



TOGETHER
for a sustainable future

OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.



TOGETHER
for a sustainable future

DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

CONTACT

Please contact publications@unido.org for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org

17919

CCF 89/457

December 11th 1989

ASSISTANCE TO THE ALGERIAN
NATIONAL STEEL COMPANY SIDER
FOR ITS FUTURE JIJEL DIRECT
REDUCTION-BASED PLANT.

For the next two years (1990-1991) during which the plant must be built and the corresponding enterprise be organized, SIDER requests UNIDO assistance on a number of subjects which are listed in the accompanying tables 1 to 8. This list was addressed to UNIDO in a letter KB/KH/278/89/SIDER/DPJ discussed and modified during a meeting of UNIDO on November 30th 1989. In each table, will be found:

- the title and a brief description of the subject
- a proposal of assistance from UNIDO with possible follow-up and comments about the general interest of such studies, we mean outside their application to the JIJEL Plant.


V. E. ASTIER

TABLE I

INSPECTION, TRANSPORTATION AND
DELIVERY OF EQUIPMENT FOR
JIJEL--BELLARA PROJECT.

DESCRIPTION

It concerns the management by JIJEL PROJECT staff members of:

- inspection of equipment at manufacturers plants
- transportation, including loading and unloading,
- insurances
- and financial settlements

for all imported equipments needed and ordered for this project

Minimum scope	Possible extension	Possible general interest
1 month by two experts (2 weeks each). Needs experts in insurance and transportation from suppliers or buyers of such large equipments	no, except time to prepare an UNIDO document on these points	Could be useful to prepare the UNIDO document on this subject. Such a document could be very useful for countries and enterprises undertaking such projects.

TABLE II

SCRAP IMPORTS FOR
THE JUEL PLANT.

DESCRIPTION

It is a technical and economical assistance to the JUEL PROJECT staff members to get expertise in the field of know how and procedures, especially for contracts, sampling and guarantees for importing of scrap with maritime transportation to the JUEL plant. It includes:

- quality control of scrap shipments, either at loading port or/and at unloading facilities
- usual guarantee procedures,
- and, more generally, typical contracts for such supply.

Minimum scope	Possible extension	Possible general interest
1 month by two experts (2 weeks each). Needs experts in purchase and transportation from overseas of scrap. Buyers or suppliers or dealers in scrap.	no	Could be useful for steel plants importing scrap

TABLE III

QUALITY CONTROL AND TQM
(TOTAL QUALITY CONTROL)

DESCRIPTION

It means the utilization of Quality Control methods and the TQC (Total Quality Control) concept by the management of the JIJEL-BELLARA PROJECT for two different applications:

- erection, building and commissioning of equipment needed for this project,
- future operations of the JIJEL Steel plant.

Minimum scope	Possible extension	Possible general interest
11 month by two experts (12 weeks each). Needs one expert for project erection and commissioning and one for operations (TQC Quality Circles).	could be followed by a contract for technical assistance to implement such concepts (one or two contracts).	Could be useful to many enterprises which are more and more interested, worldwide, by such concepts.

TABLE IV

**CONTROL OF DETAILED
ENGINEERING OF PURCHASED
EQUIPMENT FOR
JIJEL-BELLARA PROJECT.**

DESCRIPTION

It is the way of controlling detailed engineering of purchased equipment as it is made by manufacturers. Special attention should be given to the procedures to receive and approve the drawings; in a following step, procedures should be established to control the corresponding implementation i.e. the construction of these equipments. It relates, of course, to all imported equipments needed and ordered for this project

Minimum scope	Possible extension	Possible general interest
1 month by two experts (2 weeks each). Needs 1 expert in such control in similar projects (especially in the steel industry or at least in heavy industry	no except time to prepare an UNIDO document on these points	Could be useful to prepare an UNIDO document on this subject. Such a document could be very useful for countries and enterprises undertaking such projects.

TABLE V

BUDGETARY CONTROL OF THE JIJEL BELLARA PROJECT.

DESCRIPTION

This is the control of the costs for erection and building, as well as construction and delivery of equipment for the JIJEL- BELLARA PROJECT in taking in account the possibility of extra costs due to changes, alterations of original designs

Minimum scope	Possible extension	Possible general interest
1 month by two experts (2 weeks each). Needs 2 experts in such controls for similar projects in heavy industry and heavy equipments.	no	Quite general procedure. Similar one exist at SIDER EL HADJAR plant but, here, at JIJEL the problem is different as this is a quite new plant

TABLE VI

MANAGEMENT OF HUMAN RESOURCES

DESCRIPTION

This is for the future JIHEL Steel plant, the problem of management of the whole personnel including job description, evolution of the various employees, training of all levels, recruitment procedure etc...

Minimum scope	Possible extension	Possible general interest
1 month by two experts (2 weeks each) in this field and enterprises of similar sizes	subcontract could be prepared both by identification team and by SIDER for a further study of implementation	general interest for all enterprises especially in developing countries

MAINTENANCE

DESCRIPTION

This means the implementation of the maintenance function in the JFEL Steel plant but in taking in account the various steps to be taken when designing and constructing equipment for this plant. In this way, it can incorporate action and models designed for the other Steel plant of SIDER at EL HADJAR but has to be extended to specific action to be taken with manufacturers of equipment.

This includes the implementation of procedures and rules for the best maintenance system of the JFEL Steel plant which should take in consideration:

- Computer Aided Maintenance (CAM)
- Predictive Maintenance
- incorporation of the maintenance activities (or, at least, part of them) in the operations crew, normal functions.

Minimum scope	Possible extension	Possible general interests
1 month by two experts (2 weeks each) for identification of the problem	subcontract to be defined by SIDER JFEL and by identification mission	linked with SIDER El Hadjar maintenance - could be used for other projects

TABLE VIII

INTERNAL COMMUNICATION

DESCRIPTION

This assistance relates to the actions to be taken to have the best communications, inside the JIJEL Steel plants, between all the people engaged in production, in maintenance and in management of this enterprise. It should include exposé of what have been made and achieved in comparable enterprises and description of procedures such as rules, seminars, organization charts which have been used.

Minimum scope	Possible extension	Possible general interest
1 month by two experts (2 weeks each) for identification and proposal of ways and means to improve communication inside the enterprise	possible subcontract to implement such systems in the enterprises	general interest for all enterprises, especially in developing countries