



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

23252



Methodology

Development of SME Supplier Networks

Abridged version



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

Methodology
Development of SME
Supplier Networks

Abridged version

Contributors:

Paul Davidson
Luis Adolfo Medal
Griselda Soto
UNIDO consultants

and

UNIDO Project Team in Nicaragua

Project Manager:

Giovanna Ceglie
Small and Medium Enterprise Branch



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
Vienna, 2005

**Copyright © 2004 by the United Nations Industrial Development Organization (UNIDO)
First published 2004**

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries. The opinions, figures and estimates set forth are the responsibility of the authors and should not necessarily be considered as reflecting the views or carrying the endorsement of UNIDO. The designations 'developed' and 'developing' economies are intended for statistical convenience and do not necessarily express a judgement about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not imply endorsement by UNIDO.

This document has not been formally edited.

ACKNOWLEDGEMENT

The team responsible for preparing this manual would like to thank:

- Faustino Barrón and Marco Dini, as the main advisers to the Supply Network Unit;
- Giovanna Ceglie, UNIDO Project Manager,
- Pastora Sandino, National Coordinator US/NIC/97/209;
- The Chamber of Industry of Nicaragua (CADIN);
- The Nicaraguan Institute for Support of Small and Medium Enterprises (INPYME),

as the main project counterparts; and

- The thirteen Nicaraguan enterprises involved in the pilot project.

Established as part of UNIDO project

US/NIC/97/209

“Development of Clusters and Networks of Small and Medium Enterprises in Nicaragua”

Note:

This manual describes a methodology based on the NAFIN/UNDP Supplier Development Methodology for Mexico.

Written in: Managua, Nicaragua.

Table of contents

Description	Page
▶ FOREWORD	vii
▶ RECOMMENDATIONS FOR THE USER	viii
▶ SUMMARY TABLE: STAGES OF THE METHODOLOGY	x
▶ INTRODUCTION	1
A. Justification of supply network development projects	1
B. Stages of the methodology	2
C. Project duration	3
D. Organization of the manual	3
E. Steps prior to implementation of the methodology	4
F. Keys to the success of the methodology	5
▶ STAGES OF THE METHODOLOGY	6
▶ STAGE 1: PROMOTION	6
A. Description of the stage	6
B. Flow chart—promotion stage	7
C. Duration	8
D. Tools	9
E. Summary of activities	10
F. Recommendations for the success of the promotion stage	11
▶ STAGE II: AWARENESS-RAISING	12
A. Description of the stage	12
B. Flow chart—awareness-raising stage	13
C. Duration	13
D. Tools	14
E. Summary of activities	15
F. Recommendations for the success of the awareness-raising stage	15

▶ STAGE III: CUSTOMER-SUPPLIER INFORMATION-SHARING	16
A. Description of the stage	16
B. Flow chart—information-sharing stage	18
C. Duration	18
D. Tools	19
E. Summary of activities	19
F. Recommendations for the success of the information-sharing stage	20
▶ STAGE IV: DIAGNOSTICS	22
A. Description of the stage	22
B. Flow chart—diagnostics stage	23
C. Duration	24
D. Tools	25
E. Summary of activities	26
F. Recommendations for the success of the diagnostics stage	27
▶ STAGE V: FORMULATION OF IMPROVEMENT PLANS	29
A. Description of the stage	29
B. Flow chart—improvement plan stage	30
C. Duration	30
D. Tools	31
E. Summary of activities	32
F. Recommendations for the success of the improvement plan stage	33
▶ STAGE VI: IMPLEMENTATION AND FOLLOW-UP	34
A. Description of the stage	34
B. Flow chart—implementation and follow-up stage	35
C. Duration	35
D. Tools	36
E. Summary of activities	37
F. Recommendations for the success of the implementation and follow-up stage	38
▶ STAGE VII: END OF PROJECT	39
A. Description of the stage	39
B. Flow chart—end-of-project stage	40
C. Duration	40
D. Tools	41
E. Summary of activities	42
F. Recommendations for the success of the end-of-project stage	43

Foreword

The following methodology was established as part of UNIDO Project US/NIC/97/209, "Development of clusters and networks of small and medium enterprises in Nicaragua". It corresponds to work carried out within that project to strengthen "vertical" business networks between SMEs and their customers.

It is widely recognized that to be involved in supply relationships with larger, more formal enterprises represents a significant opportunity for the development of a small or medium-sized business. This is due not only to the larger, more consistent orders that are often involved, but also to the stricter requirements of a larger firm in terms of quality, on-time delivery, cost reduction and customer service, which provide market-driven incentives for the SME to improve its operations. Working with smaller, local suppliers also represents an excellent opportunity for larger companies to reduce leadtimes, inventories and logistics costs. However, if the relationship is not managed carefully it can quickly deteriorate, ruining the development opportunity for the SME involved and discouraging the larger firm from expanding its network of small, local suppliers.

Given this reality, any SME development strategy based on supply relationships should include methodologies to assure a good working relationship between the customer and supplier firms, effective communication of supply requirements and a high standard of performance by the SME suppliers to satisfy these requirements. The methodology that follows was developed to achieve those objectives.

The methodology is particularly well adapted to the case of improving supply relationships that already exist between medium and large-scale firms and their smaller suppliers. It was developed with a pilot group of four customer enterprises and nine of their SME suppliers. However, the same basic concepts of good purchasing practices and supplier development apply to newly established supply relationships as well. In addition, many of the processes and tools that make up the methodology, such as Customer-Supplier Information Sharing Sessions and the Supplier Evaluation System, represent best practices that should be promoted in supply relationships in general.

Some examples of the successes achieved through application of the methodology in Nicaragua are: cost reduction through joint (customer-supplier) re-design of cardboard boxes; substitution of imported product labels for labels printed by a local SME following improvements in the supplier's quality systems; streamlining of administrative processes such as invoicing and labeling and tracking of shipping pallets resulting in savings of time and money for both customer and supplier of plastic bottles; and 3 out of 9 SME suppliers proceeding to obtain ISO 9001 certification shortly after achieving significant process improvements through application of this supplier development methodology.

Recommendations for the user

This publication is an abridged manual. In addition to this document, UNIDO has available the following publications for limited distribution: the main methodological manual entitled "Development of SME Supplier Networks", three volumes of tools and an interactive compact disc.

▶ **ABRIDGED METHODOLOGICAL MANUAL**

This document, entitled "Abridged Methodological Manual: Development of SME Supplier Networks", describes the principal implementation stages and steps to be followed, without elaborating on the details of the activities. The summary contains the following sections:

- ✓ *Description of the stage*, indicating the objectives, contents and outputs of the stage;
- ✓ *Flow chart* of the main activities of the stage in schematic form;
- ✓ *Duration*, estimating the time required for implementing the stage;
- ✓ *Tools*, listing all the tools to be used in the stage;
- ✓ *Summary of activities*, listing all the activities or steps to be carried out as part of the stage;
- ✓ *Recommendations for the success of the stage*, containing general recommendations for the entire stage.

▶ **MAIN MANUAL**

The main manual, entitled "Methodology Manual: Development of SME Supplier Networks", indicates all of the steps to be followed in implementing the methodology. It explains each stage of the methodology in detail, under the following sections:

- ✓ *Description of the stage*, containing the objectives, contents and outputs of the stage;
- ✓ *Flow chart* of the main activities of the stage in schematic form;
- ✓ *Duration*, estimating the time required for implementing the stage;
- ✓ *Tools*, listing all the tools to be used in the stage. In the electronic version of the Manual, the tools listed are marked as hyperlinks so that the user can go directly to the selected tool by clicking on the hyperlink;
- ✓ *Summary of activities*, listing all the activities or steps to be carried out at the enterprises as part of the stage;
- ✓ *Activities*, containing a description and details of each activity or step to be carried out, together with recommendations and aspects to be taken into account for each of them;
- ✓ *Recommendations for the success of the stage*, containing general recommendations for the entire stage.

► **TOOLS**

In addition, the complete manual has three volumes of printed appendices incorporating all the tools used in each stage of the methodology (e.g. charts, presentations, diagnostic tools, software programs or spreadsheets for evaluating the diagnostic analyses). Each volume lists the tools by stage, by number (in order of occurrence) and by name to help the user to locate them.

► **METHODOLOGICAL MANUAL ON COMPACT DISC**

All the information in the Methodological Manual is also available on a compact disc (CD), which includes the complete Manual, a summary of the methodology and the appendices with all the tools.

It is possible to access the information on the CD page by page or by navigating with the aid of hyperlinks contained in the index, in the list of tools for each stage of the methodology and within the body of the text whenever a particular tool is mentioned.

Summary table: stages of the methodology

Stage	Description
I. PROMOTION	In this stage the methodology is presented to customer and supplier enterprises, explaining the commercial benefits. Agreements are signed with the firms that choose to participate.
II. AWARENESS-RAISING	Awareness-raising and training of participating enterprises in concepts advocated by the methodology: <ul style="list-style-type: none"> • Training the customer firm in modern purchasing management and the supplier evaluation system; • Raising the supplier enterprises' awareness of modern aspects of general and production management such as quality, leadership, the 5 S's and strategic planning.
III. INFORMATION-SHARING	Information-sharing meetings between customer and supplier enterprises held at the start of the project, during implementation and at the end of the project. These meetings are designed principally to enable the enterprises to share information so as to clearly establish the requirements and needs of both within the supply relationship. They also foster improved communication and enable multi-functional teams in both enterprises (and not simply the purchasing agent and salesman) to get to know each other better.
IV. DIAGNOSTICS	In this stage all the diagnostic analyses contained in the methodology are carried out in: <ul style="list-style-type: none"> • The customer enterprise in its purchasing or materials department; • The supplier enterprise, the diagnostic tools being applied to all areas of the enterprise. The tools to be used include leadership, work environment, finances, quality assurance, purchasing and sales cycles, among others.

Stage	Description
V. FORMULATION OF IMPROVEMENT PLANS	On the basis of the data obtained from the information-sharing meeting and diagnostic activities, as well as the consultant's observations, an improvement plan is prepared for each enterprise. These plans should be prioritized and endorsed by the firms in order to proceed to the next stage.
VI. IMPLEMENTATION AND FOLLOW-UP	Once the improvement plan to be carried out has been approved, the consultant provides support to the enterprise (customer or supplier) in implementing the activities contained in it. The consultant's role is to advise and coordinate, with responsibility for the actual implementation resting on the firm itself.
VII. END OF PROJECT	In this final stage, some of the diagnostic tools are re-applied in order to evaluate the progress made by the enterprise; final information-sharing meetings are held to discuss the improvements in the relationship, but, even more so, the continuing collaboration of the enterprises after the project support has ended.

Introduction

This abridged manual on the methodology for the development of SME supply networks forms part of the work carried out under UNIDO project US/NIC/97/209, "Development of clusters and networks of small and medium enterprises in Nicaragua".

The main aim of the manual is to describe the activities required for the successful implementation of this methodology for supplier development and improvement of supply relationships.

A. Justification of supply network development projects

Small and medium-sized enterprises (SMEs) are the most important source of employment generation in any country. In developing countries, however, they typically face problems such as unstable markets, low levels of technical advancement and antiquated management practices. This is due in many cases to a portfolio of small, informal, undemanding customers.

Entering into supply relationships with larger enterprises means a more stable, formal and demanding market for SMEs. The quantities required tend to be greater, allowing SMEs to better organize their production and improve their techniques. The formal status of their customers and their quality requirements oblige SMEs to work in a more formal manner and to modernize not only their production methods but their management practices as well. With these considerations taken into account, the UNIDO project promotes SME development through the establishment and improvement of supply relationships between small and medium-sized enterprises and larger companies.

Supplier development benefits not only the small and medium-sized supplier enterprises but also the customer firms and the country as a whole. The benefits for customers (large enterprises) are seen in reductions in the costs associated with poor quality, materials management, transport and customs clearance. This makes them more competitive in their respective markets and better placed to meet the demands of their own customers. As far as the country is concerned, the replacement of imported inputs increases the national value-added and the existence of a broad base of qualified suppliers makes it more attractive for investors. In general, greater and better industrial integration makes the country more efficient and competitive.

One feature of the industrial sectors in developing countries is that inter-enterprise relationships tend to be quite weak. Although supply relationships exist, they are not usually very stable or long-term. Customer enterprises typically buy from the supplier offering the lowest price and, as soon as it raises its price or poses any quality or delivery problems, they switch to another supplier. Moreover, many larger enterprises have started to seek suppliers outside the country in the belief that the industries of other countries offer better quality at a lower price. For these reasons, it is not sufficient to preach the virtues of local supply relationships; a methodological approach is also required that will result in truly lasting linkages based on mutual trust.

Buying-selling relationships typically break down for one of the following two reasons: (a) poor understanding by the supplier of the customer's requirements; (b) inability of the supplier to meet the customer's needs. In view of these circumstances, the methodology for developing supply networks focuses

on ensuring excellent formal and informal communication between the customer and its suppliers and on the comprehensive development of the suppliers' capabilities. In this way, the methodology aims at creating a culture of cooperation between customers and suppliers.

To achieve this aim, the customer enterprises are given the tools necessary for them to provide their suppliers with clear product or service requirements and with adequate feedback on their performance. Inefficient administrative procedures existing between the two enterprises that are detrimental to the relationship are thus eliminated. Finally, the suppliers are taught how to provide a better service to their customers, while improving their management so as to reduce costs, shorten delivery times and guarantee the quality of their products.

The main focus of the methodology is on strengthening *existing* supply relationships. The establishment of new supply links requires some additional procedures, which would mean a substantial extension of the project period.

B. Stages of the methodology

The methodology for the development of supply networks is founded on a number of basic concepts:

- Customer and supplier as partners;
- "Win-win" relationships;
- Cooperation between customer and supplier in solving problems;
- Direct involvement of the customer in its suppliers' development;
- Regular feedback;
- Excellent communications;
- Continuous improvement;
- Quality;
- *Development of human resources*;
- Involvement and empowerment of workers.

The methodology is divided into the following stages:

- I. Promotion
- II. Awareness-raising
- III. Information-sharing
- IV. Diagnostics
- V. Formulation of improvement plans
- VI. Implementation and follow-up
- VII. End of project

During the promotion stage, the methodology is presented to customer and supplier enterprises so as to encourage them to participate in a project for developing their supply networks. In the awareness-raising stage, as its name indicates, the customer enterprise is made aware of and trained in modern purchasing philosophy and UNIDO's supplier evaluation system. It will use the latter to provide its suppliers with feedback on their performance. In the information-sharing stage, the customer enterprise meets individually with each of the suppliers to define requirements, provide feedback on current performance and begin jointly seeking ways of improving the production linkage and making it more efficient.

In the diagnostics stage, the supply area of the customer enterprise and all areas of the supplier enterprise are analysed so as to identify opportunities for improvement. In the improvement plan stage, the consultant, on the basis of the results of the evaluations, information-sharing meetings and diagnostic analyses, makes his/her recommendations to the customer enterprise and its suppliers on ways of improving their firms and the efficiency of the production linkage within the framework of an individual improvement plan for each enterprise. In the implementation and follow-up stage, the enterprises execute the improvement plans under the supervision of the consultant. Finally, in the end-of-project stage, the progress made by the enterprises is evaluated for the last time and recommendations are made on how the supply relationship can continue to be improved.

C. Project duration

There are various factors that have a bearing on the duration of a project, including the number of enterprises involved and their availability. It is possible, however, to make a number of estimates on the basis of experience and the work content of each stage.

The promotion stage is the most variable. For certain customer enterprises, the consultancy team will need just one month to persuade them of the benefits of the methodology, while convincing others will require six months or more before a decision is made. For this reason, we recommend that the process of promoting the methodology for new customers be ongoing. The awareness-raising, information-sharing and diagnostic activities can be carried out simultaneously, depending on the availability of the enterprises and consultants. If the activities are well organized, these three stages can be completed in about two months for a group consisting of one customer and five suppliers per consultant. The preparation, presentation and acceptance of improvement plans for a group of one customer and five suppliers, requires around one month for a single consultant. Once the plan has been accepted, the implementation stage lasts 9 or 12 months. This time frame is predetermined when the project is designed. Finally, a consultant needs around two weeks per enterprise or two months for a group of one customer and five suppliers to collect closing data, write final reports and present them.

Taking into account these estimated times, once the participating enterprises have been identified; the project is likely to run for around 12 months in the enterprises (for an implementation stage of nine months), with two additional months for closure.

D. Organization of the manual

This manual is organized based on the seven stages. Each section describes a stage, with the following breakdown:

- A. A brief description of the stage, including the objectives, a summary of the contents and the outputs
- B. A flow chart of the main activities
- C. An estimate of the duration of the stage
- D. A list of tools used in the stage
- E. A list of activities carried out in the stage
- F. Recommendations and critical aspects of the stage

E. Steps prior to implementation of the methodology

The manual explains the steps required for implementing the supply network development methodology. However, there are a number of steps that need to be taken in advance, prior to initiation of the process with the enterprises.

1. *Establishment of a consultancy unit*—The consultants who will be implementing the methodology may be independents, partners or employees in a consultancy firm, project participants or members of a trade association, non-governmental organization (NGO) or government institution. It is necessary to define the profile and terms of reference of the consultants and recruit, select and hire them. The ideal profile is that of an industrial engineer with experience in supply management and excellent interpersonal skills. Once the consultancy unit has been formed, the team will need to be trained in good consultancy practices in general and in the supply network development methodology and improvement tools in particular.
2. *Definition of the target group*—The type of enterprise with which the consultancy unit will work will need to be defined. Customer enterprises might be large or medium-sized, national or transnational, from a certain sector or independent of sector and limited or not to a specific geographical region. The characteristics of the target group of suppliers will also have to be defined in terms of size, sector, location, etc.
3. *Financing*—Funds to finance the project are a prerequisite for its proper functioning. The project should not be embarked upon if this point is not clear. This means that a strategy concerning the price which will be charged by the consultancy team for its services must be fixed and a formal agreement must exist concerning the funding of the unit's operating costs that will not be covered by its fees.

It is also essential to have a signed agreement on financial support for the participating enterprises for training and technical assistance activities, without which they cannot execute an ambitious improvement plan of the type foreseen by the methodology. For this reason, it is of the utmost importance to determine the financial arrangements before presenting the methodology to potential enterprises so as to be able to give them a realistic estimate of the total cost of their participation in the project. Financial assistance of between 50 and 80 per cent is recommended, depending on the size of the beneficiary enterprise and the cost of the activity.

Finally, the improvement plans might include investments in plant and machinery. In this case, it will be necessary to provide the enterprise concerned with a list of the most suitable sources of financing. To gain a clear idea of these sources before the implementation and follow-up stage, visits to the various institutions and organizations offering financing for investments of this type should begin at the earliest possible opportunity.

4. *Specialized consultants*—The enterprise improvement plans include training and technical assistance. Normally, these services are not provided directly by the consultants charged with coordinating the development of the supply network. It will therefore be necessary to identify specialized consultants capable of providing training and technical assistance in each of the subjects likely to figure in the plans. Since the search for qualified consultants is a long process, it should be embarked upon before or, at the latest, at the same time as the promotion stage.

5. *Teaching materials*—Although this requirement is not as indispensable as the previous ones, it is nevertheless worth mentioning. It refers to the collection of materials such as books, pamphlets and videos, which can be distributed among the consultants and, even more so, among the participating enterprises, with a view to making them aware of and training them in the philosophies and basic improvement tools advocated by the project.

F. Keys to the success of the methodology

The success of a supply network development project depends above all on effective work in the initial stages to prepare the ground for the rest of the project. Among the most important factors are the following:

- Explicit commitment by the top management of the enterprises;
- Payment for the services by the beneficiaries (customer and supplier firms) as a guarantee of their commitment;
- Insistence from the outset on the need for both customer enterprises and suppliers to devote time to the project;
- Signing by the companies' managing directors, *before proceeding to the other stages*, of cooperation agreements to formalize the enterprise's commitment to complying with the project requirements;
- Assurance, *before starting to enlist suppliers*, that financial support is available for training and technical assistance;
- Suitable selection of consultants for the consultancy unit;
- Suitable selection of a project leader within each enterprise;
- Insistence on the use of key tools such as the supplier evaluation system and management indicators.

Stages of the methodology

STAGE I: PROMOTION

A. Description of the stage

A1. OBJECTIVES

- Stimulate interest within the national industry in the use of supply network development concepts;
- Raise awareness among senior officers in the customer and supplier enterprises of the benefits to be gained from implementing the methodology so as to encourage them to contract for related consultancy services;
- Ensure that the customer and supplier enterprises accept the commitment that their participation in the project entails, allocating the resources necessary for its successful implementation;
- Sign a formal agreement between the customer firm, supplier and consultancy unit on the execution of the supply network project.

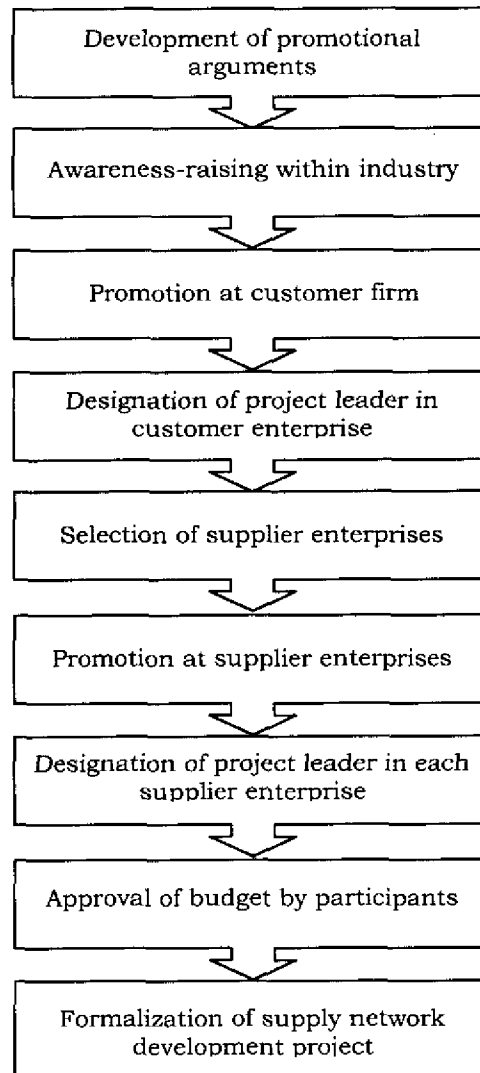
A2. CONTENTS

During the promotion stage, the consultancy unit explains to interested enterprises the concepts, benefits and costs of developing a supply network. The companies that will participate and the project leader in each of these are identified (one person per enterprise). Finally, an agreement for each customer-supplier pair is signed, thus ensuring their commitment to the project and formalizing the price to be paid for the consultancy unit's services.

A3. OUTPUTS

- Identification of customer and supplier enterprises to participate in the project;
- Technical proposal and quotation to each enterprise;
- Letter of acceptance by each customer and supplier enterprise;
- Designation of a project leader in each enterprise;
- Signed agreement between the consultancy unit and each customer-supplier pair;
- Preliminary planning of the next stages with each enterprise.

B. Flow chart—promotion stage



C. Duration

In terms of time, the promotion stage is the most variable of all the stages. The availability of the enterprises has a large influence on the process. While, in some customer enterprises, selling the idea of consultancy services for the development of their supply network can be completed in a month, in others the process can last up to six months. The parts of the process that can have the largest time allocation are the presentations to the various hierarchical levels and negotiations on the project design. Another factor worth mentioning is that, even after the terms have been agreed, the enterprise might decide to postpone the start of the project because of other, internal priorities.

Once the customer enterprise has confirmed its intention to take part in the project, promoting the project with its suppliers depends on their availability. If the managing director is outside the country, if approval by a board of directors in another country is required, or if the board meets only once a month, the process will be drawn out. The enlistment of suppliers is, in any event, estimated to take at least a month.

Although the number of enterprises to be involved will have an effect on the promoter's workload and the length of this stage, the time required does not increase as a function of the number of enterprises. Given the necessary intervals and waiting times that can arise between the arrangement of meetings, the preparation of proposals and the enterprises' decision, at the same time as activities are being conducted with one customer enterprise they can also be carried out at three or four other enterprises. Additionally, if the work is well organized, it will not take much longer to promote the methodology among ten suppliers than among three or five.

Another important variable is the signing of agreements. Often the agreements have to be reviewed by the legal advisers within the enterprises, which can take time. If the terms of the agreement need to be changed in any way, the modification will have to be approved by the other parties involved. Finally, perhaps the most important aspect regarding signature is the availability and interest of the managing director. The time required for signing of agreements can therefore be said to be normally between one and three months.

In view of the aforementioned, the minimum time required for the promotion stage is estimated to be two months (excluding awareness-raising among industry, which is an ongoing process). Because of the importance of a good selection of participants for the project's outcome, however, it is strongly recommended that the necessary time be taken to obtain a genuine and formal commitment by the enterprises.

D. Tools

Tool
1. Presentation: The Importance of Supplier Management
2. Project leaflet
3. Press articles
4. Letter of presentation of the project to the customer enterprise
5. Executive presentation for the customer enterprise
6. Complete presentation for the customer enterprise (to those involved)
7. Promotional presentation for the supplier enterprise
8. Control sheet— customer enterprise
9. Control sheet—supplier enterprise
10. Telephone script for contacting customer enterprises
11. References in the form of videos, photos, letters, etc.
12. Requirements for participation by customer enterprises
13. Profile and description of the post of project leader in the customer enterprise
14. Minimum requirements to be a supplier
15. List of criteria for selection of strategic suppliers
16. Form for (potential) suppliers to be selected
17. Process for establishing new supply relationships
18. Technical proposal to customer (quotation)
19. Letter of acceptance by customer enterprise
20. Letter of invitation from customer enterprise to supplier
21. Activity planning form
22. Requirements for participation by supplier enterprises
23. Profile and description of the post of project leader in the supplier enterprise
24. Technical proposal to supplier (quotation)
25. Letter of acceptance by supplier enterprise
26. Model 3-party agreement

E. Summary of activities

Consultancy unit

1. Definition of target group
2. Development of awareness-raising plan for industry
3. Preparation of awareness-raising tools
4. Structuring of promotional arguments for enterprises
5. Project control

Customer enterprise

6. Awareness-raising events for industry in general
7. Identification and selection of candidate customer enterprises
8. Collection of secondary information on selected enterprise
9. Contact with customer enterprise to arrange a meeting
10. Meeting to present the project to management
11. Meeting with those involved in the supply process
12. Designation of project leader in customer enterprise
13. Selection of suppliers
14. Establishment of new supply relationships
15. Preparation of a technical proposal and quotation for the project
16. Presentation of the technical proposal and quotation to the customer enterprise
17. Written acceptance by the customer enterprise
18. Planning of visits to supplier enterprises
19. Letter of invitation from customer enterprise to selected suppliers
20. Contact with supplier enterprises to arrange meetings
21. Planning of following stages

Supplier enterprise

22. Visit to plant
23. Meeting to present the project to the highest level within the supplier enterprise
24. Meeting with those involved in the continuous improvement process
25. Designation of project leader in supplier enterprise
26. Presentation to supplier of a technical and financial proposal
27. Written acceptance by supplier
28. Planning of following stages

Consultancy unit—customer—supplier

29. Formalization among the parties

F. Recommendations for the success of the promotion stage

The promotion of the methodology is extremely important for the following reasons:

- It guarantees the consultancy unit's selling of services and hence its sustainability;
- It ensures that, once an enterprise has joined the project, it will devote the time and money necessary for successfully completing all the stages of the methodology.

If this stage is not carried out properly, there is a risk that there will be no enterprises interested in the project or that there will be enterprises, which are not fully committed to its objectives. In the latter case, the consultancy unit will spend an excessive amount of time and energy attempting to carry out the methodology's activities at an enterprise without the availability of the employees, making it impossible to achieve the objectives planned within the methodology.

In addition, it will avoid the risk of supply relationships being discontinued (by the customer or supplier) during the course of the project. This can occur if the promoter does not notice that there are already serious problems in the relationship or does not confirm the customer enterprise's commitment to developing long-term supply relationships. An enterprise that bases its purchasing decisions solely on the price offered will very likely drop one supplier in favour of another for a matter of a few cents' difference in price. This attitude is contrary to the concept of long-term supply relationships.

Finally, the designation of a suitable person as project leader in the customer enterprise and supplier enterprises also has an effect on the success of the project. A project leader who does not have the skill, authority and time necessary to properly carry out his or her responsibilities will weaken the entire process.

The keys to success in this stage are therefore:

- Preparing the promotional arguments well;
- Devoting the necessary time to make sure that the enterprise truly understands the commitment it is entering into and that the project will be a priority for all employees involved in the supply process;
- Ensuring that the commitment to the methodology comes from the top management of the enterprise and not solely from middle management;
- Ascertaining that the person designated as project leader has the necessary authority to coordinate the work of all his/her colleagues, the time required and the appropriate skills;
- Confirming that the customer and supplier enterprises intend to maintain their relationship in the long term.

STAGE II: AWARENESS-RAISING

A. Description of the stage

A1. OBJECTIVES

- Familiarize the customer enterprises and their suppliers with the UNIDO supplier evaluation system, training them in its use and defining and/or adjusting the system to be used in accordance with the needs of each enterprise;
- Raise awareness among customer and supplier enterprises of the importance of modern purchasing, business management and production concepts, which will be promoted throughout the entire supply network project;
- Convince the management of the enterprises of the benefits of the tools so that it will be committed to implementing them during the project.

A2. CONTENTS

During this phase, the customer enterprise is familiarized with the modern purchasing management philosophy and the personnel involved in assessing suppliers trained in the evaluation system proposed by the project. The suppliers are also introduced to the methodology used for their evaluation.

This stage also includes an awareness-raising session consisting of a management symposium in which modern organizational and management techniques, their costs and benefits are presented.

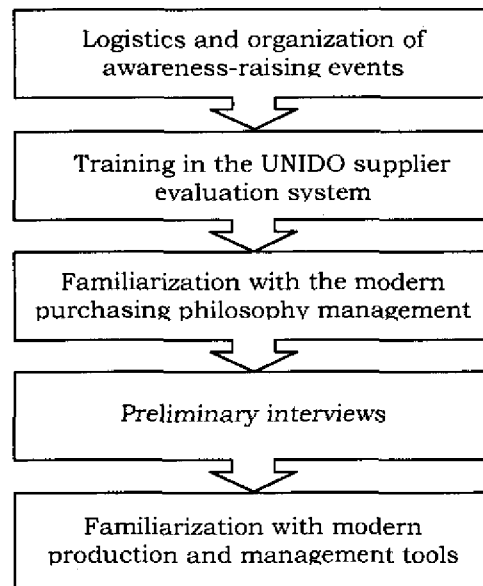
A3. OUTPUTS

The outputs for this stage are:

- The first supplier evaluation by the customer using the UNIDO methodology;
- The initial assessment of the supplier (prepared by the customer);
- The initial assessment of the customer (prepared by the supplier).

This information provides the input for the customer-supplier information-sharing stage.

B. Flow chart—awareness-raising stage



C. Duration

The awareness-raising stage can be carried out in parallel with the information-sharing and diagnostic stages, since all three stages concern the collection of information required to prepare the diagnostic report and recommendations for the improvement plan.

The awareness-raising activities can be summarized in diagnostic interviews and awareness-raising events. The two awareness-raising events each last about half a day (four to five hours). However, they can both be planned as part of this stage or between the two subsequent stages mentioned above, provided that they take place before the formulation of the improvement plan and before the report is presented to the participating enterprises.

The diagnostic interviews do not take much time. The interview for diagnostic analysis of the corporate vision in the customer enterprise is estimated to take approximately two hours. At the supplier enterprise, the basic pre-diagnostic and corporate vision diagnostic are carried out in the same interview and an initial assessment of the customer firm is also obtained. The session lasts between four and five hours. Training of the customer enterprise in the evaluation system can take between one day (8 hours) and one and a half days (12 hours), depending on the aspects to be dealt with.

On the basis of the aforementioned, the awareness-raising stage can last between two weeks and one month at the most, depending on the group of enterprises involved.

D. Tools

Tool
1. Modern purchasing management philosophy (presentation)
2. Invitation memo to customer enterprises—modern purchasing philosophy
3. Leaflet of training events, courses, etc.
4. Participant registration form
5. Event/training evaluation form
6. Presentation for management symposium: modern management and production techniques
7. Letter of invitation to management symposium panelists
8. Letter of invitation to enterprises for management symposium
9. Activity planning form
10. Diagnostic interview: strategic vision of the enterprise
11. Supplier evaluation system (SES), which includes the following: <ul style="list-style-type: none"> • PowerPoint presentation for training course on proposed supplier evaluation methodology • Supplier evaluation system manual • Guide to evaluation of system parameters • Supplier evaluation form (contained in SES) • Spreadsheet for processing evaluations (evaluation form) by customer (Excel)
12. Initial assessment of supplier (by customer)
13. Code of Conduct for Industrial Subcontracting Supply and Partnership Relations (UNIDO)
14. Initial assessment of customer (by supplier)
15. Basic pre-diagnostic—questionnaire
16. Basic pre-diagnostic—processing spreadsheet
17. Management indicator form

E. Summary of activities

Consultancy unit

1. Organization of seminar/discussion: "Modern purchasing management philosophy"
2. Organization of business symposium: "Modern management and production techniques"
3. Planning of both activities

Customer

4. Meeting to explain UNIDO Supplier Evaluation System and steps to be followed as part of the process
5. Interview on strategic vision of enterprise: meeting with managing director of enterprise
6. Preparation of material for workshop
7. Workshop on the supplier evaluation system
8. Seminar/discussion: "Modern purchasing management philosophy"

Supplier

9. Meeting to plan work and complete initial assessment of customer
10. Strategic vision and basic pre-diagnostic analyses
11. Submission to supplier of initial assessment and evaluation by customer

Enterprises: customer and supplier

12. Management symposium: "Modern management and production techniques"

F. Recommendations for the success of the awareness-raising stage

It is important to avoid the following:

Customer enterprise:

- Delay in holding the training workshop on the UNIDO supplier evaluation system because of the workload of those involved; and inability to carry out the strategic vision diagnostic for reasons of availability of the managing director;
- Failure by customer enterprise and/or supplier to respect the clauses regarding the provision of information; existence of a supplier evaluation concept and focus other than that planned under the programme; excessive secrecy by employees in the application of the purchasing process and its policies.

Supplier enterprise:

- Delay in the execution of activities because of the workload of those involved and inability to carry out the strategic vision diagnostic and basic pre-diagnostic for reasons of availability of the managing director;
- Creation of an unprofessional communication environment in the customer-supplier relationship as a result of the subjectivity and/or non-existence of support documentation.

STAGE III:

CUSTOMER-SUPPLIER INFORMATION-SHARING

A. Description of the stage

A1. OBJECTIVES

- Foster greater awareness and understanding between employees of the two enterprises, not only in the areas of purchasing and sales but also in areas dealing with production, quality, storage and use of the product;
- Improve communication between customer and supplier at all levels without detriment to official channels of communication;
- Communicate and document needs or requirements of both enterprises: technical specifications and tolerances, delivery times, contract terms, etc.;
- Promote a spirit of collaboration in problem-solving;
- Facilitate the search for ways of improving the product;
- Encourage teamwork between customer and supplier in making the relationship more efficient.

A2. CONTENTS

This stage is designed to improve communications between the customer and the supplier by presenting and explaining the *initial* evaluation of the supplier obtained using the UNIDO supplier evaluation system, by analysing the problems in the customer-supplier relationship and their impact, and by identifying their possible causes and seeking remedies. All these activities should be carried out with a view to creating an enabling and proactive environment.

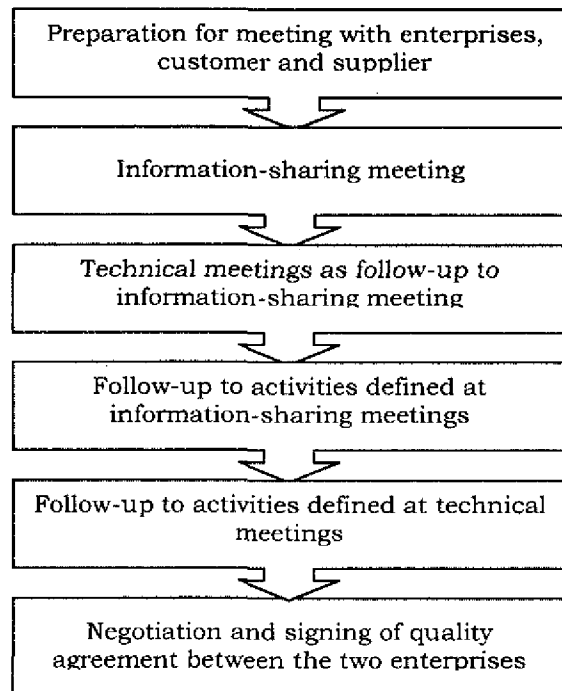
The information-sharing meetings between the customer and supplier are a very important stage in the supply network development methodology. They are used to establish the foundations for a relationship based on extensive communication and teamwork to seek solutions to existing problems and contribute to the continuous improvement of the processes involved. This is achieved through a process directed by a trained facilitator (consultant), starting with a presentation and “ice-breaking” exercise involving the participants. Then the objective and “ground rules” of the meeting are explained. A motivational film or one about changing the traditional customer-supplier relationship patterns could be shown. Finally, the problems identified by both parties are addressed, according to the priority assigned by the enterprises themselves, concluding with agreements and commitments to improvement on both sides.

The information-sharing meetings should take place regularly (every two or three months) throughout the entire supply network project. Once the project has been completed, the meetings should still be held, albeit less frequently.

A3. OUTPUTS

- Definition of customer enterprise's supply requirements
- Identification of problems and inefficiencies in the relationship
- Conclusions as to their impact on the other party
- Alternative solutions to the problems
- Agreements and commitments to improvements
- Planning of technical meetings for analysing and solving problems
- Report of the information-sharing meeting

B. Flow chart—information sharing stage



C. Duration

The information-sharing stage can take place at the same time as the awareness-raising and diagnostics stages over a period of about two months (for a group consisting of one customer enterprise and five suppliers). As the information-sharing meeting involves the participation for four hours of a large number of employees, including executive personnel, it is advisable to plan it two to four weeks in advance so that the participants can set aside the time in their appointment calendars. Also, as the meetings involve time outside the normal functions of the participants, it is inadvisable to schedule too many meetings of this type within a single week. Meetings between a customer and each of its five suppliers can normally be planned over a period of three weeks. A meeting lasts around four hours.

The holding of and follow-up to the technical meetings depends on the availability of the enterprises and on the number and complexity of the topics to be dealt with. The first technical meeting should be planned during the initial information-sharing meeting and, if further meetings are necessary, they will be planned in accordance with requirements during all the subsequent stages of the methodology.

D. Tools

Tool
1. Operating rules for information-sharing meeting
2. Meeting agenda
3. Assessment of supplier (sheet filled out by customer)
4. PowerPoint presentation for information-sharing meetings
5. Initial evaluation (evaluation sheet) of each supplier
6. Assessment of customer (sheet filled out by supplier)
7. Report of information-sharing meeting
8. Summary table of information-sharing meetings
9. Back-up documentation
10. Ice-breakers
11. Awareness-raising films
12. Purchasing policies of customer enterprise

E. Summary of activities

Before the meeting

1. Preparation of the meeting by the consultant and customer enterprise project leader
2. Preparatory meeting between consultant and supplier enterprise project leader

During the meeting

3. Presentation and "ice-breaking" exercises
4. Explanation of the objective of the meeting and its operating rules
5. Presentation of the meeting agenda (notified previously) and request for approval
6. Explanation and joint analysis of quality problems
7. Explanation and joint analysis of delivery time problems
8. Explanation and joint analysis of service problems
9. Explanation and joint analysis of technical assistance problems
10. Explanation and joint analysis of price problems

11. Presentation of overall evaluation and fixing of goals
12. Arrangement for technical meetings as follow-up to customer-supplier information-sharing meeting

After the meeting

13. Preparation and distribution of the report of the information-sharing meeting
14. Holding of technical meetings
15. Preparation of summary table on problems, causes, solutions and initial ratings for each supplier
16. Purchasing agreement containing purchasing policies and agreed and/or modified incentives, prices, specifications, delivery times, etc.

F. Recommendations for the success of the information-sharing stage

- (a) Insist on participation in the information-sharing meeting by managers at a high enough hierarchical level to take decisions and make commitments.
- (b) Emphasize the importance of objectivity in the process and the advantages of documenting the problems. Ensure that the evaluations have been made in accordance with the UNIDO supplier evaluation system or the enterprise's own evaluation system (in Nicaragua, ISO-certified enterprises normally have their own evaluation system). Seek arguments to convince the customer enterprise project leader of the benefits of a win-win relationship with suppliers based on the supply network development philosophy.
- (c) Explain to the supplier enterprise project leader that the evaluation system will make it possible to identify areas of opportunity in the company's supply performance. Also emphasize the importance of objectivity in evaluating the customer and the advantages of having documentation to back up the exposition of the problems. Explain the importance of communication in improving the exchange of information between customer and supplier.
- (d) Draw up a meeting agenda suitable to all parties so as to avoid possible delays.
- (e) Use your observation skills to determine when the supplier should be presented with the evaluation, given that experience shows that misunderstood evaluations have a negative impact on the communication process. The consultant should attempt to give all participants a chance to speak in turn so as to progressively advance the discussion and arrive at solutions.
- (f) If the problem involved with any of the issues were seen to be so complex that it would be difficult to deal with completely at the meeting, suggest to the participants that a technical meeting be arranged to address and find a solution to the problem.
- (g) Emphasize that the evaluation system philosophy for developing supply networks should serve as a basis for comparison to determine the level of development achieved by each supplier and a launching pad for continuous improvement in small, gradual and progressive steps in all areas of the supplier enterprise.

- (h) Work with the customer enterprise project leader to provide him/her with sufficient arguments to sell the idea and convince him/her of the advantages for the enterprise of improving the purchasing system. At the express request of the project leader a meeting should be arranged with the executive echelons of the customer enterprise to convince them to accept the improvements.
- (i) Keep a detailed record and documentation of the entire process so as to avoid omissions and/or errors. It is advisable to designate someone (assistant of the consultant) to take minutes of the information-sharing meetings.

F.1. Advice on critical situations that can occur in the information-sharing stage

- (a) The customer enterprise project leader could have a superior and arrogant attitude towards suppliers and not be willing to appreciate the problems that they have with the customer enterprise or be disposed to collaborate in solving them.
- (b) The customer-supplier relationship could be very poor, with the result that the “ice-breaking” does not have the desired result.
- (c) Personnel with a direct knowledge of the problems might not take part.
- (d) The customer enterprise could adopt a superior attitude and the supplier enterprise a submissive one or neither accept the operating rules.
- (e) The customer enterprise could use the evaluation to criticize the supplier.
- (f) The supplier could feel attacked and go on the defensive or even refuse to participate.
- (g) The customer enterprise could wish to take advantage of the supplier with respect to price.
- (h) The customer enterprise might not accept the suggestions made by the supplier enterprises and insist on the strict maintenance of previously established policies. The customer enterprise’s policies might not be subject to amendment.
- (i) The participants might not have the expertise or decision-making authority required to solve the problems.
- (j) The parties might not manage to reach agreement on a solution to the problems.
- (k) The customer and/or supplier enterprise might not have the back-up documentation for the submitted rating. The information might be incomplete.

To avoid these critical situations, the enterprises that will participate in the supply network development project and the project leaders in the enterprises must be selected with the utmost care during the promotion stage. An experienced consultant can predict the likelihood that these critical situations will occur from the promotion and enterprise selection stages.

STAGE IV: DIAGNOSTICS

This stage describes the steps to be taken for carrying out diagnostic analyses in the customer and supplier enterprises (small and medium-sized suppliers).

A. Description of the stage

A1. OBJECTIVE

In this stage the diagnostic tools are applied, enabling the consultant to identify and verify areas of opportunity in both the customer and supplier enterprises and in their working relationship.

A2. CONTENTS

The consultant will identify existing problems in the enterprises (and their possible causes) by means of the diagnostic analysis. In customer enterprises, the diagnostics are applied to the supply area and in the supplier enterprises to all operational areas of the enterprise.

The diagnostic analysis includes the application of the following tools:

Diagnostic tools	Customer enterprise	Medium-sized supplier enterprise	Small supplier enterprise*
1. Strategic vision (carried out earlier)	✓	✓	✓
2. Basic pre-diagnostic (carried out earlier)		✓	
3. Initial assessment of customer		✓	✓
4. Initial assessment of supplier	✓		
5. Purchasing and accounts payable cycle	✓		
6. Sales and accounts receivable cycle		✓	✓
7. Work environment	✓	✓	✓
8. Leadership	✓	✓	✓
9. Quality assurance		✓	
10. Supply management diagnostic	✓		
11. Small enterprise diagnostic			✓
12. Financial diagnostic		✓	✓

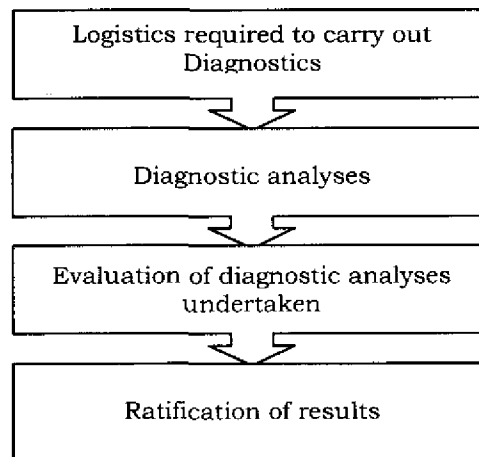
* Small enterprises are listed separately because special diagnostic tools adapted to their characteristics are required.

The table also includes the diagnostic tools that were used in the awareness-raising stage.

A3. OUTPUTS

The outputs of this stage, as its name indicates, are the diagnostics of the enterprises participating in the project: a comprehensive diagnostic analysis of the supplier enterprises (performance as supplier, management expertise and technological modernization) and a full diagnostic analysis of the supply management area and its processes in the customer enterprise.

B. Flow chart — diagnostics stage



C. Duration

The diagnostic analyses take approximately one and a half to two days for the customer enterprise, two to three days for medium-sized supplier enterprises and one to one and a half days for small enterprises. The processing and evaluation of the diagnostic analyses require between one day (for small supplier enterprises and the customer enterprise) and two to three days for medium-sized supplier enterprises). The time can vary depending on the size and complexity of the enterprise and the support and interest shown by the management in the analyses.

Application of the tool	Duration
1. Corporate vision (carried out earlier)	Carried out in previous stage
2. Basic pre-diagnostic (carried out earlier)	
3. Initial assessment of customer	
4. Initial assessment of supplier	
5. Purchasing and accounts payable cycle	
6. Sales and accounts receivable cycle	
7. Work environment	½ hour
8. Leadership	½ hour
9. Quality assurance	8-16 hours
10. Supply management diagnostic	8 hours
11. Small enterprise diagnostic	1-2 hours
Processing and evaluation of diagnostic analyses	8-24 hours

In summary, the length of the stage will depend on the number of enterprises participating in the project (both customers and suppliers). For customer enterprises, a week should be allowed and for supplier enterprises between one and two weeks, depending on their size. For a group of enterprises consisting of one customer and five suppliers, the diagnostic analysis and its processing should take around one month.

Note: The results of the diagnostic analyses are presented to the enterprise as part of the improvement plan report and therefore this stage does not include any time for preparing reports.

D. Tools

Tool
1. Activity planning form
2. Diagram of purchasing and accounts payable cycle
3. Interview—strategic vision of the enterprise
4. Letter of reminder of the leadership and work environment diagnostic meeting
5. Work environment diagnostic <ul style="list-style-type: none"> ✓ Work environment—description ✓ Work environment—questionnaire ✓ Work environment—evaluation of enterprise X (Excel spreadsheet) ✓ Work environment—forms ✓ Work environment—detailed analysis (Excel spreadsheet) ✓ Work environment—guide to application and evaluation
6. Leadership 360 diagnostic <ul style="list-style-type: none"> ✓ Leadership 360—description ✓ Leadership 360—questionnaire ✓ Leadership 360—name X (Excel spreadsheet for each leader) ✓ Leadership 360—leadership average for company X (spreadsheet) ✓ Leadership 360—guide to application and evaluation
7. Supply management diagnostic (including related statistical purchasing information) of customer enterprise
8. Management indicator form
9. Financial information on supplier enterprise (profit and loss account and balance sheet)
10. Guide to financial diagnostic
11. Diagram of sales and accounts receivable cycle
12. Basic pre-diagnostic—questionnaire
13. Basic pre-diagnostic—Processing database (Access)
14. Quality assurance <ul style="list-style-type: none"> ✓ Quality assurance—questionnaire ✓ Quality assurance—evaluation (Excel spreadsheet) ✓ Quality assurance—evaluation guide
15. Small supplier enterprise diagnostic

E. Summary of activities

Customer enterprise

1. Meeting to coordinate diagnostic plan at customer enterprise
2. Preparation and organization prior to application of work environment and leadership diagnostic
3. Sessions to apply work environment and leadership questionnaires
4. Application of supply management diagnostic at the enterprise
5. Processing of supply management, leadership and work environment diagnostics
6. Consultant's observations

Supplier enterprise (medium-sized)

7. Meeting to coordinate diagnostic plan and collection of information
8. Preparation and organization prior to application of work environment and leadership diagnostics
9. Session to apply work environment and leadership questionnaires
10. Visits to carry out quality assurance diagnostic at the enterprise
11. Evaluation of basic pre-diagnostic and quality assurance, leadership and work environment diagnostics
12. Consultant's observations

Supplier enterprise (small)

For small enterprises, the same steps are carried out except that some of the tools are different. For each of the activities listed, the special aspects of their implementation at small enterprises are therefore indicated:

13. Scheduling of visit to carry out diagnostics
14. Preparation and organization prior to carrying out diagnostics
15. Visit to carry out diagnostics
 - Session to apply work environment and leadership questionnaires
 - Small enterprise diagnostic
 - Financial information
 - Management indicators
16. Evaluation of leadership, work environment, small enterprise and financial diagnostics
17. Consultant's observations

F. Recommendations for the success of the diagnostics stage

Considerations

The following problems could occur during this stage:

1. There might be no organizational chart or the chart might be obsolete
2. A given firm could have more than one plant needing a diagnostic analysis
3. The baselines may be incorrectly defined, producing unrealistic diagnoses, or there may be no information to construct a baseline
4. The personnel might reply untruthfully (through fear of reprisals, unwillingness to show the enterprise's real situation, misunderstanding of instructions, etc.)
5. The customer and/or supplier enterprise may not comply with the requirements for providing information
6. The enterprise might not have a back-up databases and archives, with resultant loss of information, delays and repeated work during the diagnostic process
7. The information obtained in the individual diagnostics could be contradictory and its ratification could be rendered difficult
8. Emergencies in the plant's operation might prevent or delay ratification of the results
9. The consultant might influence the prioritizing of problems in the face of indecision on the part of those involved in the diagnostic analyses
10. The consultant may not have sufficient information to issue a diagnosis or may not have enough time to ratify all the information obtained through the diagnostics
11. The existing leadership style in the enterprise may make it difficult to obtain truthful information and conduct the diagnostic effectively
12. The supplier enterprise might be more interested in justifying and/or defending itself against the customer enterprise's comments (seen as attacks) than in identifying the causes of the problems, failing to realize that it is a point of departure for continuous improvement

General recommendations for the diagnostics stage

- (a) It is advisable to validate the information provided by the customer enterprise project leader by means of documents describing the daily work of the enterprise or by obtaining the opinions of others involved who can confirm the information provided. This makes it possible to identify any possible negative or biased attitudes towards the supplier. In this case, it is advisable to identify the reasons why these attitudes exist.
- (b) The customer enterprise project leader should emphasize the importance of participation by the involved personnel in the application of the diagnostic analyses.

*Abridged methodological manual:
Development of SME Supplier Networks*

- (c) The consultant should emphasize in all the diagnostics that the questionnaires are to be answered individually and that the information will be anonymous so that the participants feel confident and their replies are as objective as possible.
- (d) It is suggested that the consultant should systematically and periodically back up all the information collected and/or processed so as to avoid delays or repeated work during the project.
- (e) If the ratification of information is prolonged because of the workload of those involved, it is recommended that it be done on a random basis with emphasis on the critical and representative aspects of each area.
- (f) The consultant should ask for authorization to take photographs during the entire diagnostic process, both of the plant and of the diagnostic activities. It is advisable to take photographs during each of the diagnostics in order to document the process and it is also important to take photographs of the various areas of the plant, particularly those processes that need to be improved within the enterprise. This will provide "before" and "after" documentation of the enterprise's participation in the project.
- (g) The consultant should confirm his/her visits to the plant in advance, specifying all the activities to be carried out and the maximum time required (four hours at most). He/she should also confirm meetings one day in advance.
- (h) The consultant should familiarize himself/herself as quickly as possible with the activity and functions of the enterprise and its executives (area of business, principal market, level of competition within the sector, efficiency of the production process, etc).
- (i) The consultant should clearly display his/her independent status in dealings and relationships with the customer and supplier enterprises and his/her professionalism and expertise in handling the methodology.
- (j) The consultant should ensure throughout the diagnostics stage that the evaluations are carried out appropriately in order to guarantee their objectivity.

STAGE V: FORMULATION OF IMPROVEMENT PLANS

A. Description of the stage

A1. OBJECTIVE

In this stage the improvement plans for both the customer enterprise and its suppliers participating in the project will be prepared. These plans will include the prioritized problems and their causes, the proposed strategies to solve them, an estimate of the resources required for their implementation, and the anticipated results. For the customer enterprise, the improvement plan will be restricted to the supply management area. For supplier enterprises the plan will be comprehensive, covering all areas of the enterprise.

A2. CONTENTS

The consultant will produce an analysis and description of the results obtained in the awareness-raising, information-sharing and diagnostics stages.

He/she will prepare proposals for improvement plans for the supply management area of the customer enterprise and comprehensive plans for its suppliers, which will detail areas for improvement in the enterprises, the strategies, tools and activities proposed by the consultant for achieving the improvements, the persons responsible for carrying out the plans, the anticipated qualitative and quantitative results, and an estimate of the resources required for their implementation (time, cost and personnel).

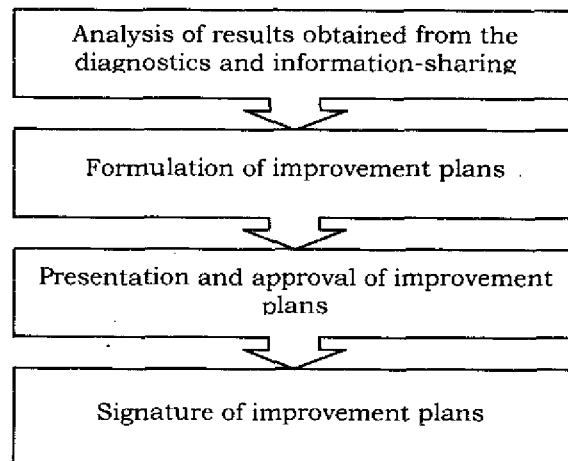
These proposed improvement plans will be presented to the project leader in each enterprise (customer enterprise and supplier enterprise) for approval, prioritization of activities to be carried out and identification of confidential information that is not to be presented to the other enterprise.

The main improvement activities to be carried out by each enterprise will be made known to the other party (customer or supplier, as the case may be). Once each enterprise has approved its improvement plan, the plans will be signed.

A3. OUTPUTS

- Analysis of the results of the diagnostics;
- Improvement plan report;
- Presentation of improvement plan;
- Approval of improvement plan by enterprise.

B. Flow chart—improvement plan stage



C. Duration

A consultant requires about three days per enterprise to prepare an improvement plan. The timetable for presenting his/her plans to the various enterprises depends on the number of enterprises involved and their availability. The plan can be signed at the end of the presentation if the enterprise does not request any changes but, if the plan has to be modified, one or two further weeks might be required before signature. Bearing in mind these considerations, a consultant is estimated to require about one month to complete this stage for a group consisting of one customer and five suppliers.

D. Tools

Tool
1. Results of diagnostic analyses of the customer enterprise
2. Reports of information-sharing meetings
3. Summary table obtained in information-sharing stage
4. Diagnostics summary table form
5. Correlation table
6. Solution tree
7. Improvement plan matrix—customer
8. Tool description and estimated cost matrix
9. Presentation of improvement plan—customer
10. Customer enterprise improvement plan summary matrix
11. Results of supplier enterprise diagnostics
12. Evaluation matrix
13. Supplier improvement plan matrix
14. Improvement plan report for supplier enterprise
15. Presentation of improvement plan—supplier
16. Supplier enterprise improvement plan summary matrix

E. Summary of activities

Customer enterprise

1. Examination and description of the results of each diagnostic analysis of the purchasing department
2. Analysis of the summary table and reports from the information-sharing stage
3. Compiling of the correlation table of problems identified
4. Identification and analysis of the principal areas of opportunity
5. Formulation of the proposed improvement plan (plan report)
6. Preparation of the improvement plan presentation
7. Presentation of the proposed improvement plan and prioritization of the suggested improvement activities
8. Preparation of a summary of the improvement plan for presentation to suppliers
9. Approval and signature of the improvement plan by the managing director
10. Presentation of the improvement plan to the purchasing staff and employees in other relevant areas

Supplier enterprise

11. Examination and description of the results of each diagnostic analysis
12. Analysis of the summary table and report from the information-sharing stage
13. Compiling of the correlation table of problems identified
14. Identification and analysis of the principal areas of opportunity and gaps to be filled
15. Formulation of the proposed improvement plan (plan report)
16. Preparation of the improvement plan presentation
17. Presentation of the proposed improvement plan and prioritization of the suggested activities for improvement
18. Preparation of a summary of the improvement plan for presentation to the customer enterprise
19. Approval and signature of the improvement plan by the supplier (managing director)
20. Presentation of the improvement plan to all the staff of the enterprise

Customer enterprise

21. Signature by the customer enterprise project leader acknowledging and approving the principal lines of action of the supplier enterprises' improvement plans

Supplier enterprise

22. Presentation of the customer enterprise's improvement plan to the suppliers

F. Recommendations for the success of the improvement plan stage

- (a) Endeavour to incorporate in the improvement plan activities that guarantee short- and medium-term results that directly benefit the customer enterprise. These activities should include direct solutions to the customer's complaints.
- (b) Keep all necessary information on hand. If there is any doubt about a problem, the consultant should review the diagnostic analyses and complementary information to confirm its validity; if the application and/or evaluation of the diagnostic analyses are found to have been incorrect, the suitability of carrying them out again should be considered.
- (c) Visit the enterprises to validate and supplement the results of the diagnostics.
- (d) Call on the experience of other programme consultants if your analysis needs ratification.
- (e) Ensure that you have theoretical knowledge and practical experience of the tools before suggesting their use.
- (f) Use your communication skills and expertise to present the plan and adequately convey its benefits, expected results and required commitments.
- (g) Emphasize the importance of customer-supplier communication that will foster the flow of timely information to permit mutual improvement.
- (h) Make the enterprises aware of the cost-effectiveness of the project by pointing out that the resulting improvements will have a positive impact on the enterprises' profits. It could also be suggested that the cost of the project might be reduced taking advantage of financial assistance and subsidies available in the country.
- (i) Emphasize to the enterprises the importance of allocating time to the project and the benefits of your participation as supervisor of the process, helping the various executives of the enterprise.
- (j) Make sure that the executives of both enterprises are really in agreement with their own improvement plans and with the improvement plan of the other party.
- (k) Confirm that both enterprises have the willingness, financial resources and available time to implement their improvement plans.
- (l) Insist that both enterprises collaborate effectively with each other in implementing their improvement plans.

STAGE VI: IMPLEMENTATION AND FOLLOW-UP

A. Description of the stage

A.1 OBJECTIVE

The objectives of the implementation and follow-up stage are as follows:

- Set in motion the principal strategies proposed in the supplier enterprise improvement plans so as to enhance performance to the level desired by the customer enterprise;
- Implement the actions proposed in the customer enterprise improvement plan so that its supply procedures conform with international best practices.

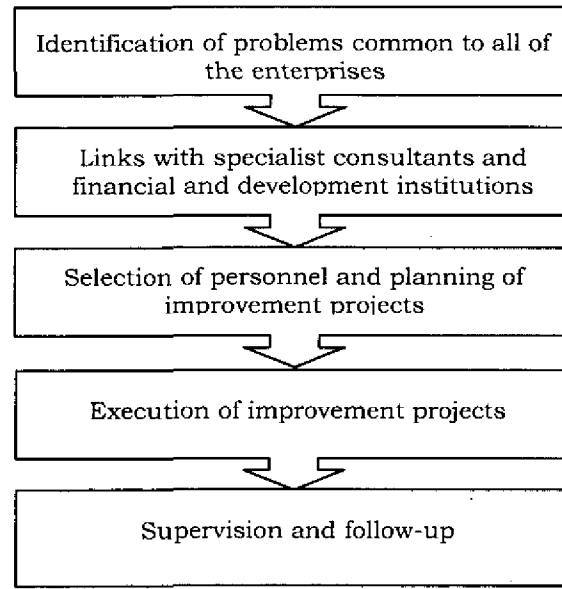
A.2 CONTENTS

The implementation and follow-up stage involves carrying out the principal courses of action described in the improvement plans for each enterprise. It starts with the identification of problems common to a number of the enterprises in order to structure and organize a joint training and technical assistance programme. To solve the specific problems of each enterprise, links are established with specialist consultants and financial and development institutions. The personnel who will be participating are selected and the improvement projects are planned. During implementation of the plan, progress in reaching the goals identified in the customer evaluations and in the behaviour of the managerial indicators is monitored. Throughout the entire stage, the quantitative and qualitative results obtained are communicated to the enterprise concerned and to the counterpart enterprise.

A.3 OUTPUTS

- Training implemented and applied;
- Technical assistance provided;
- Improvement projects carried out;
- Monthly evaluations of suppliers by customer;
- Monthly follow-up chart of management indicators;
- Progress reports written.

B. Flow chart—implementation and follow up stage



C. Duration

The improvement plan implementation period is determined as part of the initial design of the project. It should be at least nine months, and it is advisable to schedule 12 months to ensure that the project has maximum impact. In this stage, most of the steps can be carried out simultaneously in all enterprises. Although mentioned in this stage, the design of the joint training and technical assistance programme and the identification of specialist consultants are begun when the project starts. Direct actions to solve specific problems identified by the customer can be undertaken immediately while work is progressing on establishing links with specialist consultants for activities that require more time and external assistance.

D. Tools

Tool
1. Microsoft Project
2. Improvement plan for the customer enterprise
3. Improvement plans for the supplier enterprises
4. Training and technical assistance: bidding requirements and procedures
5. Training and technical assistant event planning form
6. Pool of consultants for training and technical assistance
7. Project description brochure
8. Spreadsheet for estimating costs of training courses
9. Letter or memo of invitation to enterprises
10. Training event leaflet
11. Participant registration form
12. Event evaluation form
13. Diploma for participation in training courses
14. General information to enterprises on training course
15. Detailed work plan
16. Purchasing agreement
17. Terms of purchasing agreements
18. Terms of quality agreements
19. Minimum requirements to be a supplier
20. Process for establishing new supply relationships
21. Supply requirements
22. Field visit report form
23. Monthly customer progress report (for customer)
24. Quarterly customer-supplier progress report (for customer and consultancy unit)
25. Teaching materials
26. Non-conforming material report
27. Material planning sheet
28. Inventory control sheet
29. Monthly supplier progress report (for supplier)
30. Quarterly supplier progress report
31. Presentation for intermediate and final information-sharing meetings

E. Summary of activities

Consultancy unit

1. Identification of common problems in the enterprises
2. Planning of joint training and technical assistance
3. Identification and selection of specialist consultants
4. Design of training and technical assistance workshops
5. Organization and logistics of the courses

Customer enterprise

6. Links with specialist consultants
7. Selection of personnel to participate in improvement projects
8. Planning of improvement projects
9. Execution of improvement projects
10. Supervision of the implementation of improvement projects
11. Monitoring the progress of the project
12. Communication of progress in implementing the plan
13. Monthly evaluation of suppliers

Supplier enterprise

14. Links with specialist consultants and financial and development institutions
15. Provision of additional teaching material
16. Selection of personnel to participate in improvement projects
17. Planning of improvement projects
18. Execution of improvement projects
19. Supervision of the implementation of improvement projects
20. Monitoring the progress of the project
21. Communication to customer of the progress in implementing the plan

Customer and supplier enterprises

22. Monthly meetings between project leaders
23. Intermediate information-sharing meetings
24. Presentations on progress in improvement plan

F. Recommendations for the success of the implementation and follow-up stage

- (a) Do not wait until the implementation and follow-up stage to begin devising a joint training and technical assistance programme. As the problems are more or less the same in all industries, subject definition and trainer identification can be started at the promotion stage;
- (b) Emphasize the importance of the participation of senior officers in the training;
- (c) Ensure once again that the purchasing manager of the customer enterprise and the managing director of the supplier enterprise have clearly notified their subordinates of the priority to be accorded to the project;
- (d) Establish and strictly observe the time and day of the weekly supervision meeting. If, for exceptional reasons, the enterprise cannot hold the meeting, reschedule it for another day in the same week;
- (e) Take corrective action as quickly as possible in the event of delays in implementation of the improvement plan;
- (f) Resist the temptation to advance the project more quickly by performing yourself the tasks that the employees of the enterprise should be carrying out;
- (g) Apart from meeting with the managers each week, visit the supplier enterprise's plant regularly and talk to the workers there;
- (h) Do not allow the customer enterprise to miss a month in the supplier evaluations;
- (i) Do not allow the supplier enterprise to miss a month in filling out the management indicator follow-up form.

STAGE VII: END OF PROJECT

A. DESCRIPTION OF THE STAGE

A.1 OBJECTIVE

By the end of the stage, the documents describing the experience and results obtained during implementation of the UNIDO supply network development methodology with one customer and four or five of its strategic suppliers will have been produced. The documents will most likely demonstrate to the customer enterprise the advantages of replicating the supplier development process with other suppliers. They will also critically analyse the results of the participation by the various enterprises in the supply network development project with a view to suggesting measures for continuous improvement in the individual enterprises and in the supply relationship.

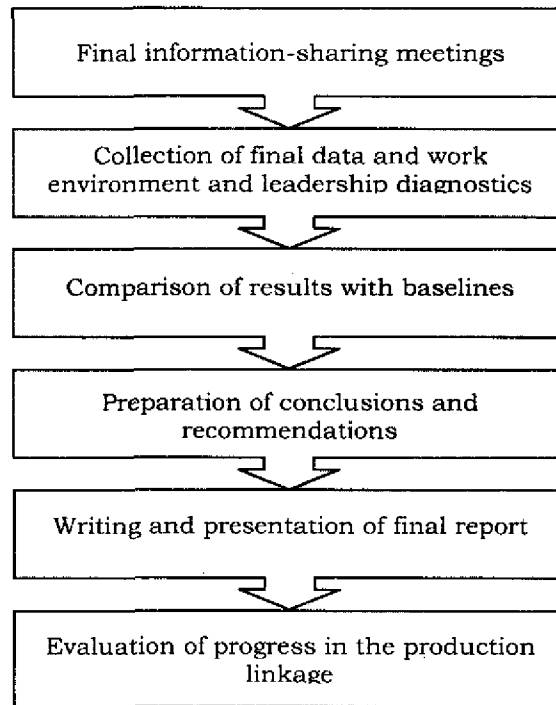
A.2 CONTENTS

The stage starts with a final information-sharing meeting, followed by collection of management indicator data from the end of implementation of the project. Also, the work environment and leadership diagnostics are repeated in order to identify changes in these areas since the start of the project. Next, the final results are analysed and compared with the initial situation to enable conclusions and recommendations to be formulated regarding the replicability of the process. A final report will be written and submitted to each enterprise. Finally, on the basis of the successful results achieved under the project, a proposal will be made to the managing director of the customer enterprise on the replicability of the project with other suppliers.

A.3 OUTPUTS

- Final reports;
- Presentations of final reports to enterprises;
- Project evaluation.

B. FLOW CHART—END OF PROJECT STAGE



C. DURATION

The end-of-project stage starts with the final information-sharing meetings. All meetings for a group of one customer and five suppliers can be organized within two weeks. At the same time, collection and analysis of the final data can begin. The enterprises must provide their final supplier evaluations and management indicators. However, the consultant is responsible for repeating the work environment and leadership diagnostics. Two workdays per enterprise should be allowed to obtain and process these data. The final analysis and preparation of the final report should not take more than three days per enterprise. Planning of the final presentations depends on the availability of the enterprises, but since each presentation takes around two hours, two presentations per day can be scheduled. The end-of-project stage should therefore last around one and a half months for a group of one customer and five suppliers.

D. TOOLS

Tool
1. Supplier evaluation system: evaluations, software, etc.
2. Information-sharing meetings
3. Presentation for final/intermediate information-sharing meetings
4. Report on initial diagnostics and improvement plan—customer
5. Enterprise progress reports
6. Final report - customer enterprise
7. Project evaluation sheet—customer (to be filled out by customer)
8. Baseline summary sheet
9. Work environment diagnostic
10. Leadership diagnostic
11. Report on initial diagnostics and improvement plan—supplier
12. Management indicator form
13. Results of final diagnostics
14. Final report - supplier enterprise (example)
15. Presentation of final report—supplier (example)
16. Project evaluation sheet—supplier (to be filled out by supplier)

E. SUMMARY OF ACTIVITIES

Customer enterprise

1. Final evaluation of suppliers participating in the project

Customer and supplier enterprises

2. Final information-sharing meetings

Customer enterprise

3. Writing of final report for customer enterprise
4. Presentation of final report, evaluation of experience and suggestions on replicability
5. Evaluation of the project by the customer enterprise

Supplier enterprise

6. Application of final diagnostics
7. Collection of management indicator data
8. Comparison and analysis of baselines with final results
9. Writing of final report for supplier enterprise
10. Presentation of final report to supplier enterprise

Customer and supplier enterprises

11. Preparation of presentation on progress in production linkages
12. Presentation of progress in production linkages to the customer enterprise and its suppliers

F. RECOMMENDATIONS FOR THE SUCCESS OF THE END-OF-PROJECT STAGE

- (a) Ensure that staff attends the meetings by sending out invitations. Ask the project leader to draw up the agenda or timetable directly with those involved in the final information-sharing meeting so as to guarantee that they take part.
- (b) Be very careful in analysing the progress of the baseline indicators and verify that they have been properly calculated. The consultant can help the enterprises to obtain the basic information necessary for this analysis.
- (c) Meticulously document the tools and their application so as to ensure that the information is correct. The consultant should note any modification to the suggested strategies or the use of new tools to solve problems that had been identified.
- (d) If the results are not satisfactory, use the periodic progress reports to identify the causes.
- (e) Study the final reports written for the first group of enterprises that participated in the UNIDO supply network development project.
- (f) Show the presentations of the final reports to your colleagues so as to obtain feedback as to their clarity.
- (g) Emphasize the importance of the results obtained, even if they are minimal, during this initial supplier development stage.
- (h) Suggest to the purchasing manager that he/she keep the company's directors (national or foreign) informed of the supply network development project from the start so as to facilitate agreement to its replicability.

* * * * *



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
Vienna International Centre, P.O. Box 300, 1400 Vienna, Austria
Telephone: (+43-1) 26026-0, Fax: (+43-1) 26926-69
E-mail: unido@unido.org, Internet: <http://www.unido.org>