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# SPX Success Stories 2001

Subcontracting and Partnership Exchange (SPX)

Providing access to local and global markets



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION  
**economy environment employment**



**SPX SUCCESS STORIES 2001**  
**Subcontracting and Partnership Exchange (SPX)**  
**Providing access to local and global markets**

UNIDO Programme for Industrial Subcontracting and Supply Chain Management  
UNIDO Quality, Technology and Investment Promotion Branch

André de Crombrugghe, Programme Coordinator

With the assistance of

Kul Bhushan, UNIDO Media Consultant  
and  
Israel San Román, UNIDO Intern



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## INTRODUCTION

### UNIDO Programme on Industrial Subcontracting and Supply Chain Management

Industrial Subcontracting at national and international level plays an indisputable role in industrial development. However, minimum conditions should exist to sustain viable subcontracting arrangements between industries of various types and various sizes, especially between small, medium and large manufacturing firms. Subcontracting does not occur naturally to the intensity desired. Therefore, promotion of the subcontracting concept needs to be undertaken. The establishment of an agency to undertake this promotion, sometimes together with other functions, is the instrument utilized by industrialized countries. In developing countries, experience has shown that the most effective institutional approach to promote subcontracting has been the Subcontracting and Partnership Exchanges (SPXs) launched by UNIDO in its' present form since 1985, but the concept as such since 1970.

The various linkages that small and medium sized industries (SMIs) can establish among themselves and with large and state-owned enterprises are essential factors for their growth and competitiveness. The organization of these linkages is crucial both upstream with suppliers and subcontractors and downstream with distribution and marketing channels. Industrial subcontracting between industries of various types and sizes, especially between large and small enterprises, is a feature of a modern industrial economy. In industrialized countries, an intricate network of complementary inter-industrial relationships exists, in which large corporations rely on smaller enterprises for the manufacture of parts, components and sub-assemblies, or for certain processing, transforming and finishing operations, which they incorporate into their own product. Subcontracting is recognized as an efficient tool to increase the rate of utilization of installed industrial capacities, to increase both industrial production and employment in the SMI sector, to produce better quality products at a reduced cost, to contribute to a reallocation of industrial resources, and thus to national industrial growth and integration.

The objective of the UNIDO programme is to reinforce the capacity of local SMIs to increase their production and employment, to upgrade their technological processes and products, to improve their international competitiveness, to attract foreign investments and orders, to encourage import substitution and to promote the exports of manufactured products. At the same time, it contributes to the transfer of manufacturing facilities, and thus the related industrial technologies and know-how, to the SMI sector in developing countries and in economies in transition. In addition, the Programme provides links to some 60 Subcontracting and Partnership Exchanges (SPXs) established by UNIDO in more than 30 countries worldwide, based on a standardized

approach and methodology. As a result, participating SMIs have access to the global market and global production systems or supply chains, thus they can promote their industrial products and services in national and international markets and identify and meet the needs of domestic and overseas partners.

### **Subcontracting and Partnership Exchanges (SPXs)**

To meet the growing needs of both the large undertakings looking for subcontractors and suppliers and of small units desiring to secure orders from large undertakings or cooperating with other small industries in the production of a finished product, a clearing house for providing desired information on subcontracting capacities is necessary. The Subcontracting and Partnership Exchange satisfies this requirement.

UNIDO's Subcontracting and Partnership Exchanges (SPXs) have been designed to build up technical information systems and networking potentials, so as to facilitate production linkages between small, medium and large manufacturing firms. Subcontracting and Partnership Exchanges (SPXs) are technical information, and matchmaking centres for industrial subcontracting and partnerships between buyers and suppliers, aiming at optimizing the manufacturing capacities of the affiliated industries. In effect, the SPXs appear not only as the meeting points or clearing houses for industrial subcontracting and partnership enquiries and opportunities, but also as the instruments of regulation between the supply and the demand of industrial subcontracting orders and the instruments of assistance to both the partners, particularly the small and medium enterprise (SME) suppliers and subcontractors.

UNIDO provides technical assistance to developing countries and economies in transition for establishing and operating SPXs. To this end, it assists in setting up a roster of subcontractors, suppliers and main-contractors. SPXs should be organized as non-for-profit industrial associations run by qualified entrepreneurs. They have a number of core functions, including the following:

- The collection, analysis, storage and organization for rapid retrieval of information and data on the existing production capacities and capabilities of industries, (equipment with its technical specifications, quality management systems, spare capacities available, type of products and services, etc).
- The identification of subcontracting, supply and partnership inquiries or orders from large foreign or domestic buyers and main-contractors, and their dissemination to potential subcontractors, suppliers or partners.
- Assistance to potential subcontractors/suppliers/partners in organizing production associations or clusters, in negotiating agreements with main-contractors, which could be their own Governments.

UNIDO recommends legal statutes and standard terms of reference for the establishment of autonomous SPXs under Management Boards. Besides, UNIDO has developed a comprehensive methodology and a full set of instruments or tools to run the SPXs, known as the UNIDOSS (UNIDO Subcontracting System). This includes a database management software, called "OUTSOURCING 2000", which is provided under licence agreement to SPXs established by UNIDO.

### **Supply chain management and development centres**

The new generation of SPXs act as centres of multidisciplinary assistance and information to subcontractors and suppliers, in fields such as:

- Technical support (product design, technology, equipment, innovation);
- Quality management systems, standards and certification;
- Marketing strategies and analysis (including organization of, and participation in international industrial fairs and business promotion forums);
- Access to venture-capital, credit, financial facilities and incentives;
- Management (lean production, kanban, financial management, stock control, etc);
- Legal advice (legal contracts, codes of conduct, reconciliation or settlement of disputes, arbitration);
- Human resource management (training and awareness building);

This range of assistance and information is provided either directly by the SPX in the form of surveys, advice, training, awareness seminars, and industrial fairs, or by referring the enterprise to the relevant specialized institutes.

In addition, most SPXs organize "Supply Development and Upgrading Programmes" to provide assistance to clusters of small-scale suppliers and subcontractors in order to upgrade their technical and commercial skills and their capability to meet quality requirements of the main contractors or buyers. These programmes are conducted jointly with the latter, and with ad-hoc support from relevant industrial institutions. The SPXs act here as the main catalysts or driving forces of these programmes.

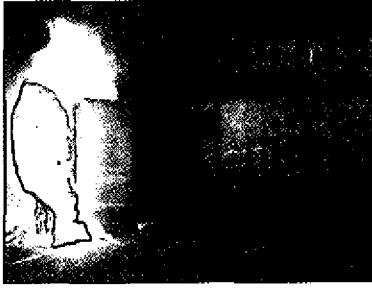
### **Performance indicators**

A performance survey conducted in 1993 shows that, on average, SPXs using the UNIDOSS methodology, consulted 80 per cent of their registered companies that year, of which 40 per cent lead to the conclusion of at least one contract that year. In 1997, a similar survey was conducted and showed that each registered company had been consulted at least twice that year, and that 66 per cent of them had concluded at least one contract that same year, which indicates a significant improvement in performance since 1993.

### **SPX success stories**

In this publication, a series of "SPX Success Stories" regarding practical examples of industrial subcontracting operations at both national and international level, are reported by SPXs in countries covered by UNIDO's Programme on Industrial Subcontracting and Supply Chain Management. They seem to demonstrate the positive effects of industrial subcontracting, the importance of the role played by SPXs and the importance of industrial fairs and exhibitions in promoting long lasting industrial partnership agreements. UNIDO continues to support, using its experience and expertise, the promotion of industrial subcontracting and partnerships, and in future, the promotion of subcontractors/suppliers development programmes. UNIDO has already established some 60 similar SPXs in more than 30 countries worldwide, thus creating a network that aims to successfully meet the challenge of globalization. This globalization fully applies to industrial subcontracting, since enterprises are now looking for outsourcing and supply opportunities worldwide, in almost all sectors of industry and related services, in an ever increasing search for a competitive edge, as evidenced by an ever increasing share of subcontracting and supply within international trade flows. Through these programmes of Industrial Subcontracting and Supply Chain Management, UNIDO's ultimate aim is to assist the SMIs in developing countries and economies in transition to gain access to the global market and global value chains or production systems, and to encourage and support the use of modern industrial linkages to further economic development on a global basis.





## ALGERIA

Constantine

### *Connecting for Cabling*

*Algeria's State-owned iron and steel complex, called "SIDER Group", decided to launch a national bidding and consultation process as part of the renovation of its facilities in early 2001. As a founding member of the SPX in Constantine, the SIDER Group decided to request the SPX to source suitable subcontractors.*

#### **The Algerian SPX Network**

The Subcontracting and Partnership Exchange covering the eastern region of Algeria, also called BSTP-E, was established in Constantine in 1993, with the financial assistance of the Algerian government and the UNDP and with the technical assistance of UNIDO. It is part of a national network consisting of four SPXs, the three others are located in Algiers in the centre, Oran in the west, and Ghardaia in the south of the country. Since its creation, the SPX of Constantine allowed its members to establish fruitful business contacts and to participate in numerous national and international fairs. During the first semester of the year 2001, a number of matchmakings took place.

The BSTP-E provides the following services to its members:

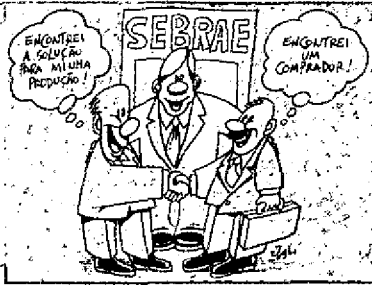
- Organizes regional subcontracting exhibitions, awareness programmes and seminars;
- Provides technical and commercial information and identifies subcontractors and suppliers in response to inquiries from foreign and domestic main contractors and buyers, either from the public or private sectors; provides information on demand and supply of second-hand machines;
- Advises the enterprises, assists them in the negotiations and facilitates the matchmaking;
- Networks with national and international agencies, government and non-government bodies, organisations, institutions, chambers of commerce and industry, enterprises and individuals;
- Provides technical assistance to subcontractors and links them up with institutions in view of providing the required guidance and technical know-how and improving their competitiveness.

#### **Matching the public sector as main contractor with private sector enterprises**

As a result of the consultation process, two specialized members of the SPX were identified and put in contact with the SIDER Purchase Department and they were selected for the final round of negotiations. At the end, the firm USINAL, specialized in metalworking and transformation, was selected for the job and signed an important contract with the State-owned complex.

#### **For more information on BSTP-E, please contact:**

Mr Mohamed Bourkab, Director BSTP-E, at e-mail: [bstpe@lycos.com](mailto:bstpe@lycos.com)



## BRAZIL

### Sao Paulo SPX Network

#### *Eureka! The Solution for Production Problems*

*"I've had problems for many months and now I can see the solution right here!" said the Technical and Production Manager of a German company operating in Brazil when he visited a Sao Paulo company's stand at the International Subcontracting Exhibition (ISE- 2000).*

*"Based on our successful experiences, we participate in around six to eight Industrial Fairs annually," said the CEO of the Sao Paulo company who attended this German manager. "During this fair, the German manager cautiously started making general inquiries and suddenly blurted out this statement that he saw his solution without even knowing whether our company was operating in Brazil or what products we could offer. We explained to him that in the past, our access to his company was limited to the purchase department that had never ordered anything from us."*

#### **Wide industrial coverage**

This "Eureka" solution emerged as one of the numerous contacts of the Sao Paulo SPX established in 1972 with the technical assistance of UNIDO. The SPX covers metal-working and engineering; plastics and rubber; electric and electronic; textiles and garments; wood and furniture; leather and footwear; and machinery and equipment sectors. In fact, the SPX incorporates three sectorial SPXs:

- ABIMAQ (Associacio Brasileir da Industria de Maquinas e Equipamentos). Exchange covering metal-working and engineering industries.
- ABINEE (Associacio Brasileir da Industria Eletro-Eletronica). Exchange covering electric and electronics industries.
- SEBRAE (Servicio Brasileiro de Apoio a Micro e Pequena Empresa). Exchange covering all SMEs not members of the above two professional associations.

The Sao Paulo SPX has more than 3,400 registered member-companies. Its core activity is to provide purchasing companies with detailed information on subcontracting capabilities of its members. This information includes technical services, production capabilities, technical specifications of machinery and equipment and other relevant details. Organizing subcontracting and partnership fairs is a major activity such as the mega continental event 'Subcontrata Latino-Americana XIV' jointly with ISE 2000 Fair—the fourteenth event in this series was held in October 2000.

#### **Paid off initial investment**

The Executive of the SPX Member Company recalled, *"The industrial applications of our products are widespread, though our products are technically very specialized. We manufacture straps and synchronous pulleys that can be applied to any equipment with a motor-driven machine. More precisely, since these products are synchronizers and made of plastic (polyurethane), these can be fully and effectively used in the transmission of small and large power engines, synchronized transports or just in simple synchronizers."*

*"Next day we visited the German company with our technicians and worked on the design of a factory for 12 engineers," he continued. "At the end of the day, we had developed a project for two machines. This project not only more than paid off our initial investment, but also allowed us to achieve our objective: To introduce our products in a German company. Today, this company is still one of our regular clients. One of the greatest benefits we get from participating in these fairs is the opportunity to deal face-to-face with the decision-making executives."*

#### **For further information on SPX Sao Paulo, please contact:**

Mr Luis Alvaro Siqueira Bastos, Director, BSI-SP, at e-mail: [luizb@sebraesp.com.br](mailto:luizb@sebraesp.com.br)



## COLOMBIA

### National Network

#### *Achieving a New Record*

*The Colombian Network of Subcontracting and Partnership Exchanges (SPXs) has helped to sign €22,651,200<sup>1</sup> worth of contracts through matchmaking interventions for subcontracting and partnerships in 2000; and by the end of 2001, this figure is expected to achieve a new record of €26.7 million.*

*The impressive figure for 2000 has been made possible due to its eight SPXs operating from various Colombian Chambers of Commerce: Bogota responsible for €8,712,000; ACIEM in Bogota for €5,880,000; Manizales for €4,954,950; Medellin for €2,559,150 and Cali for €544,500. Three other Colombian SPXs are still in their start-up phase and are expected to produce results in the near future.*

*Established with UNIDO's technical assistance, starting as far back as 1986, this network of eight SPXs promotes industrial subcontracting and supply partnerships with local and foreign partners, and organizes public procurement on behalf of the State and disseminates them to local small and medium enterprises. With the Ministry of Economic Development as the Network Coordinator, the Chambers of Commerce of Bogota, Medellin, Cali, Manizales, Barranquilla, Bucaramanga and Pasto play a major role in the operations of seven of them by hosting them. The other supporting organizations are the Colombian Association of Electric and Mechanic Engineers (ACIEM); the Colombian Association of Small and Medium Enterprises (ACOPI); the National Association of Industry (ANDI); the Colombian Association of Plastics (ACOPLASTICOS); and the National Training Service (SENA).*

#### **Active interaction**

The Colombian SPX Network provides the following services:

- Organizes regional subcontracting fairs, exhibitions, awareness programmes and seminars.
- Provides technical and commercial information for main contractors and subcontractors; identifies local subcontractors and suppliers in response to inquiries from foreign main contractors and buyers; and facilitates matchmakings.
- Advises enterprises on industrial subcontracting and partnership related issues.
- Networks with national and international agencies, government and non-government bodies, organizations, institutions, chambers of commerce, companies, firms and individuals.
- Conducts seminars, discussions and provides technical assistance to vendors; links with other institutions with a view to providing necessary guidance and know-how; improves competitiveness and viability of suppliers.

#### **New approach**

These SPXs cover various industrial sectors such as metalworking, electric, plastics, textiles and clothing, and industrial services. A new and successful approach is an SPX established within ACIEM exclusively covering industrial services. In 2000, the SPX Network successfully achieved the following results:

- As part of its company data collection activities through plant visits and industrial surveys, the SPX Network registered more than 2,000 companies in its databases.
- With the support of qualified experts, the SPX Network organized five seminars and on-the-job training events.
- The SPX Network participated in nine international and national fairs, buyers-sellers meetings, and other matchmaking or promotional events.

#### **For further information on Colombian SPX Network, please contact:**

Mr Eduardo Salas, National Coordinator, at e-mail: [unidoss@colnodo.apc.org](mailto:unidoss@colnodo.apc.org)

<sup>1</sup>The October 2001 United Nations Exchange rate of €1.089 per dollar has been used throughout this publication.



## CUBA

La Havana

### *Keeping Cool with Local Air Conditioners*

*Keeping cool is helped by air conditioners in Cuba—and a local company OBE identified a market for a large number of air conditioners for mobile offices. To manufacture these units, the company required air conditioning containers made of metal. To identify potential suppliers, the company got in touch with La Havana SPX.*

*Another enterprise in the same line of business ACUSE, had to import metal components for repairing air-conditioners. Since imports involved delays and consumed foreign exchange, ACUSE was on the look out for a local supplier and contacted the SPX of La Havana.*

*Established in 1992 with the technical assistance of UNIDO, the SPX of La Havana is supported by the State Committee for Economic Cooperation under the Ministry of Foreign Trade of the Republic of Cuba. At present, it counts 123 large State-owned enterprises—each one equal to five small and medium enterprises, or SMEs. The SPX members cover all economic sectors of the country as: metal-mechanical 43 per cent; services 39 per cent; textiles-clothing 5 per cent; electric-electronic 5 per cent; construction, plastics-rubber, mining-metallurgic and medical-pharmaceutical 2 per cent each.*

#### **Major milestones**

The main objective of the SPX is to promote contacts and business links for all Cuban industries and services resulting in subcontracting and partnerships. To increase exports, substitute imports and promote foreign investment, the SPX provides business contacts with foreign companies leading to the transfer of industrial technology and know-how. Since its establishment 10 years ago, the SPX has achieved the following milestones:

- Successful subcontracting matchmaking agreements numbering 804.
- Promotion of 1,579 affiliated companies in the media.
- Participation in 24 international subcontracting fairs abroad with 120 Cuban companies.
- Participation as an exhibitor in 30 international fairs in Cuba.
- Organization of 20 technical events, training seminars and business meetings.
- Organization of 30 seminars and conferences.
- Over 300 company interviews.

#### **New orders keep coming**

In achieving these results, the SPX of La Havana has had the cooperation, affiliation and membership of a number of national and international organizations. The SPX is a founding member of the 'Asociación Latino-Americana de Bolsas de Subcontratación' (ALABSUB), a member of the UNIDO SPX Club, an active participant in the AL-INVEST Programme of the European Union, and a consultant to Cuba's EUROCENTERS. Moreover, it works in close contact with all SPXs around the world, Chambers of Commerce, business promotion centres and with COPECOs.

It is through these networks that the SPX was able to identify a subcontracting partner to provide metal containers for mobile air conditioners for the Cuban company OBE. In this process, the SPX successfully linked a large public sector enterprise, COMETAL to provide the large metal containers. As a result of another matchmaking exercise by the SPX, a local company ICEM is producing these components for ACUSE for over a year now, and new orders keep coming in.

**For further information on La Havana SPX please contact:**

Mr Pedro Florido Gómez, Director, at e-mail: bolsa@infocex.cu



## FRANCE

Auxerre

*Voilà! Almost Instant Contact and Success!*

*Most French enterprises close for holidays during August. On 31 July, a company executive is faced with an emergency as one of his machines suddenly stops due to a broken part. For its replacement, it is imperative to find high quality sheet metal and an operator to cut it exactly 40 mm thick. Without this component, the machine will not work until September and block the entire production.*

*A global supplier of urban furniture, J. C. Decaux, having joint ventures in 38 countries and a turnover of €1.4 billion, is searching for a foundry to forge street lamps and other metallic structures. Already working with two subcontractors, the purchasing department cannot locate another subcontractor to meet the firm's specific and stringent specifications.*

*A world leader in industrial rubber, Hutchinson, was looking for many years for a subcontractor to finalize the tooling of its press equipped with the same "ProEngineer" computer-aided design (CAD) software also used in its own plant. Since none of its suppliers had this software, it became necessary to input the data for every new order entailing additional costs and a great loss of time.*

### **First industrialized country SPX**

When all these three French enterprises contact the French SPX called COSTEP, the Operational Centre for Subcontracting and Partnership of central France, the response is almost instant and successful. Established in 1997 at the initiative of the "Enterprise House" with the support of various industrial associations and the technical assistance of UNIDO, COSTEP is a non-profit association aiming to promote industrial subcontracting while optimizing the resources of its members. COSTEP is the first SPX operating in an industrialized country on the methodology developed by UNIDO. It is considered as:

- A pilot demonstration centre for countries and institutions willing to establish an SPX.
- A training centre on programmes, methods and operational tools developed by UNIDO.
- A coordination centre in France for the promotion and organization of subcontracting and partnership programmes, linked-up with international networks.

### **In a matter of hours**

When the frantic production manager with his stalled machine on 31 July contacted COSTEP, in less than one hour, a supplier of sheet metal capable of cutting sheet metal was located and started to work. In another few hours, the component was rushed to a subcontractor who could bend it before the evening. The following morning, the component was reinstalled and production restarted.

After the furniture manufacturer, J. C. Decaux, contacted COSTEP, which searched for a suitable partner and found a foundry able to meet the high standard of its products, it concluded a contract and thereby achieved a yearly turnover of €220,000.

The Hutchinson purchasing department confirmed that it could not locate any subcontractor with the requisite software and yet COSTEP put them in touch with a subcontractor using the same software to optimize its production. The on-going search lasting many years ended in a few days. These are a few examples of COSTEP success stories that occur almost daily.

**For further information on COSTEP, please contact,**  
Mr Yves Le Touze, Director, at e-mail: [costep@wanadoo.fr](mailto:costep@wanadoo.fr)



## INDIA

Bangalore

### *Global Outsourcing for Domestic Industry*

*India's Silicon City Bangalore was the venue for a five-day Karnataka Small Scale Industries Association (KASSIA) Global Outsourcing 2001 Exhibition and Symposium in September 2001 to assist Indian and foreign businesses to identify, meet and sign-up partners to supply products, components and services in India and abroad.*

*Aiming to put Indian subcontractors and industrialists in touch with global and Indian manufacturers and decision makers, it organized the first Global Outsourcing 2001 Exhibition. This event attracted not only major Indian corporations, hundreds of small and medium Indian suppliers but also major buyers such as the Indian Railways, Indian Army and Indian Navy looking for indigenous suppliers.*

#### **Salient points**

Along with this event, a symposium for small and medium enterprises (SMEs) was held to introduce Outsourcing 2000 by several UNIDO Experts, who also presented the salient points of the "OUTSOURCING-2002" software being developed by UNIDO. Other events at the Global Outsourcing 2001 included a Bio-Technology and Food Technology Seminar, one-to-one matchmaking meetings between buyers and sellers and presentations by large-scale industries and Indian defence forces on outsourcing philosophy, norms and needs.

Established in 2000 with UNIDO's technical assistance, the Bangalore SPX is located at KASSIA offices. In addition to 10 large-scale enterprises, this SPX has registered 580 members and organized 100-150 match-making meetings between buyers and sellers.

#### **Web showcase for the Indian SPX Network**

At the Outsourcing Symposium, the Bangalore SPX website was launched and it was also announced that an Industrial Subcontracting and Partnership Exchange (SPX) Portal for seven Indian SPXs and a Sri Lankan SPX will be launched in early 2002 in New Delhi. This portal will create a comprehensive online business showcase for over 2,500 Indian manufacturers and service suppliers as it will present a comprehensive online business exchange between demand and supply for subcontracting and partnerships for manufacturing capabilities and capacities in these two countries. It is envisaged to become a powerful marketing vehicle for Indian industry.

Specifically, this portal will provide an online exchange platform for new business opportunities, outsourcing, facilitating partnerships, business collaborations, exchange of information and sharing of resources at the national and global levels. The seven Indian SPXs in New Delhi, Chennai, Bangalore, Pune, Ludhiana, Hyderabad and one for information technology are linked with 60 such worldwide projects technically assisted by UNIDO. After registering online, Indian companies that cannot afford to put up their own websites will have a section to exhibit and promote their products and manufacturing capabilities for subcontracting and partnerships for national and international buyers. Thus their capabilities will get both national and global exposure. The portal will offer an extensive database of Indian SMEs and large companies with simple and advance search facilities for products and services and float inquiries at the click of a button.

#### **For further information on SPX Bangalore, please contact:**

Mr A.S. Joshi, SPX Manager, at e-mail: [kassia@blr.vsnl.net.in](mailto:kassia@blr.vsnl.net.in)



## INDIA

Hyderabad

### *Flying High with Indigenous Inventory*

*The Indian Air Force (IAF) has to maintain a huge inventory of high-tech defence systems procured in various countries around the world. This inventory includes replacement, repair and maintenance of components, modules and sub-assemblies. The ever-increasing costs of these imports and the high dependence on foreign vendors have refocused IAF's attention on the necessity of indigenization. To obtain a continuous flow of these components and spare parts locally, IAF has embarked on a concerted effort for self-reliance through indigenization.*

*As a result, the IAF contacted the Subcontracting and Partnership Exchange (SPX) established at Hyderabad by the Confederation of Indian Industries (CII) with UNIDO's assistance. In July 2001, the SPX-CII organized a two-day event AIR 2001—a Business Meet cum Exhibition on Vendor Development with IAF at Hyderabad.*

#### **Support at the highest level**

The Chief Minister of Andhra Pradesh, Mr. N. Chandrababu launched the SPX-CII in April 2001 proving that it has the State Government's support at the highest level. The SPX-CII covers the electronics and engineering sectors (including light engineering), automobile components, mechanical and electrical industries. As a first experience for the UNIDO SPX Programme, this SPX-CII caters for the chemical and pharmaceutical industry. Another unique feature of this SPX is its support and provision of its services for the self-help groups in the handicrafts sector.

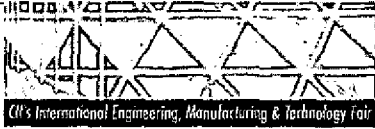
Only four months after the SPX was created, 72 companies were registered after site visits and verification. Its promotional activities include business meetings jointly organized with Industrial Districts in Hyderabad, Ranga Reddy, Medak and Mehboob Nagar. A major event organized was LINKAGE 2001—a conference on Vendor Development covering four sectors of electronics and electrical, engineering, drugs and pharmaceuticals and food processing in November 2001. This became the fourth event by this SPX and tackled issues such as marketing and packaging, financial options and the quality of technology. By the end of 2001, this SPX aims to register 130 companies in addition to organizing more matchmaking events.

#### **Connecting industry with defence**

To connect local industry with IAF, the SPX organized AIR 200—one of the largest events organized so far by the SPX. While local industries displayed the equipment and components they are manufacturing, the IAF exhibited the equipment and components it requires. The Business Meet provided helped the local industry to understand IAF requirements and the procedures to become IAF accredited suppliers. The Small Industrial Bank of India (SIDBI) and the Andhra Pradesh State Financial Corporation provided detailed information on various financing schemes for subcontractors. Around 200 participants at this Business Meet interacted with various potential partners. No less than 20 new IAF suppliers from Hyderabad were immediately selected by IAF as a result of AIR 2001 representing an important step in its import substitution exercise. More suppliers are expected to be identified. Now SPX-CII has set its sights on the Indian Navy and is planning to organize a similar event with this defence service.

#### **For further information on CII-SPX Hyderabad, please contact:**

Mr R Menon, Director CII-SPX, at e-mail: [rajesh.menon@ciionline.org](mailto:rajesh.menon@ciionline.org)



**IETF 2001**  
**INDIA EXPO**  
 CII's International Engineering, Manufacturing & Technology Fair  
**SPAIN'S COUNTRY EXPO**  
 16-18 February 2001 • Program includes: New Delhi, India

INDIA

New Delhi

### *Saving Energy and Manufacturing Costs Too!*

*To keep warm in the cold winters in North and North-East India, many traditional methods such as wood or coal burning heating stoves and fireplaces have gradually made way for electric room heaters. Recently, liquid propane gas (LPG) room heaters were introduced successfully by an enterprising company, "Shri Shakti Alternative Energy Limited" (SSAEL), of Hyderabad in Andhra Pradesh. With a well-developed distribution network in most parts of North and South India, SSAEL is India's only energy Service Company marketing a range of world class energy efficient gas appliances. The International Finance Corporation, Washington has a 26 per cent stake in the company under a special PVMTI Programme of GEF or the Global Environment Facility. SSAEL is a part of the Hyderabad based Shri Shakti Group well known for its different enterprises such as Shakti Gas, Ramada Hotel, and CHIREC Public School.*

#### **Powerful and energy efficient**

Marketed under Shri Shakti's brand name, these imported energy efficient Shakti Friendly Heaters (indoor or outdoor models) proved to be a success as these scored over the established electric appliances in a number of ways. Produced in collaboration with "Somolsa" of Spain, these heaters proved to be more powerful and also saved up to 60 per cent energy compared to electric or kerosene heaters. SSAEL currently imports these heaters from a reputable Spanish company, Somolsa; and in order to supply the large and growing market in the long-term, the Indian company decided to manufacture them to the same exacting standards as the imported product. Shri Shakti needed to outsource the non-critical sheet metal parts for indigenous production and for this purpose contacted the Subcontracting and Partnership Exchange (SPX) launched by the Confederation of Indian Industries (CII) in New Delhi.

#### **Premier business association**

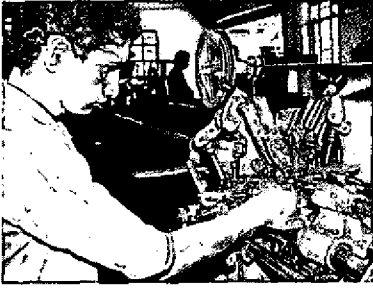
The CII-SPX was established in 2000 with the technical assistance of UNIDO, as a specialized wing of the CII Small Industry Department. Founded over 100 years ago, CII is India's premier business association with a direct membership base of over 3,900 companies, both from the public and private sector, including SMEs (small and medium enterprises), MNCs (multinational corporations) and an indirect membership of 40,000 companies of over 100 sectorial associations. The CII-SPX has 725 registered members and actively organizes the "Enterprise" series of fairs namely—AutoEnterprise, Enterprise-India, Engineering Trade Fair, DefEnterprise, both in India and abroad. Coinciding with these Subcontracting Fairs, Buyer-Seller Meetings and matchmaking events are organized. The CII-SPX also serves as the nodal coordinating agency for the network of the six other Indian SPXs, established by UNIDO in India.

For outsourcing Shri Shakti's non-critical sheet metal parts to fabricate the LPG room heaters, CII-SPX initially provided the contact details of five suppliers to develop the vendor-base for these inputs. Out of these five suppliers, one supplier was finalized by Shri Shakti to produce 5,000 units of sheet metal parts for LPG room heater. The buyer and seller are now in the process of drawing up a final contract to begin production before winter 2001.

#### **For further information on CII-SPX, please contact:**

Ms Sonia Bhrara, Manager, CII SPX, at e-mail: [sonia.bhrara@ciionline.org](mailto:sonia.bhrara@ciionline.org)





## INDIA

Pune

### *Linking Companies with Industrial Fasteners*

*A French commercial vehicle manufacturer sent a request to outsource small industrial fasteners like screws, nuts, clips, links, among other such products to the Subcontracting and Partnership Exchange (SPX) established by the Confederation of Indian Industry (CII) in Pune in the Western Indian State of Maharashtra. To supply to the quality conscious market of the West, the French manufacturer demanded high quality raw materials; exacting engineering standards based on computer-aided design (CAD), precise calibration, stringent process and quality control and cost effective prices.*

*The CII-SPX in Pune specializes in automobile industry. From a quiet town, Pune has transformed into an industrial city with a number of automobile plants and thus has a good number of ancillary suppliers. To help these small and medium industries to tap the global market, the CII established a SPX in 2000 with UNIDO's assistance. In a short time, the SPX enrolled 178 members, and registered 158, after completing on-site inspection and other formalities. Almost a hundred of these SPX members operate in the automobile industry while other members come from electrical, plastics and rubber industries.*

#### **Ensuring global standards**

The CII-SPX has organized a number of activities to create greater awareness about its utility and promote its services to its members and potential buyers. These initiatives include screening a UNIDO film about these services to 300 delegates of a CII event in March 2001; organizing an Awareness Seminar for 70 of its members and making regular presentations to various industrial, business and professional associations in Pune. In the near future, the CII-SPX envisages 300 member firms and launching programmes to upgrade the quality and productivity of its members and generate greater awareness for its services with large-scale industries.

The CII-SPX circulated the inquiry for industrial fasteners to eight eligible automotive industry members. One of them, manufacturing industrial fasteners, saw an opportunity to expand and export. This company has the requisite raw material and finished product testing facilities, CAD and process control, and stringent quality control measures with highly trained engineers to ensure global standards. The company has the capability to manufacture components for the client's specific designs and also to modify them.

#### **Both parties benefit**

As per the specifications received, samples of fasteners were fabricated and sent to the manufacturer of commercial vehicles along with a quotation. Not only were these samples acceptable but also appreciated. On approval of the samples, the Pune based company was asked for another quotation without surface coating since it could be damaged in transit. The contract is now being finalized. Both the manufacturer and the supplier have benefited from the SPX matchmaking. The vehicle manufacturer has identified a source of cost effective, quality components. The vendor has benefited by gaining confidence to a world-class manufacturer overseas. This has encouraged the vendor to look abroad for more clients and markets. This is what an SPX is all about.

#### **For further information on CII-SPX Pune, please contact:**

Ms. Tejaswini Gogate, Director, CII-SPX Pune, at e-mail [ciipune@vsnl.com](mailto:ciipune@vsnl.com)



## MAURITIUS

Port Louis

### *Promoting Industry in the Indian Ocean Region*

*A metal processing, turning and milling company in Mauritius, Atelier FRERE ANDRE Ltd., participated in SUBEX—the Regional Subcontracting and Partnership Fair for Indian Ocean countries and territories of Comoros, Madagascar, Mauritius, Reunion and the Seychelles. During its participation in the SUBEX Fair in Madagascar, the firm was looking for new partners and products to promote its business in new markets.*

*Another company, PLASPAK Group—EXPLAST Ltd., manufacturing laminated films and plastic bags used in the food packaging industry, also participated in SUBEX Fair 2000 for penetrating the regional market and orders for products not associated with manufacturing in Mauritius.*

### **Well-attended fairs produce results**

Two well-attended SUBEX Fairs have been organized so far by the Subcontracting and Partnership Exchange (SPX) of Mauritius, also called SUBEX-M. It was established in 1997. The World Bank provided a grant to the Mauritius Government for setting up SUBEX-M while technical assistance came from UNIDO. The Mauritius Government provides an annual grant for capital and operational expenditure of SUBEX-M, that has also successfully launched some fund generating activities.

To promote the business of its members, SUBEX-M provides the following services:

- *Promotion:* organizes regional subcontracting fairs, exhibitions, awareness programmes and seminars.
- *Information:* technical and commercial information for main contractors and subcontractors; identifies and match-makes inquiries from local subcontractors, suppliers and foreign main subcontractors and buyers.
- *Advice:* to enterprises on industrial subcontracting and partnership related issues.
- *Networking:* with national and international agencies, government and non-government bodies, organizations, institutions, chambers of commerce, companies, firms and individuals, as well as links with Mauritius Export Development and Investment Authority, the Export Processing Zone, the Chamber of Commerce and Industry among other public and private sector organizations.
- *Suppliers' development and upgrading:* conducts seminars, discussions and provides technical assistance to vendors; links with other institutions with a view to providing necessary guidance and know-how; improves competitiveness and viability of suppliers.

### **Creating awareness**

The first SUBEX Fair in Mauritius in 1997 attracted over a hundred exhibitors and thousands of business visitors while the second SUBEX Fair in 2000 was equally patronized by hundreds of exhibitors and serious visitors from the region eventually resulting in signed agreements. Besides, SUBEX-M along with its members has participated in the Second Regional Exhibition of the Subcontracting and Partnership in Madagascar in 1999. For SUBEX-M, most of the contacts and partnerships have resulted from these Fairs.

As an example, Atelier FRERE ANDRE Ltd., that has taken part in all SUBEX Fairs, concluded a partnership agreement with a French company and became the sole agent for the sale of grey cast iron to Mauritius. The same firm also concluded a partnership with another French company appointed TREVIS to represent this firm in Mauritius for marketing its special alloy screws.

The other company, PLASPAK Group—EXPLAST Ltd., discovered that the SUBEX Fair enabled it to better understand and penetrate into the regional market. Numerous exhibitors and visitors at SUBEX were not aware that this range of products was manufactured in Mauritius. On discovering these products, many food processors in the region placed orders with this Mauritian company and additional orders were received through local operators, thus increasing the company turnover by 15 per cent in the following year.

**For further information on SUBEX-M, please contact:**

Mr S. Rajaretnon, Director SUBEX-M, at e-mail: [subexm@intnet.mu](mailto:subexm@intnet.mu)



## MEXICO

### Monterrey

#### *Upgrading Local Companies to Global Level*

*A metal mechanical industry CRESA operating in the State of Hidalgo, in Pachuca, contacted its local SPX with a specific request for the production of galvanized iron profiles. The Pachuca SPX in turn contacted the Monterrey SPX for assistance to locate a subcontractor.*

*An export-based company, specializing in the production of slats and other automotive accessories, DENSO Mexico contacted the Monterrey SPX to find a national manufacturer of protection covers made from carton slats—an imported component.*

#### **Core services**

The SPX of the State of Nuevo Leone in Mexico was established in 1990 with the technical assistance of UNIDO at the Chamber of Manufacturing Industry (CAINTRA) in Monterrey, at the Texan border. The Monterrey SPX has successfully provided its core services:

- *Events:* Organizing subcontracting fairs, exhibitions, awareness programmes and seminars.
- *Matchmaking:* Identifying from its members local subcontractors and suppliers in response to inquiries from local and foreign buyers and main contractors.
- *Advice:* On industrial subcontracting and partnership related issues.
- *Networking:* with national and international agencies, government and non-government bodies, chambers of commerce, companies and individuals.
- *Suppliers' development:* Conducting seminars, discussions and providing technical assistance to vendors; linking them with other institutions with a view to providing necessary guidance and know-how; improves competitiveness and viability of suppliers.
- *Upgrading to global standards:* After a decade of successful operations, this SPX is working on a project to assist member companies to be certified ISO 9000 companies. Currently, the SPX is also being audited for a 108 ISO programme to further upgrade its operational standards to the global level.

In addition, the SPX has been elected to the presidency of two major national and international subcontracting organizations. These are: the "Consejo Nacional de Subcontratacion", a Mexican Subcontracting Network composed of seven SPXs and Supplier Development Centres; and the "Asociacion Latino-Americana de Bolsas de Subcontratacion", the Latin American Association consisting of 30 SPXs established by UNIDO in 14 countries of the Region.

#### **Import substitution**

The Monterrey SPX contacted two companies, HYLISA and MONTERREY Industries, as potential partners for supplying galvanized iron profiles to CRESA. After negotiations on quality and price, CRESA signed a one year agreement worth €239,580. In the case of DENSO Mexico, more stringent selection procedures were followed for maintaining quality and cost effectiveness. After visiting various manufacturers identified by the Monterrey SPX and conducting many tests, DENSO Mexico selected a SPX member company to produce the protection covers for €457,380 per year. This agreement not only encouraged import substitution but also local industrialization.

#### **For more information on Monterrey SPX, please contact:**

Mr Raul Ortiz Benavidez, Director, at e-mail: [rortiz@caindra.com](mailto:rortiz@caindra.com)



## MEXICO

Queretaro

### *Designing Moulds and Dies for New Opportunities*

*A major problem faced by the small and medium enterprises (SMEs) in Mexico has been the design and manufacture of moulds and dies. This challenge was taken up by the SPX of Queretaro, also called the Industrial Linkages and Processes Exchange. This issue was identified as part of the SPX services to SMEs as an opportunity to strengthen the development of subcontracting activities in the region. To remain competitive, these precision manufacturers must introduce other strategic services in addition to their manufacturing activities. Such services include computer-aided design and computer-aided manufacturing (CAD/CAM), and numerically controlled (CNC) machinery and electro-erosion centres which demand these companies to remain up-to-date—possible only with high investment in machinery and equipment.*

*The design centre would generate a large number of new subcontracting opportunities, either within or with other companies once the three basic integrated conditions are met: the design and manufacture of moulds or dies and their industrial applications by plastic injection, dies and stamping. Moreover, the establishment of this centre would satisfy a small proportion of the extensive and growing demand for moulds and dies by large and medium size companies located in the region, which were currently importing them.*

### **Finding common solutions**

The Centre's strength emanates from a group of precision toolmakers—the best manufacturing specialists of moulds and dies in the region based on their 20 years' of excellent craftsmanship. But the project also faced potential threats: individualistic behaviour of some companies and domination by foreign companies in the region, as well as the danger that companies would not be able to keep up with the relentless, accelerated progress of technology. A main function of the Centre would be to promote and negotiate the spare industrial capacities of its' affiliated companies to generate interest and orders. This would allow the companies to stabilize their income and achieve an appropriate level of specialization and technological know-how. Moreover, the Centre would study and analyse the individual needs of member companies to find common solutions to the main problems.

### **A centre of excellence**

To solve these problems and to foster the development of these manufacturers, the SPX of Queretaro established the "Centre for the Design and Manufacture of Moulds and Dies" on 25 August 2001 as a non-profit body to develop and provide high value-added services to its affiliated companies. In the first nine months of 2001, imports of moulds in Mexico exceeded €653,400,000; now this Centre hopes to reduce this import content.

In its first year, the target for the new Centre is to obtain import substitution subcontracting orders worth €4,356,000. During the first three years, the manufacturing members of the Association, FUNTEC and the Ministry of Economy will each contribute a third of its budget. The Queretaro Region, with its moulds and dies manufacturers has consolidated and grown into a centre of excellence in precision manufacturing. This has enabled the development of various production chains such as metal, plastic, auto-parts and domestic appliances; thus contributing its share to the rapid industrial development of the region and the country.

### **For further information on Queretaro SPX, please contact:**

Mr Alfonso Flores Rodriguez, Director General, at e-mail: [bepiqac@prodigy.net.mx](mailto:bepiqac@prodigy.net.mx) or [bepiqac@ciateq.mx](mailto:bepiqac@ciateq.mx)



## PARAGUAY

Asuncion

### *Knocking at the Right Door for Results*

*A leading metallurgy company of Germany, GERBER showed interested in investing in Paraguay. The German industrialists started their project by identifying some suitable local partners and visited this Latin American country to meet them for making their investment viable. Despite numerous meetings with different partners, not much headway was made.*

*A Paraguayan packaging company IMPACK was looking for new export markets and new products to distribute and/or manufacture them locally. Participating in the Paris Packaging Fair could provide some new contacts, but how to go about it?*

#### **Remolding mission statement**

Both these companies contacted the SPX in Paraguay for assistance. The SPX of Paraguay was established in 1992 with the assistance of UNIDO and the support of national business organizations such as the Paraguayan Chamber of Capital Goods (CAPABIC), the Centre of Metallurgist Industrialists (CIME) and the Paraguayan Chamber of Construction Industry (CAPACO). The Ministry of Industry and Trade has also actively collaborated and supported the SPX. The SPX is a partner and a founder of the Latin American Association of Subcontracting and Partnership Exchanges (ALABSUB). The organization was founded as a private entity and without capital investment.

In addition to promoting subcontracting and partnership agreements arising out of increasing and constant inquiries by local buyers and suppliers, the SPX became increasingly involved in generating international cooperation and new investment for Paraguay. Thus six years after its successful operations, it was time to remold its mission statement in 1998. It expanded its scope of activities with a new name—Centre of Managerial Cooperation and of Industrial Development or CEDIAL for short.

#### **Million dollar investment**

After its initial fruitless foray, the German company GERBER delegated CEDIAL to study the viability of its investment in Paraguay. Once the study was concluded and sent to Germany, the industrialists returned to Paraguay to meet the selected potential partners and within no time established a joint venture with EIMSA from Paraguay. The German company will contribute capital, technology and machinery for about €1.1 million while the Paraguayan partner will contribute infrastructure, local and administrative administration valued at a similar amount.

On contacting CEDIAL, the Paraguayan company IMPACK successfully participated in the Paris Packaging Fair and contacted numerous potential clients and principals. It signed an agreement for the transfer of technology from French and Italians companies for the packaging in paper, polypropylene, polyethylene and aluminium materials. In addition, this company purchased machinery for over €217,800 from a supplier. Later on, IMPACK concluded a commercial representation and distribution agreement with the French company PRA-PACK for its packaging products.

#### **For further information on SPX Asuncion, please contact,**

Ms Victoria Valdez, Manager, BSP-CEDIAL, at e-mail: [bsp@cedial.org](mailto:bsp@cedial.org)



## PERU

### Arequipa

#### *SPX Reborn from its Ashes, Helps to Revive Industry*

*A business magazine, "Parque Industrial" published by the "Asociacion de Empresas del Parque Industrial de Arequipa" (ADEPIA), in Peru, brings new business to many small and medium enterprises that are members of the Subcontracting and Partnership Exchange (SPX) of Arequipa. The "Parque Industrial" articles inform ADEPIA member companies of the benefits of industrial subcontracting for their products and services and thus the member companies are quick to respond to the queries that come to them from their SPX and at times sign an agreement. Thus an increased awareness of the SPX generates profits for them, and indeed helps to revive the country's industrial activity that has been stagnating due to the economic depression in the region, aggravated by the recent earthquake.*

*Since it was revitalized in January 2000, the main objective of SPX of Arequipa is to stimulate local industry adversely affected by the region's depressed economy. The stagnant domestic demand led to stock accumulation and resulting in a standstill of industrial production.*

#### **Counteracting hostile situation**

To counteract this hostile situation, the SPX of Arequipa encourages local companies to access new markets, trying to satisfy foreign demand for the local products and services, that could lead to industrial subcontracting, thus creating alliances not only at local level but also at national and international levels.

Many Peruvian SPX member companies have no doubt benefited from the opportunities and activities offered by the SPX, but have not informed the SPX of their successful business dealings, mainly due to the tight non-disclosure policy of these companies. Nevertheless, the SPX of Arequipa is well aware that several companies have already achieved positive results.

The SPX of Arequipa has reached an agreement with PROMSME (Commission for the Promotion of Small and Micro Enterprise), with the initiative and support of the Peruvian Government. This new alliance at the national level will allow the SPX to promote and reinforce the small and micro enterprises to work with the medium and large enterprises. This will also promote the establishment of associations of micro and small enterprises at national level.

#### **Impressive list**

The list of industrial fairs and business events in 2000 and 2001 with participation by the Arequipa SPX is impressive. These events include: the Third Business Forum Andino at Lima—Perú, International Fair at Arequipa, International Exhibition of Industrial Subcontracting at Sao Paulo in Brazil, International Trade Fair in Panama, Reunion of the Latin American Association of Subcontracting and Partnership Exchanges (ALABSUB) in Havana, Cuba, International Fair of Bilbao in Spain, Sectorial Meeting of the European Union, AL-INVEST in Bilbao in Spain.

The SPX participation in these fairs and its missions has been very successful. These events have allowed the SPX to generate a series of business contacts and industrial networks to encourage the effective growth and development of the local industry in the medium term.

Now, the Arequipa SPX has decided to organize the XVth edition of the international event "Subcontrata Latino-Americana" in its own exhibition hall in October 2002.

#### **For further information on SPX Arequipa, please contact,**

Mr Ignacio Rivera Castillo, Gerente, BSA-Arequipa, at e-mail: [bsa@adepia.com.pe](mailto:bsa@adepia.com.pe)



## SENEGAL

Dakar

### *Emergency! Mine Dredger Breaks Down*

*"One of our main mine-dredgers is currently at a standstill because its winch-shaft has broken," said the frantic caller from TAIBA Mine Workshop on 27 July 2001. "We have consulted our usual subcontractors but our specifications exceed their manufacturing capacity—a propeller shaft 3.4 metres long and weighing about three tons. To order it from the American manufacturer, BUCTRUS ERIE, would mean a delay of 6-8 months. Please put us in touch with a local subcontractor who can meet our specifications quickly."*

#### **South-South cooperation**

One of the three units of the "Chemical Industries of Senegal" (CIS)—the largest industrial complex in the country—the TAIBA Complex mines and treats phosphate. The other two CIS units produce phosphoric acid and fertilizers. An outstanding example of South-South cooperation, the CIS Group matches the important need for phosphoric acid to produce fertilizers in India with the availability of high quality phosphate in Senegal. CIS exports more than 90 per cent of its production and earns more than €155.2 million in hard currency for the Senegalese economy, thus contributing more than €61 million to the GDP of the country each year.

The call from TAIBA was received by the Subcontracting and Partnership Exchange of Senegal (BSTP-S). The SPX was inaugurated on 3 November 2000 by the Minister of Handicrafts, Mining and Industry and the Director-General of UNIDO in the presence of hundreds of representatives from public authorities, private sector enterprises and institutions. Established with UNIDO's technical assistance, the Senegalese SPX has full government support and is the result of a long dialogue between the State and the private sector. In less than a year of operations, the SPX has visited and registered 125 companies and received 70 inquiries and requests for subcontracting in various fields, specialized training, technical documentation, partnerships, and buying and selling of second-hand equipment.

#### **Urgent response**

In an urgent response to the TAIBA request, the SPX consulted its database and selected a potential subcontractor—DAKARNAVE Company in the Port of Dakar. On 30 July 2001, Dakarnave was introduced to the main contractor who placed the order. Within a short span of only two days, the propeller shaft was delivered.

On the 13 August 2001, the SPX received a fax from the Maintenance Director of CIS congratulating and encouraging the SPX to assist this large enterprise that was until then hesitating to contact the SPX for any subcontracting opportunities. Following this successful matchmaking, the SPX received other requests from CIS for subcontracting such as regulating generators and excavators, and general maintenance of public works machinery among other projects. The CIS winch-shaft order received assured the SPX that other member companies will be able to conclude new contracts with this group which offers numerous opportunities, such as the manufacture of parts and components in small and medium batches that are usually ordered from abroad.

#### **For further information on SPX Senegal, please contact:**

Mr Amadou Sylla, Director-General, BSTP-S, at e-mail [bnstp@arc.sn](mailto:bnstp@arc.sn)





## SLOVAKIA

Bratislava

### Multi-million Dollar Bonanza for Slovak Suppliers

*When a major multinational corporation (MNC) and a Fortune 500 company wanted to establish its manufacturing presence in Europe with a network of companies to supply components for its wide product range, it proceeded through the SPX. As part of its corporate strategy, the American corporate giant INGERSOLL-RAND (IR) contacted the Subcontracting and Partnership Exchange (SPX) of Slovakia for an outsourcing network of subcontractors and suppliers and/or to acquire existing production companies.*

*A major diversified and major manufacturer of industrial and commercial equipment and components supplying a wide range of industrial and commercial markets worldwide, IR has a business history dating back to 1871. The company presently ranks 199 in terms of sales in the latest Fortune 500 listing of the largest industrial and service companies. It owns 160 manufacturing plants around the world and a large number of highly regarded industrial and commercial brands which all are registered trademarks or trade names of IR or its subsidiaries: ABG, Blaw-Knox, Bobcat, Charles Maire, Club Car, Dixie Pacific, Dor-O-Matic, Ecoair, Fafnir, Falcon, Glynn-Johnson, Ingersoll-Dresser Pumps, Ingersoll-Rand, Ives, LCN, Legge, Locknetics, Monarch, Montabert, Normbau, Schlage, Steelcraft, Thermo King, Torrington, Von Duprin, Worthington and Zimmerman.*

#### Matchmaking at fairs

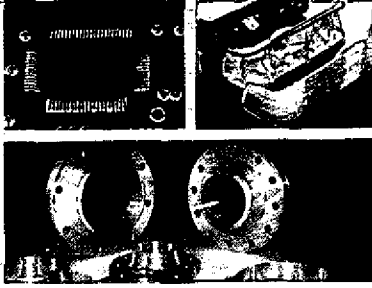
IR Europe outsourcing staff came in touch with the Slovak SPX at the MSV Brno Fair in September 2000. The SPX officials offered them help and assistance to introduce and access the Slovak manufacturing production market, based on an agreement or mutual understanding on how to proceed within Slovakia. On the basis of the broad production inquiry of IR, documented with technical drawings, terms and conditions, the SPX selected a first choice of potential suppliers in Slovakia capable of manufacturing a full range of components. During the SPX International Subcontracting Conference "SESE 2000" on 14-15 November 2000, the responsible IR staff met 20 potential Slovak suppliers selected on the basis of the first round of identification, an analysis of company profiles and the quotations supplied.

#### Parts for world class products

Slovakia's Subcontracting and Partnership Exchange, also called SES, was established in 1994-1995 with the technical assistance of UNIDO under a financing agreement with the European Union Phare Programme, as a specialized branch of the National Agency for the Development of SMEs (NADSME). The SES actively participates in many international subcontracting and matchmaking events every year, and organizes its own event called SESE. After various successful steps, IR selected Slovak suppliers and after visiting them, made a final selection of seven for two of its projects for the production of pressure vessels and hydraulic cylinders for world renowned companies BOBCAT and THERMO KING. IR required steel structures and welded parts for Bobcat valued at US\$50 million and sheet metal parts for Thermo King valued at US\$10 million. Slovak manufacturers are currently supplying these components for world class products to major MNCs—thanks to the matchmaking by Slovak SPX.

#### For further information on SPX of Slovakia (SES), please contact:

Mr Igor Kovacic, Manager, at e-mail: kovacic@nadsme.sk



## TUNISIA

### Tunis

#### *Linking Partners Across Borders*

*A Spanish company wanted to establish a fully export-oriented plant to manufacture leather covers for car steering wheels in Tunisia. This project would create 100 jobs and involved capital investment of €438,000. The promoter contacted the Tunisian SPX for assistance in January 1999.*

*A European electronics company contacted the SPX-Tunisia during its participation in the Electronic Subcontracting Fair "INTERTRONIC" in France. The SPX was to identify potential subcontractors capable of producing ten million electronic printed circuit-boards for television sets annually.*

*A multinational company manufacturing bicycles contacted the SPX for a potential partnership including technical and a financial contribution for the manufacture of carbon-fibre reinforced polyester bicycles components.*

*A French electronics company contacted the SPX in April 1999 to identify a business partner for the creation of a joint venture unit, with an equity participation, to manufacture electronic wiring of international standards.*

#### **Model worth emulating**

These are just four of over 800 requests handled annually by the Subcontracting and Partnership Exchange of Tunisia (BSTP-T) over eleven years of operations. Established with UNIDO's technical assistance in 1986, the Tunisian SPX was considered by its neighbouring countries as a model worth emulating. With a staff of only three persons but supported by 12 regional offices, the SPX has achieved the following milestones:

- Management of a database of 450 member companies.
- Processing of 450 business opportunities and 350 international subcontracting and partnership requests annually.
- Organization of three international partnership meetings/forums per year.
- Participation in five foreign subcontracting fairs and five local industrial fairs per year.
- Organisation of 12 programmes of visits by foreign companies to Tunisia.
- Foreign visits of 200 Tunisian companies per year.

#### **Hi-tech manufacturing**

All four of the above requests to the Tunisian SPX scored a bull's eye. With the assistance of the SPX, a new Tunisian joint venture started production of leather covers for steering wheels, in November 2000. A year later, this same company contacted the SPX again for assistance to expand the project with a total investment of €7,623,000 for the manufacture of foam for steering wheels.

The European main contractor on the lookout for printed circuit boards for television sets met 10 subcontracting companies in Tunisia; of these, three were appraised thoroughly for their hi-tech and high quality manufacturing capabilities. Following this appraisal, two companies were selected and an initial contract amounting to €3 million was signed.

For the multinational bicycle manufacturer, the SPX contacted 13 Tunisian companies of which nine replied positively. The foreign principal signed a joint venture partnership with one of them. The multinational started with an initial subcontracting order and subsequently plans to develop this partnership into establishing a full-fledged joint venture.

The SPX introduced the French electronics company to numerous potential Tunisian partners manufacturing electronic wiring. In May 2000, the subcontracting operations started in the laboratories of a Tunisian company specializing in the manufacture of television sets and electronic hardware. As a result, a new fully export-orientated joint venture was launched in July 2001.

**For further information on SPX Tunisia, please contact:**

Mr Mahmoud Miladi, Director, BSTP-T, at e-mail [api@api.com.tn](mailto:api@api.com.tn)



## TURKEY

Istanbul

### Supplying World Class Components

*At Germany's Hannover Messe in April 2001, "Ortal Die-Casting Ltd." from Israel contacted the Turkish Subcontracting and Partnership Exchange (SPX) for subcontracting. An Original Equipment Manufacturer (OEM) in the automotive industry, Ortal is an aluminium and magnesium die-casting company. During a further contact in May, the Turkish SPX received detailed specifications of Ortal requests and searched among its members for capable manufacturers who could comply with these exacting specifications.*

*Another inquiry came from the global purchasing department of one of the world's major heavy-duty vehicle manufacturers, JCB Bamford (JCB) that contacted the Turkish SPX for identifying and selecting appropriate foundries and forging companies. Already purchasing a number of its components from Turkey, JCB were looking for new suppliers.*

### International demand

With the technical assistance of UNIDO, the Turkish SPX was established in 1990 at the Istanbul Chamber of Commerce with more than 290,000 members in various sectors. Considering the international demand for subcontracting in Turkey, the SPX selected five main sectors: metalworking, plastics, rubber, electric and electronics. The SPX has over 1,000 members, 65 per cent in metalworking, 16 per cent in plastics and rubber and 11 per cent in electric and electronics. Sixty eight per cent of the member enterprises are working for the automotive industry, 30 per cent for the machine tool industry, 27 per cent for domestic appliances and 18 per cent for the electrical and electromechanical sectors.

Mostly small and medium industries, 75 per cent of these enterprises have less than 150 employees. According to a recent survey, 82 per cent of the SPX members export their product or services mainly to France, Germany, Italy, United Kingdom and other West European countries. The SPX provides five main services to its' members:

- *Matchmaking:* Between 80-100 contacts per week, using its database; (the most popular service used at 59 per cent).
- *Seminars and training:* On export marketing, market information, quality certification and management; (service used at 44 per cent).
- *Promotion:* Participating with members in SPX Fairs abroad such as Hannover-Messe, Midest, Subcon, Subcontratacion, and organizing business delegations to potential markets (service used at 34 per cent).
- *Market research and reports:* Conducting and publishing market analysis and reports on potential markets; and monthly bulletins for subcontractors' network; (service used at 17 per cent).
- *Consultancy:* To members mainly on export management (service used at 6 per cent).

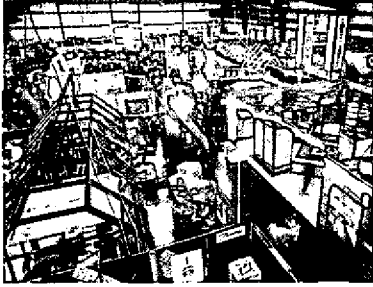
### Agreements reached

As a result of these services, Ortal's purchasing managers came to Turkey a few weeks later and met the identified and interested subcontractors. After an initial contact with the enterprises, the SPX staff followed-up on the results of the certification process. Four months' later, some Turkish springs and bolts manufacturers started working as subcontractors for Ortal; and six months later, another SPX member manufacturing auto parts also became an Ortal subcontractor.

For heavy vehicle manufacturer JCB, the SPX selected 15 foundries from its database that fulfilled its requirements. After receiving details of the JCB request, 10 interested and capable foundries and forging companies met JCB Global purchasing department managers in Istanbul and one was selected to work with JCB. Today, JCB purchases from three foundries in Turkey.

**For more information Istanbul SPX, Istanbul Chamber of Commerce please contact:**

Mr Mustak Caglar, Manager, at e-mail: yansanayi@tr-ito.com



## URUGUAY

Montevideo

### *Strengthening and Upgrading Supply Chains*

*A group of 12 small and medium enterprises (SMEs) from the metal, chemical and mechanical sectors in Uruguay supplying to a subsidiary of the giant ICI Group of Great Britain were in a desperate situation. Since they were all regularly supplying to INCA S.A., the ICI subsidiary and their major contractor, they urgently needed to strengthen and upgrade their supply chain or else they would lose these important contracts. They turned to the SPX to assist them.*

*Established in November 1991 with UNIDO's technical assistance, the national SPX operates from the Chamber of Industry of Uruguay (CIU). In addition to representing the country's manufacturing from the smallest to the biggest units, the CIU also represents and interacts with private associations covering over 50 industrial sectors and provides technical assistance to the CIU.*

### **Rising to the challenge**

During the last decade, the SPX has participated in 20 Industrial Subcontracting Fairs, and enabled companies to promote their products, parts and components in Latin America and Europe, and concluding over 50 subcontracting and joint venture agreements. Among the key services provided by the SPX are management consultancy, capacity building, Master's and Postgraduate Courses through the Internet, business cooperation and business information.

The SPX of Uruguay rose to the challenge of improving the supply chain management of these SMEs. The SPX arranged for the services of an international consultant to provide the methodology and the process; and a national consultant to encourage the supplying companies to improve production and quality. In its initial stage, this project to improve the manufacturing capacity of products and services of these SMEs has shown remarkable results.

### **Bright future**

Some highlights emerging just after three working months are:

- The participant subcontractors have clearly grasped the objectives of the main contractors and the concepts of group strategic planning and negotiation.
- During field visits to their plants, the suppliers were assisted and guided by an expert from the buyers.
- All participant subcontractors were greatly assisted by the clarification from the main contractor regarding the parameters to be used and their disposition to work at the implementation stage in order to obtain excellent results.
- An Internet based system to manage the subcontractors' stocks or inventories has been provided by the main contractor. With a password, each subcontractor can know, and thus better monitor, not only their current stock levels but also six months' production projections.
- With a "just in time" controlled inventory, there is a reduction in unnecessary inventory, benefiting both the main contractor and the subcontractors. Moreover, this system also reduces chain production cost.
- All SME participants have recognized the need to hold monthly meetings with all other members to exchange their experiences, analyse benchmarking, plan together new measures for optimum improvements and, especially, to reinforce their business and personal contacts.

With timely response from the SPX, these SMEs are successfully supplying high quality products and services to their main contractor, keeping afloat with greater confidence and looking forward to a bright future.

### **For further information on SPX Uruguay, please contact:**

Mr. Roberto Villamil, CIU Secretary-General, E-mail: [roberto@ciu.com.uy](mailto:roberto@ciu.com.uy)

## FREQUENTLY ASKED QUESTIONS

### 1. What is Industrial Subcontracting?

Industrial subcontracting and outsourcing are modern and efficient ways to organize industrial production, through cooperation between various complementary production units, in this case a main contractor and various suppliers and subcontractors.

This concept consists of an agreement between two parties—the main contractor and the subcontractor. The main contractor entrusts one or several enterprises with the production of parts, components or sub-assemblies and/or provision of industrial services necessary for the manufacture of its final product. The subcontractor executes the work as per the specifications provided by the main contractor. There is thus a division of work in the production systems in the industrial sector and the subcontractors become increasingly specialized in one or more technological processes.

### 2. What are the principal forms of subcontracting?

Subcontracting of industrial production is generally based, among others, on two important criteria—one based on production capacity and the other on the technical specialization of the enterprise.

*Subcontracting based on capacity*—When the available production capacity with a main contractor is not sufficient to cope with the total volume of production necessary to execute an order and when further creation of an in-house capacity is neither feasible nor desirable, the main contractor has to depend on a subcontractor to manufacture the balance quantity of the order. This form of subcontracting takes place when the quantity of orders received by a main contractor fluctuates.

*Subcontracting based on specialization*—This occurs when the main contractor wishes to obtain the services of subcontractors who have specialized equipment or machinery and skilled labour to undertake complex and precision jobs. Such subcontractors have specialized technical skill/know-how for specific production processes/items and the main contractors prefer to utilize their services. This relationship is not associated with fluctuations of orders and hence tends to be on a long-term or structural basis. In view of its specialized knowledge of production facilities, sometimes these subcontractors may be in a controlling position.

### 3. Who are the main contractors?

The main contractors are generally, though not necessarily, large industries engaged in industrial manufacturing, which require a large amount of parts and components for final assembly. All these parts and components are not generally manufactured in-house in an integrated way either for reasons of economy or of specialization. Though subcontracting relationship can exist in various sectors of activity, it is most prominent in the engineering sector in industries like automobiles, railways, aeronautics, electrical equipment, electronics, domestic electrical appliances, precision equipment, surface treatment, and also in plastic and basic metal work industries like foundry, forge, general mechanical or precision mechanical works.

#### 4. Who are the subcontractors?

The subcontractors are generally, although not necessarily, the small and medium industries which, having specialized in certain processes and operations, are capable of supplying quality goods as per specifications of the main contractor and at the same time offer advantageous economic terms. Sometimes large industries having available extra capacity may also act as subcontractors. It may also be the case that small and medium industries require the services of other enterprises for the manufacture of parts and components in order to fulfil large orders, thus acting as main contractors.

#### 5. What is an "Industrial Partnership"?

As the practice of industrial subcontracting has developed and become more widespread, the need gradually arose for the establishment of a more permanent and evenly balanced relationship between two or more industrial partners that was more in line with market requirements. In order to meet that need, UNIDO has since 1985 been advocating the concept of "industrial partnership" under its Programme for the Promotion of Industrial Subcontracting and Partnership. This concept refers to a modern form of industrial subcontracting that is based on subcontractor's specialization and technological expertise and can lead to long-standing, stable and horizontal inter-enterprise relationships, with equitable sharing of responsibilities among the industrial partners concerned. In order to increase the chances of success, these new forms of more stable subcontracting and supply linkages often call for other complementary forms of linkages, as can be seen in some of the stories, such as provision by the main contractor of special raw materials, sophisticated equipment, moulds, technical assistance, training, know-how and licence agreements and even, in some cases, equity participation or joint investments. Here, the traditional subcontracting relationship has become a full-fledged partnership.

#### 6. What are the new Trends in Industrial Subcontracting and Supply Chain Management?

Because of increased competition based on product quality requirements, shortening of product life cycle, and pressure on costs, several trends which have transformed the classical subcontracting relation in a more deep linkage can be mentioned, such as:

- A growing entrepreneurial commitment to "total quality management" both by the main contractor and subcontractor, and often jointly.
- An increased flexibility in the production process.
- An increasing amount of information and technology is exchanged between the subcontractors and the main contractors and among subcontractors themselves, thus the rate of innovation is speeded up.
- Subcontractors are involved from the early stages of product design.
- Delivery time is reduced ("just-in-time").
- More services are delivered with the product.
- Reduction of production defects and lead-time is a must.
- Cost reduction has become a common task of subcontractors and main contractors.
- An increased trend towards the formation of industrial clusters, or groups of firms, which rely on the same or complementary business.
- A reduced number of suppliers to each main contractor. Subcontracting systems, are increasingly based on a pyramidal structure where the main contractors rely on a small number of first tier subcontractors, who in turn rely on a large number of second and third tier subcontractors.
- An ever increasing search for long lasting reliable partners. They both rely and are loyal to each other, and the only danger remaining is the fluctuation in business activity.

## 7. Where to set-up an SPX? (The institutional set-up of the SPXs)

Let us recall that a SPX is first of all a non-profit manufacturers association enjoying full autonomy, but supported/sponsored by public authorities and professional organizations, run by a team of qualified engineers specially trained for this purpose.

Experience has shown that SPXs incorporated in Ministries of Industry and public organizations are monopolized by the State, cut-off from their industrial basis and bound to disappear. The formula of hosting the SPX in a Ministry or public organization should be considered only as a transitory start-up stage before being transferred to the private sector, preferably on an autonomous basis.

SPXs incorporated in private sector institutions such as Chambers of Commerce and Industry, Federations of Industry, Professional or Manufacturers Associations, can survive, when accorded the necessary recognition and operational autonomy. They are then considered as a specialized service provided by the Chamber or Federation to its affiliated/member companies.

But the full autonomy of SPXs is the most sustainable form of institutional set-up. It is then an industrial association with an autonomous budget and operational structure, managed by a Board of Directors (or National Council) which should be composed of all public and private sector organizations/institutions/associations which are involved in, or interested by industrial subcontracting, supply and similar forms of inter-industry linkages. In addition, the affiliated enterprises themselves should also be largely represented in the Board and possibly even take the leading role.

For this reason, UNIDO has proposed standard "Legal Statutes for establishing an autonomous SPX", as a standard instrument, to achieve the required sustainability of the SPXs.

## 8. How to finance and manage a SPX? (The modalities of financing and management of the SPXs?)

Here also, experience has shown that when the funds are provided exclusively by one source of financing, the SPX dies. A SPX financed exclusively by the Government becomes a Government department and is quickly isolate from its industry basis. The same applies for SPXs fully subsidized by international aid programmes.

On the other had, a SPX financed exclusively by the affiliated enterprises, under the false assumption that it is a profit-making activity, will soon be superseded by other activities which generate more profit and will abandon the specify activities related to subcontracting promotion.

Therefore, in accordance with the tripartite participation proposed for the Board of Directors and with the Legal Statutes proposed by UNIDO for autonomous SPXs, the financing proposed should include:

- State or public institutions, in recognition of the contribution of the SPX to the national economy (at least 10 per cent of the budget, ideally not more than 50 per cent).
- Professional Association/Industrial Federations, in recognition of the contribution of the SPX to the development of the private subsectors of industry (at least 10 per cent of the budget).
- The affiliated enterprises themselves, in recognition of the contribution of the SPX to their own productivity, competitiveness and growth (affiliation or registration fees should amount to at least 10 per cent of the budget).
- In addition, SPXs should provide various fund-generating services (to non-members as well as members) such as:

Participation in industrial subcontracting/supply fairs and business meetings.

Training seminars and conferences.



Marketing surveys and missions (national and international).  
 Sectorial studies on investment requirements and incentives.  
 Technology and quality (ISO 9000) audits and assistance.  
 Legal assistance in relation with contracts, fiscal matters, etc.

But the SPXs should not receive commissions on contracts awarded.

## 9. Which services should be performed by SPXs?

Information services, i.e. technical information concerning small and medium industries which are capable of working as subcontractors, suppliers or partners for domestic and foreign main-contractors; brokerage of information relating to the supply of and/or demand for subcontracted products and supplies; information on supply of and demand for know-how, patents, technical cooperation, opportunities and procedures for the setting-up of partnership agreements.

Promotional services, i.e. organization of business meetings with purchase managers from domestic and foreign industrial groups; organization of collective participation in industrial fairs of the sectors concerned; preparation and dissemination of promotional material including internet sites on the SPXs and their member industries.

Advisory services on legal aspects of subcontracting operations, product development and adaptation, quality control, standardization and certification, marketing.

## 10. Who are the clients/end-users?

Each SPX will provide a complete range of services to small and medium industrial subcontractors and suppliers in the respective countries and will provide information services to large domestic and foreign enterprises acting as main contractors or purchasing enterprises, to other SPXs, Chambers of Commerce and Industry, Federation of Industries, Industrial Promotion Agencies, Foreign Trade Offices, etc. operating in the subregion and worldwide.

## 11. How long do SPXs live?

SPXs are like enterprises: they live and they die. Some have a very long life, (some of the first established in 1960s are still alive) and some die after a few years. Others can be re-born and have a second life after 10 or 15 years.

Some argue that the SPXs have fulfilled their temporary functions and can disappear when all industrial enterprises of the region covered by the SPX, come to know each other.

This may be correct in some cases, but usually it is not, because:

- The manufacturing facilities and capacities of the enterprises keep changing all the time.
- New enterprises with new technologies and processes enter into the market and are willing to undertake operations under subcontract.
- New export markets become accessible through the SPX.
- New forms of enterprise collaborations appear (partnerships, strategic alliances, market and licence agreements, etc.) for which the SPX can play a unique and privileged role.

Therefore, the flexibility and adaptability of SPXs to changing conditions/environment are a must.

## 12. How good do the SPXs perform?

A survey conducted in 1993 shows that on average, SPXs using UNIDOSS consulted 80 per cent of their registered enterprises at least once that year, of which 40 per cent lead to the conclusion of contracts, which is an excellent performance. In 1997, a similar survey was conducted and showed that each registered company had been consulted at least twice that year, and that 66 per cent of them had concluded at least one contract that same year, which is even a better performance.

## 13. What results should be expected from a SPX?

Results expected by a SPX performing normally well, after a three year take-off period, could be estimated at least as follows:

- 500 enterprises visited and registered with the SPX (an additional 100 per year up to 800-1000 enterprises)
- 200 successful interventions (or consultations) per year (successful means at the satisfaction of the main-contractors)
- 50-100 national contracts concluded per year (worth approximately €5,445,000 to 8,712,000)
- 25-50 international contracts concluded per year (worth approximately €2,722,500 to 5,445,000).

## 14. What would be covered by a UNIDO project for establishing a SPX?

UNIDO assistance in establishing SPXs through technical cooperation projects involves:

- Short-term specialized expertise in all aspects related to the SPX (institutional, operational, management, computer software, enterprise auditing, marketing and fairs, legal aspects, etc.)
- Specialized and on-the-job training.
- Applying the whole package of UNIDO methodology and tools.
- Participation in international fairs and business meetings.
- Networking with other SPXs and industrial promotion agencies.

A comparison of the financial estimates shows that UNIDO's initial contribution in technical cooperation (initial investment in a standard project of €217,800) is rapidly transformed into an effective and profitable promotion of industrial development in the country.

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UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION  
Vienna International Centre, P.O. Box 300, A-1400 Vienna, Austria  
Telephone: (+43 1) 26026-5275, Fax: (+43 1) 26926-6805  
E-mail: [ade-crombrugghe@unido.org](mailto:ade-crombrugghe@unido.org), Internet: <http://www.unido.org>