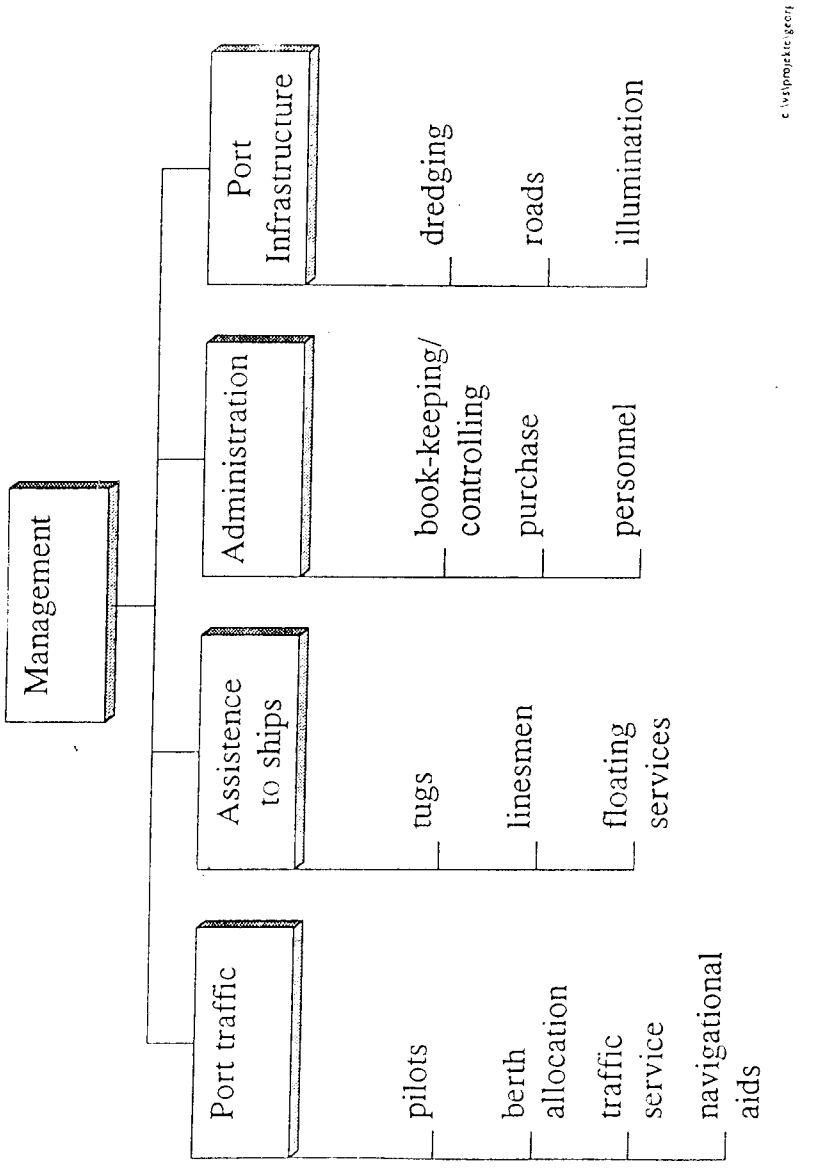
- tug boat service to vessels on arrival and departure
- a linesmen service including lines boat
- operation of anti-oil pollution equipment
- floating crane service if available in the port
- maintenance and repair of floating equipment.

While the standard maintenance should be carried out by the permanent staff, all major repair jobs should be executed by subcontractors to avoid overmanning of this department.

Administration

This department is responsible for all administrative tasks of the company. In general, these tasks do not differ from the port operation company mentioned in chapter 2.2.4.3 before. However, the administration of the port service company should be reduced to a minimum. Most of the administrative work, e.g. central book-keeping, salaries accounting, EDP and communication can be taken over by the port operation company, at least as long as the port service company is owned by one port operator only. Any double work should be avoided.

Figure 2.20: Organization of the Port Service Company/1st level



Port infrastructure

This department shall commence work as soon as more than one port operation company is active in the port. It will be responsible for the infrastructure facilities, which belong to the port as a whole and not to the premises of one individual port operation company. The department's tasks will include:

- dredging of access channels to the port and all waterways which cannot be allocated to the area of an individual port operation company
- maintenance and repair of access roads to the terminals within the port area
- illumination of general port areas like parking lots, green fields, etc.
- maintenance and repair of all general port areas .

As long as there is only one port operation company, the activities of the port infrastructure division will be carried out by the civil work/utility subdivision of the operation company's technical department.

It must be stressed again, that the company should minimize their own staff and most of the work should be carried out by subcontractors; e.g. the technical department of the port operation companies.

2.2.5 Operational Procedures

The way, how the new structural concept shall function in future will be demonstrated at two typical examples.

2.2.5.1 Example 1: Import Cargo - Flow of Information

This example shows the kind of information, which must be transferred from one department to the other to ensure a smooth execution of works. The operational steps are only mentioned, when required for the understanding of the overall procedure. The entire chain of information is divided into the following steps:

1 The sales department signs a contract with a customer; the contract includes the

- price per ton
- price for other services
- productivity indicators

2 The sales department informs the

- operation department
- cargo terminals
- invoicing division
- port service company

about the details of the contract.

3 The customer/agent advises a ship arrival to the sales department. This information includes

- time of arrival
- dimension of the vessel
- stowage plan/cargo distribution

4 The sales department informs the operation department/cargo terminals.

5 The operation department/cargo terminals define berth allocation and inform the port service company.

6. The cargo terminal determines (one day in advance and per shift)

- number/qualification of workers
- number/type of equipment/cranes required

or

- number of (standardized) gangs
- ship's foreman; responsible for the vessel
- number of rail waggons needed

and informs

- technical division
  stevedoring
- storage
- tally

7. The dispositioning division determines (per shift)

   - which jobs to be executed per worker
   - which equipment to be used per worker
   - which cranes to be employed per vessel.

8. The dispositioning division informs the

   - employees
   - technical division/garage
   - salary division
   - book-keeping
   - controlling division

9. The Tally prepares a report at the end of each shift; this report includes

   - working times
   - idle times including reasons
   - details of discharging procedures (amount of cargo, damages, etc.)

   and informs

   - ship's management
   - owner's agent
   - cargo terminal and operation department.

10. The Tally prepares a final report upon completion of services to the vessel for the

    - ship's management
    - agent/customer
    - cargo terminal
    - invoicing division
    - controlling division

11. The invoicing division prepares the invoice for the customer or his agent and informs the

    - financial division
    - sales department
    - controlling department

12. Upon receipt of payment, the financial division informs

    - invoicing division
    - sales department.

The order is accomplished upon payment of invoice.

2.2.5.2 Example 2: Cost Accounting and Price Calculation

For a commercialized and market-oriented port operation company, it is essential to know the exact cost of the services offered. Only on this basis realistic prices can be quoted to the clients. If prices are not set on a sound basis, the result can be:

- loss making, if prices are too low,
- loss of customers, if prices are too high.

The first step towards reasonable price calculation is the introduction of cost-accounting procedures (EDP-based system). The following steps will be necessary:

1. The management decides on which price shall be calculated, e.g. the price for loading one ton of a specific cargo onto a ship.

2. Calculation of personnel costs per ton

   The calculation will be done by the controlling subdivision. This is valid for all following steps unless otherwise stated.

   Information required from the different departments/divisions

tons per shift per gang - from tally division

number of persons per gang - from disposition

- qualification of persons per gang - from disposition
- salary per person per shift - from salary division
- surcharge on labour costs for vacation, sickness, etc. - from personnel division.

3. Calculation of equipment costs

Required input:

- purchase price of equipment - from accounting/book-keeping department
- annual depreciation - from economy/book keeping
- annual maintenance costs - from technical division
- consumables per hour - from technical division
- average working hours per year - from operation division.

4. Calculation of equipment costs per ton

Required input:

- tons per shift per gang - from tally
- number and type of equipment - from disposition
- cost per type of equipment per hour/shift - from controlling; see step no. 3

5. Calculation of overhead costs per ton

Required input:

- total annual cost for all persons not directly involved in cargo operations - from personnel/salary division
- total annual cost for all installations not directly involved in cargo operations - from accounting division
- all other annual expenses not directly related to cargo operations (fees, taxes, insurance, etc.) - from economy division
- total tonnage handled per year - from tally.

6 Calculation of cost per ton

- summarizing the results of steps no. 2, 4 and 5

Although the calculations shown in steps no. 2 to 6 are simplified, they demonstrate clearly, how the different departments are involved.

Price calculation

Based on the existing cost accounting system, the price calculation will be done by the following steps:

7 Determination of surcharges for

- profit
- risk
- market situation (monopoly ↔ high competition)

This decision will be made by the sales department and has to be confirmed by the general manager.

8. Price reduction according to economies of scale To attract customers, prices should be distinguished according to the

   - amount of cargo per vessel
   - amount of cargo per customer/year

   A respective decision will be taken by the sales department and the general manager.

9. Elaboration of a detailed port tariff according to the results of steps no. 6, 7 and 8.

   This basic calculation scheme is valid for any kind of cargo handled in the ports and - in general - for any kind of other services as well. Once the calculation scheme is elaborated and the persons in charge familiar with it, any new calculations and recalculations will be a comparatively easy to handle.

2.2.6 Requirements for Training and Education

It is obvious that there will be major changes in the organization and the management of the ports. As any company can only be as good as its employees, the latter must be prepared for their new tasks. Beside the structural changes described before, staff training and education will be the most important task to enable the ports to face the challenges of the future.

During their fact-finding mission, the Consultants identified some major deficiencies in the professional know-how of the port's staff. These gaps must be filled to prepare the ports for competition in a market economy.

Within regard to commercialization and efficient management, the following skills are required:

General
- English, for all levels
- English for operational staff and technicians
- EDP, basic knowledge and application of standard software

Business administration
- modern management tools
  organization of private companies
- marketing, in general
  marketing, for ports
- cost accounting and price calculation
- controlling and statistics

Cargo operation and port development
- indirect cargo handling procedures
- RoRo operation and despatch of
  -- trucks
  -- rail waggons
- container handling and container storage techniques

The specific training requirements for EDP/communication and technical matters are described in part D + E of this report.

2.2.7 Phase Concept for Implementation

The Consultants recommend the following phase concept for the implementation of the new organizational structure of the port operation company:

Phase 1: Forming a task force for "reorganization", consisting of the following persons:
- supervisor: general manager
- organizational expert
- assistance: from different departments
- adviser: foreign expert

Phase 2: Elaboration of detailed organizational plans, which include:
- Description of tasks for all departments/divisions/subdivisions
- Description of tasks for all staff, including
  -- heads of departments
  -- heads of divisions/subdivisions
  -- employees

- The task description must include
  - scope of works to be carried out
  - required education and experience of the employees
  - responsibility of the department/division/person in charge

Phase 3: Appointment of department heads by the general manager

Phase 4: Appointment of division/subdivision chiefs by the general manager/heads of departments

Phase 5: Selection of employees

Phase 6: Elaboration of detailed training programmes for employees of all levels

Phase 7: Provision of offices, equipment etc. (for all employees)

Phase 8: Implementation of the new organizational structure

Time schedule

The following table summarizes the phase concept proposed by the Consultants and indicates at the same time the periods estimated necessary to implement the new organizational structure of the ports (port operation companies).

	Estimated implementation period	
Phase	Description	months
1	Forming a task force	0.5-1
2	Organizational plans	1-2
3/4/5	Appointment of department heads Appointment of divisions Selection of employees	0.5-1
6	Elaboration of training programmes	0.5-1
7	Provision of offices	1-2
8	Implementation	1-3
Total		4.5-10

The Consultants assume that - provided the willingness for a quick adoption to the new organizational structure -, this task can be completed within less than one year.

Volume III, Annex 3

General Remarks on Development of a Maritime Administration

Contents:

1 Guiding principles

Under a clear separation of public and private responsibilities, the Maritime Administration must ensure:

- Safe, ecological responsible and facilitate maritime traffic
- efficient framework for the fair and equal treatment of all maritime commercial activities
- Reliability and competitiveness of maritime services

2 Functions of Maritime Administration

General tasks of a maritime administration are:

- to set up legal framework (laws, regulations, rules and guidelines) in the maritime field
  - for organisational structures and the tasks of the national maritime administration for the development of the national maritime industry
  - for the development of the maritime industry
- to supervise and inspect the maritime industry on complying with the legal framework
- to safeguard national interests
- to support the national and international maritime industry

2.1 Legislation Functions

2.1.1 Indigenous National Legislation for example:

- Organisation
  - Set up a law about the tasks of the government of Georgia in the maritime field
- Manpower
  - Set up regulations about the legal status of seafarers
  - Set up rules for training and education of seafarers, according to the STCW Convention
  - Set up regulations for social safety of employees
- Safety
  - Set up regulations to ensure safety of maritime traffic in national waters and the ports area
  - Set up accident prevention regulations
  - Set up accident inquiry regulations
  - Set up a pilot law
- Commercial
  - set up a commercial maritime law, containing legal framework for:
    - ship owner, ship operator, shipping company
    - rights and obligations of a ship's master

. Contracts of afreightment and charter party
. Transportation of passengers and their luggage on board ships
. General average and collision
. Salvage and assistance
. Insurance

- set up regulations for the maritime lien and the arrest of ships
- Set up register regulations
- Set up facilitation regulations
- Set up a port law

2.1.2 Conversion of international Conventions into National Law, like for example:

- Maritime Safety
  - SOLAS, International Convention for the Safety of Life at Sea, 1974, including the latest Protocols and amendments, International Safety Management Code (ISM) and International Code for High-Speed Craft (HSC)

- Cargoes
  - International Maritime Dangerous Goods Code (IMDG), incl. Emergency Procedures for Ships carrying dangerous Goods (EmS) and Medical First Aid Guide for use in Accidents involving dangerous Goods (MFAG)
  - Code of safe Practice for Solid Bulk Cargoes (BC)
  - International Code for the safe carriage of Grain in Bulk (International Grain Code)
  - Code of safe Practice for Ships carrying Timber Deck Cargoes
  - International Convention for Safe Containers (CSC)
  - Recommendations on the Safe Transport, Handling and Storage of dangerous substances in Port
  - Code of Safe Practice for Cargo Stowage and Securing

- Facilitation of Travel and Transport
  - Convention on Facilitation of international Marine Traffic (FAL)

- Legal Matters
  - International Convention relating to Intervention on the high Seas in Cases of Oil-Pollution Casualties, (Intervention)
  - International Convention on Civil Liability for oil Pollution Damage, (CLC)
  - International Convention on the Establishment of an international Fund for Compensation for Oil Pollution Damage
  - International Legal Conference on the Carriage of Passengers and their Luggage on Board Ships
  - International Conference on Limitation of Liability for maritime Claims
  - International Conference on the Suppression of unlawful Acts against the Safety of Maritime Navigation
  - International Convention on Salvage
  -

- Marine Environment Protection
  - MARPOL, International Convention for the Prevention of Pollution from Ships, 1973 - including the latest Protocols and amendments
  - Inter-Governmental Conference on the Convention on the Dumping of Wastes at Sea

- International Convention on Oil Pollution Preparedness. Response and Co-operation (OPRC)
- Ship Safety and Pollution Prevention, Ship Management and Port State Control
- IMO Guidance on Port Reception Facilities acc. MARPOL

- Marine Technology
  - International Convention on Load Lines, 1966
  - Convention on Tonnage Measurement on Ships
  - International Conference on special Trade Passenger Ships
  - International Conference on Safety of Fishing Vessels
  - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk, (IBC)
  - International Code for the Construction and Equipment of Ships carrying Liquefied Gases in Bulk, (IGC)
  - Code for the Construction and Equipment of Mobile Offshore Drilling Units, (MODU)

- Navigation
  - Convention on the international Regulations for Preventing Collisions at Sea, 1972 - including latest Protocols, (COLREG)
  - International Convention on Standards on Training, Certification and Watchkeeping for Seafarers, 1978 - including the latest Protocols, (STCW)
  - International Conference on the Establishment of an International Maritime Satellite System, (INMARSAT)
  - International Conference on maritime Search and Rescue (IMOSAR)
  - Global Maritime Distress and Safety System, (GMDSS)

2.2 Supervising Functions

Ensure through supervision and inspection that the maritime industry is complying with national laws and regulations and international conventions:

- ships
- port operators
- Port Infrastructure
- classification societies
- VTS, Vessel Traffic System
- pilots and other marine services
- maritime education and training centres
- ship waste reception facilities
- marine pollution emergencies
- communication facilities
- Search and Rescue facilities
- handling and stowage of dangerous cargoes
- against unlawful acts and illegal transport, drug smuggling and piracy
- hydrographic Surveys
- navigational Aids
- navigational publications
- navigational warning information system
- accident inquiry boards
- meteorological information system

2.3 Maritime Industry Support

- Promoting the national flag. Supporting of the ship owners in the international competition by creating possibilities to decrease costs, by formulating adequate

  - tax- policy
  - crew- and social policy; quality, quantity
  - register policy
  - streamlined administration
  - education- and training policy

- Promoting business relating to shipping
- Promoting the "off shore" industry

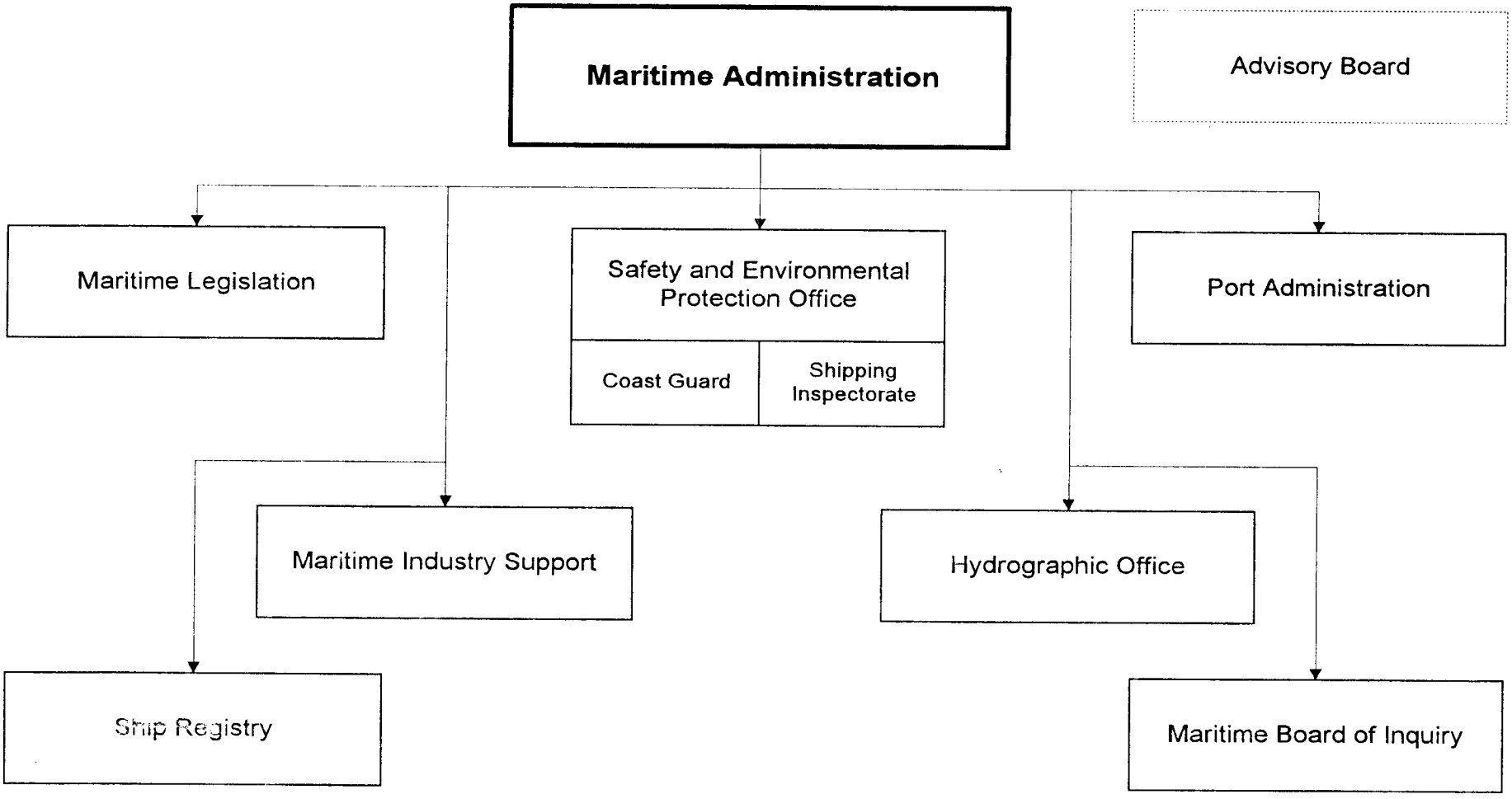
2.4 National Tasks in the Maritime Field

- Environmental protection
- Responsible use of national resources, like:
  - mineral resources in national waters
  - biological resources for example fish
  - economical and ecological resources

- Measures to be taken in case of non-compliance with national laws, regulations and rules
- Appropriation of maritime industry resources in case of emergencies or national defence

3 Organigramme of Departments in the Maritime Administration

3.1 Hierarchical Structure



4 Functions of the Departments in the Maritime Administration

Name of Department:	**Maritime Administration**

Function of Department:

- Co-ordination of all activities in the field of maritime administration
- execution of legal tasks

Superior Institution:

Government

Subordinate Division:

- Maritime Legislation
- Maritime industry promotion
- Port Administration
- Maritime Board of Inquiry
- Safety and maritime environment protection department
- Hydrographic Office
- Ship Registry

Providing Service for:

- all other departments
- Government

Receiving Service from:

- all other departments

Name of Department:	**Maritime Legislation**

Function of Department:

- submission of law bills to the parliament as described in Chapter 2.2
- establishing of decrees
- transformation of international Conventions into national law
- participating in international committees

Superior Institution:

Maritime Administration

Subordinate Division:

International Policy

Providing Service for:

- all other departments
  advises in legal questions

Receiving Service from:

- Safety and Maritime Environment Protection Department
- Maritime Industry Support
- Maritime Board of Inquiry
- Port Administration
- Hydrographic Office

Name of Department:	**Port Administration**

Function of Department:

- Administrations of the ports
- Landlord in the port area
- Determination and collecting harbour dues
- Planning, construction and maintenance of port infrastructure
- Promotion of commercial port activities
- publishing of port statistics

Superior Institution:

- Maritime Administration

Subordinate Division:

Providing Service for:

- Port Industry
  support in all questions

Receiving Service from:

- Hydrographic Office
- Shipping Inspectorate
- Coast Guard

Name of Department:	**Hydrographic Office**

Function of Department:

- Hydrographic Surveys
- Publication of Navigational information
- Establishing of Navigational Aids

Superior Institution:

- Maritime Administration

Subordinate Division:

Providing Service for:

- maritime industry,
  Providing Maritime Industry with Navigational Aids
  publishing of hydrographic survey results, Navigational Charts and Publications,
  providing with expert opinions, concerning hydrographic matters

Receiving Service from:

- Coast Guard

Name of Department:	**Ship Registry**

Function of Department:

- Managing and administrating of the Ship Register
- publishing of national fleet statistics

Superior Institution:

- Maritime Administration

Subordinate Division:

Providing Service for:

- all civil and private institutions
  providing with information, including statistics about national vessels

Receiving Service from:

- Shipping Inspectorate

Name of Department:	**Safety and Maritime Environmental Protection Department**

Function of Department:

- Co-ordinating all activities concerning safety and maritime environmental protection matters
- Supervision of classification societies
- Supervision of all other private institutions acting on behalf of national authorities

Superior Institution:

- Maritime Administration

Subordinate Division:

- Shipping Inspectorate
- Coast Guard

Providing Service for:

- all other departments
  advises in all questions concerning Safety and Marine Environmental Protection matters

Receiving Service from:

Name of Department:	**Coast Guard**

Function of Department:

- Operating of VTS
- Ensure safe maritime traffic in national waters and in the port area
- Operating of Communication Centre, including broadcasting of Weather and Navigational Warning messages
- Operating of SAR Centre
- Operating of Marine Disaster fighting Centre
- Operating of all Navigational Aids
- Factual finding in marine accidents
- Protection of national sea border
- Protection of national marine biological, mineral and economic resources

Superior Institution:

- Safety and Maritime Environmental Protection Department

Subordinate Division:

Providing Service for:

- Port Administration
  - ensure safe vessel traffic
  - supervision of pilots
  - ensure communication between vessel and Port Administration
- Maritime Board of Inquiry
  - Factual finding in marine accidents
- Hydrographic Office
  - operating of Navigational Aids
  - publishing of Navigational Warnings
- Meteorological Office
  - publishing of weather information
- Customs, Police and all other Authorities
  - Protection of the national sea border and of national resources

Receiving Service from:

- Hydrographic Office
- Meteorological Office
- Customs, Police and all other authorities

Name of Department:	**Shipping Inspectorate**

Function of Department:

- Performing flag State control
- Performing port state control
- Port Operators inspection
- Supervision of maritime education and training
- Certification of seafarers education and issuing of seafarers certificates
- Supervision of port facilities, like pilots, tugs, etc.
- Issuing of all necessary documents
- fact finding in marine accidents
- Tonnage measurement surveys

Superior Institution:

- Safety and Maritime Environmental Protection Department

Subordinate Division:

Providing Service for:

- Port Administration
  Safety Inspections on Maritime Industries equipment
- Shipping Register
  Tonnage measurement of national flag ships
- Accident Inspection Board
  Factual finding in case of accidents

Receiving Service from:

- Coast Guard
- Maritime Legislation

Name of Department:	**Maritime Board of Inquiry**

Function of Department:

- Investigation of accidents
- draw up of evidences

Superior Institution:

- Maritime Administration

Subordinate Division:

Providing Service for:

- Maritime Legislation
  advises for the adaptation of laws, regulations and rules to the latest development in accidents
- Courts
  providing with evidences

Receiving Service from:

- Coast Guard
- Shipping Inspectorate
- Police
- Maritime Legislation
- Hydrographic Office

Name of Department:	**Maritime Industry Support**

Function of Department:

- Support of the maritime Industry as described in Chapter 2.1

Superior Institution:

- Maritime Administration

Subordinate Division:

Providing Service for:

- Maritime Legislation
  exercise an influence on Maritime Legislation to support Maritime Industry

Receiving Service from:

- Advising Board

5 Institutions attached to the Maritime Administration

5.1 Maritime Advisory Board

The advisory board is advising the Maritime Legislation in their functions. Members of the board are:

- ship owners association
- port operators association
- port workers union
- seaman's union
- and more associations interested in Maritime industry

The advisory board should be heard from the Maritime Administration before setting up or changing of the legal framework., but has no direct influence on Maritime Administration decisions. The Maritime Administration has to consider the arguments of the board benevolent.

5.2 Communities of Interests in the Maritime Industry

All parties which are working in the maritime field like f.e.:

- ship owners
- ship managers
- seaman
- port operators
- port workers
- administration staff
- pilots
- shipping agents
- shipping insurers
- fishing industry
- and many more

may set up their own community of interest. They are invited to participate in the advisory board.
These organisations are independent from the Maritime Administration, their tasks and the internal structure of the organisation is laid down in statutes, which are set up by the members of the organisation themselves.

Volume III - Annex 4

Standard Balance Sheet Form

Annex 4 Standard Balance Sheet Form

NN	Assets	Code	Beginning	End
1	Intangible assets - beginning price(04)	010		
	Depreciation(05)	011		
	Residual value	012		
	Fixed assets - beginning price (01)	020		
	Depreciation(02)	021		
	Residual value	022		
	Installed equipment(07)	030		
	Capital investment-unfinished (08)	040		
	Long-term investment (06)	050		
	Settlement of account with founders (75)	060		
	Other assets	070		
	Total of 1	080		
2	Row-materials (10, 15)	100		
	Animals to be fattened up and rearing (11)	110		
	Low value and fast wearing out articles (12)	120		
	Depreciation (13)	121		
	Residual value	122		
	Non-ending production(20,21, 23, 29, 30)	130		
	Expenses of future period (31)	140		
	Finished goods (4 0)	150		
	Commodities-sale price (41)	160		
	Sale surcharge (42)	161		
	Sale costs (44)	170		
	Total of 2	180		
3	Payments with debtors for goods, works and services (45, 62, 76)	200		
	Payments for accepted bills (62)	210		
	Settlement of accounts with subsidiaries (78)	220		
	Settlement of accounts with budget (68)	230		
	Settlement of account with the staff against other operations (73)	240		
	Other debtors	250		
	Given advance to supplies and lessees(61)	260		
	Short-term financial investment (58)	270		
	Cash (50)	280		
	Account of payment (51)	290		

NN	Assets	Code	Beginning	End
	Account of currency (52)	300		
	Other money means (55, 56, 57)	310		
	Other circulating assets	320		
	Total of 3	330		
	Non-distributed profit (non-covered loss) (87) - last year	340		
	of accounting year	350		
	Balance (sum. of 080, 180, 330, 340,350)	360		

	Liabilities	Code	Beginning	End
1	Equity (85)	400		
	Reserve fund (86)	410		
	Special funds (88)	420		
	Reasonable financing and revenues(96)	430		
	Renting liabilities (97)	440		
	Payment with founders (75)	450		
	Income-for accounting period(80)	470		
	- used	471		
	Non-distributed profit - for accounting period	472		
	Total of 1	480		
2	Long-term bank credit (92)	500		
	Long-term loan (95)	510		
	Total of 2			
3	Short-term bank credit (90)	600		
	Bank credit for employees (93)	610		
	Short-term loans (94)	620		
	Payments with creditors for goods, works and services (60)	630		
	Given by bills (60)	640		
	Settlement of accounts with employees on wages and salaries(70)	650		
	Settlement of accounts with social insurance and social security (69)	660		
	Settlement of accounts with property and private insurance (65)	670		
	Settlement of accounts with subsidiaries (78)	680		
	Non-budget taxes (67)	690		
	Budget taxes (68)	700		
	Other creditors	710		

	Given advance from buyers and customers (64)	720		
	Next period revenues (83)	730		
	Reserves of expected expenses and payments (89)	740		
	Reserves of bed debts (82)	750		
	Other short-term liabilities	760		
	Total of 3	770		
	Balance (sum. of 480, 520 and 770)			

Volume III - Annex 5

Productivity indicators of the Port of Poti

Table 3.1: **PORT OF POTI** - PORT PERFORMANCE -WORK INTERRUPTIONS

прерывание работы во время эксплуатационных работ в порту

(IN SHIPDAYS) (в судоднях)

year & quarter *год квартал*	total time in port at berth *общее время в порту*	operational time at berth *время обработки у причала*	work interruptions *прерывания работы*	Time lost by interruptions in % to total time in port *время потерянновостановками в работе в % к общему времени в порту*	Time lost by interruptions in % to operational time at berth *время потерянновостановкам ие работе в % к времени обработки у причала*
1	*2*	*3*	*4*	*5*	*6*
1992 1	484,6	155,4	329,2	67,9	211,8
2	148,4	74,3	74,8	49,9	99,7
3	404,9	182,3	222,6	55,0	122,1
4	513,3	184,1	329,2	64,1	178,8
1993 1	922,2	236,4	685,9	74,4	290,1
2	701,4	270,0	431,4	61,5	159,8
3	532,1	200,2	331,9	62,4	156,8
4	356,2	117,8	238,4	66,9	202,4
1994 1	554,5	154,8	399,7	72,1	258,2
2	423,3	143,2	280,1	66,2	195,6
3	560,5	177,3	383,2	68,4	216,1
4	946,7	224,9	721,8	76,2	320,9
1995 1	993,1	276,8	716,3	72,1	258,8
2	719,4	259,2	460,2	64,0	177,5
3	628,4	203,9	424,5	67,5	208,2
4	677,5	218,8	458,7	67,7	209,6
1996 1	750,5	254,7	495,7	66,1	194,7
2	468,8	192,5	276,3	58,9	143,5
3	613,8	242,5	371,3	60,5	153,9
4	1017,1	379,1	638,0	62,7	168,3
1997 1	1294,7	346,4	948,3	73,2	273,8
2	849,9	341,9	508,0	59,8	148,6
3					

source: dispatch - office

ИНФОРМАТОР: Диспетчер порта Поти

Table 3.2:

WORK INTERRUPTIONS BY REASON - ПРЕРЫВАНИЕ РАБОТ ПО ПРИЧИНАМ

%

Year *ГОД*	Electric power cuts *ОТСУТСТВИЕ ЭЛ.ЭНЕРГИИ*	Crane or Elevator Breakdown *ПОЛОМКА КРАНОВ ИЛИ ЭЛЕВАТОРОВ*	Weather *ПОГОДА*	Lack of railwagons or trucks *НЕДОСТАТОК Ж.Д ВАГОНОВ ИЛИ ГРУЗОВИКОВ*	Other Reasons *ДРУГИЕ ПРИЧИНЫ*
1992	-	not obtainable	18	19	63
1993	3	-	15	26	56
1994	13	-	10	22	55
1995	9	-	10	24	75
1996	2	-	17	14	67
1-6 1997	6	-	26	9	59

source : Dispatcher Office Poti
ИНФОРМАТОР: ДИСПЕТЧЕР ПОРТА ПОТИ

REMARK:
Percentage refers to the available date.
Проценты ссылающиеся на действительные данные.

Times for crane breakdowns were not obtainable.
Сроки для поломанного крана не были доступны.

Other reasons: e.g.accounts not settled, documents not ready.....
Другие причины: например счета не оплаченены. документы не готовы

Table 3.3

SHIPS' TIME IN PORT OF POTI

(01 - 06 1997)

Vessel	Arrived Roads y/m/d/t	Preberthing waiting time hours (1)	Time at berth - hours (2)	Operational time at berth (3)	End of operation to sailing time (4)	Sailing time y/m/d/t (5)	Total time spent at port (arr. roads to sailing time)	Total time lost in port in % *(1+ (2-3)+ 4)*	Time lost in % of operational time to time at berth (2 -3)
January 1997									
Rize Atosoy Grain 2987	16.01.97. 21:25	-	94	73	9	21.01.97 12:25	111	27	78
P.Gutchenko Fertilizers 2987	20.21.97. 09:00	09	265	111	8	31.01/97 18:40	174	62	42
Niles Flour 1809	03.01.97. 13:20	219	170	102	9	19.01.97 19:00	389	76	60
February 1997									
Lady Linda Sigar 3009	10.02.97. 09:00	173	220	115	5	26.02.97 18:40	393	72	52
Slanik Flour 3491	09.02.97. 03:30	15	386	197	9	25.02.97. 20:30	401	53	51
Mina Flour 2971	23.01. 97. 09:40	7	240	107	9	02.02.97. 16:30	247	60	45
March 1997									
Tensa Grain 4805	28.03.97 08:20	-	62	35	3	30.03.97. 22:00	62	48	56
Doganai Flour 1904	25.02.97. 09:30	52	244	92	6	09.03.97. 17:20	296	71	38
Volgo Don-5083 Selico 4000	02.03.97. 09:15	5	126	50	17	07.03.97. 20:00	131	75	40
April 1997									
Tirgu Frama Grain 11631	07.04.97 16:00	-	143	77	19	13.04.97 15:30	143	52	54

Vessel	Arrived Roads y/m/d/t	Preberthing waiting time hours (1)	Time at berth - hours (2)	Operational time at berth (3)	End of operation to sailing time (4)	Sailing time y/m/d/t (5)	Total time spent at port (arr. roads to sailing time)	Total time lost in port in % *(1+ (2-3)+ 4)*	Time lost in % of operational time to time at berth (2 -3)
Sazim Geng Flour 3202	24.04.97. 23:00	10	103	60	18	29.04.97. 16:30	113	63	58
Nur Sugar 4501	01.04.97. 21:00	-	285	156	8	13.04.97. 17:45	285	48	55
May / Май 1997									
Sozonov Flour 2894	04.05.97. 21:00	20	142	107	11	11.05.97. 15:20	162	41	75
Daniel Sugar 3000	08.05.97. 02:30	11	95	77	10	12.05.97. 12:40	106	37	81
Volzjski-19 Pipes 1881	17.05.97 08:00	8	44	38	11	19.05.97. 11:50	52	48	86

source : port stastistics

Table 3.4

POTI SEA PORT - BERTH OCCUPATION BY YEAR AND BERTH.

%

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Mainly used for	oil products	bauxite manganese ore iron ore pellets	pipes metal	coks coal Caustic soda	Scraps Fertilizers	Selicon manga-nese	con - tainers	grain cotton	flour sugar in 50 kg bags	flour sugar food-stuff	berth port-fleet	RO-RO	RoRo and short time lay up	lay up long term	idling non port related activities
1992	-	17.3	41.1	13.5	19.8	1.8	-	25.3	24.0	-					
1993	-	16.2	64.6	21.0	14	2.7	2.7	365	37.4	29.6					
1994	10.7	2.6	24	-	15.3	9	3.6	52.3	43.6	38.4					
1995	48	2.7	17.1	1.2	12.1	10	11.6	48.8	43	37.4					
1996	46.8	-	18.5	-	29.3	4.1	20.2	44.1	52.2	21.5		29.6			
1-6 1997	17.6	2.9	6.4	-	32.8	1.2	16.8	20.0	30.1	24.6		14.8			

Table 3.6:

FERRY OPERATION - RORO
POTI
обработка парома - RORO

Year **Quarter** *Год Квартал*	**Total No of units handled** *Общее кол-во обработ-ых единиц*	**Total Time at berth** *Общее время у причала*	**Total hours worked** *общее число рабочих часов*	**Idle time in %** *Не работающее время в %*	**Units per hour of operation** *Обработка одной единицы за час*	**Units handled per hour at berth** *Единица обработанная за час у причала*
1995 3	376	283	238	16%	1,4	1,2
4	960	252	211	16%	4,5	3,8
1996 1	909	199	190	5%	4,8	4,6
2	578	173	146	16%	4,0	3,3
3	805	206	182	12%	4,4	3,9
4	1155	564	358	36%	3,2	2
1997 1	962	799	288	64%	3,3	1,2
2	1079	-	-	_-		

Table 3.7: Cargo Turnover 1993 - 1997

PORT OF POTI
COMMODITY- MTONS PER VESSEL PER DAY (24 hrs)

1993

Commodity	Type of delivery	Total cargo handled	Total days worked	Output per vessel per day	Type of equipment/ gear
Grain	Import, transit	480,0	133,3	3600	Crane
Flour	- " -	69,3	115,5	600	- " -
Sugar	- " -	65,5	109,1	600	- " -
Fertilizers	Export	25,4	50,8	500	- " -
Bauxite	Transit	296,3	59,2	5000	- " -
Coal	Import	85,0	18,0	4700	- " -
Foodstuff	Import, transit	9,0	30,0	300	- " -
Silicon manganese	Export	23,6	9,8	2400	- " -
Metal	- " -	165,0	235,7	700	- " -
Containers	Import, transit	22,4 / 1493 TEU	9,9	150 TEU	- " -
Caustic soda	Import	35,3	58,8	600	- " -

source: dispatch office poti

PORT OF POTI
COMMODITY-
MTONS PER VESSEL PER DAY (24hrs)
1994

Commodity	Type of delivery	Total cargo handled	Total days worked	Output per vessel per day	Type of equipment/ gear
Grain	Import, transit	688,0	191,0	3600	Crane
Flour	- " -	85,2	142,0	600	- " -
Sugar	- " -	10,3	17,1	600	- " -
Fertilizers	Export	23,6	47,2	500	- " -
Bauxite	Transit Azerbaijan	33,0	6,6	5000	- " -
Foodstuff	Import, transit	42,1	140,3	300	- " -
Silicon manganese	Export	78,0	32,5	2400	- " -
Metal	- " -	61,0	87,1	700	- " -
Manganese ore	Import	12,0	3,0	4000	- " -
Containers	Import, transit, export	30,0/ 2000 TEU	13,3	150 TEU	- " -
Bensine	Import, transit	67,6	19,3	3500	Vessel's pumps
Kerosene	- " -	17,9	5,1	3500	- " -
Diesel fuel	- " -	52,0	14,8	3500	- " -
Scraps	Export	15,0	8,8	1700	Crane

source: dispatch office poti

PORT OF POTI
COMMODITY- MTONS PER VESSEL PER DAY (24hrs)

1995

Commodity	Type of delivery	Total cargo handled	Total days worked	Output per vessel per day	Type of equipment/ gear
Grain	Import, transit	641,5	178,0	3600	Crane
Flour	- " -	75,7	126,1	600	- " -
Sugar	- " -	18,5	30,8	600	- " -
Fertilisers	Export	22,1	44,2	500	- " -
Bauxite	Transit	50,2	10,0	5000	- " -
Coal	Import	20,4	4,3	4700	- " -
Foodstuff	Import, transit	41,0	136,6	300	- " -
Silicon manganese	Export	86,0	35,8	2400	- " -
Metal	- " -	43,7	62,4	700	- " -
Containers	Import, transit, export	95,3/ 6353 TEU	42,3	150 TEU	- " -
Bensine	Import, transit	444,0	126,8	3500	Vessel's pumps
Diesel fuel	- " -	174,0	49,7	3500	- " -
Scraps	-	-	-	-	-

source: disptach office poti

PORT OF POTI
COMMODITY- MTONS PER VESSEL PER DAY (24hrs)

1996

Commodity	Type of delivery	Total cargo handled	Total days worked	Output per vessel per day	Type of equipment/ gear
Grain	Import, transit	379,0	105,2	3600	Crane
Flour	- " -	113,0	188,3	600	- " -
Sugar	- " -	85,3	142,1	600	- " -
Automobiles	Import, export, transit	56,6	During 16 hrs driving themselves through vessel's ramp		
Fertilisers	Export	53,5	107,0	500	Crane
Pipes	Transit Azerbaijan	61,0	68,7	900	- " -
Foodstuff	Import, transit		38,6	300	- " -
Silicon manganese	Export	36,2	15,0	2400	- " -
Cotton	Export Uzbekistan	28,0	56,0	500	- " -
Containers	Export, import, transit	166,0/ 11066 TEU	73,7	150	- " -
Bensine	Import, transit	533,3	152,3	3500	- " -
Diesel fuel	- " -	65,8	18,8	3500	- " -

source: dispatch office poti

PORT OF POTI
COMMODITY- MTONS PER VESSEL PER DAY (24hrs)

1997 (1-6)

Commodity	Type of delivery	Total cargo handled	Total days worked	Output per vessel per day	Type of equipment/ gear
Grain	Import, transit	24,0	6,6	3600	Crane
Flour	- " -	88,0	146,6	600	- " -
Sugar	- " -	32,0	53,3	600	- " -
Automobiles	- " -	63,0	driving themselves		
Fertilizers	Export	48,0	96,2	500	Crane
Silicon manganese	- " -	11,0	4,5	2400	- " -
Metal	- " -	16,3	23,2	700	- " -
Cotton	Transit Uzbekistan	33,2	66,4	500	- " -
Containers	Export, import, transit	138,4/ 9226 TEU	61,5	150 TEU	- " -
Bensine	Import, transit	209,0	59,7	3500	- " -
Kerosene	- " -	16,3	4,6	3500	- " -
Diesel fuel	- " -	-	-	3500	- " -
Scraps	Export Armenia	40,0	23,5	1700	- " -
Iron ore pallets	Export	53,0	10,6	5000	- " -

(source : dispatch office poti)

Table 3.8: Container Throughput Poti - Incoming Containers 1994 - 1997

CONTAINER THROUGHPUT
PORT OF POTI
INCOMING
YEAR : 1994

Month	20 '	40'	Total Containers	Total TEUs
January	333	-	333	333
February	83	-	83	83
March	33	-	33	33
April	43	-	43	43
May	119	-	119	119
June	175	-	175	175
July	25	-	25	25
August	315	8	323	331
September	235	-	235	235
October	192	42	234	276
November	39	2	41	43
December	98	15	113	128
Total per year			1757	1824

(cont.inc poti for

CONTAINER THROUGHPUT
PORT OF POTI
INCOMING
YEAR : 1995

Month	20 '	40'	Total Containers	Total TEUs
January	208	121	329	450
February	229	70	299	369
March	113	29	142	171
April	174	39	213	252
May	124	77	201	278
June	167	38	205	243
July	184	26	210	236
August	109	58	167	225
September	261	87	348	435
October	633	137	770	907
November	331	85	416	501
December	543	201	744	945
Total per year			4044	5012

(cont.inc poti for 1995)

CONTAINER THROUGHPUT
PORT OF POTI
INCOMING
YEAR : 1996

Month	20 '	40'	Total Containers	Total TEUs
January	311	303	614	917
February	244	250	494	744
March	431	139	570	709
April	651	152	803	955
May	275	172	447	619
June	362	118	480	598
July	309	149	458	607
August	404	202	606	808
September	609	254	863	1117
October	332	190	522	412
November	659	451	1110	1561
December	380	358	438	1096
Total per year			7705	10443

(cont. inc poti for 1996)

CONTAINER THROUGHPUT
PORT OF POTI
INCOMING
YEAR : 1997

Month	20 '	40'	Total Containers	Total TEUs
January	316	355	671	1026
February	300	261	561	822
March	407	340	747	1087
April	381	363	744	1107
May	584	761	1345	2106
June	590	705	1295	2000
July	457	1183	1640	2823
August	430	658	1088	1746
September	171	577	548	1325
October	-	-	-	-
November	-	-	-	-
December	-	-	-	-
Total per year			8839	14042

(cont.inct poti for 1997 eng)

Table 3.9: Container Throughput - Outgoing Containers 1994 - 199

CONTAINER THROUGHPUT
PORT OF POTI
OUTGOING
YEAR : 1994

Month	20 '	40'	Total Containers Всего контейнеров	Total TEUs
January	3	-	3	3
February	-	-	-	-
March	139	-	139	139
April	175	21	196	217
May	166	20	186	206
June	313	-	313	313
July	275	2	277	279
August	45	-	45	45
September	315	3	318	321
October	204	6	210	216
November	124	-	124	124
December	139	13	152	165
Total per year			1963	2028

(cont.out poti for)

CONTAINER THROUGHPUT
PORT OF POTI
OUTGOING
YEAR : 1995

Month	20 '	40'	Total Containers	Total TEUs
January	179	7	186	193
February	49	74	123	197
March	224	65	289	354
April	50	85	135	220
May	196	26	222	248
June	187	19	206	225
July	149	107	256	363
August	157	44	201	245
September	241	53	294	347
October	160	75	235	310
November	433	80	513	593
December	365	84	449	533
Total per year			3109	3828

(cont.out poti for 1995 eng)

CONTAINER THROUGHPUT
PORT OF POTI
OUTGOING
YEAR : 1996

Month	20 '	40'	Total Containers	Total TEUs
January	352	168	520	688
February	238	114	352	466
March	473	234	707	941
April	391	237	628	865
May	342	166	538	707
June	641	222	863	1085
July	418	121	539	660
August	317	154	471	625
September	454	244	698	942
October	441	151	592	743
November	429	330	759	1089
December	358	245	603	848
Total per year			7270	9656

(cont.out poti for 1996 eng)

CONTAINER THROUGHPUT
PORT OF POTI
OUTGOING
YEAR : 1997

Month	20 '	40'	Total Containers	Total TEUs
January	465	337	802	1139
February	364	326	690	1016
March	319	332	651	983
April	351	341	692	1033
May	336	491	827	1318
June	436	520	956	1476
July	234	855	1089	1944
August	341	617	958	1575
September	112	363	465	818
October	-	-	-	-
November	-	-	-	-
December	-	-	-	-
Total per year			7130	11302

(cont.out poti for 1997)

Table 3.10:

PORT OF POTI

THROUGHPUT OF OILCARGO AS LIQUID BULK

	GRADES					
YEAR	**Crude Oil**	**Diesel Fuel**	**Gasoline**	**Petroleum**	**Kerosine**	**Other Derivates**
1992						
1993						
1994		52,400	67,600		17,900	
1995						
1996		20,600	533,200			
1997 (1 - 9)		7,400	284,900		26,300	6,600

Volume III - Annex 6

Productivity indicators of the Port of Batumi

Table 3.1:

PORT OF BATUMI

PORT PERFORMANCE - WORK INTERRUPTIONS

year/quarter		total time in port	operational time at berth	work interruptions	Time lost by interruptions in % to total time in port	Time lost by interruptions in % to operational time at berth
1992	1	987,6	198,1	489,5	49,5	247,0
	2	436,1	301,8	134,3	30,7	44,4
	3	805,6	476,5	329,1	40,8	69,0
	4	5557,1	329,9	227,2	40,7	68,8
1993	1	1364,1	618,2	744,8	54,6	102,4
	2	384,5	211,5	173,0	44,9	81,7
	3	532,8	336,1	196,7	36,9	558,5
	4	1838,8	1210,9	627,9	34,1	51,8
1994	1	1287,2	451,5	835,6	64,9	185
	2	372,1	343,4	28,6	7,6	8,3
	3	322,5	277,2	45,3	14,0	16,3
	4	489,6	171,8	218,8	44,6	80,5
1995	1	4998	299,6	160,1	34,8	53,4
	2	802,0	526,2	275,7	34,3	52,3
	3	196,5	149,0	47,5	24,1	31,8
	4	699,5	293,3	406,2	58,0	138,4
1996	1	277,9	134,8	143,2	51,5	106,2
	2	354,2	285.3	68,9	19,4	24,1
	3	277,5	204.2	73,2	26,3	35,8
	4	377,5	141,9	195,5	51,7	137,7
1997	1	1012,0	592,5	419,5	41,4	70,8
	2	371,9	325,3	46,6	12,5	14,3
	3	534,7	282,0	252,7	47,2	89,6

Table 3.2:

PORT OF BATUMI
WORK INTERRUPTIONS BY REASON
%

Year	Electric power cuts	Crane or Elevator Breakdown	Weather	Lack of railwagons or trucks	Other Reasons
1992	-	- *	58	42	-
1993	1.6	-	40	57	1.4
1994	1.0	-	27	71	1.0
1995	0.2	-	37.5	62	0.3
1996	-	-	45.6	54.3	0.1
1/6 1997	-	-	60	39.8	0.2

* Based on information received from the port, crane breakdowns are insignificant .

Table 3.2:

PORT OF BATUMI
WORK INTERRUPTIONS BY REASON
%

Year	Electric power cuts	Crane or Elevator Breakdown	Weather	Lack of railwagons or trucks	Other Reasons
1992	-	- *	58	42	-
1993	1.6	-	40	57	1.4
1994	1.0	-	27	71	1.0
1995	0.2	-	37.5	62	0.3
1996	-	-	45.6	54.3	0.1
1/6 1997	-	-	60	39.8	0.2

* Based on information received from the port, crane breakdowns are insignificant .

Table 3.3:

PRODUCTIVITY ACCORDING TO TIMESHEETS IN BATUMI

ПРОИЗВОДИТЕЛЬНОСТЬ В СООТВЕТСТВИИ С ТАЙМШИТОМ В БАТУМИ (В СРЕДНЕМ 06.96-05.97)

Commodity **Груз**	**ship to shore or vice versa by** **Выгрузка с судна**	**Type of delivery** **Тип доставки**	**Time lost by weather** (In % to time at berth) **Время,потер-е по мет.условиям** (в % ко времени ст-ки у причала)	**Time lost by breakdowns** (In % to time at berth) **Время,потер-е поломками** (в % ко времени ст-ки у причала)	**Time lost by reasons beyond control of port** (in % to time at berth) **Время,потер-е по независимым от порта обстоятельствам** (в % ко времени ст-ки у причала)	**Average gross daily production** (mtons) **Средняя дневная производит-сть** (мт)
Wheat in bulk *Пшеница насыпью*	Portal crane Портальный кран	Direct Прямой	7,5	-	26,6 %	3500
Wheat in bulk *Пшеница насыпью*	"Hartman" Элеватор	Direct Прямой	17,7	-	-	1792
Flour *Мука*	Portal crane Портальный кран	Direct Прямой	17,5	-	-	409
Ammonium Nitrate *Силитра аммиачная*	Portal crane Портальный кран	Direct Прямой	11,0	-	7,9 %	390
Ammonium Nitrate *Силитра аммиачная*	Portal crane Портальный кран	Direct Прямой	46,4	-	-	383
Wheat in bulk *Пшеница насыпью*	Portal crane Портальный кран	Direct Прямой	-	-	18,2 %	1857
Sugar	Portal crane	Direct	-	-	11,9 %	972,5

Commodity Груз	**ship to shore or vice versa by** Выгрузка с судна	**Type of delivery** Тип доставки	**Time lost by weather** (In % to time at berth) Время,потер-е по мет.условиям (в % ко времени ст-ки у причала)	**Time lost by breakdowns** (In % to time at berth) Время,потер-е поломками (в % ко времени ст-ки у причала)	**Time lost by reasons beyond control of port** (in % to time at berth) Время,потер-е по независимым от порта обстоятельствам (в % ко времени ст-ки у причала)	**Average gross daily production** (mtons) Средняя дневная производит-сть (мт)
Сахар	Портальный кран	Прямой				
Grain in bulk *Зерно насыпью*	"Hartman" Элеватор	Direct Прямой	-	-	-	1072,3
Cotton *Хлопок*	Portal crane Портальный кран	Direct Прямой	43,2 %	6,3 %	69,4 %*	73,5

- Delay caused by rain
- *Задержка по причине плохой погоды*

Table 3.4:

BATUMI - БАТМИ

COMMODITY - TONS PER GANG PER HOUR

грузы-в тоннах по бригаде за час (comtghrfor.rus)

						4=2 x 3	5= 1:4	
Vessel *судно*	**Commodity** *груз*	**Type of delivery** *тип доставки*	**total mt / containers handled (1)** *общий вес м/ контейнеры*	**total number of gangs (2)** *общее число бригад*	**total hours worked per gang (3)** *общее кол-во часов работы по бригадам*	**total gang hours (4)** *общее кол-во часов работы бригад*	**total tons per gang per hour (5)** *общий вес в тоннах выгруженный бригадой за час*	**Handling gear used** *использованное оборудование*
M/V'LENA' *Т/Х"ЛЕНА*	GRAIN BULK *ЗЕРНО НАВАЛОМ*	DIRECT *ПРЯМОЙ*	23445	4	69	276	84,9	GRABS *ГРЕЙФЕР*
M/V'OLMA' *Т/Х"ОЛЬМА"*	GRAIN BULK *ЗЕРНО НАВАЛОМ*	DIRECT *ПРЯМОЙ*	8690	1	115	115	75,6	HARTMAN ХАРТМАН
M/V'K.HALID' *Т/Х"К.ХАЛИД"*	FLOUR IN BAGS *МУКА В МЕШКАХ*	DIRECT *ПРЯМОЙ*	2809	4	105	420	6,69	PORTAL CRANES *ПОРТОВЫЕ КРАНЫ*
M/V'BASHAR' *Т/Х"БАШАР"*	SUGAR IN BAGS *САХАР В МЕШКАХ*	DIRECT *ПРЯМОЙ*	1190	4	48	192	6,20	PORTAL CRANES *ПОРТОВЫЕ КРАНЫ*
M/V'LINA STAR' *Т/Х"ЛИНА СТАР"*	RICE IN BAGS *РИС В МЕШКАХ*	DIRECT *ПРЯМОЙ*	991	4	41	164	6,04	PORTAL CRANES *ПОРТОВЫЕ КРАНЫ*
M/V'FONSIA' *Т/Х"ФОНСИА"*	BARIT IN BIG BAGS *БАРИТ В БОЛЬШИХ МЕШКАХ*	DIRECT *ПРЯМОЙ*	1804	1	42	42	43,0	PORTAL CRANES *ПОРТОВЫЕ КРАНЫ*
M/V	AMONIUM	DIRECT	1198	4	53	212	5,65	PORTAL CRANES

Vessel *судно*	Commodity *груз*	Type of delivery *тип доставки*	total mt / containers handled (1) *общий вес м/ контейнеры*	total number of gangs (2) *общее число бригад*	total hours worked per gang (3) *общее кол-во часов работы по бригадам*	total gang hours (4) *общее кол-во часов работы бригад*	total tons per gang per hour (5) *общий вес в тоннах выгруженный бригадой за час*	Handling gear used *использованное оборудование*
'KARABADJAN' *Т/Х"КАРА БАДЖАН"*	NITRATE In Bags *АМИАЧНАЯ СЕЛИТРА В МЕШКАХ*	*ПРЯМОЙ*						*ПОРТОВЫЕ КРАНЫ*
M/V'K HASAN' T/X "K. ХАСАН"	METAL *МЕТАЛ*	DIRECT *ПРЯМОЙ*	447	1	10	10	44,7	PORTAL CRANES *ПОРТОВЫЕ КРАНЫ*
M/V'THOMAS' T/X"ХОМАС"	COTTON *ХЛОПОК*	DIRECT *ПРЯМОЙ*	1745	2	140	280	6,2	PORTAL CRANES *ПОРТОВЫЕ КРАНЫ*

Table 3.5

BATUMI SEA PORT

BERTH OCCUPATION BY YEAR AND BERTH

%

YEAR	PIER 1 - 3	PIER 4 - 5	PIER 6 - 9	PIER 10 - 11
Mainly used for	*Tankers*	*Lay up berth*	*Dry cargo handling*	*Passenger - & private operations*
1992	21.8	100	50.8	negligible
1993	16.7	100	74.9	do
1994	12.7	100	36.9	do
1995	23.9	100	62.1	do
1996	17.4	100	34.4	do
1-6 1997	28.4	100	81.5	do

Table 3.6

SHIPS' TIME IN PORT OF BATUMI

(12/96 - 08/97)

Vessel	Arrived Roads y/m/d/t	Preberthing waiting time hours (1)	Time at berth - hours (2)	Operational time at berth (3)	End of operation to sailing time (4)	Sailing time y/m/d/t (5)	Total time spent at port (arr. roads to sailing time)	Total time lost in port in % *(1+ (2-3)+ 4)*	Time lost in % of operational time to time at berth (2-3)
N.KALKAVAN *SUGAR*	**25/12-96 12-30**	**126-45**	**508-25**	**284-25**	**04-30**	**20/01 97-23-40**	**635-10**	**52**	**44,08**
ADVES *FLOUR*	**06/1-97 22.00**	**117-10**	**197-25**	**102-50**	**04-30**	**19/1 24-00**	**314-00**	**68**	**47,84**
PONTOPOROS *GRAIN*	**31/12-96 22-50**	**22-25**	**197-25**	**94-25**	**02-15**	**10/1 02-40**	**219-50**	**57**	**52,22**
ALTINER -1 *SUGAR*	**7/1-97 10-30**	**100-30**	**77-40**	**44-40**	**09-10**	**14/1 20-50**	**178-20**	**79**	**44,64**
DANIEL EXPRESS *COTTON*	**12/12-96 20-50**	**125-50**	**686-50**	**287-05**	**12-00**	**15/1 17-00**	**812-40**	**66**	**58,19**
KORPUS KPIST *FOOD STAFFS*	**9/1-97 09-30**	**16-40**	**478-50**	**282-45**	**06-10**	**30/1 01-00**	**495-30**	**44**	**40,98**
K.N. DEVAL *FLOUR*	**14/1-97 07-50**	**165-05**	**89-00**	**41-35**	**02-40**	**24/1 21-15**	**254-05**	**88**	**53,54**
DURSUN DZCHAVAHILI *FLOUR*	**18.4-97 02-15**	**42-25**	**58-20**	**46-00**	**04-00**	**22.4 07-00**	**100-45**	**58**	**20,97**
K.D.AKBASH *FLOUR*	**14/4-97 11-15**	**91-10**	**121-35**	**85-00**	**03-00**	**23/4 11-00**	**212-45**	**61**	**29,96**
GUMBET *SOY BEANS*	**17/4-97 16-45**	**69-15**	**247-10**	**155-40**	**00-40**	**30/4 21-10**	**316-25**	**39**	**37,12**
PINAR *FLOUR*	**12.4-97 13-00**	**---**	**119-10**	**54-30**	**08-40**	**17/4 12-10**	**119-10**	**42**	**54,41**

Vessel	Arrived Roads y/m/d/t	Preberthing waiting time hours (1)	Time at berth - hours (2)	Operational time at berth (3)	End of operation to sailing time (4)	Sailing time y/m/d/t (5)	Total time spent at port (arr. roads to sailing time)	Total time lost in port in % *(1+ (2-3)+ 4)*	Time lost in % of operational time to time at berth (2 -3)
MARE BALTICO *SOY BEANS*	**9/4-97 21-00**	**44-00**	**212-15**	**154-30**	**02-35**	**20/4 13-15**	**256-15**	**28**	**27,27**
BLK BERT *FOODSTAFFS*	**4/4-97 23-00**	**----**	**195-10**	**96-55**	**06-30**	**13/4 02-10**	**195-10**	**37**	**50,52**
OZGES *FLOUR*	**26/9-97 10-55**	**81-05**	**72-20**	**63-00**	**03-50**	**j 20-20**	**153-25**	**69**	**12,75**
CELECHATIN ASLAN *CHEMICALS NITROGEN.*	**21/3-97 09-40**	**204-20**	**96-00**	**61-30**	**06-30**	**02/4 22-00**	**300.20**	**61**	**36,15**
KOTIL *CHEMICALS NITROGEN.*	**26/3-97 07-40**	**156-50**	**288.30**	**125-25**	**19-10**	**13/4 21-00**	**445-20**	**75**	**56,56**
TURGAV KALKOVAN *SUGAR*	**16/8-97 11-00**	**01-50**	**277-35**	**188-50**	**02-25**	**28/8 02-25**	**279-25**	**36**	**32,04**
CHRISTOS *SUGAR*	**27/8-97 16-30**	**09-30**	**63-40**	**37-45**	**05-10**	**30/8 17-40**	**73-10**	**54**	**40,91**
MUGAN *FLOUR.*	**28/8-97 09-00**	**12-30**	**170-30**	**116-10**	**06-10**	**30/8 24-00**	**183-00**	**39**	**31,83**
MACHAM *SUGAR.*	**13/8-97 10-15**	**45-15**	**206-00**	**152-25**	**02-30**	**23/8 21-30**	**251-15**	**44**	**26,10**
CHELIOPULOS SKAI *SPIRITS.CHEMICALS*	**09/8-97 00-00**	**41-00**	**57-55**	**46-40**	**02-45**	**13/8 02-55**	**98-55**	**55**	**19,38**
BARTIN *FLOUR.*	**02/8-97 08-00**	**133-00**	**33-00**	**29-10**	**03-00**	**9/8 08-00**	**166-00**	**84**	**11,82**

Vessel	Arrived Roads y/m/d/t	Preberthing waiting time hours (1)	Time at berth - hours (2)	Operational time at berth (3)	End of operation to sailing time (4)	Sailing time y/m/d/t (5)	Total time spent at port (arr. roads to sailing time)	Total time lost in port in % (1+ (2-3)+ 4)	Time lost in % of operational time to time at berth (2 -3)
SANAMAP *BARITE.*	**19.8-97 16-00**	**----**	**89-30**	**52-50**	**01-10**	**23.8 09-30**	**89-30**	**41**	**41,21**
ODOMAN TOMBA *GRAIN.*	**17.8-97 06-30**	**----**	**47-05**	**22-15**	**05-05**	**19/8 05-35**	**47--05**	**63**	**52,93**
ORION STAR *FLOUR.*	**11.8-97 07-45**	**07-45**	**107-30**	**67-00**	**03-30**	**16.8 02-30**	**114-45**	**44**	**37,56**
VARBUG-2 *FLOUR.*	**31/7-97 16-50**	**125-10**	**89-05**	**75-15**	**----**	**09/8 15-05**	**214-15**	**64**	**15,61**
PASIFIK PIONER *GRAIN.*	**07.8-97 21-20**	**41-15**	**79-55**	**35-40**	**05-40**	**7/8 22-30**	**121-10**	**75**	**55,50**
KORTAN MURAN *GRAIN .*	**23/8-97 14-20**	**136-15**	**236-00**	**127-55**	**03-35**	**08/9 02-35**	**372-15**	**63**	**45,96**
BESERLER RICE	**29/8-97 05-55**	**98-45**	**12-05**	**50-30**	**05-15**	**7/9 11-50**	**218-55**	**77**	**58,11**
PADA *FLOUR.*	**2/9-97 01-10**	**55-10**	**83-25**	**44-40**	**02-05**	**7/9 17-40**	**138-35**	**70**	**46,67**
SELIMOGLY *FLOUR.*	**31/08-97 06-50**	**134-20**	**51-00**	**45-00**	**02-30**	**7/9 23-30**	**185-20**	**77**	**11,77**
IBRAIL GEMAOGLU *FLOUR*	**29/8-97 09-45**	**33-15**	**64-10**	**29-30**	**02-10**	**2/9 11-10**	**97-25**	**62**	**54,30**
CHALDIRAN *FLOUR.*	**24.8-97 15-15**	**146-45**	**146-25**	**69-50**	**01-40**	**5/9 20-25**	**293-10**	**76**	**52,48**
NADZCHI SELIMOGLU *SUGAR.*	**1/9-97 01-00**	**166-20**	**42-20**	**37-20**	**03-10**	**9/9 17-40**	**208-40**	**83**	**11,85**

Vessel	Arrived Roads y/m/d/t	Preberthing waiting time hours (1)	Time at berth - hours (2)	Operational time at berth (3)	End of operation to sailing time (4)	Sailing time y/m/d/t (5)	Total time spent at port (arr. roads to sailing time)	Total time lost in port in % *(1+ (2-3)+ 4)*	Time lost in % of operational time to time at berth (2 -3)
ERTUK *FLOUR.*	**6/9-97 16-50**	**73-20**	**25-00**	**18-30**	**03-40**	**10/9 19-10**	**98-20**	**84**	**26-80**
GUNERLER *SUGAR.*	**1/9-97 15-30**	**160-10**	**41-00**	**35-40**	**03-00**	**10/9 00-40**	**201-10**	**88**	**13,86**
K.NADZCHIDIVAL *FLOUR.*	**1/9-97 8-15**	**162-30**	**47-00**	**38-30**	**03-25**	**10/9 01-45**	**209-30**	**83**	**18,52**
EBER *GRAIN.*	**13/9-97 10.50**	**-----**	**56-50**	**51-20**	**01.40**	**15/9 19-40**	**56-50**	**12**	**09,39**
IBRAGIM TEMAOGMU *FLOUR.*	**12.9-97 16-30**	**-----**	**100-15**	**30-15**	**02-45**	**16/9 20-45**	**100-15**	**72**	**69,90**
RASIM KALTAN *SUGAR.*	**14/9-97 16-00**	**102.30**	**31-00**	**26-30**	**02-45**	**20/9 05-30**	**133-30**	**81**	**15,17**
KUT *FLOUR.*	**10.9-97 01-40**	**07-50**	**252-30**	**145-30**	**02-30**	**20.9 22-00**	**260-20**	**45**	**42,41**
ILIA SELVINSKIY	**29/8-97 05-00**	**43-25**	**198-55**	**113-45**	**02-20**	**8/9 07-20**	**242,20**	**53**	**42,87**

source : port stastistics

Table 3.7 Throughput Figures Batumi Port

TURNOVER OF BATUMI SEA PORT / ПЕРЕРАБОТКА ГРУЗА В БАТУМСКОМ МОРСКОМ ПОРТУ

INBOUND CARGO / ВЫГРУЖЕННЫЙ ГРУЗ

Commodity discharged *ГРУЗ*	**Country of origin** *СТРАНЫ ОТПРАВ-Я*	**Cargo (1000t)** *ГРУЗ*		**Total** *ВСЕГО*	
		1993	1994	1993	1994
1. GRAIN ЗЕРНО	Italy / *Италия*	63,9			
	USA / *США*	278,2	253.1		
	Russia / *Россия*	70,0			
	England / *Англия*	157,5	19.3		
	Turkey /*Турция*	33,1	137.1		
	Ukraine / *Украина*	6,0	2.2		
	France / *Франция*	99,0	36.9		
	Germany / *Германия*	3,9			
	Estonia / *Эстония*	40,0			
	Denmark / *Дания*		35.0		
	Canada / *Канада*	47,1			
	Albania / *Албания*		3.6		
	China / *Китай*		11.3		
	Cuba / *Куба*	0,3		*799,0*	*498.5*
2. FLOUR / *МУКА*	Italy / *Италия*	72,3	24.5		
	Russia /*Россия*	6,6	12.8		

Commodity discharged *ГРУЗ*	Country of origin *СТРАНЫ ОТПРАВ-Я*	Cargo (1000t) *ГРУЗ*		Total *ВСЕГО*	
		1993	1994	1993	1994
	Turkey / Турция	6,7	29.5		
	France / *Франция*	19,6			
	Cyprus / *Кипр*	0,5		*105,7*	*66.8*
3. SUGAR / *Сахар*	Italy / *Италия*	3,3			
	Russia / *Россия*	1,9	0.3		
	Ukraine / Украина		0.6		
	Holland / *Голандия*	17,4			
	Turkey /*Турция*	2,3	0.1	*24,9*	*1.0*
4. RICE / *Рис*	Russia / *Россия*	1,2	3.6		
	Turkey /*Турция*		11.5		
	Greece / Греция		1.4		
	Bulgaria / Болгария		5.6	*1,2*	*22.1*
5. EQUIPMENT Оборудование	Turkey / *Турция*	0,1			
	Russia / Россия	0,3	3.0	0,4	*3.0*
	Holland / Голандия	1,4			
	Ukraine / Украина	1.0			
	Romania /Румыния	1.1			
	Greece / Греция	0.5			
6. ORE / Руда	Guinea / Конакри	16,9		16,9	
7. OIL / *Жиры и масла*	RUSSIA / *Россия*	0,9	2.2	*0,9*	*2.2*

Commodity discharged	Country of origin	Cargo (1000t)	Total

ГРУЗ	СТРАНЫ ОТПРАВ-Я	ГРУЗ		ВСЕГО	
		1993	1994	1993	1994
8. VEGETABLES *Овощи*	Denmark / *Дания*	1,2			
	Turkey / *Турция*		1.3		
	Russia / Россия		1.1	*1,2*	*2.3*
9. FOOD / Продукты питания	Turkey / *Турция*		1.0		
	Ukraine / *Украина*		1.1		*2.2*
10. Wood / Лес	Turkey / *Турция*		0.3		*0.3*
11. COAL / Уголь	Russia / Россия		2.2		*2.2*
12. TEA / Чай TOBACCO / Табак	USA / *США*		0.2		*0.2*
9. Other commodities *Другие грузы*	Russia /*Россия*	5.0	2.7		
	Turkey / *Турция*	5. 0	3.3		
	Ukraine / *Украина*	6.0			
	Bulgaria /*Болгария*	4,0		*20,0*	*6.0*
TOTAL INBOUND ***Всего выгруженных***	**DRY CARGOES** ***сухогрузов***			**974.7**	**606.7**

source : Statistics Dept. Batumi Port

Таблица / Table 3.8:

BATUMI / БАТУМИ
OUTBOUND CARGO
ПОГРУЖЕННЫЙ ГРУЗ

COMMODITY *ГРУЗ*	**COUNTRY OF DESTINATION** *СТРАНЫ НАЗНАЧ-Я ЭКСПОРТА*	**CARGO (1000t)** *ГРУЗ*		**TOTAL** *ВСЕГО*	
		1993	1994	1993	1994
1 METAL / *Металл*	TURKEY / *Турция*	18,1	20	18,1	
	UKRAINE / *Украина*		2.8		
	EGYPT / *Египет*		3.7		26.5
2 CHEMICAL CARGO *Химический груз*	TURKEY /*Турция*	3,4	5.4		5.4
	RUSSIA / Россия	1,5		4,9	
3 CONSTRUCTION CARGO *Строит. мин. груз*	TURKEY / *Турция*	0,9			
	RUSSIA / *Россия*	0,2		1,1	
4 CITRUS FRUITS *Цитрусы*	TURKEY / *Турция*	1,1			
	RUSSIA / *Россия*	3.0	8.5		
	UKRAINE / *Украина*	3.1	7.8	7.2	16.3
5 FOREST / PRODUCTS *Лесные Грузы*	TURKEY / *Турция*	8,1	1.1		1.1
	RUSSIA / *Россия*	1.0		9.1	
6 TEA / *Чай*	TURKEY / *Турция*	0,1			
	RUSSIA / Россия		0.7		0.7
TOBACCO / *Табак*	RUSSIA / *Россия*	0.2			
	UKPAINE / *Украина*		0.1		0.1
BAY LEAVES / *Лавр. лист*	UKPAINE / *Украина*	0.1		0.4	
7 COAL / *Уголь*	TURKEY / *Турция*	2,4	4.4	2,4	4.4
8 EQUIPMENT / *Машины и оборудование*	RUSSIA / *Россия*	0,9	1.2		
	UKRAINE / *Украина*	1.9	0.4	2.8	1.6
9 OTHER CARGO *Прочие грузы*	ITALY / *Италия*	0.1		0.4	
	RUSSIA / *Россия*	0.1			
	TURKEY / *Турция*		0.5		
	UKRAIN E/ *Украина*	0,1	0.1		0.6
TOTAL OUTBOUND DRY CARGOES ***Всего погруженных сухогрузов***		***46.5***	***57.7***		

TOTAL TURNOVER ***Общий грузообо-рот***	**1993 MT**	**1994**
	1.021.200	***664400***

source : Statistics Dept. Batumi

Таблица - Table 3.9

GOODS DISCHARGED AT PORT IN MT AND DISPATCHED **BY RAIL**
РАЗГРУЗКА ИМПОРТА В ПОРТУ И ОТПРАВКА М. ТОНН ПО Ж. Д.

1995

	Origin by country / Страна отправления	Commodity / Наименование товаров	Final Destination / Место Доставки		
			GEORGIA / ГРУЗИЯ	ARMENIA / АРМЕНИЯ	AZERBAIJAN / АЗЕРВАЙДЖАН
1	BULGARIA / *БОЛГАРИЯ*	Flour / *МУКА*	1372	-	-
2		Sugar / *САХАР*	1035	-	-
3		Cigarettes / *СИГАРЕТЫ*	-	-	1985
4		Drink / *НАПИТКИ*	211	-	-
5		Different Goods *РАЗЛИЧНЫЕ ТОВАРЫ*	56	-	-
6	TURKEY / *ТУРЦИЯ*	Flour / *МУКА*	2486	-	1003
7		Chemical Oil /*ХИМ. МАСЛА*	-	-	758
8		Sugar / *САХАР*	1350	-	-
9		Grain / *ЗЕРНО*	-	-	5943
10	FRANCE / *ФРАНЦИЯ*	Flour / *МУКА*	24005	7985	9363
11		Grain /*ЗЕРНО*	19888	19849	39797
12	ITALY / *ИТАЛИЯ*	Flour / *МУКА*	6045	5575	5056
13		Grain / *ЗЕРНО*	39765	993	1123
15	GERMANY / *ГЕРМАНИЯ*	Flour / *МУКА*	-	4742	1204
16		Sugar / *САХАР*	2484	-	-
17	BELGIUM / *БЕЛЬГИЯ*	Flour / *МУКА*	-	3524	-
18	USA / *США*	Flour / *МУКА*	-	474	-
19		Pea / *ГОРОХ*	1281	1113	2195
20		Dry Milk / *СУХОЕ МОЛОКО*	-	754	-
21		Vegetable Products *ОВОЩНЫЕ ПРОДУКТЫ*	499	-	-
22		Beans / *БОБОВЫЕ*	937	1184	1858
23		Rice / *РИС*	4570	4436	6236
24		Vegetable Oil / *РАСТ-ОЕ МАСЛО*	1017	427	-
25		Containers/ *Контейнеры*	-	34	5
26		Pneumatic Machinery / *ПНЕВМАТИЧ-КИЙ МАШ.. ОБОРУД-Е*	55,5	-	-
27		Soya / *СОЙЯ*	-	5853	-
28		Grain / *ЗЕРНО*	34339	154973	-
29	SPAIN / *ИСПАНИЯ*	Butter / *МАСЛО*	5261	-	-
30	ROMANIA / *РУМЫНИЯ*	Pea / *ГОРОХ*	1503	-	-
31	RUSSIA / *РОССИЯ*	Sugar / *САХАР*	-	1542	-
32		Food / *ПРОДУКТЫ*	489	-	-
33		Wood / *ЛЕС*	1706	-	-
34		Pipes / *ТРУБОПРОВОДЫ*	1113	-	-
35		Coal / *УГОЛЬ*	4424	-	-
36		Railway Sleepers / *Ж-Д ШПАЛЫ*	1032	-	-
37		GRAIN / *ЗЕРНО*	400	247	-
38	DENMARK / *ДАНИЯ*	GRAIN / *ЗЕРНО*	34935	74426	89517

	Origin by country / *Страна отправления*	Commodity *Наименование товаров*	Final Destination *Место Доставки*		
			GEORGIA *ГРУЗИЯ*	ARMENIA *АРМЕНИЯ*	AZERBAIJAN *АЗЕРВАЙДЖАН*
39	HOLLAND / *ГОЛАНДИЯ*	GRAIN / *ЗЕРНО*	-	19887	-
SUB TOTAL			*192258,5*	*308018*	*165043*
GRAND TOTAL MT				**665,319.5**	

source : statistics dpt. batumi port

Таблица / Table 3.10

GOODS LOADED AT PORT OF BATUMI /РАЗГРУЗКА ЭКСПОРТ
(METRIC TONS RECEIVED **BY RAIL /** *ОТПРАВКА М. ТОНН ПО* **Ж. Д.**)

1995

	CONTRY OF DESTINATION СТРАНА ОТРПАВИТЕЛЬ	**COMMODITY НАИМЕНОВАНИЕ ТОВАРА**	**TONNAGE ВЕС**
1	TURKEY / *ТУРЦИЯ*	METAL / МЕТАЛ	45,212
2		MINERAL PRODUCTS / *МИНЕРАЛЬНЫЕ ПРОДУКТЫ*	17,290
TOTAL ВСЕГО			**62,502**

source: statistics dept. port of batumi

Таблица / Table 3.11

GOODS LOADED AT PORT OF BATUMI / *РАЗГРУЗКА ЭКСПОРТ ЗАГРУЗКА В ПОРТУ*
(A METRIC TONS RECEIVED **BY ROAD /** ОТПРАВКА М. ТОНН ПО **ДОРОГЕ)**

1995

	Origin by Country / СТРАНА ОТПРАВЛ-Я	**Commodity / НАИМЕНОВАНИЕ ТОВАРА**	**Tonnage / ВЕС**
1	ISRAEL / *ИЗРАИЛЬ*	DIFFERENT GOODS / *РАЗЛИЧНЫЕ ТОВАРЫ*	361
2	RUSSIA / *РОССИЯ*	MINERAL WATER / *МИНЕРАЛЬНОЯ ВОДА*	450
3		TOBACCO / *ТАБАК*	926
4		CARS / *МАШИНЫ*	1
5		DIFFERENT GOODS / *РАЗЛИЧНЫЙ ТОВАР*	187
6	UKRAINE / *УКРАИНА*	CARS / *МАШИНЫ*	104
7		TEA / *ЧАЙ*	1530
8		DIFFERENT GOODS / *РАЗЛИЧНЫЕ ТОВАРЫ*	1009
	TOTAL / *ОБЩЕЕ*		**4463**

source :Statitics Dept. Batumi

Таблица / Table 3.12

TURNOVER OF BATUMI SEA PORT IN 1996 and 1997
INBOUND CARGO
ПЕРЕРАБОТКА ГРУЗА В ПОРТУ БАТУМИ В 1996 / 1997 ГГ
ВЫГРУЖЕННЫЙ ГРУЗ

COMMODITY / *ГРУЗ*	COUNTRY OF ORIGIN / *Страны Отправления*	COUNTRY OF DESTINATION / СТРАНЫ НАЗНАЧЕНИЯ											
		GEORGIA / *ГРУЗИЯ*		ARMENIA / *АРМЕНИЯ*		AZERBAIJAN / *АЗЕРБАЙДЖАН*		UZBEKISTAN / *УЗБЕКИСТАН*		KIRGISTAN / *КИРГИСТАН*		RUSSIA / *РОССИЯ*	
		1996	1997	1996	1997	1996	1997	1996	1997	1996	1997	1996	1997
GRAIN / *Зерно*	ITALY / *Италия*	10020				9862							
	ROMANIA / *Румыния*			2950				41049					
	DENMARK / *Дания*	19714				9908							
	AUSTRALIA / Австралия		11.4		1.8		6.5						
	USA / *США*	95642	25.8	121287	61.0		0.5			6959			
	TURKEY / *Турция*		24.9		23.7	8064							
	FRANCE / *Франция*					6573							
	C.I.S. / *С.Н.Г.*			19896									
FLOUR / *Мука*	USA / *США*	4141	1.5	1908	4.8	6245	0.2		3.3				
	FRANCE / *Франция*		0	1665	0		6.0						
	TURKEY / *Турция*	4846	13.4	4836	9.0	5795	69.0					1410	
	ITALY / *Италия*	11125	1.9	9610	8.8	5234	6.2						
	ROMANIA / *Румыния*	368		842		5441							
	UKRAINE / Украина		0		1.2		6.8						
	RUSSIA / Россия		0.4										
	BELGIUM / *Бельгия*	4748		2516		4234							

COMMODITY / *ГРУЗ*	COUNTRY OF ORIGIN / *Страны Отправления*	COUNTRY OF DESTINATION / СТРАНЫ НАЗНАЧЕНИЯ											
		GEORGIA / *ГРУЗИЯ*		ARMENIA / *АРМЕНИЯ*		AZERBAIJAN / *АЗЕРБАЙДЖАН*		UZBEKISTAN / *УЗБЕКИСТАН*		KIRGISTAN / *КИРГИСТАН*		RUSSIA / *РОССИЯ*	
		1996	1997	1996	1997	1996	1997	1996	1997	1996	1997	1996	1997
	DENMARK / *Дания*	1011		994		245							
FFF	GERMANY / *Германия*					2525							
VEGETAB. OIL / *Раст. масла*	USA / *США*	1230		2881		710							
	BELGIUM / *Бельгия*	212				309							
SUGAR / *Сахар*	BRASIL / *Бразилия*	13959	7.7										
	MEXICO / *Мексика*						13.8						
	FRANCE / *Франция*				1.5	13249	11.4						
	ITALY / *Италия*						0.3						
	ENGLAND / *Англия*			994			4.3						
	BELGIUM / *Бельгия*	646		222	1.0	6121	9.0						
	BULGARIA / *Болгария*	50	0.2	6366	2.1	1154	0.5						
	UKRAINE / Украина		1.6										
	TURKEY / *Турция*	320	4.0	999	0.9		33.4						
	C.I.S. / *С.Н.Г*	3068		2516									
OIL / Жиры, масло	USA /*США*		0.9		6.0		0.3		4.7				
SPIRIT / Спирт	UKRAINE / Украина		0.2										
	RUSSIA / Россия		0.1										
	BULGARIA / *Болгария*		0.1										

COMMODITY / *ГРУЗ*	COUNTRY OF ORIGIN / *Страны Отправления*	COUNTRY OF DESTINATION / СТРАНЫ НАЗНАЧЕНИЯ											
		GEORGIA / *ГРУЗИЯ*		ARMENIA / *АРМЕНИЯ*		AZERBAIJAN / *АЗЕРБАЙДЖАН*		UZBEKISTAN / *УЗБЕКИСТАН*		KIRGISTAN / *КИРГИСТАН*		RUSSIA / *РОССИЯ*	
		1996	1997	1996	1997	1996	1997	1996	1997	1996	1997	1996	1997
RICE / *Рис*	BULGARIA / *Болгария*	449											
	RUSSIA / *Россия*		0.3										
	Egypt / *Египет*						1.0				0.7		
	TURKEY / *Турция*		1.5										
	USA /*США*				0.6				5.9				
	ENGLAND / *Англия*	396		135		572							
	VIETNAM / *Вьетнам*					2032							
	USA /*США*	208		2430									
PEAS / *Горох*	BELGIUM / *Бельгия*			748									
BEAN / *Фасоль*	BELGIUM / Бельгия	203											
	USA / *США*		0.1		1.3		0.1						
TEA / *Чай* TOBACCO/ *Табак*	TURKEY / *Турция*						1.0						
FOOD / *Продукты питания*	UKRAINE / Украина	0.2											
	RUSSIA / Россия	0.1											
	BULGARIA / *Болгария*	0.1											
FROZEN CHICKEN *Мороженные куры*	BULGARIA / *Болгария*	568											
CONTAINERS	USA / *США*	28				55							

COMMODITY / *ГРУЗ*	COUNTRY OF ORIGIN / *Страны Отправления*	COUNTRY OF DESTINATION / СТРАНЫ НАЗНАЧЕНИЯ											
		GEORGIA *ГРУЗИЯ*		ARMENIA *АРМЕНИЯ*		AZERBAIJAN *АЗЕРБАЙДЖАН*		UZBEKISTAN *УЗБЕКИСТАН*		KIRGISTAN *КИРГИСТАН*		RUSSIA *РОССИЯ*	
		1996	1997	1996	1997	1996	1997	1996	1997	1996	1997	1996	1997
Контейнеры													
	ITALY / *Италия*		1.5										
	BULGARIA / *Болгария*		1.0		0.1		0.1						
	TURKEY / *Турция*		1.8				1.3						
	RUSSIA / Россия								0.2				
	BELGIUM / *Бельгия*	103											
CHEMICAL CARGO *Хим. грузы*	BELGIUM / *Бельгия*					882							
	TURKEY / *Турция*					2944	10.1						
JUICES/ *Соки*	BELGIUM / *Бельгия*			1122		1119							
JAM / *Джем*	BELGIUM / *Бельгия*			575		574							
SOLT / Соль	BELGIUM / *Бельгия*	70											
RAIL EQUIP-MENT / *Ж.Д. оборудования*	BELGIUM / *Бельгия*			111		514							
RAIL TRACK *Ж.Д. рельсы*	C.I.S. / *С.Н.Г.*			1378									
CEMENT/*Цемент*	C.I.S. / *С.Н.Г.*	2492											
	TURKEY / *Турция*		0.2										
BARIT / *Барит*	TURKEY / *Турция*					5508							
COAL / *Уголь*	C.I.S. / *С.Н.Г.*	8160		2566									

COMMODITY / *ГРУЗ*	COUNTRY OF ORIGIN / *Страны Отправления*	COUNTRY OF DESTINATION / *СТРАНЫ НАЗНАЧЕНИЯ*											
		GEORGIA / *ГРУЗИЯ*		ARMENIA / *АРМЕНИЯ*		AZERBAIJAN / *АЗЕРБАЙДЖАН*		UZBEKISTAN / *УЗБЕКИСТАН*		KIRGISTAN / *КИРГИСТАН*		RUSSIA / *РОССИЯ*	
		1996	1997	1996	1997	1996	1997	1996	1997	1996	1997	1996	1997
OTHER */Разное*	C.I.S. / *С.Н.Г.*	5052											
	USA / *США*		1.5										
	FRANCE / *Франция*		0.3										
	TURKEY / *Турция*		0.5										
	RUSSIA / Россия		0.6										
	UKRAINE / Украина		0.2										
	BULGARIA / *Болгария*		0.8		0.2		0.3						
TOTAL / Всего		***18882 9***		***204537***		***99869***		***41049***		***6959***		***1410***	

		1996	1997 (1-8)
TOTAL INBOUND CARGO /	***ВСЕГО ИМПОРТНОГО ГРУЗА***	**542,791 MT**	**616,900 MT**
IMPORT FOR GEORGIA /	*Импорт для Грузии*	188,800. MT (34,8 % of total import / всего импорта)	
TRANSIT /	*Транзитные грузы*	353,900 MT (65,2 % of total import / всего импорта)	

source : Statistics Dept. Port of Batumi

Volume IV

Annexes

Annex 1

Dimensions of the Quay-walls, Basins and Storage Areas

PORT OF POTI
Quay Facilities

Berth	Length (m)	Width (m)	Design Waterdepth (m)	Actual Waterdepth (m)	Type of Construction	Max. Load (t/m2)	Year of Construction	Physical Condition	Present Use	Remarks
1	200	55	12.5	10.00	Sheet Piles	4	1978	Satisfactory	Oil	Sheet piles in front of existing blockwall
2	185	55	12.5	9.50	Sheet Piles	4	1980	Satisfactory	Bauxite and container	This berth will be used for the new rail ferry terminal
3	215	45	8.5	8.50	Blockwall	4	1900	Unsatisfactory	Dry bulk	
4	175	50	8.5	8.50	Blockwall	4	1910	Unsatisfactory	Dry bulk	
5	175	50	8.5	8.00	Blockwall	4	1910	Unsatisfactory	Dry bulk	
6	220	50	9.75	8.00	Concrete Piles	4	1968	Unsatisfactory	Dry bulk, ro-ro and container	
7	170	115	8.25	8.00	Concrete Piles	4	1984	Satisfactory	Container	
8	220	50	9.75	8.50	Concrete Piles	4	1974	Satisfactory	General cargo and grain	
9	220	60	8.00	8.00	Blockwall	4	1900	Unsatisfactory	General cargo	
10	220	60	8.00	8.50	Blockwall	4	1900	Unsatisfactory	General cargo and grain	
11	100	10	8.00	8.00	Blockwall	4	1900	Unsatisfactory	Port vessels	Not suitable for cargo handling
12	275	50	8.00	6.00	Blockwall	4	1900	Satisfactory	Passenger and ro-ro	Not suitable for cargo handling
13	100	0	6.50	6.00	Blockwall	4	1900	Satisfactory	Ferry and ro-ro	
14	250	50	8.50	?	Blockwall	4	1910	Unsatisfactory	Laying up	Not suitable for cargo handling
15	155	10	8.50	?	Blockwall	4	1910	Unsatisfactory	Laying up	Not suitable for cargo handling

PORT OF POTI
Open Storage Facilities

Berth	Dimensions (L x W)	Area (m2)	Construction Pavement	Stack loads (t/m2)	Physical condition	Present use	Suitable for storage of	Hinterland Connection	Remarks
1	200 x 40	8,000	Concrete slabs	10	Satisfactory	Storage of iron ore	Dry bulk cargo	Rail	Not being used at the moment
2	180 x 40	7,200	Concrete slabs, partly not paved	10	Unsatisfactory	Container	Container and general cargo	Rail / road	Connected to inner port road
3	175 x 30	5,250	Partly concrete	10	Unsatisfactory	Steel pipes	General cargo	Rail / road	Connection to port road is in very poor condition
4	170 x 35	5,950	Concrete	10	Good	Under construction	Container and general cargo	Rail	Direct connection to port road not available
5	150 x 40	6,000	Gravel	10	Poor	Iron scrab	Bulk cargo	Rail	It is planned to provide this area with concrete pavement
6	225 x 40	7,200	Partly concrete and gravel	10	Poor	Container	Container and general cargo	Rail / road	Connection to port road is in very poor condition
7	125 x 100	12,500	Concrete slabs	10	Poor	Container	Container	Rail / road	Combined entrance (rail/road) is too small
8	100 x 20	2,000	Partly concrete and gravel	10	Poor	Container	General cargo	Rail / road	Vry small area
9	200 x 45	9,000	Asphalt	10	Satisfactory	Operational area general cargo	General cargo	Rail / road	Presently not used as storage area
10	200 x 45	9,000	Asphalt	10	Satisfactory	Operational area general cargo	General cargo	Rail / road	Presently not used as storage area

PORT OF POTI
Existing Warehouses

WH No	Port Bldg No.	Location	Dimensions (L x W x H)	Area (m2)	Volume (m3)	Construction	No of doors	Size of doors (W xH)	Stack loads (t/m2)	Physical condition	Present use	Suitable for storage of .....
1	5	Berth 10/11	121 x 72 x 7.8	8,700	68,000	concrete , roof asphalt	6 Front 2 Side	4.2 x 5	4	OK, not leaking Doors: poor	Storage of general cargo	General cargo
2	22	Berth 10	102 x 30 x 4.8	3,000	14,700	steel frame and corrugated roof plates	8 Front 8 Back 2 Side	4.2 x 4	4	Poor	Storage of general cargo	Small consigments

PORT OF BATUMI
Quay Facilities

Berth	Length (m)	Width (m)	Design Waterdepth (m)	Actual Waterdepth (m)	Type of Construction	Max. Load (t/m2)	Year of Construction	Physical Condition	Present Use	Remarks
1	200	n.a.	12.00	11.00	Sheet piles	0.5	1972	Good	Oil	
2	140	n.a.	10.20	9.00	Blockwall	0.5	1928	Poor	Oil	Superstructure has to be renewed
3	165	n.a.	10.20	8.00	Blockwall	0.5	1928	Poor	Oil	Superstructure has to be renewed
4		n.a.	10.20	5.50	Blockwall	3	1976	Poor	Not operational	
5	225		8.00	5.50	Blockwall	3	1958	Poor	Mooring fishing vessels	Not being used as cargo berth
6	187	45	8.60	8.00	Concrete piles	3	1958	Unsatisfactory	Dry bulk	
7	260	50	11.00	10.00	Concrete piles	3	1958	Unsatisfactory	Dry bulk	
8	176	40	10.00	10.00	Sheet piles	3	1962	Satisfactory	General cargo and grain	
9	176	35	10.00	9.00	Sheet piles	3	1962	Satisfactory	General cargo and grain	
10	220	20	11.60	10.00	Concrete piles	1.5	1978	Satisfactory	Ferry and ro-ro	Also used for small general cargo vessels
11	194	20	8.25	7.50	Concrete piles	1	1967	Unsatisfactory	Ferry and ro-ro	
12	n.a.	n.a.	n.a.	15.00	Off shore bouy	n.a.	1966	Satisfactory	Oil	

PORT OF BATUMI
Open Storage Facilities

Berth	Dimensions (L x W)	Area(m 2)	Construction Pavement	Stack loads (t/m2)	Physical condition	Present use	Suitable for storage of	HinterlandConnection	Remarks
6	125 x 30	3,750	Concrete (pertly not paved)	14	Satisfactory	General cargo	General cargo and dry bulk cargo	Rail / road	Surrounded by concrete wall. Only one entrance. Area is very uneven.
7	180 x 23	4,100	Asphalt	14	Unsatisfactory	Operational area	Temporary storage	Rail / road	Operational area, not really to be used as storage area
8	90 x 15	1,300	Asphalt	14	Unsatisfactory	Operational area	None	n.a.	Very small area which is required for port operations

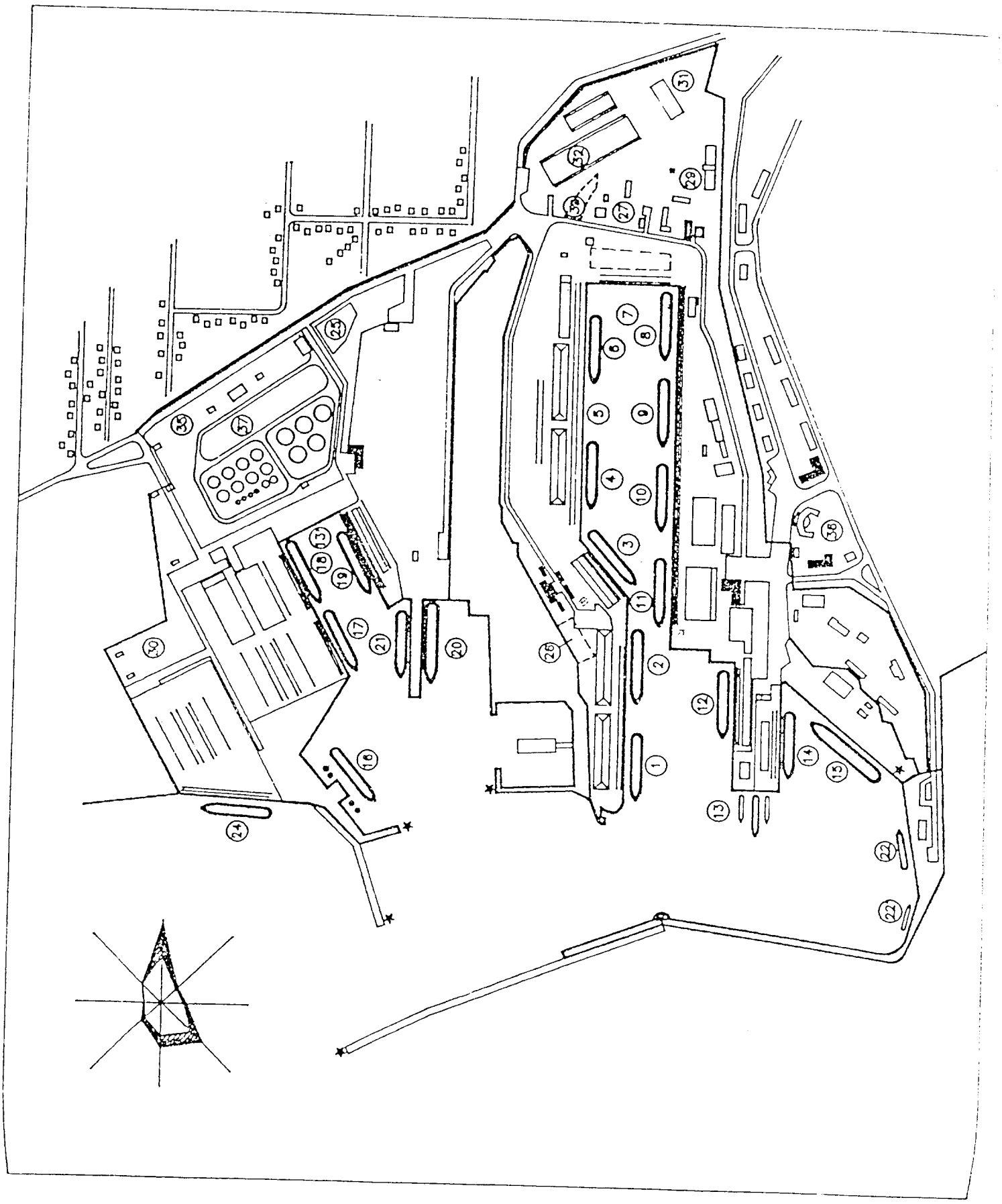
PORT OF BATUMI
Existing Warehouses

WH No	Port Bldg No.	Location	Dimensions (L x W x H)	Area (m2)	Volume (m3)	Construction	No of doors	Size of doors (W x H)	Stack loads (t/m2)	Physical condition	Present use	Suitable for storage of .....
1	3	Berth 9	139 x 21 x 8 (Partly 5 m high)	2,872	13,211	concrete , roof corrugated steel - sheets	6 Front 6 Back	4 x 5	10	OK, Doors: poor	Storage of General Cargo	General Cargo
2	4	Berth 9	17 x 15 x 5	254	1,173	dito	1 Front	3 x 4	10	OK	Spare Parts	small consigments
3	5	Berth 8-9	47 x 13 x 5	624	2,870	dito	4 Front	3 x 4	10	Poor, roof is old	General Cargo & Spare Parts	small consignments
4	13	Berth 7	15 x 83 x 4	1233	4,980	steel frame, corrugated steel sheets	1 Side 3 Front	5 x 4	14	OK	Store Civil & Mechanical	General Cargo
5	6	Behind WH 1	48 x 20 x 8	960	7,680	dito	1 Front	5 x 5	20	Good	Stores of Georgian Shippg.Co	General Cargo but no connection to the berth
6	15	Berth 6-7	113 x 21 x 5 (up to 8 in the middle)	2,340	10,760	concrete , roof steel - sheets	3 Front 1 Side	3 x 4	14	OK, floor oily and dirty	Spare Parts	General Cargo
7	14	Berth 6-7 connected to no.6	49 x 20 x 6	972	4,784	steel frame with alluminium plates, roof steel sheets	2 Front	5 x 5	14	Good	General Cargo	General Cargo

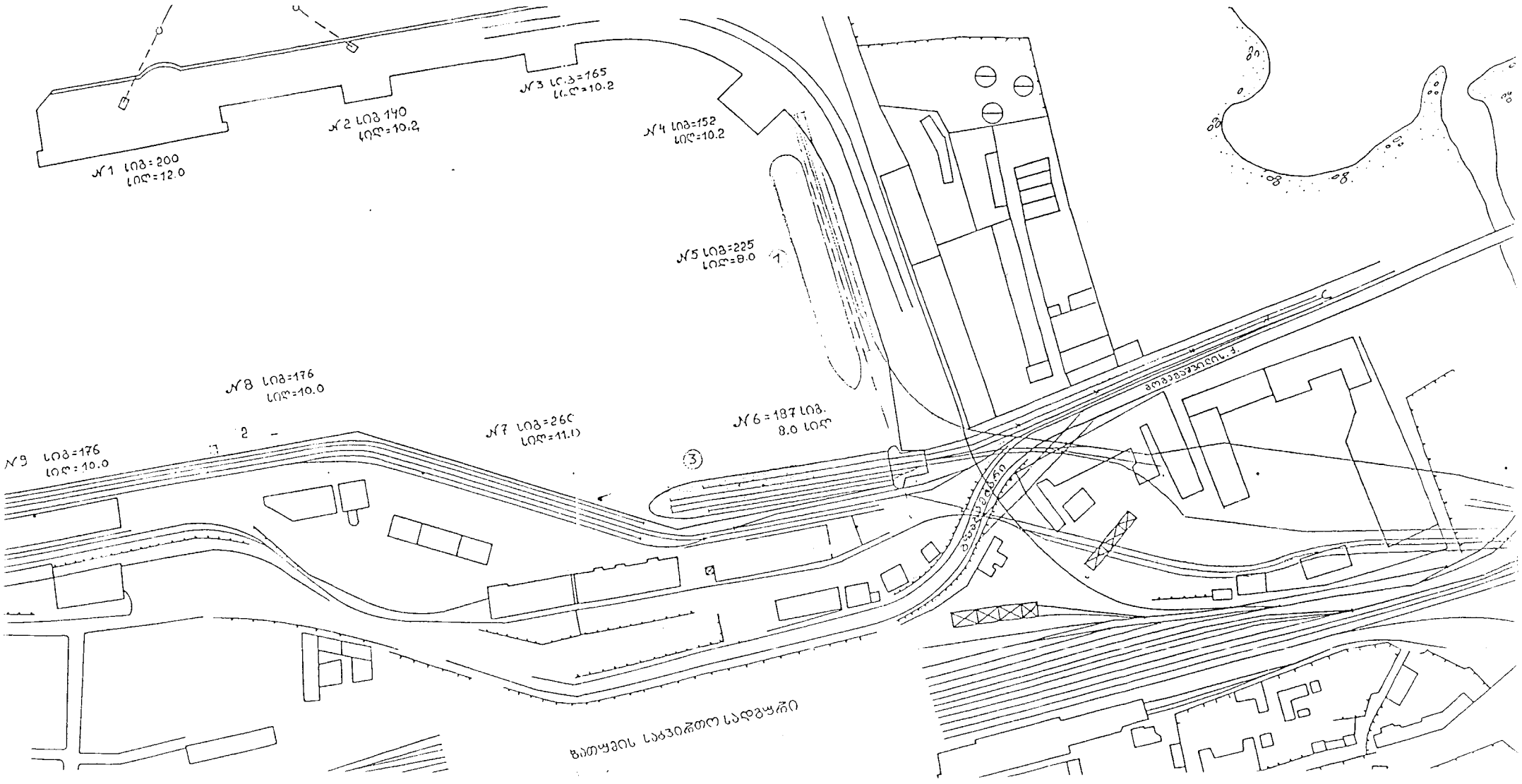
Annex 2

Existing Port Development Plan

Development Plans Port of Poti



Development Plans Port of Batumi

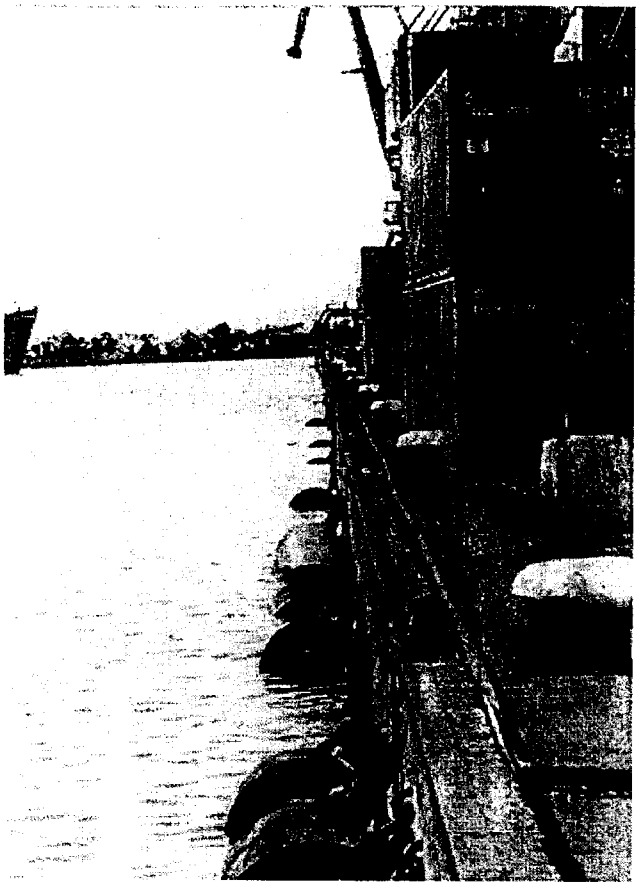


Annex 3

Photo Documentation of the Technical Condition of Infrastructure

Annex 3 Photo Documentation of the Technical Condition of Infrastructure

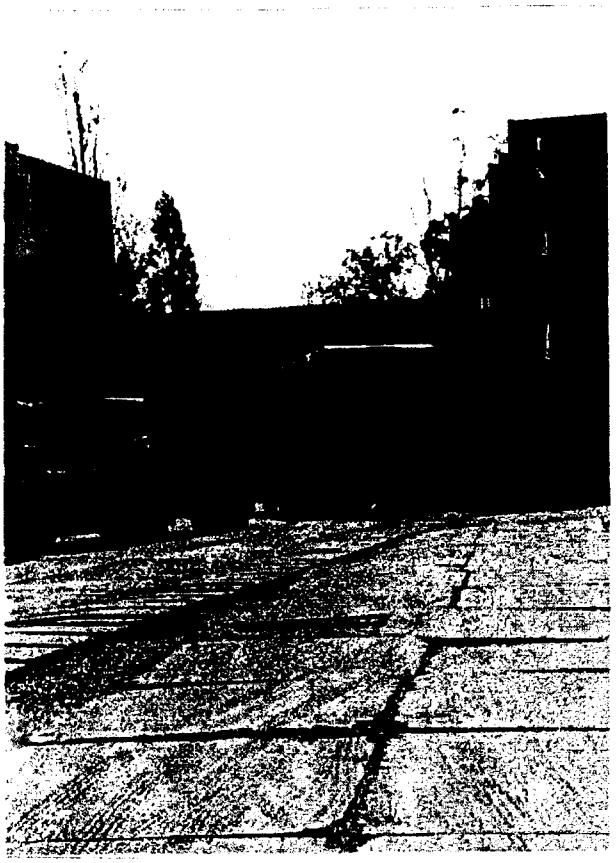
Photo Number	Description
Poti	
P1	Berth 1 and 2: The lining of the quay is not straight. The edge of the quay is damaged at some places. Containers are stored between the crane rail and quay.
P2	Berth 6: The edges of the quay wall are eroded, which results in corrosion of the reinforcement of the concrete. There is no pavement between the rail tracks. This berth is presently used for ro-ro and container handling.
P3	Breakwater: This is the south-western part of the breakwater. The subsidence is clearly visible. The level of the breakwater used to be horizontal. However, near the vessels the breakwater is subsided by approximately 1 meter.
P4 & P5	Storage area berth 7: These photo's of the container terminal illustrate the unequal subsidence of the concrete slabs, big holes in the pavement and large crevices between the slabs. This part of the storage area is also used by traffic from and to the ro-ro vessels at berth 6.
P6	Storage area berth 4: New concrete pavement at berth 4, which is presently under construction.
P7	Northern breakwater: This is a view on the inside of the northern breakwater overlooking the northern basin. The siltation problem is clearly visible. Old fishing vessels are "drowned" in the sand.
P8	Berth at shipping yard: The photo illustrates the condition of the pavement at the quay of the shipping yard. This berth is presently being used for general cargo handling.
P9	Berth 6: The quay construction and the pavement at the quay is unsatisfactory.
P10	Rail track berth 8: The photo illustrates the lining of the rail tracks.
P11	Rail track connections: An example of the condition of the rail tracks. On this photo the big gap between the rail tracks is illustrated causing damage to equipment and rail foundation.



P 1

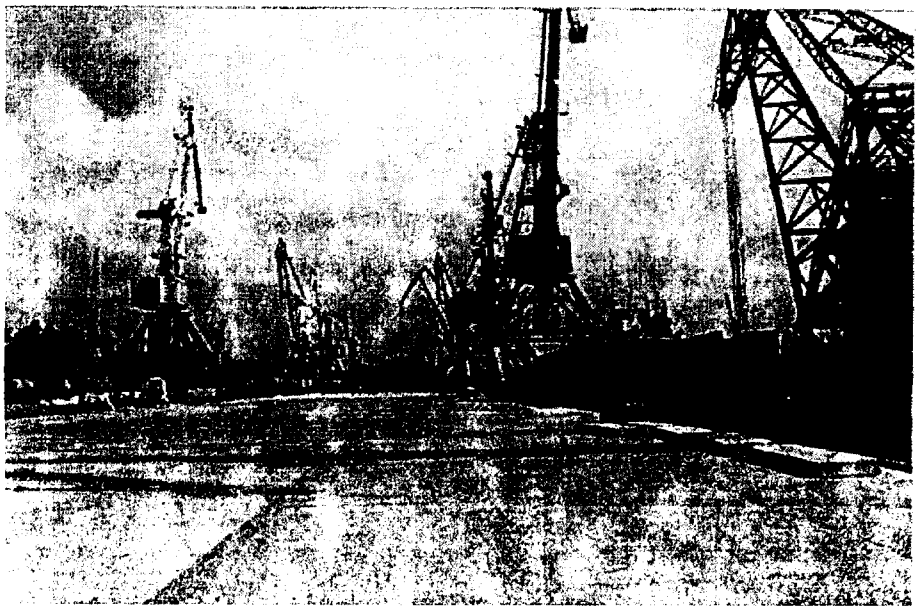
P 2

P 3

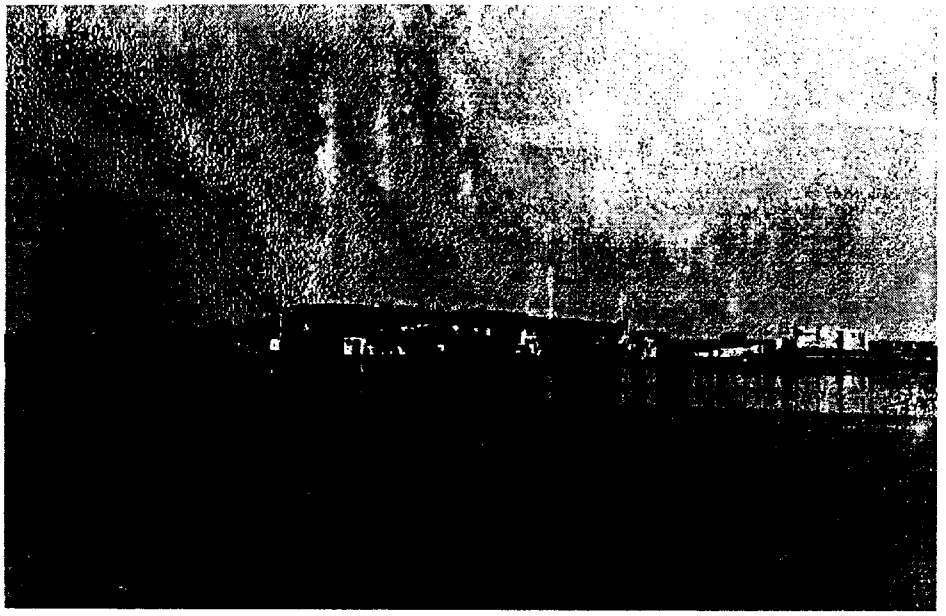


P 4

P 5



P 6

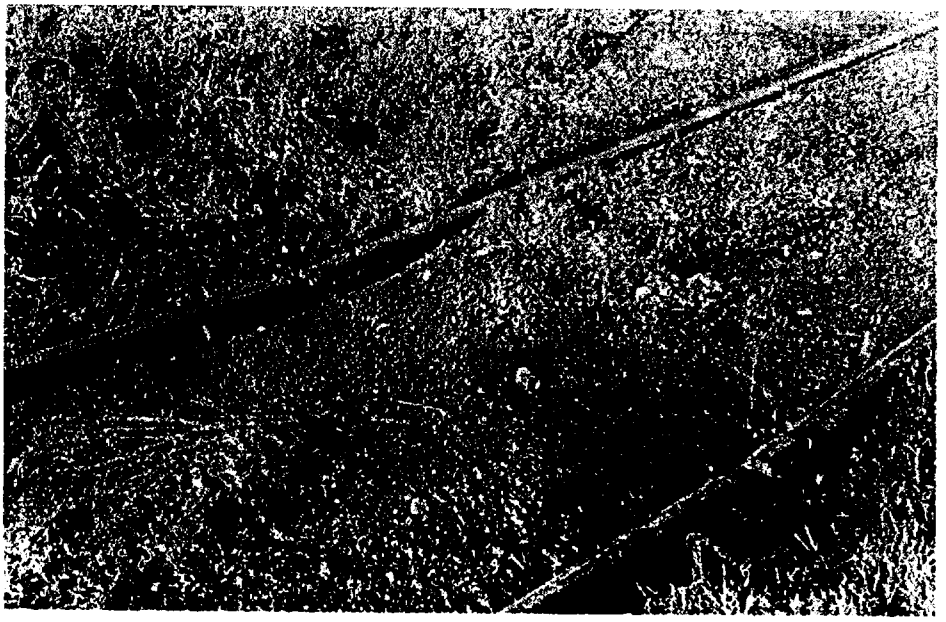


P 7

P 8

P 9

P 10

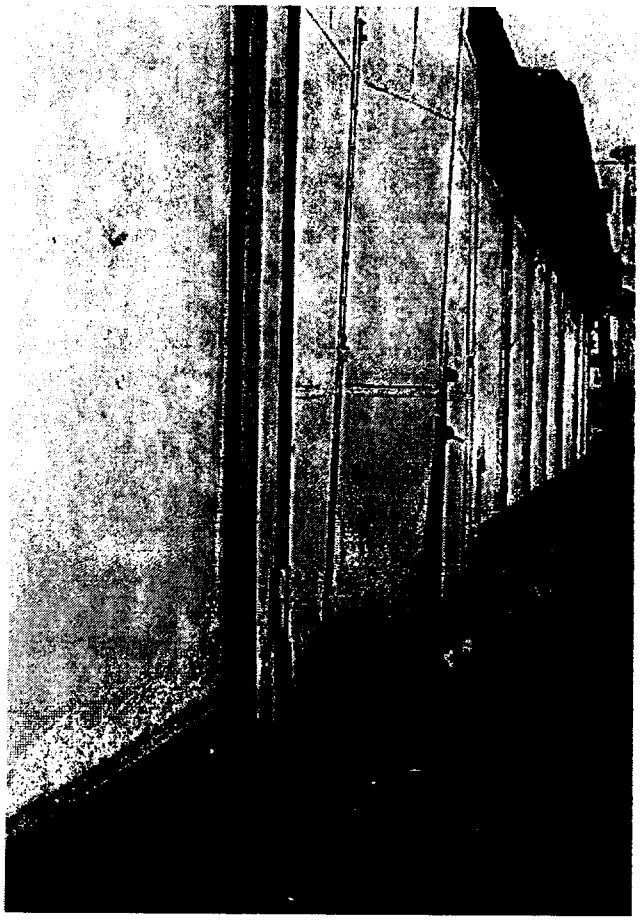


P 11

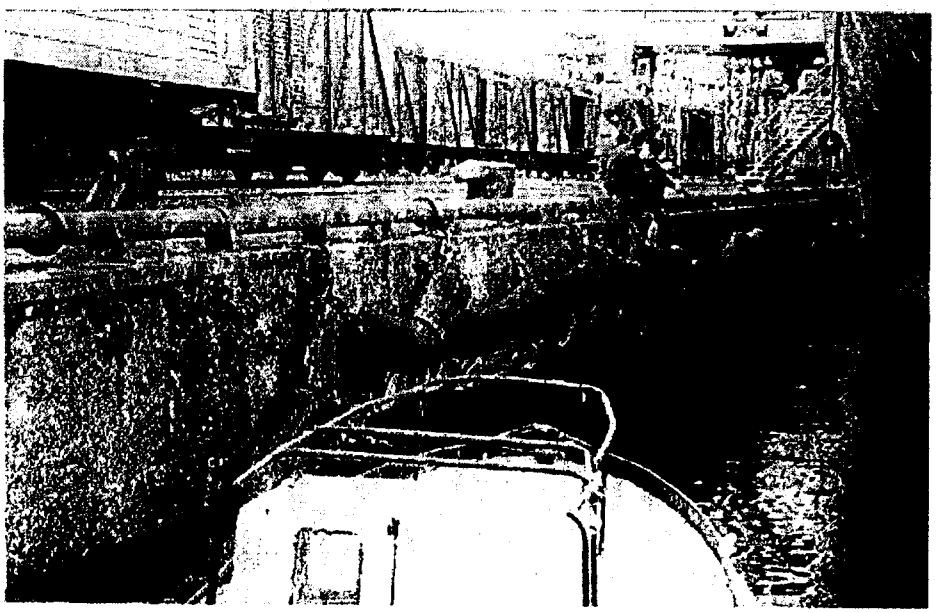
Photo Number	Description
Batumi	
B1	Berth 1: The quay wall of berth 1 is in a good condition.
B2	Berth 2: The superstructure of this berth and also of berth 3 is in a poor condition. Especially the steel beam is severely corroded.
B3	Warehouse 1: The photo illustrates the condition of the doors. However, the roofs of the warehouses are well maintained.
B4	Berth 7: The concrete of the superstructure is severely damaged at various places. The fenders are very small.
B5	Pavement: New rail tracks and new concrete pavement . The condition is good with sufficient drainage. However, the level of pavement is approximately 6 cm lower than the rail tracks.
B6	Railway crossing: This photo illustrates the condition of railway crossings.

B 1

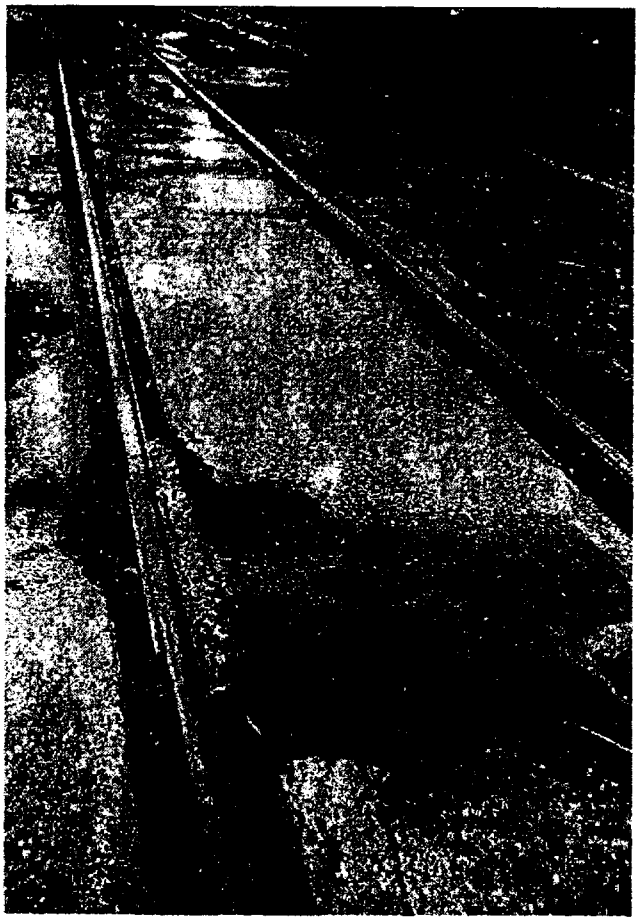
B 2



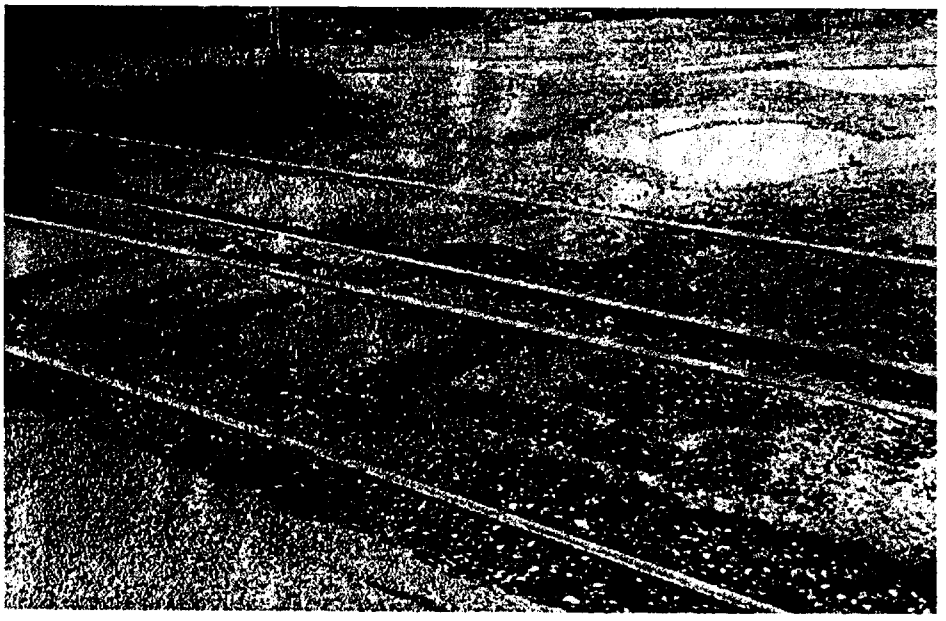
B 3



B 4



B 5



B 6

Drawings

Volume V

Annexes

Annex A

List of Meetings

Annex A: List of Meetings

Wednesday, 13 August 1997

Departure Hamburg to Tbilisi

Thursday, 14 August 1997

Arrival Tbilisi, Travel Tbilisi to Poti

Meeting with: **Mr. Devi Gvalia**, Deputy General Manager, Sea Port of Poti

Friday, 15 August 1997

Meeting with: **Mr. Ninidze Djambul**, First Deputy Manger, Batumi Sea Port,
Mr. Valeri Bekaya, Deputy Chief Engineer, Batumi Sea Port

Saturday, 16 August 1997

Meeting with: **Mr. Kukuri Kakulia**, Ecological Department, Commercial Seaport of Poti
Mr. Levan Bubuteishvili, Ecological Department, Commercial Seaport of Poti

Monday, 18 August 1997

Meeting with: **Mr. Anzor Tkhebuchava**, Environmental Consultant of the City Mayor, City Council, Poti

Tuesday, 19 August 1997

Meetings with: **Mr. Tariel Gogoli**, Inspector at the City Council, Poti
Mr. Guram Janjghava, Marine Inspection Department, Poti

Wednesday, 20 August 1997

Port visit with: **Mr. Sergo**, Port Construction Engineer, Commercial Seaport of Poti

Thursday, 21 August 1997

Meeting with: **Mr. G. Vachnadze**, Managing Director of the International Business Planning and Development Institute, Tbilisi

Friday, 22 August 1997

Meetings with: **Dr. Mamuka Cantladze**, Deputy Head, International Relations Department, Ministry of Transport, Tbilisi
Prof. Dr. Rezo G. Chageslishvili, Deputy Minister,
Mr. Zurab Tvartkiladze, First Deputy Minister and
Mr. Soso Tsabadze, Ministry of the Environment, Tbilisi

Saturday, 23 August 1997

Meeting with: **Mr. Aidmir Lagvilava**, Ecological Department of the Police, Poti

Monday, 25 August 1997

Port visit with: **Mr. Kukuri Kakulia** and
Mr. Levan Bubuteishvili, Ecological Department, Commercial Seaport of Poti

Wednesday, 27 August 1977
Port visit, Seaport Batumi

Thursday, 28 August 1997
Meeting with: **Mr. Tengiz Gogotishvili**, Head of the Conventional Black Sea Marine Inspection, Batumi

Friday, 29 August 1997
Meetings with: **Mr. Niko Charkviani**, Deputy Manager, Seaport Batumi
Mr. Merab Davitadze, Environmental Engineer, Seaport Batumi
Mr. Aslan Smirba, General Manager Seaport Batumi

Monday, 1 September 1997
Meetings with: **Mr. Kalandadze Otari,** Head of Ecological Expert Division
Ministry of Environment of Adjaria, Batumi
Capt. Valerian G. Imnaishvili, Head of Legal and Foreign Affairs Division
Georgia Marine Department, Batumi

Tuesday, 2 September 1997
Meeting with: **Mr. Tengiz Gogotishvili**, Head of the Conventional Black Sea Marine Inspection, Batumi
Inspection of the port and oil terminal

Thursday, 4 September 1997
Scoping Meeting
Commercial Seaport of Poti

Friday, 5 September 1997
Meeting with: **Mr. Tengiz Gogotishvili**, Head of the Conventional Black Sea Marine Inspection, Batumi

Saturday, 6 September 1997
Meeting with: **Mr. Akaki Komakhidze**, Director of the Black Sea Ecology and Fishery Institute, Batumi

Monday, 8 September 1997
Meetings with: **Mr. Tengiz Gogotishvili**, Head of the Conventional Black Sea Marine Inspection, Batumi
Mr. Akaki Komakhidze, Director of the Black Sea Ecology and Fishery Institute, Batumi

Tuesday, 9 September 1997
Scoping-Meeting
Seaport Batumi

Wednesday, 10 September 1997
Departure Batumi to Tbilisi

Thursday, 11 September 1997
Departure Tbilisi to Hamburg

Annex B

List of Participants of the Scoping-Meetings

Annex B: List of Participants of the Scoping-Meetings

1. Poti, 4 September, 1997

Name	Institution and Function
Mr. Jemal Inashvili	President, Commercial Seaport of Poti
Mr. Devi Gvalia	Deputy Manager, Commercial Seaport of Poti
Mr. Vladimir Kikava	Assistant of the General Manager for Safety, Commercial Seaport of Poti
Mr. Bodo Rössig	Project Leader, HPTI, Tacis/Traceca
Mr. Buram Adamia	Chief Engineer, Commercial Seaport of Poti
Mr, Alexandre Janghava	Marine Inspection for the Protection of the Black Sea, Poti
Ms. Irma Gugushvili	Head of the Press Centre, Poti
Ms. Violeta Kutsia	Leader of the Green Party, Poti
Mr. Genadi Kacharovxki	Head of the Department for Hydraulic and Engineering, Commercial Seaport of Poti
Mr, Kokulia Kukuri	Deputy Head of the Department for Hydraulic and Engineering, Commercial Seaport of Poti
Mr. Levan Bubuteishvili	Environmental Engineer, Commercial Seaport of Poti
Mr. Tariel Gogoli	Inspection of Environmental Protection, City Council, Poti
Ms. Tatiana Eggert	Environmental Expert, HPTI, Tacis/Traceca
Ms. Aza Shengilia	Interpreter
Ms. Lia Parsvania	Interpreter

2. Batumi, 9 September, 1997

Name	Institution
Mr. Bodo Rössig	Project Leader, HPTI, Tacis/Traceca
Mr. Gia Sikharulidze	Adraria Regional Organisation of Georgian Greens
Mr. Tengiz Gogotishvili	Head of the Conventional Marine Inspection of the Black Sea, Batumi
Ms. Sophiko Akhobadze	Academy of Southern Black Sea, Batumi
Mr. Nikolai Charkviani	Deputy Manager of Operations, Batumi Sea Port
Mr. Zurub Dumbadze	Head of the Oil Terminal, Batumi Sea Port
Mr. Alexander Gurgenadze	Port Development Engineer, Batumi Sea Port
Mr. Otar Kalandadze	Head of Department of Ecological Expertise, Ministry of Environmental Protection and Natural Resources, Adjaria
Mr. Merab Davitadze	Environmental Engineer, Batumi Sea Port
Mr. Akaki Komakhidze	Information Service MEFRI, Ministry of Environmental Protection, Director of The Black Sea Ecology and Fishery Inastitute
Mr. Irakli Goradze	Information Service MEFRI, Ministry of Environmental Protection, The Black Sea Ecology and Fishery Inastitute
Ms. Tatiana Eggert	Environmental Expert, HPTI, Tacis/Traceca
Ms. Aza Shengilia	Interpreter
Ms. Marika Chichinadze	Interpreter

Poti / Поти

Name	Institution	
Илья	Учреждение	
[illegible Georgian signature] Deputy Manager	Потийский коммерческий морской порт	Levi Cvalia Deputy Manager
Владимир Микава помощник нач-ка порта по Т/Б	Потийский порт	Vladimer Mikava Assistant of General Manager for Safety
BODO RÖSSIG PROJECT-LEADER	TACIS TRACECA	
ГУРАМ АДАМИЯ главный инженер	Дирекция развития и реконструкции объектов Потийского порта	Guram Adamia Chief Engineer
Джинджгава Александр Jenjghava Alexandre	Морская инспекция Защиты Черного моря.	Marine Inspection for the Protection of Black Sea
[illegible Georgian]	[illegible Georgian]	Irma Gugushvili Head of the Press-Centre
Куция Виолетта Председатель Зеленых г. Поти	Директор биологического хозяйства.	Kutsia Violeta Leader of Green Party
Качаровский Геннадий начальник отдела гидротехнических и инженерных сооружений Потийского порта.	Потийский морской торговый порт	Kacharovski Genadi Head of Department for Hydraulic and Engineering Facilities
Какулия Кукури Викторович Зам. нач-ка ОГиИС Потийского порта	Потийский морской торговый порт.	Kakutia Kukuri Deputy Head for Hydraulic and Engineering facilities
Бубутеишвили Леван Инженер по ООС Потийского морского торгового порта.	Потийский морской торговый порт	Bubuteishvili Levan Engineer of environment protection in Poti commercial seaport
Д. Инашвили	Нач. морского порта Поти	Jemal Inashvili President of Poti Port
Тоголи Тариель Нач инспекции г. Поти охране природы	[illegible Georgian]	Tariel Gogoli Poti City Council Inspection of Environment Protection
Tatiana Eggert	HPTI Tacis / Traceca	

[illegible Russian handwriting]

It's necessary to establish a laboratory for defining impact on air, soil and water resources.

[illegible Russian handwriting]

In order to avoid transportation of waste water from vessels to Batumi for refining, it's necessary to provide the collector with seperator.

[illegible Russian handwriting]

Special attention should be paid to EAI in advance of construction.

Poti 4 Sept. 97

Terrestrial Impacts (2)

Воздействие на сушу

[illegible]	It is required to make the decision about disposal the hard and liquid waste materials; construction of a plan with corresponding capacities.
[illegible]	Allocation of contaminated soil on a special place for this
Воздействие на сушу, при нерациональной организации работ будет минимальное. (2)	Influence of the soil will be minimized if the operations were well organized

Aquatic Impacts (1)

Воздействие на акваторию

[illegible]	Attention should be paid to waste oil collector
[illegible] (1)	Contamination of sea with oil or other hazardous substances. It will cause negative influence of sea bain nature
[illegible]	The main impact on aquatic is caused not only by the vessels and waste oil, but sedimentation from Rioni.
[illegible]	Examination of dredged materials and if it is possible using it for establishing beach zone
[illegible] (2) (1)	Development of the port is connected with environmental impacts. That's why all the aspects and measures for keeping environment should be taken into consideration. This means to follow modern requirement and methodology for surviving nature.
Воздействие на акваторию, неорганизованное работы (1)	Minimize the aquatic impacts

④ Air Quality

Качество атмосферного воз

③ Waste Management

Организация сбора и удаления отходов

3) [illegible]	Installation of new equipments for protection air pollution
[illegible]	Utilization of residual in the city and in the port
Необходимо совместно с городом наладить систему по сбору и утилизации отходов с судов. (3)	Jointly with the city municipality, organize the system for collecting and utilizing wastes from the ships.
При организации сбора и удаления отходов необходимо учесть потребности не только порта, но и всего города. (3)	Requirements, not only the port but of the city should be taken into consideration while organizing the system of waste handling
[illegible]	It is necessary to allocate waste on a special space for it, this will help to avoid pollution of air, water and soil.
Вооружить порт передовыми (3) техническими средствами.	Re-equip port with modern facilities

Other Issues (6)

Прочие вопросы

Необходимо предусмотреть контроль всего груза. (6)

It's necessary to provide X-ray control of all the cargo

Необходимость (6) четкой работы, для минимизации

Defined operation is requered for minimizing EI.

Black Sea Water Area is small itself and to carry out big constructions like Supsa Terminal will have negative impact on environment

Even the existence of ports of Poti and Batumi has impact on environment. It causes dirt, water or soil pollution. Finally they will affect the

the health. It can become genetic.
Though the regulations are kept for environmental protection. Georgia as a country

of TRACECA will be the subject of pollution.
The Green party was against the building Supsa

Terminal but it's being built.
After the Chernobil neuclear station accident Black Sea was polluted, as

well as the air of Black Sea littoral. We suppose that it is polluted in the future.

General Health & Safety Issues (5)

Охрана здоровья и техника безопасности

Introduction of new modern technical facilities to avoid professional deseases and injuries

Необходимо обеспечить (5) специальной защитной одеждой для обработки опасных грузов

It is neccessary to provid dockers with special uniforms for handling hazardous corgoes

Rob'i & Sept. 97

Batumi / Батуми

Name / Имя	Institution / Учреждение	Name	Institution
Bodo Rössig	Tacis/TRACECA		
[illegible]	[illegible]	Gia Sikharulidze	Adjaria regional organization of Georgian Greens
თ. [illegible]	[illegible]	T. Gogilashvili	Head of the condentional inspection of Black Sea Defence
[illegible]	[illegible]	Sophiko Akhobadze	Acoacademy of Youth of Black Sea
Чарквиани Николай Васильевич	Зам. начальника морского порта по эксплуатации.	Nikolai Charkviani	Deputy Head for exploitation
Зураб Думбадзе	Батумский морской порт.	Zurub Dumbadze	Batumi Sea Port
[illegible]	[illegible]	Alexander Gurgenadze	Batumi Sea Port
Каландадзе Олари Александрович	Зав. отделом экологической экспертизы Министерства охраны окружающей среды и природных ресурсов.	Olar Kalandadze	Head of the ecology expertizing department of Ministry Environmental protection and natural resources
[illegible]	[illegible]	Merab Davitadze	Environmental protection engineer of the port
[illegible] Goradze Irakli	[illegible]		Informational service MEFRI
[illegible] Akoki Komakhidze	[illegible]		MEFRI
Tatiana Eggert	HPTI TACIS/TRACECA		

① Aquatic Impacts

① Воздействие на акваторию

1. [illegible]

It will cause the death of the distress etc

1. [illegible]

It will have negative impacts on the harbour ①

① skimming contaminated water

1] [illegible]

It's better to open special division to study the spilled oil, other wastes from the ships

1. Scimming of oil products during the accidents

1 [illegible]

① Increasing the number of ships and turn-over will have negative influence on environment, if not specialized facilities

① [illegible]

① [illegible]

① [illegible]

[illegible] ①

① Assesment of current Eco-Toxicological situation (Biodiversity, impact of pollution on Hydrobionts) in order to perform monitoring of Poti and Batumi Ports.

A. Kom[illegible]khidze

[illegible]

1. [illegible]

sewage water flows into the aquatorie without any refining ①

1. [illegible]

1. Contemination of Sea shore

① [illegible]

① If we fight for pure rivers it will help us to have few problems with sea

1. [illegible]

It is required to have modern booms; oil-scimmers to liquidate the problems of pollution

① [illegible]

① Flow of balast water into the sea without refining

② Terrestrial Impacts

② Воздействие на сушу

1. Думаю больших проблем нет и не будет.

by my opinion there won't be any serios problems

2. [illegible]

The dust from some kind of cargo

② [illegible]

② [illegible]

② Negative impacts on coil

2. [illegible]

② Pollution of the surface with the oil

2. [illegible]

① Handling large amount of oil and oil products will have neggative influence on soil

② [illegible]

To take measures for collecting spill oil products in the harbour ②

2 [illegible]

2. negative impacts - use of Chorokhi carrier

② [illegible]

② reabilitate of the fleet and floating-facilities "Georgian Sea Coast Guard"

③ Waste Management

③ Организация сбора и удаления отходов

3. Порт имеет практику в этом вопросе, однако нуждается более мощном современном оборудовании.

Port has a lot of experience, but we are in sore need of more modern equipment.

3. ...

It's better to buy ~~equipment~~ for collecting spilled oil.

3 ...

3 For providing handling the increasing amount of wastes, it is necessary to establish capable system for this purpose.

...

5 To supply port with facilities for handling wastes

5 ...

5 All the ships coming into the port are to handl sewage and sewerage wastes Port captains won't let ship to leave port without sp. recomendation

5 ...

5 To establish capable service for recieving wastes from the ships

...

3 ...

4 ...

3. ...

4 ...

④ Air Quality

④ Качество воздуха

4. Change the quality of air

4. ...

4. Organic and nonorganic dust, aerozoles

4. ...

4 It is natural that port development will increase amount of dust, steam etc.

4 ...

4 To supply ships at the berth with el power from the shore

4 ...

4 Handling specific cargoes (oil, oil-products, chemical cargos) will have negative influence on the air in port and in the city in whole

4 ...

4 To improve the methods of handling cargoes exhausting dust

4 ...

4 Smell, insuficience of oxygene, clouds of acid

⑤ General Health & Safety Issues

⑤ Общие вопросы охраны здоровья и техники безопасности

5. Порт занимается этой проблемой долгие годы - думаю при дальнейшем развитии нужно считаться с современными охранительными средствами.

Poit has been discussing this problem for years

⑤ [illegible]

Forbide Handling hazarhous cargoes, which may have neggative influence on the health of the staff.

5. Потребуется создание новой системы, включая средства индивид. защиты охраны труда и т.д.

It is required to establish new system, including individual facilities, for labor protection

5. ევროპული სტანდარტები

5. European standards

⑥ Other Issues

Прочие вопросы

6. Sea ports of Georgia will have influence on the sea surrounding

6 Вопросы могут образоваться при новых строительствах терминалов ~~и~~ причалов и т.д.

A lot of problems will appear during the constiuction of the terminals and quaes

6. Необходимо закупить средства локализации разлив. нефти, (боны, емкости для сбора нефти.

to install equipment for localization of spilled oil.

⑥ Мощность планируемого объекта.

6. capacity of the planned objects

⑥. обеспечение строительными инертными материалами.

⑥ providing with construction materials

6) შეძენილ იქნეს სპეციალიზებული საშუალებები ზღვაში დაღვრილი ნავთობპროდუქტების აკრეფისათვის.

⑥ purchase specialized facilities for scimming oil products spilt into the sea

Annex C / Приложение C

Photo Documentation / Фото Документация

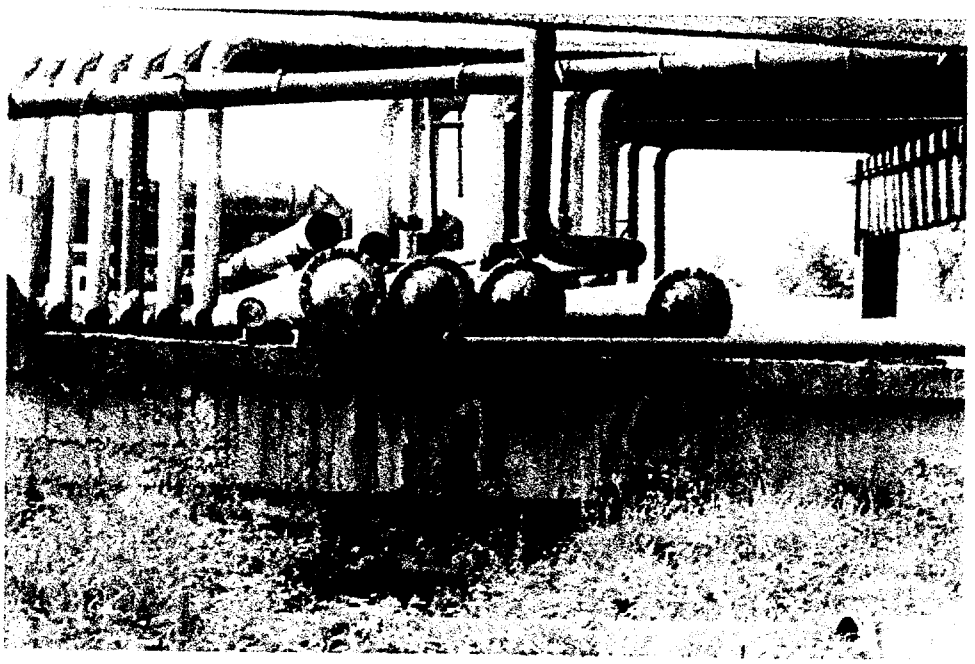


Photo 1: Batumi Seaport. New overground oil-pipeline
Фото 1: Батумский Морской Порт. Новый наземный трубопровод

Photo 2: Batumi Seaport. Old subterranean oil-pipeline
Фото 2: Батумский Морской Порт. Старый подземный нефтепровод

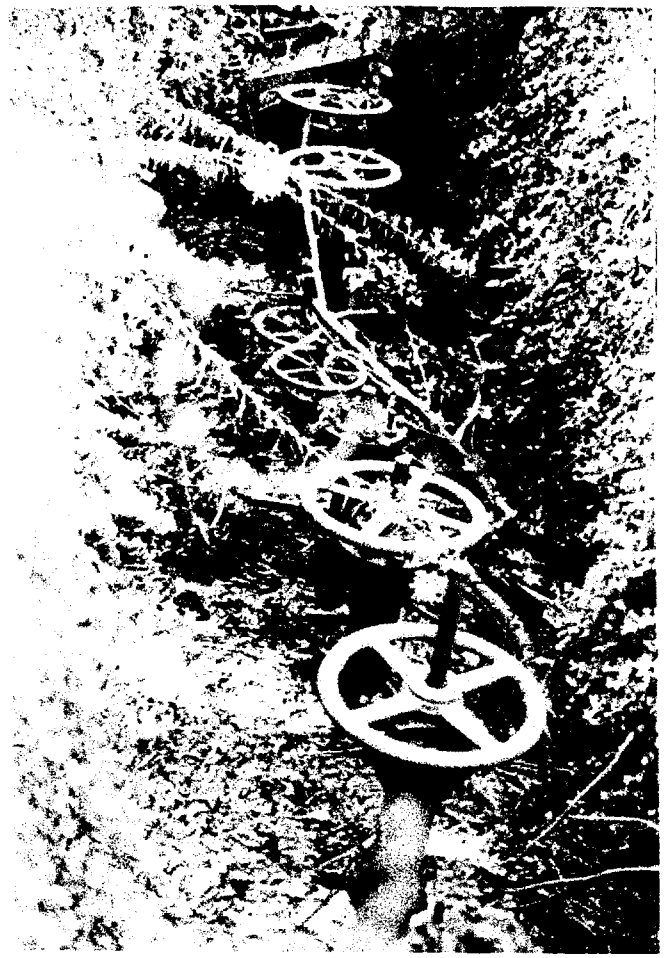


Photo 3: Batumi Seaport. Old subterranean oil-pipeline
Фото 3: Батумский Морской Порт. Старый подземный нефтепровод

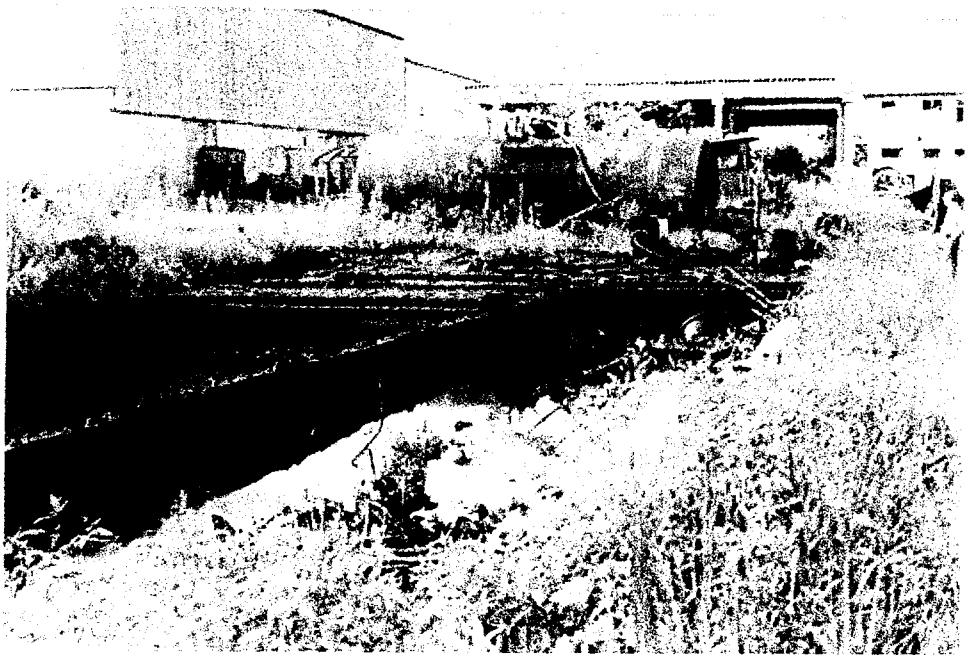


Photo 4: Batumi Seaport. Former cleaning area for rail tank wagons
Фото 4: Батумския Морской Порт. Бышвая территория для очистки ж/д цистерн

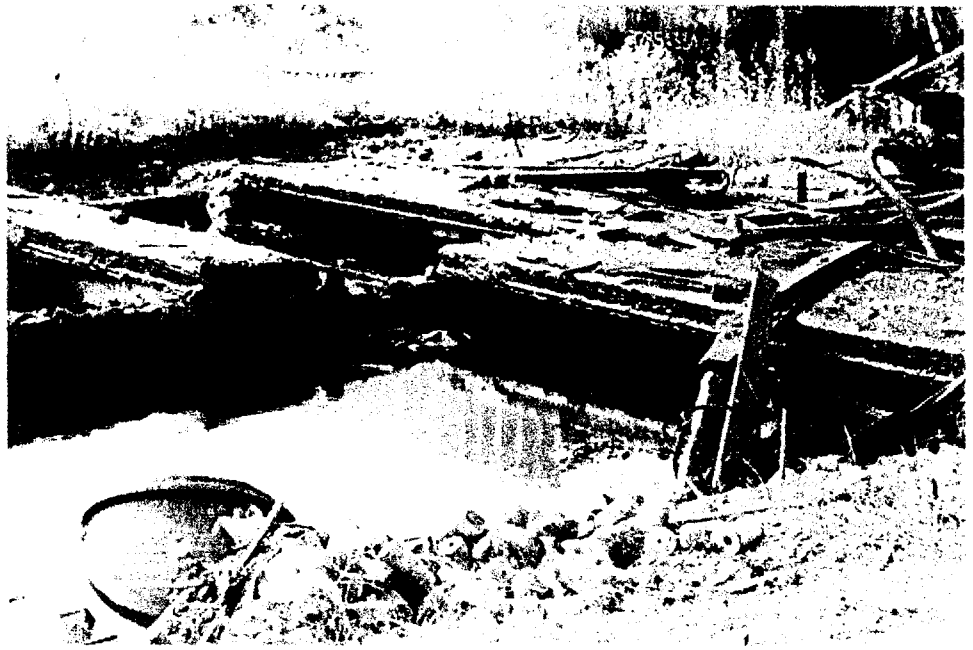


Photo 5: Batumi Seaport. Former cleaning area for rail tank wagons
Фото 5: Батумский Морской Порт. Бывшая территория для очистки ж/д цистерн

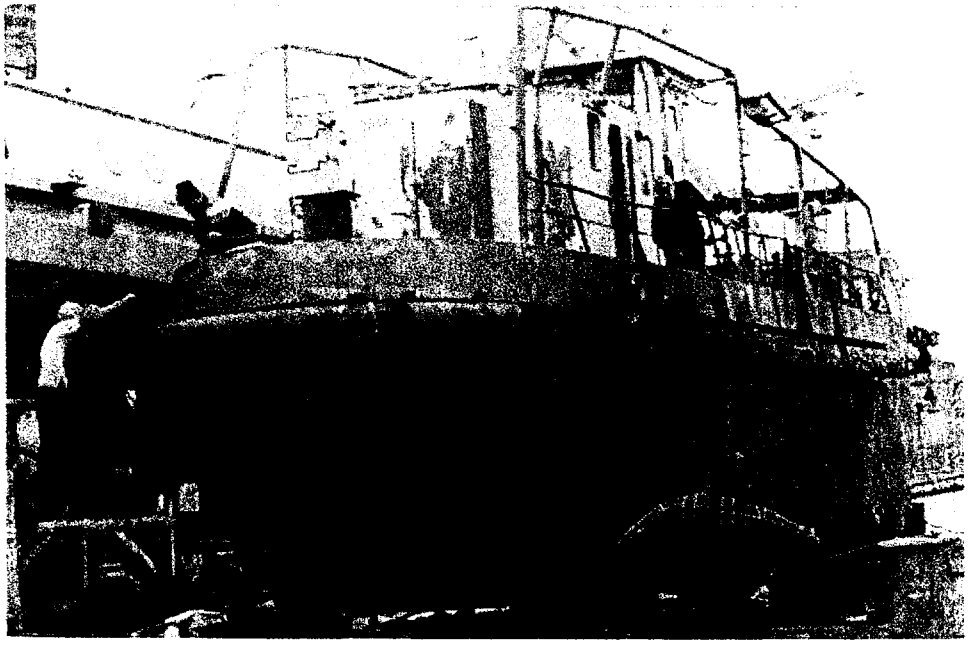


Photo 6: Commercial Seaport Poti. Oil skimming vessel
Фото 6: Потийский Коммерческий Морской Порт. Нефтесборщик