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INDUSTRIAL DEVELOPMENT ORGANISATION

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REPUBLIC DU CAMEROON

PRE-FEASIBILITY STUDY

CNIC DEVELOPMENT PLAN

UNIDO / RAF / 89 / 850 PROJECT

MANUFACTURE of Equipment for Land Rail

and Water Transport

INVESTMENT PROJECT REPORT
(FINAL REPORT)

OCTOBER 1993

Prepared by UNIDO on behalf of the Economic Commission

for Africa (ECA)

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATIONS

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INVESTMENT PROJECT REPORT

Development plan of the Cameroon Shipyard and Industrial Engineering Company (CNIC)

Number : DU/RAF/89/850

(Manufacture of Equipment for Land Rail and Water Transport)

FOREWORD AND THANKS

This study was conducted by a TRACTEBEL Consult team, designated after a restricted call for tender.

The present report is the draft of the final report; it was established after several two-week missions in Africa (Cameroon, Benin and the Ivory Coast), 2 months of desk works in home office and a synthesis meeting in Headquarters of UNIDO together with CNIC General Manager and the chairman of the CNIC Board.

The Project Manager and the team members on this project are :

- Project Manager : Mr Yves Ekoué AMAIZO, Feasibility Studies Department, Industrial Development Division;
- Team Leader, Economist and Financial Analyst : Mr Bruno LAMBIN, Manager of TRACTEBEL Consult;
- Expert on Naval Construction and Repair : Mr Jean Marchal, Professor at the University of Liege, manager of the Naval Transport Systems and Construction Department; associated to TRACTEBEL Consult;
- Mr Byll ARHINI, industrial economist of ACA consulting firm.

This study was conducted by UNIDO experts and has benefited from the information, advice and support of the following bodies and organisations :

- Ministry of Industry,
- Société Nationale des Investissements,
- UNIDO representation at Yaounde,

- Belgian Embassy at Yaounde,
- Offshore Projects companies,
- Carena Naval Shipyard (Abidjan),
- United Nations (FAO) at Cotonou,
- Executives and Staff of CNIC.

We wish to thank all of these for their support.

KEY WORKS

- Strategic Business Plan
- Investment Study
- Shipyard
- Shipyard Repair and Industrial Engineering
- Workshops
- Privatisation
- Partnership
- Training
- Profitability

ABREVIATIONS

- CNIC	Cameroon Shipyard and Industrial Engineering Ltd
- ONPC	Cameroon National Ports Authority
- CSL	Cameroon Shipping Line
- SNH	Société Nationale du Cameroun
- UIC	Union des Industries du Cameroun
- IRR	Internal Rate of Return
- SNACH	Société Nouvelle des Ateliers et Chantiers du Havre
- CARENA	Compagnie Abidjanaise de Réparations Navales et de Travaux Industriels
- FOB	Free on board
- CIF	Cost, Insurance, fret

SUMMARY

SUMMARY

PRE-FEASIBILITY STUDY FOR THE DEVELOPMENT OF A REGIONAL UNIT FOR TRANSPORT EQUIPMENT IN CAMEROON (CNIC)

Chantier Naval et Industriel du Cameroun (CNIC) is a naval repair and maintenance enterprise created in 1988, employing some 150 personnel, having its installations and head offices in the port area of the town of Douala.

CNIC is equipped mainly with three floating docks, one of which has 10 000 t lifting capacity, purchased in 1988 and owned by the Cameroon Government. The other floating docks are owned by the National Ports Authority.

The CNIC shareholder ship is structured as follows :

- Cameroon National Ports Authority (ONPC) : 20 %
- Other Cameroon State Organisations : 50 %
- Private European enterprises : 30 %.

It is important to bear in mind that, on account of the disappearance of the present partners, the 30 % held by the foreign shareholders are available and could be repurchased (and subscribed to) by other candidate partners.

One of the major problems facing the development of CNIC's activities resides in the (provisional) present location of its main floating dock (10 000 t), which is berthed at a distance of 3 km from the CNIC workshops, rendering difficult its utilisation, increasing the construction, repair and gracing work completion times. This situation makes CNIC less competitive compared to its main competitors (Carena at Abidjan, and South African shipyards).

In 1993, CNIC's turnover was about FCFA 1200 million, of which more than 800 million were accounted for by interventions on about thirty ships.

Since 1990, the gross results and net profits of CNIC are both positive (respectively millions : 321 and 62 in 1992).
However, it must be stressed that CNIC bears no financial charges bound to the acquisition of its main production resources; similarly, neither has CNIC to bear the amortisation of its equipment. Therefore, the profits booked are to a degree artificial, especially that the equipment it rents from ONPC is billed at rates reflecting quite less than its actual value.
In other words, CNIC is significantly subsidised by the Cameroon State.

The study analyses the project as a whole in that it considers all the assets used.

The **market research** reveals that along the more than 6 000 km stretch of coastline between Abidjan and Capetown, there are only very few reliable shipyards capable of providing maintenance and repair services for vessels in excess of 2 000 t.

In this area, and particularly in the Gulf of Guinea, substantial offshore oil activity is developing. For the fleet active in the Gulf of Guinea and, of course, for the Cameroon vessels, Douala is the nearest place where ship repair services can be provided.

Carena, the main competitor in this field, is a French firm which works at full capacity and is competitive enough to attract business form a substantial part of the fleet in the Gulf of Guinea, despite its being located at a distance from that area.
The CNIC shipyard proximity is an undeniable asset, since vessels are able to curb their travel times and, hence, their fuel bills.

It can be said confidently that, with respect to ship maintenance and repair, there exists in Cameroon an attractive potential market for a local competitive shipyard.

However, as for ship construction, there is practically no market, neither in Cameroon nor in the sub-region. Fishing vessels are for the major part bought second hand (steel hulls).

The project consists of :

- reinforce the local technical expertise by means of an operational program of training

- re-siting the 10 000 t floating dock to its final location, this being expected to yield gains in productivity of between 20 to 30 %

- purchasing of additional machines and tools permitting to meet any demand for repair and maintenance services

- identifying an experienced technical partner who would take a significant share in the capital and who would supply technical cooperation.

CONCLUSIONS

CNIC, which is still in its starting phase, has adequate production resources, especially the 10 000 t floating dock, still provisionally berthed in the port area of Douala at a distance of 3 km from its workshops.

The projected investment regarding additional tools, and, especially, for the rational siting of the docks (implying the relocation of the 10 000 t dock), as well as for effective technical cooperation, should enable CNIC to offer to its potential clients, who are many in this sub-region, more competitive services in terms of completion times, quality of work and improved range of services.

These technical and human resources would make for improved productivity and a higher utilisation ratio of the CNIC installations.

Under these conditions, a doubling of the turnover can be expected within 5 years so as to reach 6 billion in the year 2010 (i.e. roughly the same level of business as Carena at Abidjan).

Computed over 15 years, the Internal Return Ratio amounts 12.8 % (of the total investment), which is satisfactory considering the size of the investment, i.e. the totality of the assets available to CNIC (i.e. including those owned by ONPC and the Cameroon State).

This project perfectly fits within the objectives assigned to the study, these being the production of services for maritime transport, since the development of the repair and maintenance services by the CNIC river units will make it possible for the country to :

- on the one hand, avoid expenditure and costs (in foreign currencies) for the journeys of the vessels that would have to travel longer distances for repair and gracing at facilities far distant from Douala (without implementation of the present project), and,

- on the other hand, sell maintenance and repair services (billed in foreign currencies) to many vessels of the oil sector operating in the Gulf of Guinea, which at present (without the project) are travelling for these services to the Ivory Coast or South Africa.

The success of this project will allow the technical capacities reinforcement of the Sub-Region in the field of ship repair and industrial engineering.

The objective is to present to the Sub-Region and international ship owners, high-performance services, namely :

- short completion times
- quality of work
- improved range of services
- competitive price

CONTENTS

INVESTMENT PROJECT REPORT

1. PRESENTATION OF THE ENTERPRISE AND ITS SHAREHOLDER SHIP

Chantier Naval et Industriel du Cameroun (CNIC) is a shipyard and industrial engineering company created in 1988; its installations and its operational head offices are located in the Douala port area.

The company employs some 150 personnel (temporary personnel included).

The technical resources available at present to CNIC are :

- 1 floating dock, 10 000 t (dated 1987, purchased 1988) and owned by the Cameroon State,
- 1 floating dock, 1 000 t (dated 1904, without lifting equipment, though still operational) owned by ONPC (National Ports Authority),
- 1 floating dock, 500 t, dated 1982, with lifting equipment owned by ONPC,
- 400 m² surface area of covered workshops (boiler making, general mechanical workshop, joinery, stores),
- berthing facilities, offices and 13 hectares of land.

Annex 1 gives a copy of the presentation brochure of CNIC's activities.

CNIC owns only the tools, machines, office furniture and vehicles; all the other equipment and resources (docks, crane, quays and buildings are owned by the State and rented to CNIC on a 25 year lease, for a rental fee for the equipment and the occupation of a portion of the public domain of the port of Douala. This fee is set at 25 million/year.

The company capital amounts to FCFA 800 million, 70 % of which is held by the Cameroon parties as follows :

- Office National des Ports Camerounais (ONPC) : 20 %
- Société Nationale d'Investissement (SNI) : 15 %
- Société Nationale d'Hydrocarbures (SNH) : 15 %
- Cameroun Shipping line (CSL) : 10 %
- Cie Nationale des Chargeurs du Cameroun : 10 %

and 30 % by the European parties :

- A & P Appledore (UK) : 10 %
- Dapico (Denmark) : 15 %
- Naval Invest (Switzerland) : 5 %.

One of the major problems facing the development of CNIC's activities resides in the (provisional) present location of its main floating dock (10 000 t), which is berthed at a distance of 3 km from the CNIC workshops, rendering difficult its utilisation and increasing the repair and graving work completion times. This situation makes CNIC less competitive compared to its main competitors (Carena at Abidjan, and South African shipyards).

2. EVALUATION OF THE EXISTING SITUATION

2.1. Situation of available assets

At June 30, 1992 (the last balance sheet available), CNIC's own capital still represented some FCFA 600 million (i.e. 50 % of the liabilities) despite the losses carried over from the first two business years; the paid up company capital amounted to 708 million and the capital called is 800 million.

Tables 1, 2 and 3 present the balance sheet as at June 30, 1992, as well as the situation of the shareholders' account.

To Cameroon, the purposes of having these European partners were two : getting access to international clients, with payment of a commission to these partners for business so obtained, and getting access to European technical assistance. The latter expectation has not yet been met.

It is now important to stress that, given the little interest displayed by the present partners, 30 % (or even more) could be taken over by other candidate partners. **Annex 2** gives a list of Belgian firms in this sector which may be contacted with a view to examining with them whether they would be interested in taking a share in the capital (to this day, no contacts have been made nor information in this respect supplied to these firms).

The immobilised assets owned directly by CNIC are estimated (at June 93) to amount to 273 million (cf. **tables 4 and 5**).

In turn, the assets made available to CNIC by their owner, the Cameroon State, amount to close to 6 700 million, and are composed mainly of the floating docks and the workshop (cf. **table 6**).

Accordingly, the assets available to CNIC which it needs to operate as a ship repairer and graver are estimated to be close to 7 billion, of which only 4 % are actually owned by CNIC.

2.2. Evolution of CNIC's activities

Table 7 gives the evolution of CNIC's operation accounts of the last four years.

CNIC's turnover evolved as follows :

- 435 million in 1989,
- 617 million in 1990,
- 1167 million in 1991,
- 1604 million in 1990
- 1200 million in 1993, of which more than 800 million consist of work on some 30 vessels.

Also, in 1992, the company carried out an exceptionally large job on the Youpwe dredge of ONPC, which in itself accounted for 520 million of that year's turnover.

Since 1990, the gross results and net profits of CNIC are both positive.

However, it must be stressed that CNIC bears no financial charges since it is not the owner of its main production resources and therefore has not had to finance these.

Similarly, neither has CNIC to bear the amortisation of its equipment. Therefore, the profits booked are to a degree artificial, especially that the equipment it rents from ONPC is billed at a rental fee reflecting much less than its actual value.

In other words, CNIC is significantly subsidised by the Cameroon State.

The study analyses the project as a whole in that it considers the totality of the assets used.

It is also worthwhile to mention that CNIC has been granted the D status of the Investment Code, giving it various advantages (exoneration from taxes, patent rights, customs taxes and duties on imports, etc.).

3. MARKET ANALYSIS

This point provides a description of ship repair and construction supply and demand in the area of the gulf of Guinea.

3.1. Existing supply of ship repair

Along the more than 6 000 km stretch of coastline between Abidjan and Capetown, there are only very few reliable shipyards capable of providing maintenance and repair services for ships in excess of 2 000 t.

In this sector and particularly in the Gulf of Guinea, substantial offshore oil activity is developing. For the fleet active in the Gulf of Guinea and, of course, for the Cameroon vessels, Douala is the nearest place where ship repair services can be provided. The nearest competition are located at Abidjan (Carena) and at Capetown. For a supply boat, the journey to Abidjan, for instance, already means 6 days at sea.

The other competitor shipyards, less busy (or more distant, or maybe less reliable) are situated in Cape Verde, at Dakar, in Ghana (Thema), at Lagos and in Namibia.

At Douala itself, there is also a workshop belonging to Bouygues which carries out ship and mechanical repairs (engines, electrical repair and steel plate working); however, this facility, the Union des Industries du Cameroun (UIC), has no lifting equipment.

3.2. Carena shipyard at Abidjan

In the course of the data collection assignment, a visit was made to the Carena shipyard at Abidjan, a French firm set up under Ivory Coast Law.

This shipyard had a turnover of FCFA 5123 million (in 1992) and works at capacity with the following facilities :

- a floating dock with 600 t lifting capacity (4.40 m draught),
- a 200 t floating dock (5.20 m draught) with a 3 t crane,
- a 10 000 t floating dock (6 m draught).

The firm at present has three spillways with up to 300 t lifting capacity; it employs 337 people, among whom 23 non-African expatriate staff.

The order book is usually filled for 3 to 4 months, despite the high prices charged for repairs (European prices or even higher).

The yard's activity concerns mainly ship repair for the oil sector (60 %); ship construction represents only 4 % of the turnover.

In the 92/93 business year, Carena repaired or provided maintenance work for some 203 vessels.

The cost structure roughly consists of

- labour : 70 %
- materials and consumable : 30 %

Carena's strategy focuses on the development of the means towards meeting the clients' criteria of speed of the work and an extensive range of services so that the time of unavailability of the vessels can be kept to the minimum.

The proximity of a shipyard is an undeniable asset : it makes it possible to reduce the sailing time and thus also the fuel cost for the journey to the shipyard.

3.3. Ship construction

The ship construction market is a very small one in the sub-region, and there is practically no export of new constructions since most of the materials and components are imported, so that ship builders are hardly if at all competitive.

Purchases of fishing vessels are mostly for second hand boats (with steel hulls).

As regards construction of wooden boats, the problem arises, at least in the west of the Region, of timber supplies, including in the Ivory Coast, where very little quality timber is available.

The only activity left with respect to wooden boats concerns the small scale crafting of canoes for inshore fishing.

The Cameroon fishing industry uses some forty trawlers, most of these imported since, as mentioned before, there is hardly any local construction of boats with steel hulls.

Fishing industry is falling, and to meet the demand for fish, a considerable rise is taking place in frozen fish imports, this in turn calling for the development of the "low temperatures" industry.

3.4. Demand for ship repair and maintenance

More than 360 supply boats are in operation in the Gulf of Guinea, 7 of which operated by Cameroon companies. Maintenance to these boats is required on average every 18 months.

Cam ship (CSL) owns two boats and charters more than 6 other boats.

ONPC has about a dozen of service boats that need gracing on average twice a year.

The Cameroon navy has 3 vessels.

About a 1000 cargo vessels call at Douala every year, and on average stay in port for some 3 three days. Accordingly, they are potential users of CNIC services for repair work afloat or in the dry dock.

As said before, the fishing sector comprises some 40 trawlers, which can use the 550 t and 1000 t docks.

Therefore, the demand is very high, and a highly attractive potential market exists for a competitive shipyard.

4.PRODUCTION MATERIALS AND FACTORS

The raw materials of CNIC are mainly steel plate, bends, sections, tubes and pipe, wood and semi manufactured products.

The production consumables comprise essentially paints and solvents, welding rods and materials, fuels and lubricants, gas and butane and electricity.

Practically all these materials are imported, on account of the local market having become too costly.

Purchases are usually made following invitations of tenders via a central procurement unit located in The Netherlands (ESMA); this unit is specialised in shipyard supplies.
Paints and solvents are purchased in two ways :

- either, via the ship owners who supply their own paint, or
- via a call for tender from international paint suppliers; the products are left by these on consignation and are billed by the supplier as and when they are being consumed.

5. LOCATION AND ENVIRONMENT

We must bear in mind that the main problem faced by CNIC is the present provisional location of its 10 000 t floating dock, which is berthed at one of the quays of the port of Douala.
This situation results in the major drawbacks of remoteness (3 km) of the dock from the CNIC workshops (affecting its productivity) and the unavailability of a berth at the quay in the Port of Douala.

The new location considered at present offers the following advantages :

- it is close to the existing workshops (mechanical and steel plate working),
- easy access by the road, close to the town,
- railway sidings, useful in the event of various industrial work involving steel plate (wagons, containers, etc.).

The transfer of the 10 000 t floating dock to this location, together with the arrangements to the area where finally the three docks will be grouped side by side (the 500 and 1000 t docks are already situated at this place) will require various work; this work is already programmed in the 5th Plan for the Transport Sector, in which an amount of 4 billion has been allocated to it.

Of this amount, the portion dedicated specifically to the installation of the docks amounts to 1.7 billion.

The dock installation work involves :

- a package of marine and infrastructure construction (site installations, protective fenders, quays, access jetties to the docks),
- a package of dredging work (dredging and embankment protection),
- a package of road and drainage work.

This work was the subject of a contract (No. 2389/AO/85-86 dated 26 May 1986), which started financed from the State's own resources; the work was stopped in May 1987 after about 30 % had been completed.

Now that 6 years have past, the project should be re-evaluated and a technical study conducted so as to re-assess the investment cost of this installation work.

Since the site is in the port area, the dredging (to 5 m depth with respect to the 0 hydrographic reference level) is carried out by the Port services. Considering the 2.5 m amplitude of the tide, this dredging would result in 7 m depth, enough to secure access for 10 000 t vessels.
The feasibility of these arrangements, as well as of the access and the silting up rates, if any, need to be checked prior to performing the basic design work.

6. TECHNICAL ASPECTS

6.1. Present situation of CNIC

As indicated previously, CNIC has lifting equipment available which is owned by ONPC and leased by the latter to CNIC.

This equipment comprises :

- 1 floating dock with 500 t lifting capacity (42 m long, 13.5 useful width), built 1982,
- 1 floating dock, 1000 t (60 m long, 13.5 m useful width), built 1903,
- one floating dock, 10 000 t (180 m long and 33 m useful width), built 1987,
- one floating crane with 120 t lifting capacity (very old, but operational),
- 4000 m2 of covered workshops, including :
    - a general mechanical worship,
    - a steel plate working facility,
    - a joinery,
    - a warehouse for storage of components and materials.

The tooling and machinery is generally in good condition and is usually between 15 and 15 years old.

6.2. Development project

It is estimated that the CNIC development plan could be achieved in two phases :

- a 1st phase in which the utilisation of the existing equipment could be optimised and its productivity improved,
- a 2nd phase in which the production capacity would be increased and also ship construction activity could be started.

In the present project, that second phase has not been taken into account as it is felt that, on account of the very low demand for ship construction, it would not be reasonable to as yet plan for a ship construction activity. This sub-project could be reviewed within 5 to 6 years after the completion of the 1st phase regarding the optimisation of the existing ship repair capacity.

Accordingly, the project encompasses :

- installing the 10 000 t dock at its final location, leading to a productivity improvement of between 20 and 30 %

- purchasing the additional tooling and machinery so as to be able to meet any demand with respect to repair and maintenance.

The investment for these additional tools and equipment is estimated at over 700 million, and will also call for basic and detailed preliminary design work.

The overall investment planned (1st phase) is summarised in chapter 9 (cf. **tables 8 and 9**).

The overall cost of the new investments planned is estimated at FCFA 2.8 billion.

7. HUMAN RESOURCES AND ORGANISATION

The permanent personnel of CNIC numbers 93 (in April 1993), of whom :

- 31 for the General Management and the Administrative and Financial Management,

- 62 for the Production Management.

The company employs also one expatriate (Asian) with a direct contract.
The Production management, in addition to the Technical Bureau comprises five units (electrical, mechanical and engines, fabrication and erection, steel plate working, gracing & docks).

Annexes 3 and 4 present the present organisational chart of CNIC, as well as the situation of its permanent personnel.

8. PROJECT IMPLEMENTATION CALENDAR

The project retained and of which the financial aspect is analysed in detail in chapter 9 hereafter, consists of the implementation of the investments that will result in increasing the company's productivity.

Accordingly, the investments taken into account are :

- installation of the floating dock in a small bay situated adjacent to the CNIC workshops, this item of the project requiring, therefore :

  . design work and construction supervision,
  . maritime construction and infrastructure work,
  . dredging and protection of the embankment,
  . extension of administrative buildings,
  . construction of roads, drainage system, utilities.

- acquisition of additional equipment and machine tools with a view to improving productivity and offering a better range of services to meet market demand.

It follows that the investments planned by CNIC with respect to ship construction are not taken into account, such as :

- a slipway for shipbuilding,
- a steel plate working facility for shipbuilding,
- a training centre (it is felt that, as training is indeed of utmost importance, it should best take place with adequate instructors "on the job site", so there would be no immediate need for a building dedicated to training).

In any case it is planned that the administrative building will be extended and modernised.

The development plan can be implemented over a period of 2.5 years, of which :

- 6 months for the detailed design work,
- one year for the maritime construction, dredging and dock relocation,
- 1 year for the roads and drainage and building modernisation.

9. FINANCIAL EVALUATION OF THE PROJECT

The financial evaluation concerns the project as a whole, i.e. the ship repair activity conducted by CNIC.

Are therefore considered part of the project the totality of the assets used to exercise that activity, and thus, above all, the floating docks and the workshop building with the steel plate and general mechanical workshops, which at present are the property of ONPC.

Thus the financial evaluation is an overall one that regards the business plan of an organisation that bears the whole of the real costs of its activity.

At present, CNIC leases the floating docks at a cost which hardly at all reflects their real value (the rent is 25 million/year); it follows that CNIC is indirectly subsidised by the State, and there is no doubt that the State will have to modify the level of this rent especially if the State is to finance the continuation of the project.

Rather than making assumptions as to the level of the future rent, it appeared to us more realistic to consolidate all the costs and evaluate the project on the basis of "true prices".

9.1. Summary of investments

The new investments for the project are estimated at 2.8 billion, of which :

- 50 % for maritime structures and dredging,
- 30 % for equipment and machine tools,
- 20 % for roads and drainage, buildings and design work.

The overall investment taken into account in the financial evaluation amounts to 9 800 million (including rounded off figures and contingencies); it concerns the totality of the assets and investments for the ship repair activity, i.e.

- 2.8 billion of new investments,
- 6.7 billion of ONPC assets (docks and workshops),
- 0.3 billion of CNIC assets.

9.2. Estimate of future turnover

The implementation of the proposed investment plan (rational facilities and additional equipment) as well as the benefits from the transfer of technology from experienced technical assistance should make it possible for CNIC to better meet the demand and offer more competitive services.

Under these conditions it is estimated that the productivity can increase as soon as from the second year of the next millennium with 10 % per year and as soon as from the year 2006 with 15 % year, this leading to the productivity being doubled within a span of 10 years.

Similarly, using closer to capacity the existing floating docks can be achieved, i.e. between 60 and 80 % (instead of the present 20 to 40 %).

Under these circumstances, CNIC would be capable of performing typical services on about 115 vessels, i.e. about a fourfold of the present production (making it rank with the level of activity displayed by Carena at Abidjan with their floating docks).

This brings the turnover at 6 billion t the 10th year after project implementation : i.e. five times the present turnover.

Table 10 summarises the business plan of the project.

9.3. Estimate of future charges

The operating expenses, composed of variable expenses and fixed charges, have been extrapolated over the period considered, in function of the investment plan and the intended organisational changes.

For instance, among the factors taken into account is the increase in pay-roll costs due to CNIC being joined by a technical partner (to be identified) who will bring his experience in the sector of ship repair and gracing.

The benefits from incorporating such a team within CNIC comprise :

- assistance to the implementation of the investment project (relocation of the dock, arrangements to the installations of the shipyard and the workshops),
- training in productivity improvement techniques,
- sales and management support.

The advisory and support personnel intended are the following :

- 1 assistant to the present Director General
- 1 administrative and financial staff
- 1 business promoter/sales staff
- 1 experienced ship repair engineer (production)
- 1 engineer for the Design Office,
- 5 senior technical staff (electrical. mechanical-engines, steel plate working, erection, gracing & dock)

i.e. in all 10 people.

Under these conditions, CNIC can achieve a substantial gross margin; in terms of internal return ratio however, the overall return is only an average one (IRR of 12.8%) essentially due to the size of the investment considered, especially for the 10 000 t dock which is now assumed owned by the company itself. The financing of such investment may be costly, but, nevertheless, that gross margin will make it possible to cover both the amortisation and the financial charges.

9.4. Financial structure

Given the hypothesis made in the present analysis that CNIC would become the owner of the whole of the assets required to perform its activity, the company will have to both amortise and finance the entirety of the assets available.

It has been assumed that CNIC would self-finance 50 % of the value of the new investments to be made and of the repurchase from the State of Cameroon of the assets the latter made available to it (that total 9.6 billion), and that the balance would be borrowed under the following conditions :

- duration of the loan : 20 years
- period of grace : 5 years
- interest rate : 8 %
- commitment rate : 0.75 %

10. CONCLUSIONS

CNIC, which is still in its starting phase, has adequate production resources, especially the 10 000 t floating dock, at present provisionally berthed in the port area of Douala at a distance of 3 km from its workshops.

The projected investment regarding additional tools, and, especially, for the rational siting of the docks (implying the relocation of the 10 000 t dock), as well as for effective technical assistance, should enable CNIC to offer to its potential clients, who are many in this sub-region, more competitive services in terms of completion times, quality of work and improved range of services.

These technical and human resources would make for improved productivity and a higher utilisation ratio of the CNIC installations.

Under these conditions, a doubling of the turnover can be expected within 5 years so as to reach 6 billion in the year 2010 (i.e. roughly the same level of business as Carena at Abidjan).

Computed over 15 years, the Internal Return Ratio attains 12.8 %, which is satisfactory considering the size of the investment, the latter being the totality of the assets available to CNIC.

Therefore, this project offers an attractive opportunity for a foreign partner of the ship repair and shipbuilding sector, providing he is willing to invest in the company both financially and in terms of human resources.

In this respect, one of the conditions to success is the integration of a team of experts in this sector into the CNIC personnel.

A majority holding in the capital of the company is a favourable position towards having the necessary measures adopted to make it competitive on this market.

Let us bear in mind also that the company has been granted a privileged status.

Table hereafter summarises the main components of the project as well as the recommended action plan.

Components	Action Plan
1. Training programme (management, planning, technical training)	Search for financing
2. Re-siting the 10.000 t floating dock	Search for financing the technical and realisation studies
3. Purchasing of additional machines and stocks	Search for financing the technical and realisation studies
4. Identifying and experienced technical partner	- giving in CNIC the assets of State and ONPC, at an attractive price - search for an experienced technical partner

TABLE 1. CNIC BALANCE SHEET – AT 30 JUNES 1992

FCFA X 1000

ASSETS		LIABILITIES	
Tangible Assets	196 709	**Equity**	
Other tangible assets		Capital paid up	708 590
Medium–term loans & credits	23 941	Losses carried over	(347 907)
Operating assets (supplies, stocks,..)		Profit of the 91/92 period	61 595
Material & Supplies	74 206	Provision for charges and losses	181 983
Stockon consignment	27 699	*Total Equity*	604 261
Total operating assets	101 905	**Short term liabilities**	
Realisable & liquids assets		Suppliers	330 378
Suppliers	8 893	Clients, advances and pre–payments, personnel	8 058
Clients	566 886	State	46 268
Personnel	3 421	Associates (A &P Appledore)	15 000
Associates	pm	Affiliated companies (ONPC)	31 755
Miscellaneous debitors	2 818	Miscellaneous creditors	36 089
Short term securities	300 000	Liabilities regularisation account (charges payable)	127 677
Banks & liquid assets	14 825	Banks	19 912
Total realisable and liquid assets	896 843	*Short term liabilities*	615 137
TOTAL ASSETS	1 219 398	TOTAL LIABILITIES	1 219 398

Source : Financial statements CNIC (1992/1993)

TABLE 2. CNIC BALANCE SHEET – AT 30 JUNES 1992

FCFA X 1000

ASSETS	1000 FCFA	%	LIABILITIES	1000 FCFA	%
Tangible Assets	220 650	18%	Equity	604 261	50%
Operating assets (supplies, stocks,..)	101 905	8%			
Realisable & liquids assets	896 843	74%	Short term liabilities	615 137	50%
TOTAL ASSETS	1 219 398	100%	TOTAL LIABILITIES	1 219 398	100%

TABLE 3. SITUATION OF THE SHAREHOLDERS ACCOUNT (CAPITAL CALLED/PAID UP)

FCFA X 1000

FOREIGN PARTIES	Part	Called	paid up	CAMEROON PARTIES	Part	Called	paid up
Naval Invest	5%	40 000	30 000	ONPC	20%	160 000	160 000
Dapico	15%	120 000	90 000	SNI	15%	120 000	90 000
Appledore	10%	80 000	60 000	SNH	15%	120 000	120 000
				CSL	10%	80 000	78 590
				CNCC	10%	80 000	80 000
Total	30%	240 000	180 000	Total		560 000	528 590
Not paid up 60 000				31 410			31 410

TABLE 4. SITUATION OF CNIC TANGIBLE ASSETS (1) FCFA X 1000

Description	Acquisition value	Average amort. rate	Amort./year	Net value june 1992
Office Installations	4 375	*10%*	*506*	*3 211*
Indus. build. Install. (barrier, workshop etc)	5 573	*10%*	*557*	*3 901*
Housing installation	2 807	10%	281	1 774
Installation of facilities (docks)	55 100	10%	5 478	42 808
Office Equipment	26 729	10% to 25%	6 282	17 718
Office Furnitures	10 142	15% to 33%	1 696	7 324
Housing Equipment	4 897	25%	1 155	1 113
Housing Furnitures	15 287	25%	3 228	711
Motor cars & light trucks	34 250	25%	11 010	3 869
Containers & tanks	22 660	25%	5 665	16 917
Production tools and machinery	175 451	10% to 20%	30 181	91 676
Total	357 271		66 039	191 022

(1) CNIC has a lease under which it operates and manages equipment (3 floating docks, 1 floating crane and a workshop pontoon) and is authorized to use a plot of land in the port property comprising workshops, stores, aprons, offices, quays, basin, roads and drainage systems.
These tangible assets, therefore, are not shown in the CNIC Balance Sheet. Instead they are included in that of the owner : ONPC.
These assets are rented from ONPC at present; the annual rent amounts to 25 million
Source : Financial statements at June 30, 1992

TABLE 5. ESTIMATED 1993 VALUE OF CNIC'S PRESENT NET ASSETS **FCFA X 1000**

ITEMS	*Net value June 1992 (1)*	*Amort. rate*	*amort. /year*	*Acquisitions 92/93*	*Est. value June 1993 (1)*
Buildings	pm				
Office & housing equipment	31 851	20%	12 847		19 004
Industrial installations & equipment	63 626	10%	8 333		55 293
Vehicles	3 869	25%	3 869	35 000	35 000
Production tools & machines	91 676	10%	17 545	90 000	164 131
NET ASSETS	191 022		42 595	125 000	273 427

(1) source : CNIC balance sheet (june 1992)

TABLE 6. EXISTING ASSETS COMPLEMENTARY TO SHIP REPAIR ACTIVITY (ONPC) **FCFA X 1000**

ITEMS	FOREIGN CURRENCY	LOCAL CURRENCY	TOTAL 1993 Value
TANGIBLE ASSETS (existings)			
Covered workshops (4000 m2)	450 000	50 000	500 000
PRODUCTION EQUIPMENT (existing)			
Floating dock 10000t (1987)	5 146 875	571 875	5 718 750
Floating docks 500 & 1000t (1982 & 1903)	405 000	45 000	450 000
Floating crane 120t (1930)	9 000	1 000	10 000
Workshop pontoon (1986)	2 250	250	2 500
TOTAL	6 013 125	668 125	6 681 250

TABLE 7. EVOLUTION OF THE CNIC OPERATING RESULTS

FCFA X 1000

Year	88/89		89/90		90/91		91/92	
	June 89	in %	June 90	in %	June 91	in %	June 92	in %
PRODUCTS								
Services billed	335 363	77%	686 850	111%	1 076 799	92%	1 515 638	94%
Production stored	65 091	15%	(65 091)	-11%		0%		0%
Internal work	23 955	6%		0%	21 810	2%	20 017	1%
Other products		0%	(18 508)	-3%	43 981	4%		0%
Miscellaneous & int.	10 835	2%	13 904	2%	24 849	2%	68 369	4%
Total of products	435 244	100%	617 155	100%	1 167 439	100%	1 604 024	100%
CHARGES		0%		0%		0%		0%
Materials and supplies	76 372	18%	186 264	30%	302 521	26%	526 140	33%
Transport consumed	35 461	8%	21 431	3%	17 369	1%	21 197	1%
Other services consumed	282 394	65%	200 454	32%	341 378	29%	331 712	21%
Miscellaneous charges and losses	25 450	6%	18 840	3%	30 324	3%	44 447	3%
Pay-roll	230 590	53%	272 639	44%	328 997	28%	295 741	18%
Taxes and duties	8 060	2%	9 109	1%	7 200	1%	17 462	1%
Other charges		0%	43 629	7%	(42 888)	-4%	45 464	3%
Total charges	658 327	151%	752 366	122%	984 901	84%	1 282 163	80%
GROSS MARGIN	(223 083)	-51%	(135 211)	-22%	182 538	16%	321 861	20%
Amortization	26 125	6%	66 479	11%	79 025	7%	260 142	16%
provisions		0%		0%		0%		0%
Financial charges	170	0%	356	0%		0%	124	0%
RESULTS (LOSSES &PROFITS)	(249 378)	-57%	(202 046)	-33%	103 513	9%	61 595	4%

TABLEAU 8. NEW INVESTMENTS PLANNED FOR THE SHIP REPAIR ACTIVITY

FCFA X 1000

ITEMS	FOR. CURR.	LOCAL CURR.	TOTAL	Calendar year 1	year 2	year 3
DESIGN AND WORK SUPERVISION	173 280	18 000	191 280	180 000	11 280	
MARITIME WORK AND SUPERVISION						
Site installation	6 500	58 500	65 000	65 000		
Protective fenders	129 000	129 000	258 000	258 000		
Access pontoons to the docks	11 300	101 700	113 000	113 000		
DREDGING AND EMBANKMENT PROTECT	598 400	149 600	748 000	748 000		
ADMINISTRATIVE BUILDING	18 800	169 200	188 000		188 000	
ROADS, DRAINAGE, UTILITIES	25 800	103 200	129 000	129 000		
TOOLS AND MACHINERY	505 602	216 686	722 288	722 288		
TOTAL	1 468 682	945 886	2 414 568	2 215 288	199 280	0
Physical contingencies 10%	146 868	94 589	241 457	221 529	19 928	0
Price revisions 5%	87 778	56 532	144 310	121 841	22 469	0
TOTAL INVEST. PROJ.(incl. conting.)	1 703 327	1 097 007	2 800 334	2 558 658	241 677	0

TABLE 9. ADDITIONAL INVESTMENT IN EQUIPMENT AND TOOLS (1)

Type of investment	FCFA X 1000
Transport within the shipyard, and utilities	
. 2 forkiift trucks	53 625
. acces roads (200m)	94 050
. strengthening of electr. system, water network improv.	247 500
Improvement of utilization ratio of the steel plate workshop	
. 2 compressors	16 088
. 4 sans blasters	12 870
. airless painting equipment	10 725
. 10 standart welding stations 300 ampères	4 290
500 ampères	6 435
. semi–autom. stations 400 amperes, outside welding	1 716
. autom. stations (arc air) 500 amperes	2 145
. plate roll (for 20 mm thick and 3 m wide) (with edge folding)	18 662
. boring machine	64 350
. shear for 12 mm thick plate	21 450
Improvement of utilization ratio of the mechanical workshop	
. 2 vertical lathes (15 m bench, 2m diameter)	150 150
. test bench for injection pump	18 233
Total of additional investment	722 288

(1) estimate : CIF Douala value, delivered on site

TABLE 10. SUMMARY OF FORECAST OPERATING RESULTS

FCFA X 1000

YEAR	YEAR 1		YEAR 5		YEAR 10	
	FCFAX1000	in %	FCFAX1000	in %	FCFAX1000	in %
INCOME						
Cleaning and repairs	1 254 237	91%	3 118 453	91%	5 539 721	91%
Shipbuildings	0	0%	0	0%	0	0%
Miscellaneous	125 424	9%	311 845	9%	553 972	9%
Subsidies	0	0%	0	0%	0	0%
			0		0	
TOTAL RESOURCES	1 379 661	100%	3 430 298	100%	6 093 693	100%
			0		0	
OPERATING CHARGES			0		0	
Variable expenses			0		0	
Raw & semi-finished materials	171 494	12%	426 390	12%	757 454	12%
Direct consumables	62 731	5%	155 971	5%	277 071	5%
Direct pay-roll	71 398	5%	121 145	4%	164 421	3%
Water and electricity	36 367	3%	90 421	3%	160 626	3%
Fuel and lubricants	69 187	5%	172 022	5%	305 585	5%
Subcontractors and subsidiaries	136 515	10%	339 421	10%	602 959	10%
Total variable expenses	547 692	40%	1 305 370	38%	2 268 115	37%
Fixed expenses						
Rents, fees, communications	120 000	9%	155 953	5%	155 953	3%
Misc., manag., insurance & taxes exp.	62 000	4%	62 000	2%	62 000	1%
Maintenance for veh. and equipment	258 945	19%	267 345	8%	267 345	4%
Office expenses and miscel.	49 288	4%	93 589	3%	93 589	2%
Representation expenses	35 150	3%	65 244	2%	69 739	1%
Wages for executive & employees	267 018	19%	507 018	15%	507 018	8%
Transport and travel	25 000	2%	25 000	1%	25 000	0%
Total fixed expenses	817 401	59%	1 176 150	34%	1 180 644	19%
TOTAL OPERATING CHARGES	1 365 093	99%	2 481 519	72%	3 448 760	57%
GROSS MARGINS	14 568	1%	948 779	28%	2 644 934	43%
PROVISION	0	0%	0		0	
AMORTIZATION	28 596	2%	385 180	11%	340 864	6%
FINANCIAL EXPENSES	379 263	27%	379 263	11%	252 842	4%
FINANCIAL EXPENSES/OVERDRAFTS	0	0%	0	0%	0	0%
	0	0%	0		0	
PRE-TAX RESULTS	(393 291)	-29%	184 336	5%	2 051 227	34%
TAXATION	0	0%	0	0%	0	0%
NET RESULT	(393 291)	-29%	184 336	5%	2 051 227	34%

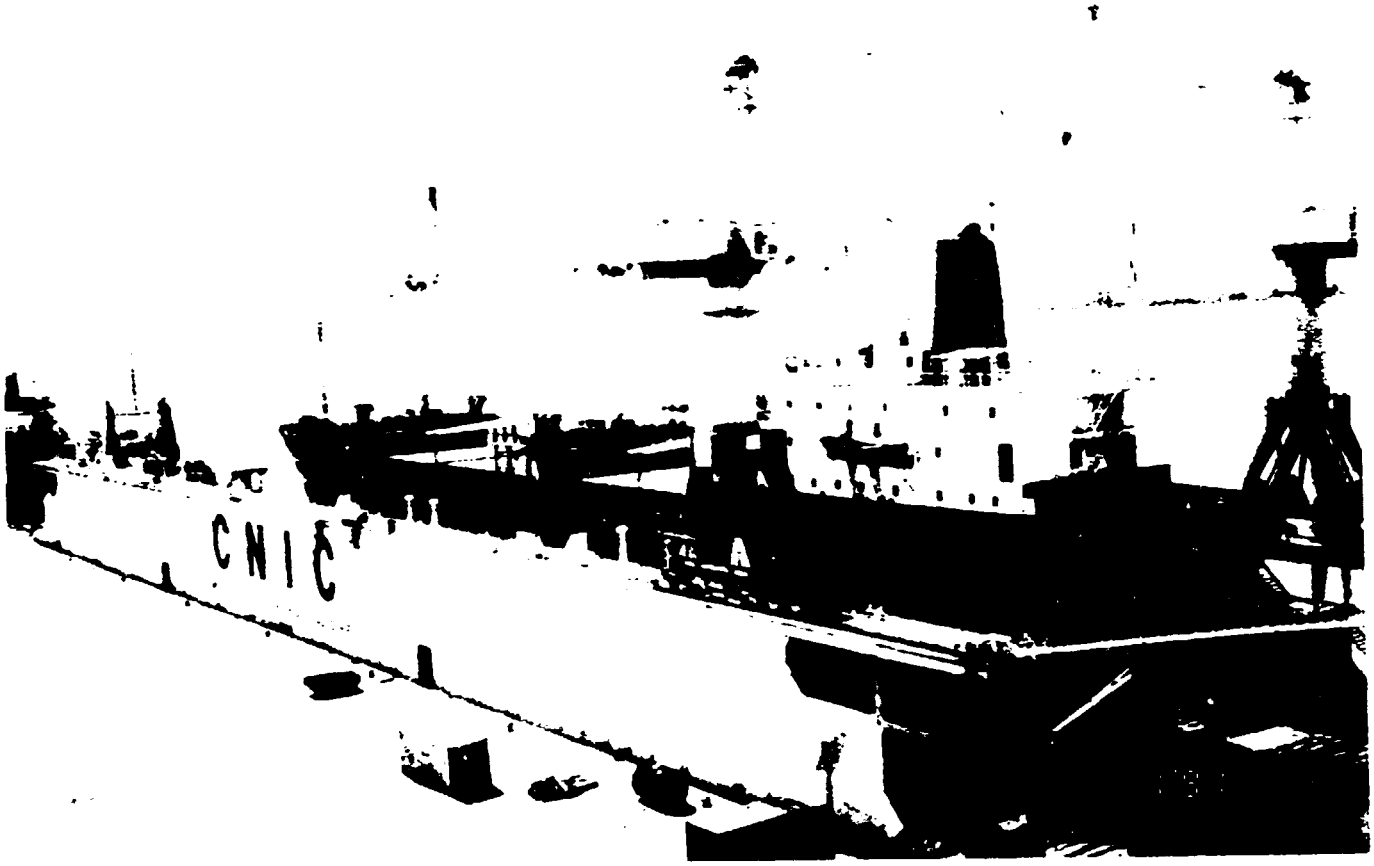
ANNEXES TO THE INVESTMENT PROJECT REPORT

ANNEX 1. LITERATURE ABOUT THE ACTIVITIES OF CNIC

CHANTIER NAVAL ET INDUSTRIEL DU CAMEROUN S A

REPARATION CONSTRUCTION NAVALE TRAVAUX [illegible]

CNIC



NOTRE FORCE : LA PERFORMANCE

SIEGE SOCIAL

ZONE AMONT - PORT DE DOUALA - B.P 2389 DOUALA - CAMEROUN - AFRIQUE CENTRALE
TEL : (237) 40 15 60 - 40 34 88 - FAX : (237) 40 73 26 - TLX : 5479 KN

CORRESPONDANTS

A & P APPLEDORE 6th FLOOR QUEEN HOUSE, 2 HOLLY ROAD
TWICKENHAM MIDDMESEX - TWL - HEG - ENGLAND
TEL : 081 891 1422 - FAX : 081 892 4484 - TLX : 21275 APAFUNG

GEORGE MOUNDREAS & COMPANY S A SHIPBROKERS - 167, AIKIVIADOU STR.
TEL : 301 428 4200 - FAX : 301 428 4242 - TLX : 213 481 / 213 482

ESMA-EURO SHIPBUILDERS AND MARINE AGENCIES B V
P.O.BOX 752, 1180 AT AMSTEL VEEN - HOLLAND
TEL : 31 20 64 37 737 - FAX : 31 20 64 77 521 - TLX : 13321

PRESENTATION GENERALE

DATE DE CREATION : 5 FEVRIER 1988 - FORME JURIDIQUE : SOCIETE ANONYME - CAPITAL SOCIAL : 800 000 000 FCFA - SIEGE SOCIAL : DOUALA- CAMEROUN

OBJETS PRINCIPAUX :

- REPARATION ET CONSTRUCTION NAVALES - TRAVAUX INDUSTRIELS ON ET OFF-SHORE - REPARATION ET FABRICATION DE CONTENEURS

ACTIONNAIRES :

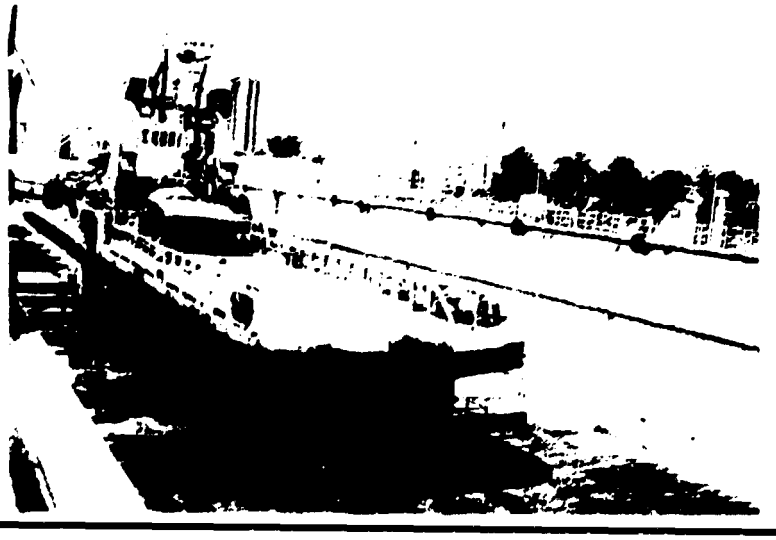
- CAMEROUN : ONPC, SNH, SNI, CNCC, CAMSHIP - EUROPE : DAPICO (DANEMARK)
- A & P APPLEDORE (ANGLETERRE). - NAVAL INVEST (SUISSE)

LES EQUIPEMENTS

*3 DOCKS FLOTTANTS
- 500 T (42M LONG X 13,5M LARGEUR UTILE)
- 1 000 T (60M LONG X 13,5M LARGEUR UTILE)
- 10 000 T (180M LONG X 33 M LARGEUR UTILE)
*UNE GRUE FLOTTANTE DE 120 TONNES DE CAPACITE DE LEVAGE.
*4 000M2 D'ATELIERS COUVERTS, EQUIPES DE MACHINES OUTILS MODERNES.

LES OBJECTIFS

OFFRIR A NOTRE CLIENTELE DANS LES DELAIS:
UN MEILLEUR RAPPORT QUALITE/PRIX, UNE TECHNOLOGIE DE POINTE DANS LES DOMAINES : DE NOUVELLES CONSTRUCTIONS ET REPARATIONS NAVALES, DES INDUSTRIES ON ET OFFSHORE.



LE PERSONNEL

INTERNATIONAL, DIVERSIFIE ET COMPETENT DANS LES DOMAINES :
- DES REPARATIONS ET CONSTRUCTIONS NAVALES,
- DES TRAVAUX INDUSTRIELS ON ET OFFSHORE,
POUR LA CLIENTELE SUIVANTE :
OPERATEURS INTERNATIONAUX DES BARGES OFFSHORE, DES PLATES-FORMES, NAVIRES, SUPPLY, CHANTIERS, REMORQUEURS, CHALOUPES.

GENERAL PRESENTATION

DATE OF CREATION : FEBRUARY 5th, 1988 - FORME OF COMPANY : P.L.C. - CAPITAL : 800 000 000 FCFA - HEAD OFFICE : DOUALA- CAMEROON

MAIN OBJECT :

- SHIP REPAIRS AND SHIPBUILDING - ONSHORE AND OFFSHORE INDUSTRIAL ENGINEERING ACTIVITIES - MAINTENANCE AND MANUFACTURE OF CONTAINER - GENERAL ENGINEERING

SHAREHOLDERS :

- CAMEROON : ONPC, SNH, SNI, CNCC, CAMSHIP - EUROPE : DAPICO (DENMARK) - A & P APPLEDORE (U.K). - NAVAL INVEST (SWITZERLAND)

OUR FACILITIES

- 3 FLOATING DRY DOCKS OF FOLLOWING LIFTINGS CAPACITIES :

- 500 T (42M LONG X 13,5M CLEAR WIDTH)

- 1 000 T (60M LONG X 13,5M CLEAR WIDTH)

- 10 000 T (180M LONG X 33M CLEAR WIDTH)

* A FLOATING CRANE OF LIFTING CAPACITY 120 T,

* AN AREA OF 4 000M2 OF COVERED WORK-SHOPS, EQUIPED WITH MODERN MACHINERY.

OUR PURPOSE

TO OFFER OUR CUSTOMERS AT AGREED TIME :

- THE HIGHEST COST EFFECTIVE AND QUALITY WORK,

- LATEST TECHNOLOGY IN THE FOLLOWING FIELDS :

* NEW BUILDINGS AND SHIP REPAIRS (CIVIL AND NAVY),

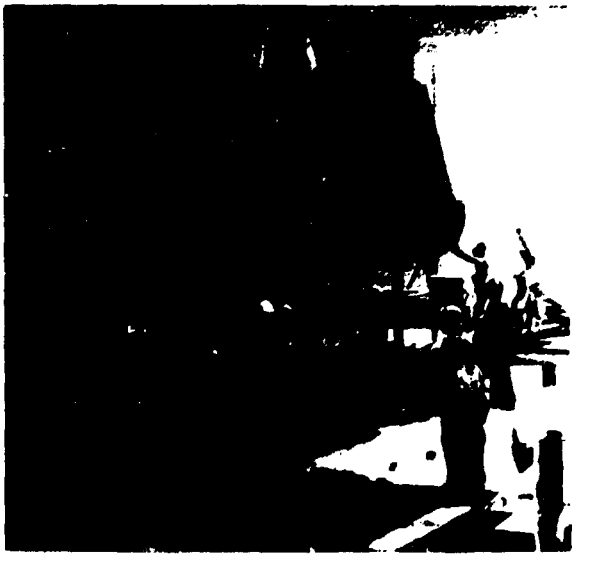
* INDUSTRIAL WORKS ONSHORE AND OFFSHORE.

OUR STAFF

INTERNATIONAL, DIVERSIFIED AND COMPETENT IN :

(1) SHIPBUILDING AND NAVAL REPAIRS,
(2) INDUSTRIAL WORKS ON AND OFFSHORE

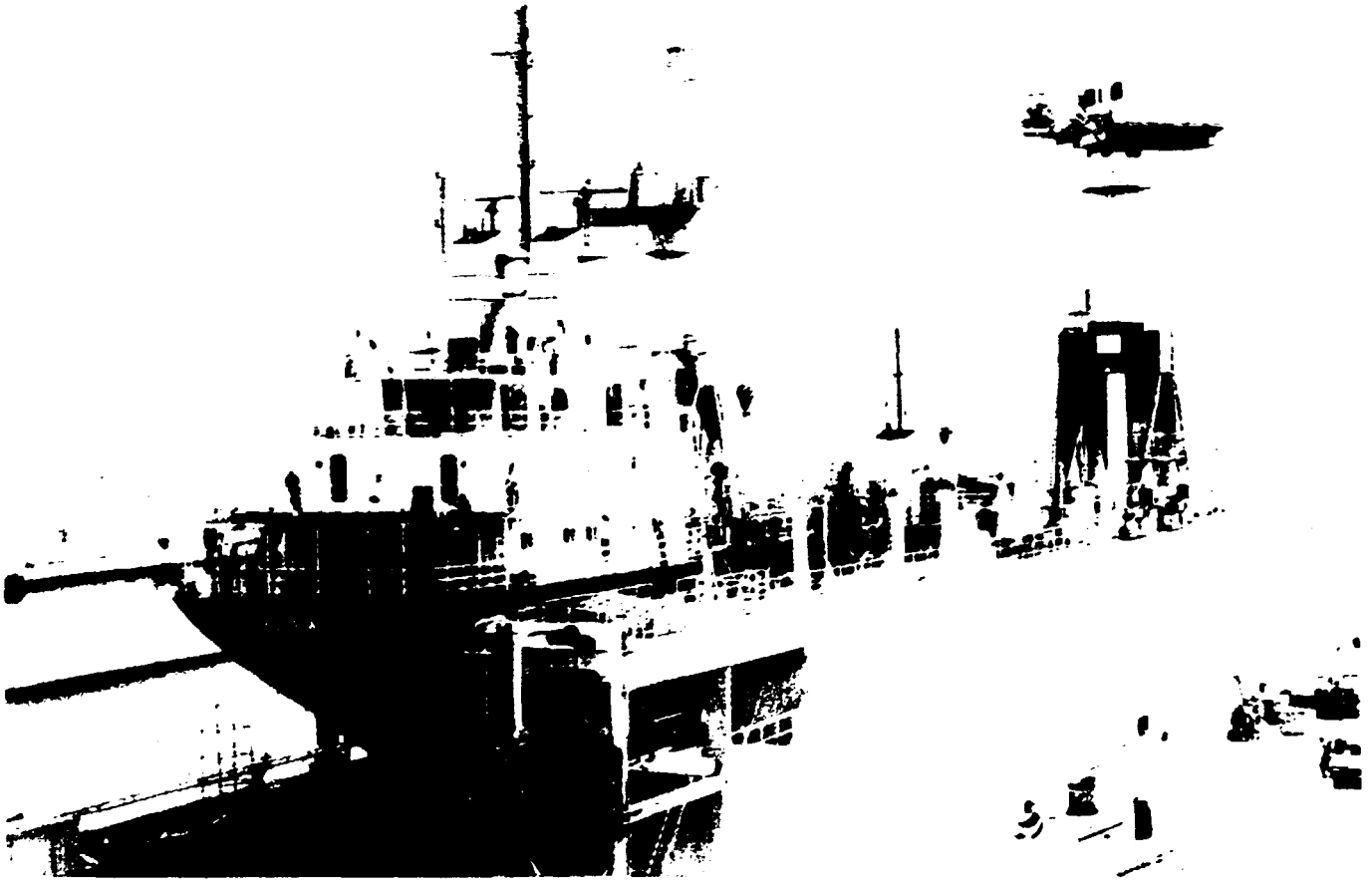
FOR THE FOLLOWING CUSTOMERS :
INTERNATIONAL OPERATORS OF OFFSHORE BARGES, MODU'S, PLATFORMS AND SUPPLY BOATS, FISHING CRAFTS, TUG BOATS, WORK/ CREW BOATS, DREDGERS, CARGO BOATS, TANKERS, ETC...



CHANTIER NAVAL ET INDUSTRIEL DU CAMEROUN S A

CAMEROON SHIPYARD AND INDUSTRIAL ENGINEERING LTD

CNIC



OUR STRENGTH IS PERFORMANCE

HEAD OFFICE

ZONE AMONT - PORT DE DOUALA - CAMEROON - AFRICA - P.O.BOX : 2389 DOUALA CAMEROON - AFRICA
TEL : (237) 40 15 60 - 40 34 88 - FAX : (237) 40 73 26 - TLX : 5479 KN

CORRESPONDENTS

A & P APPLEDORE 6th FLOOR QUEEN HOUSE, 2 HOLLY ROAD
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P.O.BOX 752, 1180 AT AMSTEL VEEN - HOLLAND
TEL : 31 20 64 37 737 - FAX : 31 20 64 77 521 - TLX : 13321

BAMUSSO 10.000 TLC FLOATING DOCK

CAMEROON SHIPYARD AND INDUSTRIAL ENGINEERING LTD.

Principal Particulars

Length over all	180.000 m
Length over pontoon	172.000 m
Overall breadth of steel structure	40.800 m
Breadth between side walls	34.000 m
Clear width between side platforms	33.000 m
Breadth of side walls	3.400 m
Slope of pontoon decks	0.200 m
Depth of keel blocks	1.500 m
Freebord of dock in lowered condition	1.500 m
Water depth over keel blocks	7.800 m
Pontoon freeboard (dock centreline)	0.450 m
Normal lifting capacity	10.000 T
Max lifting capacity	12.140 T

The dock is equipped with six pumps needing approx 60 minutes to lift a ship with a weight of 10 000 tons out of the water until emerging the pontoon deck.

HULL STRUCTURAL AND DOCK OPERATIONAL EQUIPMENT

FLOODING & EMPTYING SYSTEM

3 adjacent ballast via pipelines compartments out of a total of 18 are connected through remote controlled gate valves to one collector. One doublesuction centrifugal pump with a capacity of 3 200 m3/h is associated to each of the collectors.

Central Control

Command of the entire ballast system is effected from the control cabin by means of indicators showing the pressure level in the individual tank systems, the draught, the dock's deflection as well as the heel and trim positions.

Talk-back System

Reciprocal intercommunication between all vital stations on the dock, such as switchgear, capstans etc. Radio telephony connection to the ship.

Warping outfit

4 warping capstans having a pull of 8 tons each controlled locally or from the control cabin with a combined traction and countering of always two capstans situated opposite to each other.

Tanks

For accepting bunkers from drydocked ships four oil tanks holding a total of 680 m3 and one pump room.

Sanitary Systems

Integrated systems in the dock with sewage tanks and discharge line to the shore.

Energy Supply

Electric energy is supplied to through a movable connecting cable in the form of 15 kv/50 Hz stepped down by dock own transformers to the operating voltage needed.

For the power supply to ships in drydock, there are available :

AC : 380/220 V - 50 Hz
440 V - 60 Hz

Keel & Bilge Blocks

109 keel blocks equispaced 1.25 m.
24 beam style bilge blocks equipspaced 7.5 m

Facilities for Repair and New Consturction Operations Dock Crane

Two dock cranes of 12.5 tons at 19 m radius and 6.3 tons at 22 m radius traversable over the full length of the dock.

Pipe Lincs

Dock-based pipe lines to be feed from ashore for
- Compressed air
- Steam
- Fresh water
- Fire fighting water

Fire Fighting Equipment

Two fire pumps operating indepcndrntly from each other capacity 120 m3/h WG.

Construction Power Supply

380 V - 50 Hz three-phase AC

Welding Power Supply

Welding rectifiers having a total capacity of 3 x 2500 A for 65 V welding current.

ANNEX 2. TENTATIVE LIST OF BELGIAN FIRMS IN THE SECTOR

List of Belgian shipyards (repair and construction)

Belgian Shipbuilders Corporation N.V.
Nijverheidsstraat 2
2870 Puurs

Fulton Marine N.V. (Mr Van Volsem)
Nijverheidsstraat 2
2870 Puurs

Meuse et Sambre S.A. (Mr Van Frachen)
Rue de Namur 16
5128 Beez/Meuse

Nieuwe Scheepswerven Sint Barbara (Mr. Porreye)
Sint Barbara Straat
Eisden - 3640 Maasmechelen

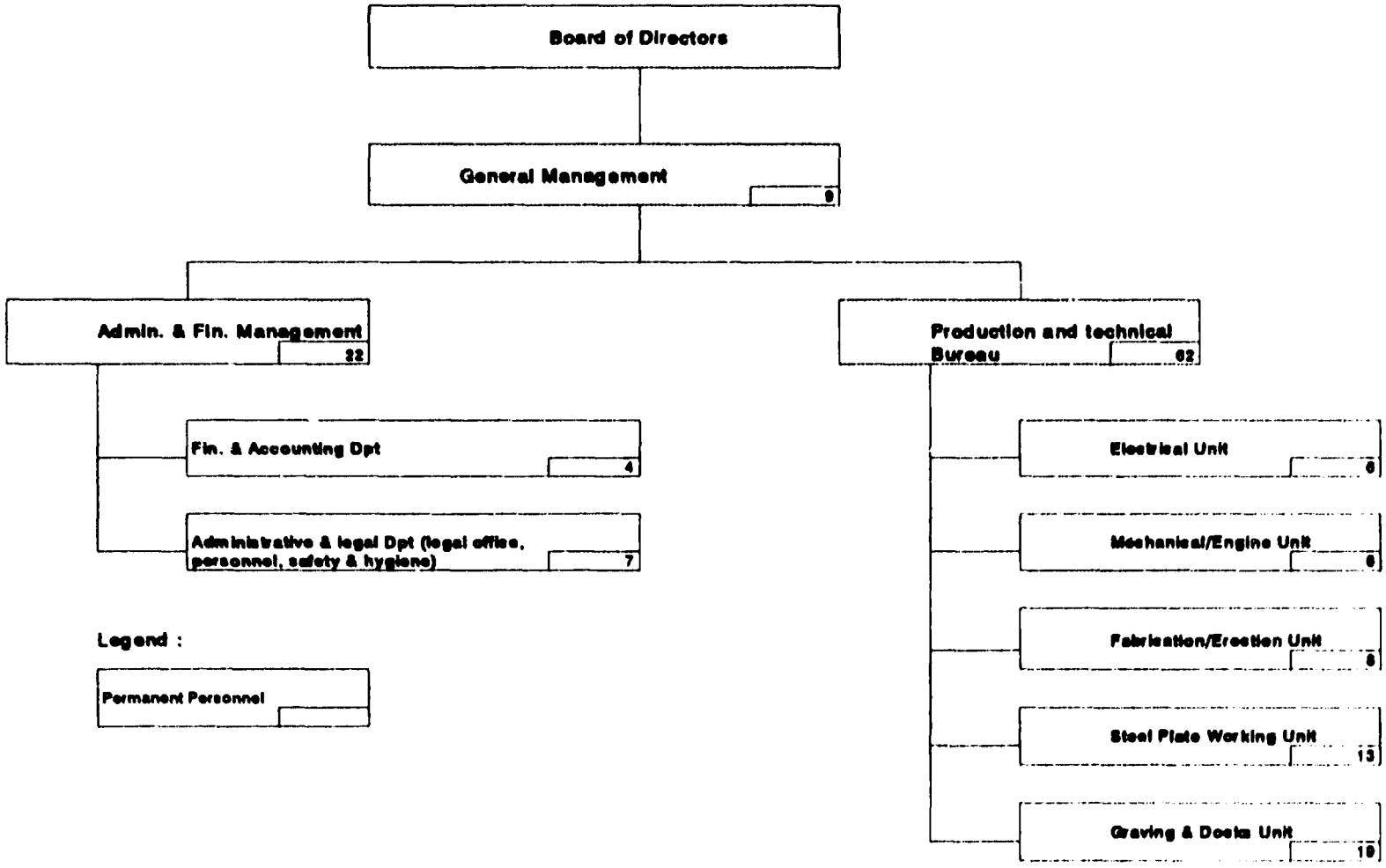
Chantier Naval de Rupelmonde S.A. (Mr Swolf)
Dijkstraat 7
2928 Rupelmonde

Chantiers Navals Namèche/Seilles (Mr De Gentille)
Rue de Reppe 20
5210 Seilles

S.K.B. N.V. (L. Longueville)
Royerssluis Kaai 48
2030 Anterwerpen

ANNEX 3. ORGANISATIONAL CHART OF CNIC (APRIL 1993)

FUNCTIONAL ORGANIZATION CHART OF CNIC's PERMANENT PERSONNEL



Total personnel of the departments 11

Total personnel of the unit : 52

Overall total 63

ANNEX 4. SITUATION OF CNIC'S PERMANENT PERSONNEL

SITUATION OF THE CNIC PERSONNEL (APRIL 1993)

in FCFA

FUNCTIONS OF THE MANAGEMENTS, DEPTS, AND UNITS (1)	PERSONNEL PERMANENT Numbers	Monthly Unit Wages (approx.)	Miscel. unit indemnities	TOTAL OF MONTHLY UNIT WAGES	TOTAL OF YEARLY UNIT WAGES	ANNUAL WAGES TOTAL (2)
General management						
Deputy General Manager	1	410 000	430 000	840 000	10 080 000	10 080 000
Unit Manager	1	210 000	110 000	320 000	3 840 000	3 840 000
Executive employee	1	180 500	50 000	230 500	2 766 000	2 766 000
Administrative staff	6	180 500	50 000	230 500	2 766 000	16 596 000
Total General Management	9				19 452 000	33 282 000
Admin. and Fin. manag.						
Adm. & fin. Manager	1	321 200	359 000	680 200	8 162 400	8 162 400
Adm. & fin. Senior Staff	1	180 500	50 000	230 500	2 766 000	2 766 000
Admin. Employees	2	180 500	50 000	230 500	2 766 000	5 532 000
Fin. & Acc. Senior staff	4	180 500	50 000	230 500	2 766 000	11 064 000
Adm. & legal senior other staff	7	180500	50000	230 500	2 766 000	19 362 000
Safety agents, telephonists	7	61 700	20 000	81 700	980 400	6 862 800
Total admin. & fin. mgt	22				20 206 800	53 749 200
Production management						
Technical Bureau Mgr	1	400 000	359 000	759 000	9 108 000	9 108 000
Deputy Dpt Head (Techn. Bur.)	2	250 000	250 000	500 000	6 000 000	12 000 000
Executive employee	4	180 500	50 000	230 500	2 766 000	11 064 000
Employees	3	180 500	50 000	230 500	2 766 000	8 298 000
Total Production Mgt	10				20 640 000	40 470 000
Electrical Unit						
Unit Manager	1	210 000	110 000	320 000	3 840 000	3 840 000
Section Head	3	75 000	110 000	185 000	2 220 000	6 660 000
Executice employyes	2	180 500	50 000	230 500	2 766 000	5 532 000
Total Electrical Unit	6				8 826 000	16 032 000
Mechanical Engine Unit						
Unit Manager	1	210 000	110 000	320 000	3 840 000	3 840 000
Section Head	1	75 000	110 000	185 000	2 220 000	2 220 000
Labour	4	75 000	20 000	95 000	1 140 000	4 560 000
Total Mechanical Engine Unit	6				7 200 000	10 620 000
Fabrication Erection Unit						
Unit Manager	1	210 000	110 000	320 000	3 840 000	3 840 000
Section Head	2	75 000	110 000	185 000	2 220 000	4 440 000
Labour	5	75 000	20 000	95 000	1 140 000	5 700 000
Total fabrication Erection Unit	8				7 200 000	13 980 000
Steel plate Working Unit						
Unit Manager	2	210 000	110 000	320 000	3 840 000	7 680 000
Section Head	4	75 000	110 000	185 000	2 220 000	8 880 000
Labour	7	75 000	20 000	95 000	1 140 000	7 980 000
Total steel plate work. unit	13				7 200 000	24 540 000
Graving & Docks unit						
Unit Manager	1	210 000	110 000	320 000	3 840 000	3 840 000
Section Head	4	75 000	110 000	185 000	2 220 000	8 880 000
Labour	14	75 000	20 000	95 000	1 140 000	15 960 000
Total graving & doks unit	19				7 200 000	28 680 000
Total Production mgt	62				58 266 000	134 322 000
GENERAL TOTAL	93				97 924 800	221 353 200

(1) the functions listed do not systematically concerned with grades

(2) without social security contributions, pensions, bonuses and fringe benefits, and exclusive of temporary labours