WIPO ASIAN REGIONAL SYMPOSIUM ON THE IMPORTANCE OF THE INTELLECTUAL PROPERTY SYSTEM FOR HIGH-TECH INDUSTRIES

organized by
the World Intellectual Property Organization (WIPO)

in cooperation with
the Ministry of Science and Technology of the Government of the People’s Republic of China,

the State Intellectual Property Office (SIPO) of the People’s Republic of China,

the Guangdong Bureau of Science and Technology

and the Guangdong Intellectual Property Administration

and with the assistance of
the Japan Patent Office (JPO)

Guangzhou, China, July 10 to 12, 2002

ROLE OF WIPO IN PROMOTING THE USE OF THE INTELLECTUAL PROPERTY SYSTEM BY HIGH-TECH SMALL AND MEDIUM-SIZED ENTERPRISES (SMES); IP SERVICES IN SCIENCE AND TECHNOLOGY PARKS AND BUSINESS INCUBATORS

Document prepared by the International Bureau of WIPO
WIPO’S STRATEGY FOR SMEs

Given the increasing importance of new and original knowledge in remaining ahead of the competition, WIPO’s strategy for assisting SMEs worldwide has a clear and overarching objective: to enhance their competitiveness through a wider and more effective use of the intellectual property system. In this respect, the Milan Plan of Action has established a clear direction for future initiatives. Its implementation requires working towards the achievement of two main sub-objectives: a) to promote awareness in order to enable SMEs to make informed decisions concerning how to fully exploit their innovative and creative potential through an effective use of the IP system and b) to improve the policy framework and business environment to make it conducive and easier for SMEs to use the IP system.

In order to achieve the above-mentioned objectives, WIPO’s SME strategy focuses on 6 main pillars:

(i) **Targeting a new audience**: bringing intellectual property issues to business events, articles and interviews in business magazines, building IP component in innovation promotion programs for SMEs and in training programs for entrepreneurs, etc;

(ii) **Creating simple SME-friendly material on IP**: drafting, publishing and assisting in the preparation of promotional and training material for SMEs, including web sites, brochures, IP guides and training manuals;

(iii) **Focusing on new areas**: expanding WIPO’s traditional activities to new areas such as intellectual property and financing, IP and taxation, IP services within publicly and privately provided Business Development Services (BDS);

(iv) **Gathering and providing information**: collecting and disseminating information on “best practices” by institutions assisting SMEs to make an effective use of the IP system; collecting and disseminating information on case studies of SMEs using the IP system; conducting and commissioning research on IP issues of relevance to SMEs;

(v) **Establishing new partnerships**: expanding the network of partners to include SMEs associations, chambers of commerce, government SMEs support institutions and other relevant public and private service providers for SMEs; and

(vi) **Strengthening outreach activities of IP offices**: working together with national and regional IP offices to strengthen their outreach activities for SMEs.

At the heart of WIPO’s strategy for SMEs is the conviction that intellectual property represents an important tool for the development of a dynamic and competitive small and medium-sized enterprises sector in the knowledge driven economic environment. This

---

1 The Milan Plan of Action was adopted at the WIPO Forum on “Intellectual Property and Small and Medium-sized Enterprises” held in Milan, in cooperation with the Italian Ministry of Industry and Foreign Trade in February 2001; visit the web site of the SMEs Division of WIPO for the full text of the Milan Plan of Action.
conviction goes hand in hand with the understanding that WIPO’s objective requires dovetailing of IP policies for SMEs with a wide range of policies in a number of other areas aimed at promoting the development of a vibrant national SMEs sector. A strategy that seeks to promote the use of the IP system by SMEs should therefore promote the inclusion of IP issues within the overall framework of assistance and support for SMEs provided by government institutions, NGOs, chambers of commerce, international organizations, SME associations, business consultants and other institutions.

WIPO’s strategy, therefore, requires a strong network of cooperation with partners at the local, national, regional and international level. This is a necessity not only due to the nature of the objectives and the sheer number of SMEs worldwide, but also is a direct implication of WIPO’s strategy of addressing the issue from the broader perspective of promoting the development and competitiveness of SMEs in a holistic framework. As a result, WIPO is focussing on assisting Member States and their various institutions involved in supporting SMEs in integrating intellectual property aspects in the formulation and implementation of programs, policies and activities for strengthening the competitive position of SMEs in the marketplace. As such, WIPO seeks to work closely with national and regional IP offices for development of their outreach activities and with SME support institutions for building their IP-related capacity in various ways, such as through awareness raising events and publications, practical guidance through workshops and by including IP-related content in different types of guides for SMEs, and various other types of assistance on IP matters. WIPO’s activities are generally demand-driven and, wherever possible, a “training the trainers” approach is taken to maximize results from events. This approach has been followed, for instance, in India where WIPO contributed to developing an IPR awareness campaign together with the Ministry for Small Scale Industries through a series of 14 seminars in as many Indian cities. WIPO’s SMEs Division participated directly in the first two seminars and assisted in the overall planning and structure of the remaining 12 events.

Crucial to WIPO’s strategy concerning SMEs is to present the utility of the IP system from the perspective of the business community. In seeking to address the intellectual property needs and concerns of SMEs; the first step is to assess the overall needs and constraints faced by SMEs in their business activities, in order to identify ways in which the intellectual property system may assist them in addressing those needs and concerns. The focus is, therefore, on how an IP strategy can be an effective part of the overall business strategy of the SMEs for enabling it to face some of their common business challenges, including raising finances, increasing the market value of the firm, marketing products and services, finding partners and suppliers, exporting, acquiring technology, facilitating business transactions on the Internet, etc.

A. The SMEs Web site of WIPO

One of WIPO’s major initial activities was the creation of an SME web site, as a distinct part of WIPO’s main web site. The section on IP for Business on the SME’s web site explains basic IP issues in relation to some practical business concerns in a simple, business-friendly language. The web site already has over a hundred and fifty pages (A4 Size), in some 300 html screens, of substantive information and advice, in addition to full text of some very useful documents and links together parts of WIPO’s web site or outside links to various issues of interest to SME entrepreneurs, managers, investors and business consultants. Through the content on the web site, the SMEs Division of WIPO seeks to reach out to the largest number of SMEs and SME support institutions in a low-cost and reader-friendly
manner. It allows readers to rapidly select the information they are interested in and have the option to follow links for more detailed discussions of certain issues. Finally, publication on the Internet gives the possibility to update information regularly and maintain readers informed of the latest events. The disadvantage related to such an endeavor is the limited access and spread of the Internet in many countries and, therefore, the inability to reach out to a large number of potential users in SMEs. WIPO is, therefore, committed to providing paper copies of the material available therein, including documents, presentations and IP guides to enterprises and institutions requesting the information in paper format. A CD-ROM, with a search function, containing the full content of the SMEs web site, in three languages (English, French and Spanish), is presently under preparation and will be available for distribution by August 2002.

B. Overall Aims of the SMEs Web site

(i) To provide an overview of the main reasons why SMEs should consider IP issues when preparing their business plans and strategies;

(ii) To offer practical information on how to protect, manage, license, and enforce a company’s IP assets and how to deal with IP issues in e-commerce;

(iii) To disseminate information on “best practices” aimed at assisting SMEs to use the IP system and “case studies” on companies that have benefited from a sound IP strategy; and

(iv) To provide information on the SME-related activities of WIPO in general, and of the SMEs Division in particular.

Given the international nature of the information provided, there is significant scope for national customization or adaptation of the relevant content on the SMEs web site based on the national legal and institutional system. WIPO encourages national IP offices and other SME support and financing institutions to use the material and adapt it according to the needs of national entrepreneurs, and is willing to provide advice, guidance and/or other support in this respect. Needless to say that when ever this is done, it would be advisable to seek prior approval of WIPO which would normally be given very expeditiously and would not entail making any payment to WIPO; of course the copyright of WIPO over the content would have to be acknowledged and respected.

The SMEs web site is currently available in English, Spanish and French at www.wipo.int/sme/ and some parts of it are in Chinese, Arabic and Russian. The entire section on of “Intellectual Property for Business can be downloaded/printed in a single PDF or Word document, and so also for “Intellectual Property and E-commerce”.

C. Collection of “Best Practices”

On a regular basis, the SMEs Division of WIPO collects information on policies, programs and strategies adopted by a range of institutions to assist SMEs to use the Intellectual Property (IP) system effectively. In May and June 2001, the International Bureau of WIPO sent a questionnaire to IP offices, focal points on SMEs within governments, chambers of commerce and a number of other institutions (primarily SME associations) requesting information on the activities conducted by each institution related to the initiatives to be undertaken under the Milan Plan of Action. The information was gathered with a view to compiling “best practices” and enhancing wider information sharing and exchange of
experiences among and within countries. From the collection of “best practices,” one may draw some general conclusions concerning current trends in the field of promoting and facilitating the use of the IP system by SMEs.

In the first place, the traditional functions of IP offices in the area of examination, registration and grant of IP rights are increasingly supplemented with a range of additional services aimed at facilitating the access to, and reaping the benefit from, the IP system for various users including SMEs. Replies to the questionnaire show that the bulk of activities specifically targeted to the SME sector have focused on awareness raising and advice on procedural matters concerning the application for IP rights. These activities take into account that low awareness and limited knowledge of the IP system by SMEs is perceived in many countries to be one of the main issues to be addressed. Web sites, practical guides, interactive CD-ROMs, magazines on intellectual property, help-desk services on how to file a patent or trademark application and awareness-raising seminars for entrepreneurs are among the most widespread outreach activities of IP offices aimed at the SME sector. Establishing an IP culture among SMEs is a challenging task and the further dissemination of information on the IP system is a crucial first step in this direction. The Internet and other advancements in information and communication technology (ICT) have provided IP offices in some countries the possibility to reach out to an important part of the business community in a fairly inexpensive and simple manner. Web sites, in fact, are increasingly becoming one of the predominant ways of spreading basic information on the IP system and many IP offices have devoted considerable efforts at enhancing their content and distributing their IP guides, magazines, annual reports and gazettes on-line.

Many IP offices have also sought to go beyond the initial awareness-raising phase seeking to provide a wide range of information services and customized legal, financial and commercial support for a wider and more effective use of the IP system by SMEs. Mr. Tschudin from the Swiss Federal Institute for Intellectual Property described the new functions of the Swiss Federal Institute as those of a “service provider” to the business sector.  

The services are no longer limited to the registration of IP rights but seek to respond to the broader IP-related needs of the business sector. Ms. Nora Rodriguez from the Information Department of the Cuban Intellectual Property Office referred to a “radical change” in the fundamental mission of industrial property offices that are increasingly enhancing their technological and commercial information services. In Australia, IP Australia established a marketing department in order to conduct training and promotion activities at the general public and particularly to SMEs. These are but some examples of the outreach functions of the modern IP office in response to an increasing awareness of the importance of intellectual property rights for the development of SMEs.

In addition, in some countries the government institutions in charge of supporting the development of SMEs have begun to include intellectual property related services within their programs of support for SMEs. This has particularly been the case in the following areas:

---

3 Information Department of the Cuban Intellectual Property Office: Specialized service for the entrepreneurial sector and support for technological and commercial innovation of Cuban enterprises, June 2001, Cuba.
(a) innovation programs
(b) sectoral programs aimed at promoting the development of specific priority sectors
(c) export-promotion programs
(d) training programs for entrepreneurs and
(e) R&D funds to promote the commercialization of R&D results and the acquisition of new technology by SMEs.

The provision of technological information services within innovation programs, the inclusion of IP modules within training programs, the distribution of practical IP guides by SME support institutions and other similar activities have contributed to bringing intellectual property within the broader framework of SME support programs. This has enabled the IP system to no longer be perceived as an isolated theme with little relevance to SMEs but increasingly as an important element of a package of services provided by SME support institutions.

Furthermore, increasing cooperation between institutions providing support to SMEs and institutions involved in the National Innovation System, such as universities, R&D centers, IP offices, incubators, chambers of commerce, SME associations, inventors associations and venture capitalists has permitted, in some cases, to address the issue of IP promotion for SMEs in a holistic manner with greater coordination between institutions. The ambitious objective of assisting SME competitiveness through a wider and more effective use of the IP system can only be really attained through a joint effort including all relevant actors in the public and private sector. In the case of Korea, close cooperation between the Korean Intellectual Property Office (KIPO), the chambers of commerce, the Korean Patent Attorneys Association and other public and private partners have allowed to establish a network of support to SMEs in IP matters.

In summary, replies to questionnaires have reflected a wide range of initiatives or “best practices” aimed either directly at the SME community or having an indirect impact in bringing the IP system closer to SMEs. Such initiatives are evidence of the growing importance of intellectual property as a crucial element in the development of a vibrant, dynamic and competitive private sector. They have also proven that IP offices have a crucial role to play in the development of SME friendly IP services and should not take the challenge on their own but rather in cooperation with other partners concerned with the development of the SME sector. The following is a non-exhaustive list of the types of activities that were mentioned in response to the questionnaire and provide an overview the number of initiatives that may be takes in this area. Initiatives have been grouped into six broad categories.

a) Awareness-raising and Training on IP:
- Awareness-raising seminars for entrepreneurs;
- IP guides and other information material on IP for SMEs;
- Web sites with practical information and/or distance learning programs on IP for entrepreneurs;
- Collection and dissemination of case studies illustrating the success stories of SMEs using IP;
• General advice to applicants on administrative issues relating to the application process (e.g. helpdesks within IP offices);

• Multi-media products (e.g. CD-ROMs) with information and advice on management of IP assets;

• Participation in business fairs, contribution of articles to business magazines, and other promotional activities;

• Monthly radio and/or television programs on issues relating to intellectual property and innovation;

• Inclusion of IP within national training curricula for entrepreneurs;

• Proactive visits to SMEs;

b) Technological Information Services:

• Regular workshops for entrepreneurs on how to use patent information services;

• Free access to IP databases;

• Provision of a range of technological information services for SMEs at a reduced price;

• Establishment of Centers for Technological Information or decentralized branches of the IP office for the provision of technological information;

c) Financial Assistance:

• Financial assistance to SMEs for patenting their innovative products;

• Fee reductions for SMEs applying for IP rights;

• Partnerships between IP offices and associations of patent attorneys for the provision of free legal advice for SMEs;

d) Customized Advisory Services on IP:

• Legal and managerial assistance to enterprises on how to manage their IP assets and how to develop an IP strategy;

• Promotion of and legal assistance on the use of collective marks, certification marks and geographical indications by small-scale businesses;

• Pilot projects on IP management with a selected group of enterprises;

• Assistance in the creation of trademarks or distinctive signs;
e) Assistance for Technology Transfer:

- Creation of databases on licensable technologies (e.g. virtual marketplaces for IP);
- Tools for the valuation of IP assets;
- Business fairs of licensable technologies where potential licensees and licensors may meet;
- Advice for licensing negotiations;

f) Partnerships Between Institutions:

- Partnerships between IP offices and other institutions providing services to SMEs such as chambers of commerce, incubators, research centers and science parks for the inclusion of IP within a wider range of services to SMEs;
- Partnerships with universities and public research centers for the establishment of Technology Licensing Offices (TLOs), for the promotion of the development of spin-off companies and for the inclusion of IP issues within technical and management degrees; diplomas, etc.

Short summaries of a number of experiences in the provision of IP services to SMEs have been compiled below:

**IP Australia**

IP Australia has taken an active role in raising awareness and educating SMEs about the importance of the intellectual property (IP) system. Its main activities in this area include:

- Reader-friendly publications: over 35,000 information kits on IP are distributed every year;
- Easy-to-use multi-media products: CD-ROMS with assistance on how to manage IP assets;
- Preparation of SME case studies illustrating the use of the IP system by a number of Australian SMEs;
- Practical information on the web site including a section on business strategies and one of IP managers and professionals providing services to SMEs;
- Seminars for SMEs

National Institute of Industrial Property of Brazil

In order to promote the use of the IP system by SMEs the National Institute of Intellectual Property of Brazil (INPI) offers the following services and incentives:

- 50% discount for trademark applications, for the registration of technology transfer contracts and for technological information services for SMEs;
- 60% discount for patent applications for SMEs;
- Information on procedures for acquiring intellectual property right in the INPI website.

Moreover, the INPI has initiated a program of activities in cooperation with the SEBRAE, the government agency in charge of promoting the development of SMEs, as well as with technology incubators. Finally, in cooperation with a non-profit organization, the INPI is preparing intellectual property guides for SMEs.

Cuban Industrial Property Office

The Specialized Service for the Enterprise Sector, established by the Cuban Industrial Property Office, offer a package of information services and advice to SMEs. Such services consist in:

- State-of-the-art searches;
- Training and advice in intellectual property issues;
- Suggestions and advice for the selection of trademarks, trade names and slogans;
- Trademarks searches;
- IP diagnosis for enterprises;
- Courses and workshops.

For more details see www.ocpi.cu

Foundation for Finnish Innovation

The Foundation for Finnish Inventions supports and promotes the development and exploitation of Finnish inventions. Legal advice and financial support for patenting inventions is an important part of the activities of the Foundation. The activities of the Foundation may be grouped into six categories corresponding to six different phases in the development of an invention:

- Promotion of inventive activities;
- Evaluation of inventions (market potential, novelty and inventiveness, business potential, etc);
Advisory services (invention-specific advice, IP rights, other advice);

Protection of inventions (assistance with patent applications and other IP rights);

Product development (planing and design, prototype development, technical and commercial advice);

Marketing (including advice on licensing);


INSTI Project - Germany

Since 1995, the German Federal Ministry of Education and Research has established a program to promote the use of the patent system and the development of innovative technologies. Some of the program's main features include:

- financial assistance to SMEs applying for the first time for a patent or utility model
- an innovation market, or database of new technologies for interested parties to seek new business opportunities
- training for inventors and business managers on innovation management, creativity and evaluation techniques, industrial property rights and development of products and processes.


Small Industry Development Organization (SIDO), of the Indian Ministry for Small-Scale Industries, Agro and Rural Industries

The Small Industry Development Organization (SIDO), the nodal development agency of the Ministry for Small Scale Industries, Agro and Rural Industries (SSI & ARI) of India, has recently published a new web site with substantial information on intellectual property for Indian SMEs. SIDO is also conducting a series of 16 workshops around the country on “Intellectual Property for Small and Medium-sized Enterprises” in cooperation with WIPO’s SMEs Division.

Enterprise Ireland

Enterprise Ireland has been providing support on intellectual property to inventors and SMEs through the Intellectual Property Assistance Scheme since 1998. The main activities of the scheme may be summarized as follows:

- Advice on the protection of inventions
- Funding for patent applications
- Advice on the development and commercialization of inventions


Japanese Patent Office

The Japanese Patent Office (JPO) is currently involved in four patent-related measures designed to promote the use of the intellectual property system by SMEs and to encourage technology transfer:

- **Promotion Policy for Patent Utilization and Technology Transfer**, including a database of licensable technologies and the organization of patent distribution fairs;
- **Support for the Development of Technology Licensing Offices** within universities and research centers;
- **Fee Reduction and Exemption**;
- **Support for Self-Evaluation of Patents & IP Strategy** through the creation of indices for patent valuation and assessment of IP strategies

The Korean Intellectual Property Office

The Korean Intellectual Property Office (KIPO) provides a wide range of services to small and medium-sized enterprises (SMEs) including the following:

1. Through an agreement with the Korea Patent Attorneys Association (KPAA), free legal advice is provided to SMEs on their first patent application.
2. 50% fee reductions for SMEs and 70% for micro-enterprises.
3. Free education on patent search systems through regular workshops.
5. Establishment of a patent technology market.
6. Small and Medium-Sized Enterprises’ IPR Acquisition Campaign in cooperation with 14 related organizations, including the Korean Chamber of Commerce.


**Mexican Institute of Industrial Property**

The Mexican Institute of Industrial Property (IMPI) organizes a wide range of activities and provides a series of services and incentives to facilitate and promote the use of the intellectual property system by SMEs. Activities and services include:

1. 50% fee discount for the acquisition of patents, utility models, industrial designs, lay-out designs of integrated circuits and technological information services;

2. Seminars, workshops and courses for entrepreneurs as well as information in the IMPI website;

3. Free user guides on patents, utility models, industrial designs, distinctive signs, and technological information products and services;

4. Conferences with universities and enterprises to disseminate information on the issue;

5. Establishment of provincial IP offices in order to spread the use of technological information services and to provide advice on how to apply for IP rights to enterprises.

For more details, see: [www.impi.gob.mx](http://www.impi.gob.mx)

**National Institute for the Defense of Competition and of Intellectual Property Rights of Peru**

The National Institute for the Defense of Competition and of Intellectual Property Rights of Peru (INDECOPI) recently published on its web site a document entitled “Services provided by the INDECOPI for SMEs” in which it described, inter alia, the services which the various departments of the institute provide to SMEs in IP related matters, such as:

- Legal assistance to all clients requesting it;
- Promotion of collective marks for SMEs by raising awareness on the mechanisms of registration of collective marks and providing legal advice on how to protect collective marks;
- Inventors awards;
- Cooperation with private enterprises in events aimed at promoting the creativity of enterprises;
- Other events such as presentations in mass-media (radio) and talks aimed at specific enterprise sectors.
For more details, see: www.indecopi.gob.pe

**Intellectual Property Office of the Philippines**

Initiatives by the Intellectual Property Office of the Philippines include:

- **Reduced Fees**: small entities pay a reduced fee of 50% for all services
- **Technology Information Brokering System and Matching Center (TIBMC)**: the TIBMC is currently being developed and is meant as a project aimed at the dissemination of patented technology for the benefit of SMEs
- **IP Information and Education**: through workshops and seminars at a provincial level
- **Information Unit**: delivers advice on procedures for patenting and registering trademarks including some advice on how to formulate specifications and claims

**Intellectual Property Office of Singapore**

The Intellectual Property Office of Singapore (IPOS) administers the Patent Application Fund (PAF), established in 1993 by the National Science and Technology Board. The fund supports 50% of the legal, official and other related fees incurred in the process of applying for a patent, up to a maximum of S$30,000 for each invention and is mainly targeted at SMEs. All companies of which Singapore citizens own at least 30% of the equity may apply as well as any Singapore citizens or permanent residents.

IPOS has also recently introduced a new marketplace platform on the Internet enabling IP owners, potential buyers and sellers, and licensees to come together and commercialize IP assets. See http://wwwSurfIP.gov.sg

**Spanish Office for Patents and Trademarks**

The activities of the Spanish Patent and Trademark Office directed to SMEs included the following:

- **Sensitization Campaigns**: “Awareness-raising days” in chambers of commerce and technology parks (a total of 19 over the past 1 1/2 years), courses for post-graduates organized by the Superior Council for Scientific Research and courses in universities (a total of 14 over the past 1 1/2 years)
- **On-line services for technological information**: a total of 1,328,998 searches over the initial 6 months of 2001
- **Program for spin-off entrepreneurs** in cooperation with a Spanish university

**Swansea Intellectual Property Rights Initiative (Wales, UK)**

The Swansea Intellectual Property Initiative was established as a pilot project with the aim of assisting local entrepreneurs to appreciate the value of their intellectual property assets.
Under the scheme, participants may benefit from free expert advice and a 60% grant (up to £6000) towards the commercial and legal costs relating to the acquisition of intellectual property rights for their business. Through its activities the Initiative has been able to enhance IP awareness amongst local SMEs. Currently more than 125 SMEs have signed up, as members, to the Initiative and 24 firms have been supported to acquire intellectual property protection.


Autonomous Service of Intellectual Property of Venezuela

The activities of the Autonomous Service for Intellectual Property of Venezuela (SAPI) that aim to promote the use of the IP system by SMEs are as follows:

- Participation in the development of industrial parks throughout the countries by organizing seminars, talks, and awards to promote creativity among SMEs;

- Creation of decentralized units of the SAPI for the dissemination of information on intellectual property;

- Agreement with the Fedeindustria in order to develop an education and promotion campaign on IP rights;

- In cooperation with the Ministry for Education, Culture and Sports, organization of a training course for intellectual property teachers for technological institutes.

Virginia Biosciences Development Center (VBDC) of the Virginia Bio•Technology Research Park (VBRP), Richmond, VA, USA

The VBRP is Virginia's research park for the life sciences. Located in Richmond adjacent to the medical sciences campus of Virginia Commonwealth University and the Medical College of Virginia Hospitals, the Park is home to 34 biotechnology, bioscience and related companies and research institutions.

The VBDC was formed by legislative authority granted to the VBRP in Senate Bill 568, which was enacted during the 2000 Session of the Virginia General Assembly. VBDC was formally created following action by the VBRP Authority Board on September 19, 2000. The Virginia State Corporation Commission issued the VBDC’s Charter effective October 13, 2000.

The successful launch of a life sciences technology company requires specialized expertise, suitable facilities, and significant amounts of capital. But even when those requirements are met, biotechnology start-ups still face significant market, regulatory, and capital risks. To help life sciences start-up companies meet and manage these inherent challenges, the Virginia Bio•Technology Research Park (VBRP) has established a development center, located in the Park.
Reducing the Risk and Cash Needs of Start-Up

The Virginia Biosciences Development Center (VBDC) is a non-profit, 501(c)(3) corporation, created to deliver fee-based management services and business support to seed and pre-seed start-ups, as well as to other tenant companies in the Park’s biomedical incubator. By taking advantage of the resources available from the VBDC, start-up companies can significantly reduce their risk and cash requirements.

Fee-Based Support and Management Services

Functioning as a virtual business accelerator within the Park’s incubator, the VBDC will provide two types of services to start-ups, tailored to satisfy each client company’s needs:

1. Business support services, including bookkeeping and accounting, reception, clerical functions, administrative assistance, general Internet research, and human resource administration.

2. Hands-on management assistance, such as providing one-on-one business consulting, serving as interim senior management, preparing business plans, addressing intellectual property issues, validating nascent opportunities, securing start-up funding, recruiting personnel and staff, organizing kitchen-cabinet mentoring boards, and creating networking opportunities on a regional, state, and national basis.

Plus Professional Services at Discounted Rates

Professional services are another important but costly resource for start-up companies. So, continuing to leverage its non-profit status, VBDC has also created access to a group of pro bono professional service firms willing to work with VBDC client companies at discounts of up to 50%.

Pro bono discounts apply only to labor hours, not to out-of-pocket expenses such as travel, filing fees, and postage. Participating firms may receive tax benefits from their pro bono discounts, which can be treated as a contribution to a 501(c)(3) non-profit corporation (VBDC). The initial group of participating pro bono companies includes general legal counsel, intellectual property counsel, accounting & audit, advertising and public relations, and human resource specialists.

For more information on VBDC and what we can do to make your start-up a success, contact David R. Lohr, Executive Director, at 804-828-7048, Fax: 804-827-8230, or Email: drl@vabiotech.com.

Nova Universities Technology Inc. (NU-TECH), Canada

Company Profile

NU-TECH is the leading academic technology transfer office in Atlantic Canada. It is headquartered at Dalhousie University in Halifax, Nova Scotia. It is the unified office of technology transfer and commercialization representing several Maritime Canada universities and colleges, and is a maritime resource of expertise in intellectual property protection, licensing, and spin-off company creation.
Services

NU-TECH provides the following technology management and commercialization services:

- Confidential Disclosure
- Patent Protection
- Technology and Market Assessment
- Industrial Liaison
- Technology Collaborations and Partnering
- Licensing and License Administration
- Business Start-up Planning
- Venture Financing Options
- Early Stage Management
- Marketing and Distribution Agreements

Vision

To achieve economic and social benefits and returns from efficient intellectual property management, from effective liaison and partnerships with industry, and from successful technology commercialization.

Mission Statement

NU-TECH shares in the fulfillment of its member universities common mission of education, research and public service. NU-TECH serves the faculty, staff, students and administration of member universities by carrying out its mission to:

- Encourage invention and innovation
- Protect intellectual property rights assigned
- Transfer research results to the public by bringing scientists and the business community together
- Generate income for research, education, and commercialization
- Contribute to regional and national industrial competitiveness and economic development

Strategic Internal Partnerships:

**Dalhousie University**

Maclean's Magazine Guide to Canadian Universities notes that Dalhousie University remains "the research powerhouse of Atlantic Canada".

**The Nova Scotia Agricultural College**

The Nova Scotia Agricultural College (NSAC) is an internationally respected teaching and research institution providing quality education in the science and management of agriculture and related disciplines.

**Dalhousie Medical School**

The Dalhousie Medical School is the fourth oldest of the 16 medical schools in Canada. It is a highly research-intensive
Institution and boasts some of the country's top investigators and educators.

**Dalhousie Faculty of Engineering**

The Technical University of Nova Scotia merged with Dalhousie University in 1997 and is the largest school of study in the area's of Architecture, Engineering, and Computer Science.

For more details visit their web site at http://www.dal.ca/~nutech/Corporate_Profile.htm

**Loughborough University Innovation Centre, UK**

High tech business is set to receive a significant boost as work gets underway to create one of the East Midlands' largest incubation centres for high growth start up companies. The Innovation Centre will provide up to 45,000 square feet of office and laboratory space for up to 45 fledgling companies and act as a magnet for attracting innovative start-ups from the East Midlands and further afield. Loughborough Innovation Centre will be fully transformed and open for business in July 2002.

Already widely regarded as a high tech cluster, Loughborough attracts global interest as it is extremely well served in terms of infrastructure and accessibility. There is currently a lack of space for young innovative companies in Loughborough. The new Innovation Centre will directly address this growing need and act as a magnet for attracting innovative start ups from the East Midlands region and further afield. The creation of the Loughborough Innovation Centre will enable a step change in the enterprise culture in the region.

Loughborough University, with the highest spin-out rate per research £ of any UK university, is committed to the regional innovation strategy. The University's track record in establishing successful start-up companies demonstrates its 'can do' attitude in the field of innovation. The applied nature of the University's research and its excellent links with industry make the institution a natural focus for a large incubator centre.

This exciting new initiative represents a collaboration between the University, Loughborough Advanced Technology Initiative (LATI), Charnwood Borough Council and Pronovus, the primary incubation service in the East Midlands, with funding from the East Midlands Development Agency (emda).

Loughborough Innovation Centre will provide up to 45,000 square feet of office and laboratory space for up to 45 fledgling companies. Loughborough Innovation Centre aims to encourage technology, innovation and employment in the Loughborough area. We are therefore seeking people with new and early stage high tech companies and business ideas with the potential for high growth. While University spin outs will be one source of tenants for the Centre, we also seek to attract innovative start up companies from inside the East Midlands, from outside the region and overseas.

**Incubation services offered by the Loughborough University Innovation Centre:**

Incubation services are provided from the pre-start phase through to graduation from the Centre, and include services such as:

- mentoring, information provision, and sign-posting
• advice and access to specialist advice, legal, contractual and intellectual property advice
• assistance with applying for start-up and development funds
• business planning support, networking, training, mediation, incentivising eg business plan competition, receptionist services,
• access to University expertise, and membership of Loughborough Enterprise Club and Loughborough Advanced Technology Initiative (LATI)

For details visit the web site of the Loughborough University Innovation Centre at http://www.lboro.ac.uk/business/pages/innovationcentre.html

I-C-IP LTD, Australia

I-C-IP stands for "I see IP", "I see Intellectual Property" and "I see Internet Protocol". The I-C-IP LTD is a full-service incubator and investment fund created to turn innovative Internet and e-business ideas rapidly into thriving listed companies. I-C-IP LTD was founded in 2000 and is located in tech-friendly Perth and Sydney, Australia. I-C-IP LTD invests seed capital in highly innovative start-ups with significant intellectual property, preferably patentable.

I-C-IP LTD incorporates a strategy of integrated capital investment, functional consulting and active involvement, creating a collaborative partnership with our portfolio companies. I-C-IP LTD provides these new companies with customised turnkey support, as well as equity investment capital. This innovative strategy allows entrepreneurs to focus on managing their business, rather than investing their time in less-productive infrastructure and capital raising activities. This approach breathes life into the process of evolving from concept phase to business reality at Internet speed. I-C-IP LTD is a specialist in both IPOs and back door stock market of new generation venture funded start-ups.

Deepening the functionality of the collaborative partnerships, I-C-IP LTD also provides proactive hands-on strategic and tactical consulting related to the vital areas of marketing, commonwealth and state R&D grants, overseas investor support, technology, human resources, recruiting, legal, accounting and taxation, stock market floats, business strategy, market research, branding and organisational structure. The benefit of this integrated approach is clear – the probability of success is increased tremendously through the creation of a nurturing environment wholly focused on the well being of each portfolio company.

I-C-IP LTD receives an equity stake in each portfolio company in return for financing and support services, though I-C-IP LTD usually does not take a controlling interest. Each of I-C-IP LTD’s portfolio companies is a separate legal entity and is directed by its own management team. I-C-IP LTD treats its portfolio companies as both partners and clients.

Success = Innovation x Collaboration x Capital

Unique Approach

I-C-IP LTD is expected to have a significant impact on the Australian seed capital market boosted by its novel approach of both IPOs and backdoor listings of the best companies under its management covering both European and Australian stock exchanges. I-
C-IP LTD has a unique approach reflected in its value proposition to both its shareholders and start-ups in its investment portfolio.

**Value Proposition for Shareholders**

- Participate in a publicly listed company
- Participate as preferred investors in I-C-IP LTD sponsored IPOs
- Benefit from the listing of the best companies under our management
- Shareholders that have registered their interest and signed for non-disclosure will be invited to participate in the deal flow as additional investors by pooling their investment under I-C-IP LTD funds management, thus benefiting from I-C-IP LTD's commercial and technical due diligence and evaluation and will have visibility to the various services I-C-IP LTD provides for its start-ups.

The services of I-C-IP LTD include technical and commercial due diligence, market research, financial modelling, business planning, marketing and sales planning, assistance in obtaining commonwealth R&D grants, public relations and advertising, global promotion and business opportunities, intellectual property advise and protection, search for executive management and non-executive board positions, and share market listing services.

**Investment Preferences**

- Minimum Investment: $500,000
- Maximum Investment: $5 million
- Funds Available for Investment: $50 million target
- Stage of Investment: Seed, start-up, early stage
- Types of Management Support: Strategic, operational, international marketing, protection of intellectual property rights, joint venture formation, third party capital raising, backdoor listing and IPO float services
- Board Representation Required: Yes
- Industry Preferences: Information technology and telecommunications, Internet services and e-business
- Specific Exclusions: Real estate, resources
- Geographical Preferences: Australia

**Mission**

The mission of I-C-IP LTD is to provide outstanding returns for investors by subscribing equity into mainly private companies that show the potential to develop into substantial corporations with potential for becoming listed on the stock market. Investors in I-C-IP LTD have the full liquidity of a listed share and benefit from IPOs of their funded investments. I-C-IP LTD takes substantial minority equity positions of up to the low millions of dollars; and the funds subscribed must stay in the company to help fuel growth. The investment horizon is 4-6 years. A primary target for investment are Australia's e-businesses, Internet services, emerging telcos, companies who have found new markets with significant intellectual property either patentable or in trade secrets and require capital to allow them to compete in and exploit these new markets. Besides providing equity capital we add value by providing the management and discipline required to attract public market price/earnings multiples. Our vision is to be recognised as one of Australia's leading and most innovative Development Capital fund managers.
**Investment Process**

*Suitability Of Proposal*

The investment process begins with I-C-IP LTD conducting an initial review of the proposal to determine if it fits with the firm's investment criteria. If so, a meeting will be arranged with the entrepreneur/management team to discuss the business plan.


**Gemma Frisius Fund K.U.Leuven (GFF), Belgium**

Gemma Frisius Fund K.U.Leuven (GFF) is a seed capital fund. It was founded on October 14, 1997 as a joint venture involving the K.U.Leuven (Catholic University of Leuven), the 'Almanij KBC' Group and the 'Fortis' Group, represented by respectively K.U.Leuven Research & Development, KBC Investco and VIV. The objective is to stimulate the creation and growth of university spin-off companies by:

1. Providing seed capital (first and second round) in the very early phases of research-based spin-off companies.
2. Combining the research & technology transfer expertise of the university with the financial and investment expertise of the financial partners.
3. Setting-up contact networks to detect and explore new opportunities and to stimulate entrepreneurship and spin-off growth from the K.U.Leuven research base.

GFF started with a capital of 2.5 M EUR, which is extendible to 12.5 M EUR. At present it manages 6.25 M EUR.

**GFF and the socio-economic mission of the K.U.Leuven**

GFF supports the K.U.Leuven in taking its socio-economic responsibility of creating companies with a high growth and job creation potential. Spin-off creation is indeed an important mechanism to transfer to society knowledge and technology developed at the university. This is part of the more general task of providing science based services to the community, which besides scientific education and research is one of the three core activities of a university, as indicated by a series of decrees of the Flemish Government.

It is the expertise of the researchers and their willingness to act as entrepreneurs which form the basis for a successful spin-off program. While education and research will always be the prime objectives of any university, it is an explicit policy of the K.U.Leuven to further promote and support this climate of entrepreneurship. In addition to the foundation of GFF, this has resulted in initiatives such as the interfaculty course "Introduction to Entrepreneurship" and Leuven.Inc, the Leuven network for high-tech entrepreneurship.

**Investment Policy**

1. GFF’s scope is not restricted to a specific technology, but it will consider every opportunity involving know-how of the K.U.Leuven. However, there has to be an exit possibility within the 10-year lifespan of the fund. In addition, GFF requires a financial investment by the founders.
2. As a seed capital fund, GFF mainly focuses on first round financing. The contribution for a specific project is limited to about 0.5 M EUR. In order to support the successful growth during the initial years, GFF also provides second and third round financing together with internal or external partners.

3. The capital is made available in exchange for capital shares. Contribution of intellectual property (IP) by the founders and the University can be rewarded by founder shares. In addition, warrants can be created for management and key personnel.

4. GFF offers active guidance in the process of (international) growth and will be involved in the company's board of directors.

Organisation & support

1. Scouting network: The operation of GFF is grafted on the activities of the technology transfer office of the university, K.U.Leuven Research & Development. Most opportunities are presented to GFF via the network of K.U.Leuven R&D, which at present includes three liaison officers and ten innovation co-ordinators, being academic researchers remaining in their research department and having a basic knowledge of entrepreneurship and intellectual property rights. The officers and co-ordinators assist the researchers in the process "from idea to business" including defining the most appropriate Intellectual Property strategy. The resultant business model and business plan is presented at GFF.

2. Gemma Frisius Fund: The operational units of GFF consist of two boards: the advisory board and the board of directors. The advisory board, composed of advisors of the different GFF partners, meets at least every two months. It is responsible for the evaluation of the spin off ideas and assists in the (further) fine-tuning of the business plan. Given the innovative nature of the products/services, the finalisation of the business model often requires several rounds of interaction. Thereafter, the final business plan is presented for approval to the board of directors consisting of members of K.U.Leuven R&D, KBC-Investco and Fortis -VIV. Once the project is approved, foundation support is provided (drafing of the memorandum of association, bye-laws, shareholder agreement, technology transfer and collaboration agreements). Support on strategic decisions with regard to the process of (international) growth is provided through participation in the Board of Directors and personal contacts with advisors of the GFF partners. Due attention is paid to "corporate governance" by appointing independent Directors.

3. Business community network: Through an extensive network of national and international contacts, GFF and its partners will look for potential commercial partners both during the start-up and initial growth. If necessary, GFF contacts external funds and/or venture capitalists. In co-operation with the various departments of the K.U.Leuven, the Innovation & Incubation Centre, the Science Parks and the city of Leuven, GFF assists in finding the right infrastructure for every spin-off.

For more details visit http://www.kuleuven.ac.be/admin/lr/niv3pbis/SpinOffs/GFF.htm
D. Selected Current Activities of WIPO’s SMEs Division

A brief introduction is as follows:

(i) Preparation of a CD-ROM with the content of the SME web site (www.wipo.int/sme) in three languages (English, French and Spanish) containing over 300 pages of practical information for SMEs and SME support institutions. The product will be ready by mid-August 2002.

(ii) Nationally Focused Action Plans (e.g., for the Philippines and Mongolia) which include activities such as the following:

- Analysis of the present use of the IP system by SMEs
- Preparation of user-friendly guides and toolkits containing information and promotional products addressed specifically to SMEs
- Assistance in developing web pages addressed to SMEs with information on IP management, how to use patent information, etc
- Organization of seminars on IP for SMEs

(iii) Organization of national, sub-regional and regional seminars/workshops on IP for SMEs, with the participation of SME associations, government focal points for SMEs, business consultants, entrepreneurs and investors. (e.g. WIPO Workshop on Intellectual Property and SMEs for in Rio de Janeiro Brazil; WIPO National Forum on Using the Intellectual Property System for Business Success of Small and Medium-sized Enterprises, Valletta, Malta, etc.)

(iv) Preparation of practical IP guides. The first two entitled “Trademarks for SMEs” and “Successful Technology Licensing” will be published in the second half of 2002.

(v) Monthly e-mail updates for subscribers of the SME web site at: www.wipo.int/sme

(vi) Monthly articles on IP under ‘IP and Business’ published in the WIPO magazine and on the WIPO web site; reproduction of these articles is encouraged.


(viii) Organization of a session on “Contemporary African Art and the International Market” in Dakar (Senegal) during the Dakar Biennial of Art, in cooperation with the International Trade Centre, Geneva, Switzerland.

(ix) Training the trainers workshops on IP for SMEs in cooperation with the Ministry for Small Scale Industries in India and preparation of customized IP guides for SMEs in the machine tools industry and the toy industry in India, in cooperation with UNIDO.
(x) Research report on Use of the Intellectual Property System by SMEs in Norway

(xi) Collection of ‘best practices’ and case studies.

(xii) Contribution to and participation in SME and business events organized by government SME focal points, international organizations and other institutions (e.g. Ministry of Small and Medium Enterprises in Croatia, World Association of Small and Medium-sized Enterprises, UN regional economic commissions, regional development banks, etc)

III. AREAS FOR POSSIBLE FUTURE COOPERATION BETWEEN CHINA AND WIPO

A non-exhaustive list is outlined below for discussion:

(i) Cooperation/assistance for the design or implementation of information/advisory services for SMEs on intellectual property;

(ii) Nationally Focused Plan of Action (NFAP), based on the Milan Plan of Action;

(iii) Market and other research studies on issues related to intellectual property and SMEs;

(iv) Awareness raising workshops, seminars and other activities in partnership with SME associations, chambers of commerce, business/technology incubators, financing institutions, and other SME support institutions as well as private sector business advisors;

(v) Partnerships with SME support institutions in order to include intellectual property services within the broader framework of assistance to SMEs;

(vi) Partnerships with SME support institutions for development of customized web sites (or sections of web sites) on intellectual property for SMEs;

(vii) Development of customized guides on intellectual property for SMEs in paper format or in electronic form, such as multi-media products (e.g. CD-ROM);

(viii) Development of special packages of IP services/information for specific sectors such as agro-based SMEs, SMEs in E-commerce, SMEs in biotechnology, SMEs in the manufacturing industries, SMEs in the craft sector, SMEs in copyright/cultural industries, etc;

(ix) Assistance to SMEs in licensing and technology transfer; and strengthening of value added technology information services for SMEs;

(x) Assistance to artisans, cooperatives of artisans and small entrepreneurs in the crafts sector for a better understanding of the legal means of protecting crafts; preparation of practical guides; inclusion of basic IP training in courses for artisans;

(xi) Strategies for promoting the use of collective marks, certification marks and geographical indications by SME associations and cooperatives of artisans;
(xii) Strengthening university-industry links, through cooperation with technology/business incubators and university spin-offs;