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UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

Expert Group Meeting on Software Technology and
Cooperative Initiatives in Latin America
Curitiba (Brazil), 6-10 December 1993

REPORT*

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*   This document has not been edited.

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ANNEXES

Introduction

1.   The First Consultation on the Electronics Industry held in Malta from 6-10 November 1989 recognized that the electronics industry in general and the software industry in particular have brought about tremendous changes in industrial restructuring, employment generation and manufacturing systems. Considering the world-wide movement towards increasing penetration of electronics in all sectors of the economy and taking into account the fast growing demand for specialized software and related services together with the enhanced prospects of exporting this technology, the need for providing developing countries with national and international support mechanisms was seen as an area where UNIDO could play a key role.

2.   To this end, UNIDO started organizing a series of expert group meetings on very focused aspects of the electronics sector.   The software industry was identified as one where local entrepreneurs could play a significant role to meet the demand for software products and services in their own countries and in the countries of their region.   This industry was also seen as having a very strong potential for generating foreign capital by catering to the needs of other international markets.

3.   This Expert Group Meeting was organized by UNIDO in cooperation with SELA (Sistema Económico Latinoamericano)/RITLA (Red de Información Tecnológica Latinoamericana).   Financial and substantive inputs were also provided by COLCYT (Comisión Latinoamericana de Ciencia y Tecnologia) and by ICST (International Centre for Software Technology), Curitiba, Brazil.

4.   The main objective of the Meeting was to review regional and international trends in software technology and propose cooperative initiatives in the Latin American and Caribbean region.   In particular, the Meeting:

(i)   reviewed the demand for and supply of software and related services for both local and export markets from the Latin American and Caribbean region in light of global trends in the software industry;

(ii)   underscored the need for applying quality management and assurance standards to the software industry especially when dealing with the export market;

(iii)   suggested mechanisms by which software technologies could be effectively monitored and the information disseminated to software developers and service providers;

(iv)   encouraged the establishment of technology incubator centres as a means of fostering new and innovative enterprises with special emphasis on software industries;

(v)   reinforced the need for establishing software developers associations at national and regional levels as a means of enhancing negotiations with foreign software suppliers and distributors;

(vi)   proposed effective modalities for bilateral, regional and international cooperation in the electronics industry in general and the software industry in particular.

5.   The Meeting brought together some 40 regional and international experts from 15 countries. Their names appear in Annex I. The list of documents distributed at the Meeting is in Annex II.

6.   The opening session of the Meeting was presided over by Mr. Kival Chaves Weber, in his capacity as Executive Director of ICST. He is also the Director-President of Polo de Software de Curitiba S.A. The inaugural address was delivered by Mr. Ramiro Wahrhaftig, Vice-Rector, Catholic University of Parana (PUC). The Meeting elected Mr. Kival Chaves Weber as Chairperson. Mr. Atilio Reigada, Director for Promotion of the Brazilian Software Developers Association (ASSESPRO) and Mr. Enrique D'Angelo, Director, Sectoral Promotion Division from Asociación Latinoamericana de Integración (ALADI), were nominated as Rapporteurs. Representatives of UNIDO, ALADI, SELA/RITLA and COLCYT also addressed the opening session.

7.   In his inaugural address, Mr. Wahrhaftig welcomed all participants not only to the Meeting but also to the inauguration of their new conference facilities which were graciously made available for holding of this event. Mr. Wahrhaftig highlighted the fact that the software industry in the State of Parana in general and the City of Curitiba in particular were experiencing tremendous growth. This, he stressed was due mainly to the cooperative initiative of Municipal Governments, local entrepreneurs and universities in the State all working together for promoting and ensuring the development of this very important sector. Universities and R&D centres, through their well established links to local industries, continued to play key roles in providing excellent breeding grounds for young entrepreneurs. Because of these initiatives, the City of Curitiba has gained international recognition as a centre of excellence in the software industry. He further encouraged all countries in the Region to emulate the Curitiban experience and help their own local industry to grow. Speaking on behalf of the Municipality of Curitiba, the Catholic University of Parana and on his own behalf, Mr. Wahrhaftig offered to provide whatever technical and institutional assistance was required to aid countries from the region in promoting and further developing the software industry in Latin America.

8.   The various expert papers were presented and discussions took place in the plenary as well as working groups. The Meeting's agenda is in Annex III.

9.   The Meeting adopted its conclusions and recommendations on 15 December 1993. It placed on record its appreciation of the Catholic University of Parana, SELA/RITLA and ICST for providing excellent host facilities.

I. AGREED CONCLUSIONS AND RECOMMENDATIONS

Establishment of a Regional Association of Software Services Providers

10.   The Meeting recognized that the software industry from the Latin American and Caribbean region would need to better coordinate its efforts in order to sustain a steady growth and capture its share of the domestic and foreign consumer software market and related services. Participants stressed the point that the software industry is a fast moving knowledge intensive one and that only through real cooperation could the necessary technological information be collected, disseminated and used by local entrepreneurs. National software associations, they felt, should play leading roles in this endeavour by providing the institutional framework and support mechanisms through which these efforts could be channelled and possibly harmonized. The Meeting also acknowledged the fact that even though companies in the region are competing with each other for local, regional and international sales, the demand for commercial software and services would indicate there is room for everyone to prosper. However, the potential for achieving international recognition as software services providers would best be attained by working in unison.

11.   It was further recognized that only through the enactment and consistent application of anti-piracy laws could the intellectual property rights of local software developers be ensured. This, participants again stressed, could only be carried out through local associations' concerted joint efforts.

12.   The Meeting therefore recommended the establishment of an entity comprised of national software and informatics services associations from the region whose primary objective would be to coordinate the efforts made by the software industry in Latin America and the Caribbean. In particular, this regional entity would have the following objectives:

> a)   to define and provide the coordinating services necessary for undertaking regional promotional activities aimed at fostering the growth of the software industry both at country and regional levels;
>
> b)   to assist those countries or subregions which have yet to establish national software associations to do so by providing information and advisory services in the form of technical expertise. These same services would also be rendered to existing software associations or entities in the region thereby ensuring that services to their members are properly focused and efficiency maintained;
>
> c)   to enhance the marketing potential of software services providers in the region by undertaking concrete activities which will increase productivity both at local and regional levels and promote the collection and exchange of software technology information and other information related to the software industry such as:
>
>> - awareness and application of national and international anti-piracy laws;

- development and disseminating of investment models and strategies;

- budgetary requirements, preparation and disbursements;

- organizational structures;

- human resource requirements and development needs;

- overall objectives;

- general immediate objectives;

d) to collaborate with national entities in representing and upholding the interests of the region in international forums;

13. In order to accomplish this, it was suggested that the following activities be undertaken immediately:

a) the representatives of associations and national entities present at the Meeting committed themselves to promote, together with ALADI and UNIDO, this recommendation and to take the necessary actions for the convening of the first meeting of presidents of associations and software entities and this by April 1994. Presidents from national chambers of industry could be invited to attend failing the existence of a representative national entity. Representatives from the private sector should serve as catalysts in promoting this initiative with their national entities;

b) national associations or entities should request that regional and international organizations provide logistic and financial support for the establishment of such an entity and ensure its adequate operation for the first year making the best use of existing experiences and initiatives. It is further requested that these same organizations assist with the initial elaboration of a legal framework and budgetary guidelines which would be used for discussion purposes at the above-mentioned meeting of presidents;

c) make maximum use of existing informatics services, telecommunication facilities and networks in order to ensure that this entity become operational in a most efficient and timely manner and with the maximum of transparency, regardless of physical location.

Intellectual Property Rights

14. The Meeting recognized that intellectual property laws should satisfy a social welfare or national interest model. The predominant trend worldwide is to protect software under copyright laws. Furthermore, it was quite clear that the policy-making process in most countries is slower than the technological changes that are taking place especially when dealing with software technology. The ambiguities and uncertainties created by the attempted application of these

laws has caused a great deal of dissatisfaction to both producers and consumers alike. To producers because of the limited effect of these laws and to consumers because of the higher costs attached to commercial software due to piracy. Therefore, the need for laws that are clearly defined, understood, recognized and upheld at all levels of national, regional and international governments becomes crucial. Mutual respect of these laws will only serve the common good of individuals and countries which in turn will allow this industry to grow.

15. Participants were made aware of the existence of various studies dealing with this issue prepared by UNIDO through the UNDP funded project, the Regional Network for Microelectronics in the ECLAC Region (REMLAC) as well as other works carried out by various institutions in the region. These studies, participants felt, should firstly be more widely distributed to industrialists in the region and secondly they be collated into a single publication which could eventually be sold on a cost-recovery basis to interested parties.

16. UNIDO, ALADI and SELA/RITLA were requested, in collaboration with national decision-makers and representatives of the industry within the region, to use these various sources of information in order to prepare a comprehensive document which would assist in identifying the problem areas and allow for the formulation of concrete actions which could be taken in order to:

a) build awareness within the region of the necessity for enacting and upholding intellectual property laws;

b) standardize or synchronize the legislative criteria and procedures in these matters of countries in the Region;

c) facilitate the mutual recognition at the regional level of nationally developed software through the application of intellectual property laws;

d) provide a factual reference source, possibly in the form of a computerized databank, for decision-makers and industrialists of prevailing copyright laws of countries in and outside the Latin American and Caribbean region.

Local, Regional and International Barriers and Constraints

17. The Meeting acknowledged that countries from the region are faced with numerous obstacles when attempting to penetrate external markets. The existence of non-tariff trade barriers was explicitly mentioned as being a major obstacle which inhibits the easy flow of technological information as well as the import and export of software and servic s to and from countries within the region. Another obstacle which appears to exist but has no legal origin or foundation is one which can be classified as the stigma of "originating in a developing country". Participants acknowledged that consumers from countries within the region are probably the best promoters of this concept. Many companies from the Latin American and Caribbean region have therefore had to resort to either establishing a subsidiary in the targeted country or to taking on a local partner whereby the product or service becomes "domestic". The Meeting recognized that in order for local industries to grow and be accepted as viable and reliable sources of commercial software and service providers, restrictive trade barriers

should be eliminated and mutual recognition of competency be promoted and practised.

18. The Meeting therefore requested ALADI and UNIDO to document what real obstacles exist, analyze their contents and propose ways and means for eliminating them.

19. National software developers associations and entities in the Latin American and Caribbean region were also requested to promote the technological development, commercialization and growth of the sector by undertaking activities such as:

    a) holding yearly national contests for identifying the best software developed in the country and within the given year;

    b) elaborating national product catalogues for regional and international distribution;

    c) organizing training courses and seminars on various topics for local and where applicable regional software developers and distributors;

    d) exchanging information and experiences with other associations and institutions within the region.

20. With respect to the first activity mentioned above, national associations or entities, with assistance from UNIDO, should facilitate the participation of winners of national contests to regional and international fairs for the purpose of promoting these specific products and also as a means of demonstrating the potential that exists in the region.

Technology Incubator Centres and Technopoleis

21. The Meeting recognized that the software industry in the region is made up of mostly small companies started by young entrepreneurs. The majority of these companies are primarily engaged in offering consultancy services in the form of tailor made software to financial institutions in their countries. It was further recognized that the software industry is not a capital intensive industry but rather more labour and knowledge based. A great majority of these companies cease to exist after one or two years due to inadequate or non-existent managerial skills needed to carry the company through the startup years. The participants reflected that even though technological information is important, it constitutes only one form of knowledge needed by industrialists in general. The need for production, promotional, packaging and marketing expertise is especially vital in the software industry. The Meeting emphasized the urgent need for enhancing the managerial skills of upcoming entrepreneurs in order to allow them to sustain any form of future development and which would also better prepare them to compete at all geographical levels. Universities and R&D centres in the region were singled out as possible providers of solutions to this problem through the establishment of technology incubator centres.

22. Participants also agreed that while technology incubator centres attached to these institutions could provide excellent training and development

facilities, incubator managers played a key role in ensuring the proper functioning and eventual success of not only the centres themselves but also of its graduating tenants. Therefore, the ability to transmit the necessary managerial skills to incubator tenants was highlighted by all participants. Hence the Meeting suggested that countries in the region promote and establish technology incubator centres so that young startup companies can be guided and assisted in their formative years. This activity should also include an identification and a proper screening process of potential incubator managers and other business people within the community who would network with the incubator centres.

23. The general belief held by participants was that the world was on the threshold of an advanced technological era wherein the rapid increase and diversity of new technologies was changing the shape and evolution of societies. Furthermore, new institutional alliances were altering the strategy and tactics of economic development. These two statements are probably best captured in the term "technopolis" where "techno" reflects the emphasis on technology and "polis" the Greek word for city-state reflects the balance between the public and private sectors. The concept of the modern technopolis is one that interactively links technology commercialization with public and private sectors to spur economic development and promote technology diversification.

24. ALADI and UNIDO were therefore requested to coordinate and undertake with other international institutions (e.g. ATI in Austin, Texas) and programmes (e.g. CRE Columbus) the following actions:

a) the organization and holding of a meeting of technology incubator managers and potential managers for the purpose of exchanging experiences, promoting cooperation and fostering the creation and strengthening of this effective development mechanism;

b) the dissemination of information and acquired experiences in the area of incubators and the establishment of a specialized network of these same;

c) support the development and implementation of training programmes aimed at institutions or private entrepreneurs interested in establishing and promoting technology incubators in the region. The programme should include at least the following:

- seminars on software packaging, marketing and joint-ventures;
- student and/or vocational training;
- process of adaptation to local realities;

d) the development of a framework for applying the technopolis concept wherein the interlinkages between universities, R&D centres, large and small technology companies, local governments and support groups are identified and strengthened.

Quality Management and Assurance Standards

25.   In the late 70's, the term "quality" was rapidly emerging as a new emphasis in commerce and industry.   Numerous national and international standards have since evolved in the quality systems arena for commercial and industrial.   What had also become very clear to consumers or purchasers was that the term standards was not necessarily synonymous with quality.   The initial publication of the ISO 9000 series has brought harmonization on an international scale, and has supported the growing impact of quality as a factor in international trade. However, given the nature of the software industry, the International Standards Organization (ISO) elected to elaborate guidelines (ISO 9000-3) for the application of ISO 9001 (Quality systems - Model for quality assurance in design/development, production, installation and servicing) more specifically aimed at the development, supply and maintenance of software.

26.   The Meeting recognized that in order for software developers from the region to successfully export their products, they must make a concerted effort to implement effective quality systems in their organizations or improve their existing ones.   However, the ISO 9000 series of standards need to be more widespread among software industrialists.   They also need to be clearly understood and then applied accordingly.   Concern was expressed by several participants that these standards represented yet another form of "trade barrier" as the cost of certification is relatively speaking high and benefits or increased marketing potentials unsure.

27.   In order to address these issues in the most effective manner possible, the Meeting requests UNIDO to organize and hold a meeting of international experts in this field so that software industrialists from the Latin American and Caribbean region can become better acquainted with these standards and the possible impact of applying them debated.   Prior to holding such a meeting, UNIDO should provide those national associations and entities representing the software industry with informative material which could then be distributed to its members.   This material should include such things as printed technical documents, educational software, audiovisual media and others.

Software Technology Monitoring and Information Exchange

28.   It has become quite evident that with the very fast growth, in economic terms, of the software industry the opportunities for developing countries wishing to enter the international market-place have grown.   The Meeting however recognized that information is fundamental for promoting and fostering the growth of this very important sector.   Given the nature of the software industry, it is widely accepted that the technological information needed for software development is knowledge-intensive even though a great deal of artistic or creative talents will also influence the success of any given software product. The Meeting fully acknowledged that talent-related information cannot easily be documented let alone computerized.   Technological information can however be structured, computerized and disseminated.   Participants were made aware of the work already undertaken by COLCYT in the area of technology monitoring and expressed interest in having the scope of this work expanded in order to include software technologies.

29.   Caribbean countries which are considered part of the Latin American Region
expressed their discontentment with respect to the adequate flow of information
within the entire region. Participants from these countries felt that they were
being marginalized since the many documents, publications and studies emanating
from regional gatherings or projects were in most cases issued in Spanish only.

30.   The Meeting therefore recommended in the first instance that UNIDO, ALADI
and SELA/RITLA cooperate in the elaboration of a publication, in all relevant
languages, using the information generated in this encounter as well as from
other national sources and the results be widely diffused.

31.   Secondly, it was recommended that UNIDO and COLCYT/RITLA/SELA study the
implications of expanding their technology monitoring activities and include
software technologies in their respective programmes.

32.   In order for all countries of the region to take advantage of the
information generated within the Latin American Region, representatives from the
Caribbean subregion further requested international organizations in general and
UNIDO in particular to ensure that all pertinent documents be translated into
English and French.

ANNEX I

LIST OF PARTICIPANTS

Argentina

Mr. Ernesto Jorge Peraud
Secretaria de Ciencia y Tecnologia
Subsecretaric de Informática y
Desarrollo
Córdoba, 831
1425 Buenos Aires
Tel.: (54-1) 7733421
Fax.: (54-1) 7759016

Bolivia

Mr. Oscar Espinoza Guillen
FUNGEOTEC Enterprise
National Council for Science and Technology
(CONACYT)
Vicepresidencia de la República
La Paz
Tel.: (591-2) 329914
Fax.: (591-2) 2392023

Brazil

Mr. Roberto A.R. Almeida
Coordenador Executivo
Centro Internacional de Tecnologia de Software
Rua Augusto Stellfeld, 1308
Conj. 3/4
CEP 80430-140
Curitiba
Tel.: (55-41) 2224462
Fax.: (55-41) 2244948

Mr. Jose Fabio Marinho Araujo
Director
ASSESPRO Nacional
Rua 13 de Maio, 33
Bloco A/GR 509
Rio de Janeiro RJ
Tel.: (55-21) 5331185
Fax.: (55-21) 2956993

Mr. Luiz Carlos Barboza
Director
CNI/DAMPI
Av. Nilo Pecanha, 503
CEP 20044-900
Rio de Janeiro - RJ
Tel.: (55-21) 2927766 PABX
Fax.: (55-21) 2621495

Ms. Silvia Barcellos
Systems Analyst - Technology Information Department
IBICT
SAS Quadra 05 Bloco H Setimo Andar
Brasilia DF
Tel.: (55-61) 2176360
Fax.: (55-61) 2262677

Mr. Antoninho Caron
Municipal Secretary of Industry and Trade
Rua Ebano Pereira, 187
Curitiba - PR
CEP 80410-240
Tel.: (55-41) 2233535
Fax.: (55-41) 2244246

Mr. Eduardo Costa
Coordinator Softex-2000
CNPq
Brasilia DF
Fax.: (55-61) 2732955

Mr. Ricardo Dellamea
ASSESPRO Nacional
Rua 13 de Maio, 33
Bloco A/GR 509
Rio de Janeiro RJ
Tel.: (55-21) 5331115
Fax.: (55-21) 2204706

Mr. Eduardo Guy de Manuel

Mr. Edson Fermann
Bolivar Program
Technology Department/FIESP
Sao Paulo SP
Tel.: (55-11) 2898115

Mr. Jose Eduardo Fiates
Director
ANPROTEC - Fundaçao CERTI
Campus da UFSC
Caixa Postal 5053
CEP 88040-970
Florianopolis - SC
Tel.: (55-482) 343000
Fax.: (55-482) 341514

Mr. Jose Carlos Laurindo
Technical Coordinator
Incubadora Tecnologica de Curitiba
Rua Professor Algacyr Munhoz Mader, 2400
CEP 81310-020
Curitiba - PR
Tel.: (55-41) 3463141
Fax.: (55-41) 2476788

Mr. Atilio Eduardo Proença Reigada
Promocion Director
ASSESPRO Nacional
Rua 13 de Maio, 33
Bloco A/GR 509
Rio de Janeiro RJ
Tel.: (55-21) 5331115
Fax.: (55-21) 2204706

Mr. Antonio Edison Urban

Mr. Ramiro Wahrhaftig
Vice-Rector
Pontificia Universidade Católica do Paraná
Vice-Reitoria de Pesquisa e Extensao
Rua Imaculada Conceiçao, 1155
Prado Velho
CEP 80215-901
Cx.P. 16210
Curitiba
Tel.: (55-41) 3221515
Fax.: (55-41) 2254373

Mr. Kival Chaves Weber
Director Presidente
Polo de Software de Curitiba S/A
Rua Augusto Stellfeld, 1308
Conj. 2
80430-140 Curitiba
Tel.: (55-41) 3225666
Fax.: (55-41) 2241142

Chile

Mr. Rodrigo Correa Ch.
Gerente Comité de Empresas Exportadoras de Software
Comite Empresas Exportadoras de Software - Chile
Avenida Santa Maria 0503
Santiago
Tel.: (56-2) 7355755
Fax.: (56-2) 7355751

China

Mr. Shi, Jiaoying
Director of State Key Laboratory of CAD & CG
Zhejiang University
Hangzhou 310027
Tel.: (86-571) 5126780/5172244
Fax.: (86-571) 7043358
Cable: 0420

Colombia

Mr. Eduardo Feged
Vice-President
INDUSOFT-Feged & Co.
Carrera 14 No. 86A-97
Apartado 90682
Bogota
Tel.: (57-1) 2362100/2142970
Fax.: (57-1) 2566818

Mr. Andrés Restrepo Isaza
Vice-Presidente de Desarrollo
Fundación Proantioquia
Carrera 43A, No. 1-204
Medellin
Tel.: (57-1) 2683000
Fax.: (57-1) 2665374

Costa Rica

Mr. José Luis Fernández Cabrera
Gerente General Ferysol Ltda.
Ferysol
Apdo: 1657 2100
San Jose
Tel.: (506 2) 536406
Fax.: (506 2) 530007

Israel

Ms. Rachel Zucker
Manager Logistic's Financial Systems Department
MAMAN. Data Systems Center
Israel Aircraft Industries Ltd.
Ben Gurion International Airport
70100
Tel.: (972) (3) 9353429
Fax.: (972) (3) 9355040

Jamaica

Ms. Yvonne A. Brown
Technology for Microenterprise
Development
Microenterprise Project Manager
Scientific Research Council
P.O Box 350
Kingston 6
Tel.: (809) 9271771-4
Fax.: (809) 9275347

Mexico

Mr. José Icaza Chávez
Asociación Nacional de la Industria
de Programas para Computadoras, A.C
ANIPCO
Insurgentes Sur 1677
2do. Piso
Col. Guadalupe Inn
01020 Mexico, D.F.
Tel.: (52-5) 6623632/6633510
Fax.: (52-5) 6625880

Peru

Mr. Victor Gamarra
Asociación Peruana de Computación
e Informática
Montero Rosas 994
Santa Beatriz
Lima
Tel.: (51-14) 336691
Fax.: (51-14) 337735

Mr. Celedonio Méndez Valdivia
Consejo Nacional de Ciencia y Tecnología
Asesor de CONCYTEC
Ministerio de Educación - Piso 18
Lima
Tel.: (51-14) 762693

Trinidad

Mr. Ian Furlonge
Director
Information Technology College
National Institute of Higher Education
(Research, Science and Technology)
20 Victoria Avenue
Port of Spain
Tel.: (809) 6222210
Fax.: (809) 6227505
E-Mail: ianf@niherst.gov.tt

Uruguay

Mr. Leonardo Latorre
Asesor en Informática
Dirección de Ciencia y Tecnología
Ministerio de Educación y Cultura
CP 11000 Montevideo
Tel.: (598-2) 960329 (Fax & Telephone)
E-Mail: leolat@enlace.edu.uy

Mr. Walter Neri Spiller
Secretario Técnico
Cámara Uruguaya del Software
Rincón 454, 2o Piso
Cámara de Comercio
CP 11000 Montevideo
Tel.: (598-2) 961277 a 80
Fax.: (598-2) 961243

United States of America

Mr. Charles Georg
ISO Software Solutions
3089 C Clairemont Drive Suite 343
San Diego, California 92117
Tel.: (1-619) 2751726
Fax.: (1-619) 2754745

Mr. David V. Gibson, Ph.D.
Senior Research Fellow
IC2 Institute
The University of Texas at Austin
2815 San Gabriel
Austin, Texas 78705
Tel.: (512) 4784081 x 266
Fax.: (512) 4990245

Mr. Michael John Remington
Legal Expert on Intellectual Property Law
Suite 609
1000 Thomas Jefferson St. N.W.
Washington, D.C. 20,07
Tel.: (1-202) 3423342
Fax.: (1-202) 2987810

Mr. Ken Alan Wasch
Executive Director
Software Publishers Association
1730 M St. NW., Suite 700
Washington, D.C. 20036
Tel.: (1-202) 4521600
Fax.: (1-202) 2238756

UNIDO Consultants

Ms. Maria Cruz Alonso Antolin
Directora
San Gregorio, 8 3E
28004 Madrid
Spain
Tel.: (341) 3101773
Fax.: (341) 5781773

Ms. Lynda Baker
Asst. Director of External Relations
Austin Technology Incubator (ATI)
8920 Business Park Drive
Austin, Texas 78759
USA
Tel.: (1-512) 7949994
Fax.: (1-512) 7949997

Specialized agencies and other regional and irternational organizations

Asociación Latinoamericana de integración (ALADI)

Mr. Enrique D'Angelo
Director de Promocion Sectorial
Cebollati. 1461
Montevideo
Uruguay
Tel.: (598-2) 4011.''/483925
Fax.: (598-2) 4906

Comisión Latinoamericana de Ciencia y Tecnologia (COLCYT)

Ms. Ana Lorena Garcia Méndez
Coordinación Regional
Calle Independencia. Edf. ONNIS/ Ofic. 91/ Bello Campo
Caracas
Venezuela
Tel.: (582) 2634493
Fax.: (582) 322820

Sistema Económico Latinoamericano/Red de Información Tecnológica Latinoamericana (SELA/RITLA)

Mr. Manuel Montenegro
Executive Director
RITLA
SAS Quadra 05 Lote 6 Bloco H
Brasilia, Brazil
Tel.: (55-61) 3215671/2176420
Fax.: (55-61) 3215766

Ms. Lillian Alvares
RITLA Consultant
SAS Quadra 05 Lote 6 Bloco H
Salas 1109/1110
Brasilia, Brazil
Tel.: (55-61) 3225671/2176420

Ms. Adriana Semiramis Prado
RITLA Consultant
SAS Quadra 05 Lote 6 Bloco H
Brasilia. Brazil
Tel.: (55-61) 3215671/2176420
Fax.: (55-61) 3215766

Mr. Rodrigo Pires de Campos
RITLA Trainee
SAS Quadra 05 Lote 6 Bloco H
Brasilia, Brazil
Tel.: (55-61) 3215671/2176420
Fax.: (55-61) 3215766

Ms. Andrea Domingues Cordeiro
RITLA Trainee
SAS Quadra 05 Lote 6 Bloco H
Brasilia, Brazil
Tel.: (55-61) 3215671/2176420
Fax.: (55-61) 3215766

Mr. Emiliano Waiselfisz
RITLA Trainee
SAS Quadra 05 Lote 6 Bloco H
Brasilia, Brazil
Tel.: (55-61) 3215671/2176420
Fax.: (55-61) 3215766

United Nations Industrial Development Organization (UNIDO)

Mr. Klaus Billand
UNIDO Country Director
SCN Quadra 2, Lote B
70710-500 Brasilia DF, Brazil
Tel.: (55-61) 2238101
Fax.: (55-61) 2259275

Mr. Carlos Chanduvi
Industrial Cooperation and
    Consultations Service
P.O. Box 300
A-1400 Vienna
Austria
Tel.: (43-1) 211313432
Fax.: (43-1) 237288

Mr. Anthony Spina
Industrial Cooperation and
    Consultations Service
P.O. Box 300
A-1400 Vienna
Austria
Tel.: (43-1) 211315034
Fax.: (43-1) 237288

ANNEX II

LIST OF PAPERS DISTRIBUTED

Aide Memoire	UNIDO Secretariat

BRAZIL

The Brazilian Software Export Program	Softex 2000
Brazilian Software	Comdex
Plan for Integration of Software Companies to the National Program for Software Exportation	Centro Internacional de Tecnologia de Software (CITS)
Trends in Computer Technology	Centro Internacional de Tecnologia de Software (CITS)
Diferenciaçao Incubadora Empresarial -Incubadora Tecnologica Empresarial	Incubadora Tecnologica de Curitiba
A Center of Excellence in Software	Polo de Software de Curitiba S/A
Aplicaçao da ISO 9001 ao Software	Polo de Software de Curitiba S/A
Programa Bolivar - Integración regional, Innovación y Competitividad Industrial	Oficina Nacional Enlace
Guia para a Formulaçao da Consulta ao Programa Bolivar	Oficina Nacional Enlace
Programa de Trabajo 1993 - RITLA	Red de Información Tecnológica Latinoamericana (RITLA)
Ato Constitutivo da RITLA	Rede de Informaçao Tecnológica Latino-Americana (RITLA)

Informe al XVIII Consejo Latinoamericano sobre la Red de Información Tecnológica Latinoamericana, RITLA	Red de Información Tecnológica Latinoamericana (RITLA)
Normalizaçao Técnica	Associaçao Brasileira de Normas Tecnicas (ABNT)
Guia do Investidor-A nova Lei de Informática	Ministério da Ciência e Tecnologia

CHILE

La Industria Chilena de Software y Comité Empresas Exportadoras de Software	Comité Empresas Exportadoras de Software
Catalogue of available software	Comité Empresas Exportadoras de Software

CHINA

Introduction of State Key Lab of CAD & CG at Zhejiang University	Zhejiang University
Genuine Cooperation between Universities and Enterprises in China	State Key Laboratory of CAD and CG -Zhejiang University

COLOMBIA

El Software en Colombia	Asociación Nacional de Industriales de Software (INDUSOFT)

COSTA RICA

Desarrollo de Estrategias para la Innovación Tecnológica en Empresas de Informática: Enfasis en la Comercialización y la Negociación Final	Compañia Consultora FERYSOL Ltda.

JAMAICA

A Brief Highlight of the Activities of the Area of Software Technology in Jamaica	Scientific Research Council

MEXICO

Presentación y objetivos de la ANIPCO	Asociación Nacional de la Industria de Programas para Computadoras, A.C. (ANIPCO)
Mercado Mexicano de Software	Servicios de Estrategia en Electrónica, S.A. de C.V.(SELECT)

PERU

Recursos Informáticos de las Entidades del Gobierno Central del Perú	Consejo Nacional de Ciencia y Tecnología -Asesor de CONCYTEC
Asociación Peruana de Computación e Informática	APCI

TRINIDAD AND TOBAGO

Initiatives in Assisting local Software Industry	National Institute of the Higher Education (NIHERST)

URUGUAY

La Industria de Software en el Uruguay	Cámara Uruguaya de Software
Catálogo Nacional de Software Uruguay 93	Cámara Uruguaya de Software
La Experiencia Informática en el Uruguay	Ministerio de Educación y Cultura- Dirección de Ciencia y Tecnología

UNITED STATES OF AMERICA

ISO-9000 - An International Marketing Approach	ISO Software Solutions
IC^2 Institute - The first fifteen years - 1977-1992	IC^2 Institute University of Texas at Austin

Networking the Technopolis: Cross-Institutional Alliances to Facilitate Regionally-based Economic Development	University of Texas at Austin
Austin Technology Incubator	University of Texas at Austin
Growth Policy in the Age of High Technology - The Role of Regions and States	University of Texas at Austin
Creating the Technopolis: High-technology Development in Austin, Texas	University of Texas at Austin
NASA Technology Commercialization Centers NASA, Academia & American Business: A Winning Combination - The entrepreneurial spirit takes flight with NASA technologies	University of Texas at Austin
NASA (Field Center Based) Technology Commercialization Centers - Value-Added Technology Transfer for U.S. Competitive Advantage	University of Texas at Austin
Free Trade and Open Competition	Leonard, Ralston, Stanton and Danks Washington, D.C.
Presentation on the Software Industry	Software Publishers Association
Intellectual Property Rights in Industry-Sponsored University Research	Industrial Research Institute Washington, D.C.

VENEZUELA

Boletín Informativo de la Comisión Latinoamericana de Ciencia y Tecnología (COLCYT) del SELA	COLCYT
Programa de Fortalecimiento de los Sistemas Nacionales de Ciencia y Tecnología	COLCYT
Informe de la Secretaría Ejecutiva de la Red de Información Tecnológica Latinoamericana (RITLA)	Sistema Económico Latinoamericano (SELA)

ANNEX III

FINAL AGENDA

Sunday, 5 December 1993

18:00   Registration of participants at Hotel Araucaria

SESSION 1

Monday, 6 December 1993

09:00   Workshop on Innovation Software
         Conducted by Polo de Software de Curitiba

SESSION II

Tuesday, 7 December 1993

08:30   Opening remarks
         Mr. Ramiro Wahrhaftig - Vice Rector of Research and Extension of PUC/PR

09:00   Election of officers (Chairperson & Rapporteurs)
         and adoption of agenda

09:15   Presentation of UNIDO issue and discussion paper

09:40   Presentation of SELA/RITLA, ALADI, Program Bolivar,
         and COLCYT, role & activities

11:15   Curitiba - center of excellence

         Panel: Role of entrepreneurs, municipal and national authorities in
         supporting software development activities.
         (Chairman: Mr. Eduardo Guy de Manuel; Mr. Kival Chaves Weber,
         President Director of the Polo de Software de Curitiba; Mr. Antonio
         Edison, Urban Planning and General Coordination Secretarariat of
         Parana Government; Mr. Antoninho Caron, Industry, Commerce and Tourism
         Secretary of Curitiba; Mr. Ramiro Wahrhaftig, Vice Director of
         Research and Extension of PUC/PR)

15:00   Free trade and open competition
         (Mr. Michael Remington, Partner, Leonard, Ralston, Stanton and Danks,
         Washington D.C.)

World market demand & production of software
(Mr. Ken Wasch, Executive Director Software Publishers Association, Washington D.C.)

16:30 National Experiences

Brazil
(Mr. Eduardo Costa, Project Coordinator SOFTEX-2000)

Costa Rica
(Mr. José Luis Fernández Cabrera, Gerente General Ferysol Ltda.)

Wednesday, 8 December 1993

08:30 National Experiences

Brazil
(Mr. Jose Fabio Marinho Araujo, ASSESPRO)

Mexico
(Mr. José Icaza Chávez, ANIPCO)

Chile
(Mr. Rodrigo Correa, ACTI,

Colombia
(Mr. Eduardo Feged, INDUSOFT)

Bolivia
(Mr. Oscar Espinoza Guillen, CONACYT)

Peru
(Mr. Victor Gamarra, APCI)
(Mr. Celedonio Méndez Valdivia, CONCITEC)

Argentina
(Mr. Ernesto Jorge Peraud)

13:30 **Technology Monitoring**

Monitoring technological change
(Ms. María Cruz Alonso Antolin, FUNDESCO, Spain)

Trends in Computer Technology
(Mr. Roberto Almeida, Executive Coordinator CITS, Curitiba)

Information exchange and networks
(Ms. Silvia Barcellos, IBICT, Brazil)
(Mr. Ricardo Dellamea, ASSESSPRO, Brazil)

15:00   **Quality Management and Standards**

Quality Management and Assurance Standards and demonstration of ISO software (ISO 9000)
(Mr. Charles Georg, Chief Executive Officer, ISO
Software Solution, San Diego, California)

Application of international standards to software:
The Brazilian experience
(Mr. Kival Chaves Weber, Director-President,
POLO de Software de Curitiba, S.A.)

16:00   **Technology Incubators**

The University of Texas' experience
(Ms. Lynda Baker, Asst. Director, Austin Technology Incubator (ATI),
Austin Texas, USA)

The Brazilian experience
(Eng. José E. Fiates, University of Santa Catarina/Fundaçao CERTI,
Florianopolis, Santa Catarina)
(Mr. Jose Carlos Laurindo, Incubadora Tecnologica de Curitiba)

17:30   **Software Developers' Association**

Role of software developers' associations in software export negotiations
(Mr. Ken Wasch, Executive Director
Software Publishers Association, Washington D.C.)

18:30   Establishment of working groups for drafting the conclusions and recommendations

SESSION III

IV International Conference on
Software Technology-Cooperative Initiatives
organized by ICST

Thursday, 9 December 1993

08:30   Opening Session
Technology Transfer in Consortia and Strategic Alliances: US
experience (Mr. David Gibson (IC2-US))

15:30 **Panel**: Incubators and Software Parks

17:30   Meeting points
Mr. Kival Chaves Weber (POLO), Chairman

Friday, 10 December 1993

08:30   Invited Speaker, Dr. Alberto Elfes (SOFTEX 2000)

10:00 **Panel**: "Cooperative Development Propositions in
SOFTEX-2000 Core Centers"

14:00   Invited Speaker: Mr. Shi, Jiaoying, Director of State Key
Laboratory of CAD & CG

15:30 **Panel**: "International Cooperation for Software Development"

18:00   Closing of Session III: Mr. Ramiro Wahrhaftig (PUC/PR), Chairman

18:30   Presentation and adoption of conclusions and recommendations
of UNIDO/RITLA meeting

19:30   Official closing of UNIDO/RITLA meeting