

SECTION I

The Setting

In the context of the galloping pace of technological progress and the transition from command economies to market-oriented systems, small and medium enterprises (SMEs) have become the prime movers of economic growth through the creation of employment, incomes, taxes, innovations and exports. Governments and international donors are searching for new ways to support these enterprises, as well as to enhance the effectiveness, impact and financial sustainability of their support services.

A. Purpose of Assessment

USAID/Kyiv has had major programs for promoting small enterprises, with significant work on policy and regulatory reform. In August 1997, using grants totaling \$4.7 million, the Mission initiated a program to establish pilot business incubators. Under this program, Loyola College with a grant of \$3.1 million over 24 months is working on two technology business incubators – the Kharkiv Technologies Incubator and the Kyiv Center for Innovation Development. With a grant of \$1.6 million over 30 months, Counterpart International has started the Counterpart Meta Center at Lviv. With some months still remaining on these programs, USAID/Kyiv has undertaken this incubator study to guide its future course of action.

The purpose of this assessment is *‘to assist USAID/Kyiv in understanding the current overall environment for the growth and sustainability of business incubators in Ukraine, and provide recommendations for the formation of the Mission policy’*. The scope of work is in Annex A. The tasks are three-fold:

- To review incubation concepts and developments in restructuring and other countries,
- To assess the performance of the Mission-supported business incubator program within the policy environment in Ukraine. Also, to visit non-USAID supported incubators and other business service providers,
- Based on the global experience on incubation and the conclusions of this study, to provide recommendations toward the formulation of a Mission policy regarding the support of future business incubation development in Ukraine, as warranted.

B. Work Plan and Report Structure

The work plan covered briefings at USAID/Washington and USAID/Kyiv, followed by visits to the three incubator locations and discussions with the management teams and member-companies, Government of Ukraine agencies concerned with entrepreneurship and SME development, and other stakeholders. In addition, two other incubators and several business support centers (BSCs) were visited.

Prior to the team's arrival, a comprehensive questionnaire was sent to the Mission for review and consultation. This questionnaire formed the agenda for meetings with the management teams of the incubators and the fact-finding process in Ukraine. To the extent possible, given the complexity of and lack of transparency in Ukrainian regulations, and within the limited time available, information gathered was verified. Where such was not possible, it is so noted in the assessment. When and where appropriate, the assessment team took advantage of the meetings to pass on and suggest innovative incubation management practices from selected countries worldwide.

At the end of three weeks of field work (September 23 to October 16, 1999), a draft report was presented and discussed with the Mission. Based on comments received from USAID/Kyiv during the presentation and several weeks later after a review of the draft report, this final report was submitted in November 1999. The work plan is in Annex B, persons met in Annex C, and references in Annex D.

The report is structured as follows:

- *Section 1* introduces the assessment and outlines current USAID activities on SMEs.
- *Section 2* presents business incubation concepts together with related developments in selected countries (Annex E), as well as lessons drawn from them.
- *Section 3* reviews the Loyola College and Counterpart incubators, their objectives, organization, services, facilities, linkages to other support activities, special features, their effectiveness and financial sustainability.
- *Section 4* presents the findings of the assessment team on the key issues.
- *Section 5* summarizes the main conclusions on planning and operational issues.
- *Section 6* makes recommendations on future USAID strategy and suggests proposals for the business incubation program in Ukraine.

C. Obstacles To (and some opportunities for) SME Development

Barriers to starting and operating a business in restructuring countries include many that are a legacy of former command systems. These constraints prevail in Ukraine and adversely affect the performance of incubators. Problems arise from the proliferation and frequent changes in legislation and regulatory processes and from the conditions of the market. Some obstacles confronted by business incubators and their members, as experienced by managers and tenants are introduced in Annex F.

Despite the difficult conditions, countries in transition have some important advantages over many developing countries:

- Strong educational and scientific facilities. These institutions provide a work force with a high level of technical skills. It was stated at the Small Enterprise Summit (October 1, 1999) that of the 7 million private entrepreneurs in Ukraine today, 70 percent had university education and were looking for opportunities to improve their earnings; the bulk of these were women.
- Availability of competent personnel. These people provide a pool of potentially excellent incubator managers if given opportunities for training and commensurate remuneration. Here, as in many other countries, women make excellent incubator managers.
- Donor interest. Donor interest in the central European and Asian countries presents an opportunity that must be taken and effectively utilized before ‘donor fatigue’ sets in.
- Leap frogging. Late-comers to SME development, countries such as Ukraine have the opportunity to leap-frog toward better institutional structures, market-led business development mechanisms and advanced communication technologies, benefiting from the experience of others.
- New government. Specific to Ukraine, the existence of a new government may offer some changes favorable to SMEs.

D. Ukraine Support for Business Incubation

The Ukraine State Committee for Entrepreneurship Development (SCED) has initiated a dialogue with small businesses and their promoters, to mobilize public support for its initiatives. The SCED has expressed support for business incubation as an important means of familiarizing entrepreneurs with the market economy and of creating employment.

According to SCED, there are currently 28 business incubators in Ukraine. However, some of these are still in the planning stage and the number of functioning incubators, offering work spaces and services, is under 10. SCED would like to develop three incubators in each of the 25 oblasts and 2 principal cities, that is, a total of about 80 incubators. For this purpose it is seeking support from the donor community. The main problems for business incubators as cited by SCED are:

- Lack of funds.
- The absence of a proper legal framework to promote not-for-profit business incubators.
- The implementation of the recently introduced simplified tax code for SMEs.
- Extensive legislation and regulation—over 3,000 items—that inhibit business activity.

- A property ownership structure that prevents incubator operations from owning buildings, charging rents and obtaining long-term leases

A national law on small enterprise promotion has been formulated that is to be sent up for parliamentary approval. This includes a sub-program on business incubators and service centers. In addition, there was a recent presidential decree, prepared by the Committee on Science and Technology, promoting technology parks.

E. USAID/Kyiv Support to SMEs in Ukraine

An earlier study on a possible strategy on SMEs stressed the needs for USAID support in promoting an enabling environment and helping SMEs to start and grow (MSI, 1996). It also proposed strengthening the Mission's capacity to provide leadership in these activities. A comparative assessment in Bulgaria, Poland, Russia and Ukraine a year later proposed organizational models for USAID in structuring future efforts on SME development. (Silcox et al, 1997). A recent study of USAID experience in business development services in Europe and Eurasia indicated that service providers need a market, a competent management structure and an enabling environment, for their services to be effective and sustainable, (Pennell, 1999).

The USAID/Kyiv's technical assistance programs for developing Ukraine's SME sector fit broadly into three areas:

- Policies and regulatory reforms, together with technical assistance for legal, banking and tax reform, and support to the State Committee on Entrepreneurship Development and the Inter-agency Commission on Economic Reform.
- Access to finance for micro, small and medium enterprises through the Western NIS Enterprise Fund, EBRD Microcredit Program, Eurasia Foundation, micro-finance and municipal finance initiatives, credit unions, and training on leasing and international accounting.
- Business skills development through a network of business support centers, NewBizNet, IFC Post Privatization, and a business incubation program with the three targeted pilot incubators being developed by Loyola College and Counterpart International.

F. Comparison with other Programs in Support of SMEs in Ukraine

Business incubators and service centers have special roles in particular situations. Understanding when and where each is appropriate is important. The scope of work for this study asks the team to provide a snap shot of the NewBizNet and IFC business centers to compare and contrast them with incubators. These briefs, along with snap shots of other SME support programs in Ukraine, are available in Annex G. While there are gray areas, the defining characteristics between business incubators and business service centers are as shown in Table I-1.

Two things stand out from this review. One, BSCs have been operating in Ukraine since 1990 while BICs are more recent. Measures are needed to promote a sharing of experiences between managers and experts.

Two, the quick review suggests that SME service operations, driven as they are by culture and economic conditions, can and do differ from one community to the next. Importantly, it appears that both support center and incubator can operate side by side, each providing designated functions. In some situations it may be necessary to start as a business center and transform into a business incubator as conditions warrant. In other cases it may even be possible to attract a business center to become a tenant inside an incubator.

Table I-1. Comparing Business Incubator Centers (BICs) and Business Service Centers (BSCs)

Business Incubators	Business Support Centers
<ul style="list-style-type: none"> Target group is typically start-up and early stage ventures. 	<ul style="list-style-type: none"> Generally all types of firms, existing and start-up, large and small, are served
<ul style="list-style-type: none"> Entrepreneurial groups with potential for growth are carefully selected for entry. 	<ul style="list-style-type: none"> There is usually little or no selection process in choice of firms for a longer-term involvement.
<ul style="list-style-type: none"> An exit process requires that successful firms (and those that fail) leave BICs to make space for other entrepreneurs. 	<ul style="list-style-type: none"> No exit is required and firms may be served as long as they can pay for the services.
<ul style="list-style-type: none"> BICs provide affordable work space, shared office facilities, synergy among resident firms as well as focused training, counseling and access to finance and external support. 	<ul style="list-style-type: none"> Typical BSC offers advisory and training services to larger numbers of participants.
<ul style="list-style-type: none"> Securing a large enough workspace, constructing a building or renovating one call for major investment and may cause delays. 	<ul style="list-style-type: none"> BSCs need a small space for the coordination and service functions, and can be set up more quickly and at lower costs.
<ul style="list-style-type: none"> Counseling is often of a specialized nature, on one-on-one basis, to a selected group. 	<ul style="list-style-type: none"> Services are more general, to cater to large groups.
<ul style="list-style-type: none"> BICs provide inter-actions among members under one roof plus services to affiliates outside on an out-reach basis. 	<ul style="list-style-type: none"> BSCs serve all comers without any facility for working under one roof.
<ul style="list-style-type: none"> BICs charge affordable rents and fees for services to tenants. Some BICs now have their own seed capital funds or take equity in tenant-companies, which provide additional income. 	<ul style="list-style-type: none"> Without the rental income of BICs, BSCs must raise the bulk of revenues from development of training and counseling services.
<ul style="list-style-type: none"> BICs aim to attain sustainability after the initial public support. 	<ul style="list-style-type: none"> BSCs also have the prospective of becoming sustainable. While its expenses are lower than a BIC, so also are its sources of income.
<ul style="list-style-type: none"> BICs require good building space and a trained, competent management team. They also depend on external networks of trainers and advisors. 	<ul style="list-style-type: none"> Space requirements for BSCs are small. External experts, including executive-volunteers usually provide services.

SECTION II

Incubation Concepts and Developments

Business incubation centers (BICs) are planned to meet the specific support needs of target groups and the objectives of different communities. Therefore, it is expected that BICs will differ—in governance, approaches, services, financing sources and other parameters—from each other and from other business service providers. For these reasons, *good practices* (not *best practices*, which are location specific) can only be *adapted* (not *adopted*) from one situation to another. In addition, the business incubation center has certain defining characteristics that separate its operations from those of business support centers (BSCs) and other service provider formats.

A. Understanding Business Incubators

While business incubation appears to be a straightforward process, it is often difficult to understand and implement, particularly in transitioning countries where entrepreneurship is nascent and the required business infrastructure is inadequate. Governments profess enthusiasm for business incubation as it is seen as a tangible demonstration of government interest in promoting small business, but there is often misunderstanding in many countries, including Ukraine, of the true potentials and problems, as well as of the initial ‘patient money’ needed.

A1. Defining Characteristics

In simple terms, the BIC is a micro-environment with a small management team that provides physical work-space, shared office facilities, counseling, information, training, access to finance and professional services in one affordable package. The seven services provided by BICs can be depicted in a pyramid structure.

Figure II-1: Pyramid of Incubation Services

Services on legal issues & marketing
Skills development training & counseling
Support on information, facilitation, advocacy
Seed capital, in-house or access to credit & equity
Synergy among tenants thru exchanges of experiences
Shared office facilities, services, equipment & networking
Space that is functional, affordable, modular & on flexible terms

The defining characteristics for the business incubator are:

- A careful selection of entrepreneurial, growth-potential businesses for entry and a flexible process for exit by those who are successful (or who are not likely to be).

- Payment of rents for space and fees for services, often starting below market rates and rising progressively.
- A small management team to provide and organize counseling, training, information, access to external services and finance, and to promote synergy among tenants.
- Operation as a business, with the prospective of becoming essentially self-supporting.

According to the National Business Incubation Association (USA), the two core principles of business incubation are: "first, the incubator aspires to have a positive impact on its community's economic health by maximizing the success of emerging companies, and second, the incubator is itself a dynamic model of a sustainable, efficient business operation."

In this context, a recent assessment of 50 incubators in the U.S. (Business Incubation Works, 1997, NBIA) showed that the majority of the programs received an average annual operating subsidy of \$86,254 (on annual expenses of \$ 278,240). This resulted in a public subsidy cost of \$1,109 per job. The tax revenue generated was \$4.96 per dollar of subsidy. Of the 550 incubators in the U.S., the world's largest program, three-quarters of the incubators continue to receive some form of subsidy from federal, state, city government and other sources. A small number (around 50 in the US) are private, for-profit incubators (Tiedemann and Lalkaka, 1998).

A2. Types of Incubators and Support Centers

Incubators may be dedicated to commercializing technical innovations; in this case they may be called Technology Business Incubators, and if they do not have resident tenants they are Innovation Centers. BSCs typically provide training, advisory and information services to large numbers of existing and early-stage businesses; they do not have the defining characteristics of classic BICs, such as entry-exit criteria for tenants and work under one roof. A comparison of the characteristics of business incubators and business support centers is in Table I-1.

Compared to technology incubators, the Technology Park is a large-scale real estate development, requiring more than ten hectares of land for a clustering of scientific research and technology development activities, needing over ten years to develop and tens of millions of dollars as investment. The enthusiasm for technology parks in Ukraine should be based on these realities. It is possible and desirable to build an incubator in an existing techno-park or to develop a park around an existing incubator. There is considerable potential for synergy.

A3. BICs and SME Development

A trend toward the convergence of SME support services is emerging. The 'minimalist' view of providing financial services, separated from training or counseling or work space is giving way to an integrated approach where a variety of non-financial and financial services are being inter-linked.

The experience emerging from developing and transitioning countries indicates that when carefully designed and prudently managed the business incubator can be effective in creating successful enterprises and, therefore, the business incubator can be a useful component in a small

enterprise development strategy. The focused support provided through BICs to carefully selected start-up and early-stage firms in the incubator greatly increases (in the US by three- to four-fold) the chances of success for these firms as compared to companies outside the incubator. Special-purpose incubators can be especially helpful in empowering women entrepreneurs, retired military personnel and disadvantaged groups.

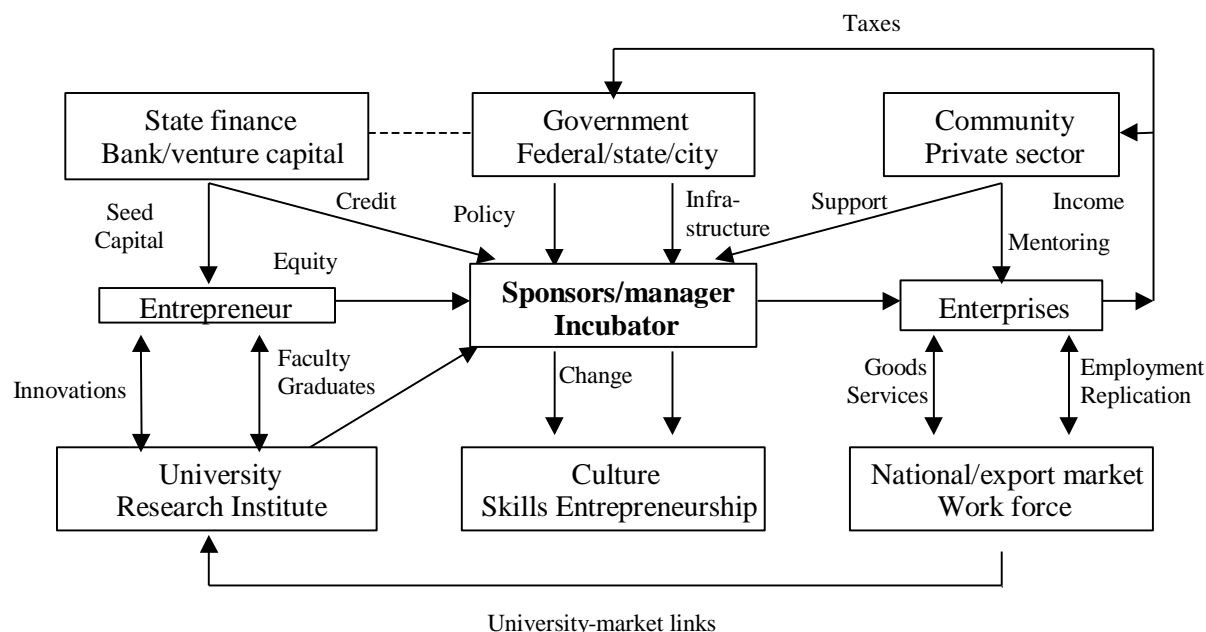
The majority of incubator (and support center) programs worldwide can be characterized as “public-private partnerships” in which initial (and often small continuing) financial support is received from the state bodies or through other channels. Many governments consider such programs part of the business infrastructure. The evidence to date indicates that the annual taxes and externalities from small and medium enterprise development more than offsets the net capital and operating cost subsidies. The private sector usually participates when it sees that the program will lead to greater business opportunities and promote spin-offs.

Business incubators are effective because they provide a supportive environment; facilitate access to money, materials and markets; and help overcome some of the regulatory barriers and bottlenecks to starting, surviving and thriving. Incubators offer a platform for the convergence of support and the opportunities for synergy among tenant companies, as well as the work space and shared office facilities that an entrepreneur could not otherwise afford.

But providing such focused, nurturing services to a selected group can be expensive. Therefore, to become cost-effective, the incubator must design its services carefully based on assessments of entrepreneur needs and operate in a business-like manner.

B. The Art and Science of Assessing Business Incubator Programs

An assessment starts with an understanding of the objectives and client base for which the incubator was established, the revisions made to the original design, the quantified measures (if any) of performance, and the events transpiring in the period since start of operations. As shown in Figure II-2, the evaluation of incubators involves understanding and reviewing a number of interwoven and multidimensional relationships.

Figure II-2: Assessment of Incubator Relationships

The intricate weave of relationships depicted in Figure II-2 needs to be evaluated for impact/outreach, effectiveness and sustainability over the medium term. To accurately identify the benefits accruing to small businesses, sponsors, local community, region and nation requires that sponsors—donor, private or government—make provision for, and pursue, the collection of needed information by the management team on firms in the facility and those leaving it. Table II-1 lists the type of data useful to a full analysis of performance.

Table II-1: Performance Evaluation Data Points

I. Impact/Outreach	II. Effectiveness	III. Sustainability
<ul style="list-style-type: none"> • Enterprises created • Survival rate of enterprises • Jobs generated (6 years) 	<ul style="list-style-type: none"> • Employment per net \$ subsidy • Taxes paid per net \$ subsidy • Income, sales & exports 	<ul style="list-style-type: none"> • Revenue surplus (6 years) • Services cost recovery • University-business links
<ul style="list-style-type: none"> - Incubated/affiliated firms - In graduated firms 	<ul style="list-style-type: none"> • Research commercialized • Disadvantaged groups 	<ul style="list-style-type: none"> • Stakeholder satisfaction • Tenant/graduate satisfac.
<ul style="list-style-type: none"> - Indirect jobs 	<ul style="list-style-type: none"> • Incubator expansion 	<ul style="list-style-type: none"> • Changes in culture
<ul style="list-style-type: none"> • Enterprises reached • Replication of "pilot" model • Extra-curricular activities 		<ul style="list-style-type: none"> • Enhancement of skills • Leveraging state policies • Enhanced self-esteem

Outputs alone (such as numbers of persons trained) while useful as an indicator of how resources were spent fail to capture the more significant and sustaining results of business incubation. Without this information it can be difficult to justify the existence or expansion of BICs, especially given their outgoing need in many cases for continued support. More critical—and more difficult to measure—are the effects (mid to long term) of BICs on employment, incomes, skills enhancement and cultural change.

Impact and outreach are critical assessment criteria. Impact is measured in terms of economic benefits. Outreach depends on replicability and replicability is driven by impact. If a BIC remains at the pilot or demonstration stage, it does not do much to alter the conditions of mass unemployment and deprivation. Once a critical mass of experience has been accumulated and chronicled though, the evidence is available on which political decisions can be made for broader application and the mobilization of resources to support the expansion. An equally important criterion is that of effectiveness. This can be expressed in terms of all the benefits derived in the whole system in relation to the use of all resources.

For donors financial sustainability is essentially the ability of an incubator—and other support services—to continue achieving positive outcomes and the durability of the benefits achieved after termination of external assistance. This can be shown by an analysis of the flow of funds in and out of the system. If the facility has been well managed and has established a reputation in the market, then other sources of funding could be mobilized. Another measure of sustainability is the satisfaction derived by sponsors and tenants from the services received and the ability to expand operations. Full self-sustainability is difficult to achieve even in strong, stable economies, and more so in a fluid situation with deterrents as in Ukraine.

C. Lessons from Abroad

In the face of severe constraints, significant progress is being made by the incubation industry in countries around the world, both industrial and industrializing. The donor community can play an important role in presenting a world-view on incubation. This can be accomplished by providing opportunities for well-prepared study tours by a cross-section of incubator managers and government decision-makers and by ensuring that some of their aid is utilized to acquire (and translate, if needed) the vast body of publications on small business and incubator planning and management.

It is useful to consider some of the lessons that can be drawn from this experience. Annex F provides a synopsis of incubators in six countries (Poland, Uzbekistan, China, Brazil, Israel and Malaysia). Seven related lessons emerge from this exercise. These important lessons, in part, inform the assessment of USIAD/Kyiv's incubator programs.

C1. Planning

Lesson 1. The first step is to analyze the feasibility of the proposed incubator based on the likely market for the services to be offered and to prepare a professional business plan using local experts to the extent possible. Such a plan should be a prerequisite for donor support. This should also be one of the priorities for international technical assistance.

From the outset, consensus must be developed among the sponsors and local administration on the purposes, incubator type and target groups to be served. While employment is usually a priority, incubators essentially nurture entrepreneurs, who create enterprises, which may generate jobs, direct and indirect.

The business plan can be used to mobilize state policy and financial support as well as community consensus on the objectives and client base. During this preparatory stage (lasting

from 9 to 12 months), the key local sponsors concerned should be enabled to participate in well-prepared study-tours to comparable incubators abroad.

In many instances these essential steps are not taken, as protection from the tax police is more useful than a business plan, or what is called a ‘business plan’ does not carefully address the key questions of the management, markets and money needed. Poor preparation results in major future difficulties, delay and cost over-runs. Donor-sponsored incubators and business centers train entrepreneurs to prepare a business plan as an essential first step, but many of these centers themselves have been started without such preparation!

Lesson 2. The design of the incubator building has to be functional but attractive and low in cost, with the layout promoting people inter-actions. The size of the facility should initially be about 2,000 sqm gross (1,500 net leasable) with provision for future expansion.

Without this area it is not possible to generate the rental incomes toward sustainability. A vacant renovated space enables a faster, lower-cost start for the incubator. If this area can not be secured initially (or for other cultural/political reasons), it may be necessary to start as an ‘incubator without walls’ but with the clear prospective of moving to a physical facility later.

This was the case at Fundacion Biominas, Belo Horizonte, Brazil, which started in vacant space at a publicly-funded research laboratory, while it planned and raised \$ 2 million for a well-equipped biotechnology incubator facility; it is now raising resources and preparing plans for a biotechnology park adjacent to the incubator.

Lesson 3. The governance structure should include an autonomous Board and advisory committees with private sector participation, and a competent management team with business experience.

The responsibility of the Board is to guide the managers, mentor the tenants, and monitor/evaluate the overall performance of the incubator. The competence and commitment of the manager is the key to success. This requires that (s)he be properly trained at home and abroad, and adequately compensated. For example, managers of the Uzbekistan incubators were trained in Turkey, Poland and Italy while those from Indonesia and Malaysia were trained in the U.S.; managers from central and eastern Europe participate in the annual conferences of ADT and Science Parks and Innovation Centers Expert Group (SPICE). European Union Columbus Program trains incubator managers from Latin America.

C2. Facilities and Services

Lesson 4. The prime task of the incubator is to support the success of the tenants through value-adding services. This calls for well-prepared in-house programs and linkages to a wide network of professionals and facilities, to utilize their skills and experience to the benefit of the tenant enterprises and affiliates.

Incubator staff and tenants in the restructuring and developing countries are usually unwilling to share information and experience. But the development of networking capabilities and

strengthening of SME/incubation/innovation associations, on national and regional basis, can play useful roles. This would help promote access to trade/technology information, sub-contracting opportunities, seed capital, and stimulate the exchange of experiences. The central and eastern European countries have strong computing and Internet systems, which can be better utilized for these purposes. The Poland incubator program is a good example of sound preparation and good operations to help solve economic and social problems

C3. Sustainability

Lesson 6. The state, in cooperation with international donors, has the task of providing some of the ‘patient money’ for the incubator until operations are stabilized. Importantly, finance has to be organized for starting and growing the tenant companies.

For the tenant enterprises in restructuring countries, family and friends usually do not have the needed assets. Furthermore venture equity capital and ‘business angel networks’ are also frequently not available. The needs of informal businesses can be met through micro-finance mechanisms but for incubator tenants, the commercial banks, credit unions and seed capital funds are essential.

But subsidies to incubators from the state and from donors inevitably decline, and the managers have to plan in advance for raising revenues and expanding services while carefully controlling operating expenses. Where ample finance is assured from the start, there is less motivation for the manager to improve services for the resident ventures or to attract other resources. A case in point is the incubation industry in Mexico which suffered a set-back as it was not prepared for the end of state funding following the economic crisis.

C4. Special Features

Lesson 7. National and donor concerns in transforming the economy to promote women entrepreneurs, create new job opportunities and safeguard the environment are going to become more insistent in future. So also is the need for continuous monitoring and evaluation of programs.

These issues are of special importance in the transition economies such as Ukraine. Despite the high social investments in higher education and scientific research, the playing field is far from level and large numbers of highly educated women and men remain under-employed. And as for environmental preservation, the record so far has been poor.

A country such as Brazil has used incubators effectively to stimulate entrepreneurship among women. For instance, 33 percent of the managers of the country’s incubators, 18 percent of the tenant company leaders, and 29 percent of tenant employees are women.

SECTION III

The Pilot Incubators

USAID/Kyiv's pilot business incubator program has the potential to establish well-designed and operated business incubators that could be models for future incubators in Ukraine. The program is well funded and monitored. This section outlines the general facilities, operations and outputs of the Loyola (BID/Kyiv and BID/Kharkiv) and Counterpart (CMC/Lviv) implemented incubators, which are focused on existing businesses and activities that help firms grow under difficult conditions. Table III-1 summarizes some useful salient descriptive facts regarding the three pilot incubators, as reported by their respective managements.

Table III-1: Main Features of the Pilot Incubators

<u>Features</u>	<u>BID/Kyiv</u>	<u>BID/Kharkiv</u>	<u>CMC/Lviv</u>
Date Started*	August 29, 1997	August 29, 1997	August 29, 1998
Work Space			
-Gross	IMI 70 sqm plus 75 sqm at Ukraine coordination office	260 sqm	620 sqm
-Net Leasable	None	185 sqm	300 sqm
No. of Members**			
-Resident	None	6	12
-Graduates	None	2	0
Firm Survival Rate	N/A	100%	100%
Sponsors	International Management Institute & Loyola College	Institute for Single Crystals & Loyola College	Counterpart Intern'l.
Focus	Tech innovation	Tech innovation	Mixed
Management staff	5 at Kyiv facility plus 5 for BID coordination	15	13 plus part-time advisers
Jobs created	No data	28	48

*Actual operations at the Ukraine locations started in second quarter 1998, some months after the dates of grant awards. The Loyola BID program is due to end in March 2000 and the Counterpart program in September 2000.

**Each incubator has trained a number of persons (200 – 300 over the last 2 years) that it considers affiliates or members of its business club.

A. Objectives

The objectives of the Loyola College BID program are to assist the growth of tech-based business by establishing incubators in several Ukraine cities. The emphasis is on the process of incubating incubators through the establishment of the BID/Kharkiv and BID/Kyiv facilities.

A1. BID/Kyiv

The International Institute of Management hosts BID/Kyiv. Its purpose is to help develop technology-based enterprises, specifically:

- Specialized training in innovation management and technology transfer. This calls for preparing and implementing programs, methods and materials, particularly developing computer-based instruction and distance learning.
- Advisory services mainly provided by outside experts, on marketing and information.
- Organizing and conducting conferences, seminars and exhibitions.
- Providing consulting services for development of additional incubators under BID and new Technology Parks under the recent national legislation.

A2. BID/Kharikiv

BID/Kharkiv, at the Institute of Single Crystals (ISC), has the purpose of creating an environment for development of small enterprises, specifically:

- Train and advise on business planning, management, marketing and finance, including access to external financing sources.
- Provide office space and shared office facilities to a few tenants.
- Deliver Internet services to its tenants and affiliates as well as to ISC, its host organization.
- Technology related tasks in the major regional development Kharkiv Initiative and the Marketing Assistance Program (MAP).

A3. CMC/Lviv

CMC in Lviv supports economic development in the city and oblast, specifically:

- Revitalize business activity in Lviv and surrounding communities, through SME development.
- Develop a loan program for tenants and affiliates, with related business training and advisory services.
- Develop a strong Ukrainian team to assume management responsibility.

- Create a financially viable facility based on income from the loan operation, fees for services and rents for space, with the goal of becoming financially self-sustaining in year 2000.

The purchase and refurbishing of its own office space and the launch of the loan program have been major initial tasks.

B. Organization

B1. BID/Kyiv and BID/Kharkiv

In August 1999 BID/Kyiv was registered as a legal entity called the Center for Innovation Development (CID). Under the International Institute of Management, the board consists of five members, including two from Loyola. A board of experts in Kyiv advises on selection of tenants and other technical issues for both centers.

BID/Kharkiv is a limited company, founded by the Institute of Single Crystals (ISC) in 1998 and called Kharkiv Technologies Incubator (KTI). The executive director manages the operations while its board of directors plays a supervisory role. BID/Kharkiv reports to Loyola College and the coordination unit.

In Ukraine, the activities of BID/Kyiv and Kharkiv are coordinated through the program headquarters and the Ukraine coordination office in Kyiv. The manager of BID/Kyiv is also Director of the coordination office. At the U.S. end, the International Technology Research Institute of Loyola College, Baltimore manages the program. In turn, the Institute receives guidance from a high-level advisory board. An American representative office serves to link Ukrainian scientists with opportunities in the United States.

B2. CMC/Lviv

CMC in Lviv is a Ukrainian public organization, like a non-governmental organization, registered in October 1997. The founders are two Americans and one Ukrainian. CMC is also registered as a project with the National Agency for Ukrainian Reconstruction and Development. Counterpart International is responsible for overseeing CMC. In the second quarter of 1999 CMC/Lviv registered a new entity, Meta Plus, as the profit-making business arm; enabling it as one immediate benefit to save around \$12,000 per year on employment tax.

C. Staffing

C1. BID/Kyiv and BID/Kharkiv

BID/Kyiv has an Ukrainian director and four other professional staff members. In addition there is a staff of five which supports the Ukraine coordination office. While the BID managers are paid salaries based on the conditions at their respective host institutions, these are 'topped-up' from the grant project through consultancies and other paid tasks.

BID/Kharkiv's Ukrainian executive director was on the staff of ISC and has been trained on business incubation in the US. The manager of the Internet Business Club was also an employee of ISC before he was hired by KTI. Other staff consists of 11 professionals and supported by 2 technical persons, making a total of 15. Some of these were selected by competition announced in the newspapers. KTI staff has major involvement with training on the Marketing Assistance Program.

C2. CMC/Lviv

CMC/Lviv's American general director is one of the founders of CMC. He has been president of a diverse group of public and private companies, and earlier managed a USAID-funded business program in Macedonia. The program director and other staff are Ukrainians. There are 8 professionals, 4 support workers, and 4 part-time workers. Additionally, CMC has legal and accounting advisors as well as American business consultants. A special feature is the incentive bonus plan that adds six to eight percent to the monthly salary for all staff when work targets are met.

D. Facilities, Services and Operations

D1. BID/Kyiv

BID/Kyiv is on the fourth floor of IMI, near the city center. Space (70 sqm) is provided by IMI through a payment program. This location facilitates contacts with scientists and businessmen. Seminar halls and computer rooms of IMI are also used to conduct training courses.

BID/Kyiv provides training and consulting on technology transfer and commercialization issues with access to Internet and databases. It also offers advanced training on marketing, business planning, and finance management courses in different modules. BID experts help to develop business plans and credit applications. The Business Club, established by graduates of BID courses, facilitates collaboration between companies and sharing experience. BID is also pursuing establishment of the legal environment for development of Technology Parks in Ukraine and expects to generate consulting revenues from this activity.

D2. BID/Kharkiv

BID/Kharkiv is located on the eighth floor at ISC, in a district of the city dominated by scientific institutes. Entry to the incubator premises requires a security check on the ground floor, which tends to inhibit open access. The incubator consists of several rooms covering about 600 sqm. Most of the space is leased from the ISC and renovated by tenants themselves. A small, renovated area (about 150 sqm) is an in-kind input of ISC.

BID/Kharkiv conducts a program of basic and advanced training on marketing of innovative projects, business planning, accounting, business English, restructuring and privatization, computer skills, and the Internet. Special offers are business courses for women and retired scientists. It counsels its clients on access to financial sources through the credit union but derives no income from this. This limits its options for generating income.

The training programs conducted in the first operating year by BID are summarized below:

	<u>No. of courses</u>	<u>No. of students</u>	<u>Student-Hours</u>
BID/Kyiv*	12	225	16,450
BID/Kharkiv**	27	701	34,285

*Kyiv has provided 390 hours of consultations linked to training.

**Does not include extensive training by KTI on MAP, and then on Kharkiv Initiative.

D3. CMC/Lviv

CMC/Lviv occupies custom-modified space on the whole fifth floor of an office block. It provides office space for 12 tenants as well as shared services for tenants and affiliates, such as telecommunication, e-mail, Internet, copier, binder etc. The floor space is a rectangle of 620 sqm., with about 300 sqm rentable. Though the building is well located, CMC is not visible or easily accessible. Office space renovations, completed in first quarter 1998, meet western standards in terms of lighting, electrical, telephones, heating, rest rooms and kitchen.

The start-Up Client Program provides computer and office desk for four hours a day, with consulting and training hours determined by space rented. Fee-based services include consulting, copier, conference room, overhead projector, translation, interpreting, international phone and fax. Short-term courses (2 to 12 hours) are provided on a range of topics from taxation to marketing.

CMC/Lviv offers a loan program which provides small business guarantees for timely, flexible credit between \$2,000 and \$20,000 for up to 12 months at lower interest rates than commercial banks. Participants get limited training (4 hours) and consulting service (2 hours).

E. Monitoring and Evaluation

As required by USAID, Loyola and Counterpart have made efforts to provide quantifiable indicators of outputs.

E1. BID/Kyiv and BID/Kharkiv

BID/Kyiv and Kharkiv prepare quarterly reports to USAID, Loyola College, and their local sponsors. With respect to participation of women, at BID/Kyiv 40 percent of trainees and clients are reported to be women. BID/Kharkiv conducts joint courses with Iowa State University and Center of Small Business Development-Women Programs on retraining for women-scientists. Currently there are no women-owned businesses.

E2. CMC/Lviv

In June 1998 CMC/Lviv prepared and discussed with USAID a work plan covering the three years October 1997-September 2000. Ten schedules have been developed to assist management in monitoring its overall program: activity plan, loan plan, revenue plan, program monitoring and evaluation, loan monitoring, tenant monitoring, client employees, program management, training monitoring, and marketing monitoring. While these reports provide much operational data the

more basic issues of strategies to achieve projected outcomes and effectiveness are not being covered.

CMC/Lviv has links to several women's associations. Its staff has made presentations at Women's Business Club. Women are said to constitute 30 percent of borrowers, 45 percent of incubator tenants and 55 percent of trainees.

F. Marketing of Incubators

The available space and services at the BID/Kharkiv and Kyiv incubators are still limited, the rents and fees are low and the demands are high. The USAID grants are significant sources of revenue. As a consequence, the marketing of the incubators is limited to some brochures and media announcements and through the training programs and affiliated 'clubs'.

Governmental institutions, universities and many of the social structures for Ukraine are located in the capital city of Kyiv, and foreign programs usually start their activities there. The potential market for business services is high in Kyiv, but then so is the costs of doing business.

BID/Kyiv has established a Business Club with over 180 training-graduates and 240 affiliates. It plans to develop a "*Cyber Business Incubator*" which will include clients as well as current and future incubators developed by BID, with Loyola College providing support through the U.S. representative office. BID/Kharkiv also has a Business Club for its tenants and clients.

In Lviv the business services market is also well developed in comparison with other cities in Ukraine. CMC/Lviv offers monthly business forums featuring US and local experts.

Despite the significant educational capacities in all three cities, the business culture and experience of a functioning market economy are still new.

G. User Satisfaction

G1. BID/Kyiv and BID/Kharkiv

BID Kyiv clients met by the assessment team at a session of their Business Club expressed satisfaction with their training courses; which gave them insights in developing and marketing technical innovations. They continue attending other courses and expressed appreciation for the opportunity to meet managers of different enterprises and to share experiences. Innovations developed by some members of the incubators are summarized in Annex H.

BID/Kharkiv tenants interviewed were generally satisfied with the services offered, especially the low rent, access to the Internet and shared facilities. They would like to have more telephone lines for each firm. Several tenants needed access to low-cost, long-term credit. One tenant would like to be supported on public relations work.

The head of the Kharkiv Regional Economic Development Office confirmed the government's commitment to SME development and expressed appreciation for the activities being carried out by BID. A legacy of the previous regime was that much of the research work done by 100,000

scientists at 220 institutes was on problems outside the Kharkiv oblast; now these must be re-deployed to work in the market economy. He felt that international assistance had to take into account the reality of the local situation. The government preferred incubator programs that combined technical services with workspaces, and those that collaborated closely with the city and the oblast administration.

G2. CMC/Lviv

The two CMC tenants interviewed were generally satisfied with the workspace provided in the city center; although the price for office space elsewhere was lower. For them, an important factor was the heating that operated even in winter when city heating did not. Both tenants expect future access to the kitchen facility and to two telephone lines for each firm. They would like cheaper, longer-term credits than CMC offers and loan approvals to be shorter than three months. Another needed office and storage space in the same building.

The team met with two loan recipients. One has started a milk processing plant with a loan of UAH 32,000. Another has taken three loans (UAH 40,000, 30,000 and 15,000) for his drug distribution business. He also has loans from a bank, where he maintains accounts for business purposes. He had earlier attended some CMC training courses, but now needs more advanced training and advice. Both clients indicated satisfaction with the loan program. The representative of Lviv administration expressed positive views on the CMC training program.

H. Linkages to SME Programs

H1. BID/Kyiv and BID/Kharkiv

BID/Kyiv has good links with the Government of Ukraine, the National Agency for Reconstruction and European Integration, the Academy of Sciences and its members, and other scientific bodies.

BID/Kharkiv is a good example of collaboration with other programs locally, nationally and internationally. It participates in various activities on entrepreneurship promotion, technology transfer and innovation. Together with NewBizNet, CID and Alliance, KTI has prepared the Program for Innovative Marketing in Small and Medium Enterprises. The Director is a member of the Task Force on Innovation Development at the Regional Program for SME development. KTI collaborates actively with the American-Ukrainian "Kharkiv Initiative". The regional administration has a program for SME development 1998-1999 while the program for 2000-2010 is under preparation.

H2. CMC/Lviv

At CMC/Lviv the officials representing city and oblast administrations are members of the Loan Committee. Representatives of CMC make presentations at regional meetings on entrepreneurship promotion. Partners of CMC include the Association of Ukrainian Women, NewBizNet, Alliance, Counterpart Humanitarian Assistance Program, Incubator Center at Lviv Technical University and Western Ukrainian Innovation Center.

I. Jobs and Innovations

No reliable information is available on the increases in jobs created or sales income as a result of help from the incubators (or by the business support centers), given the current economic vagaries and the reluctance of entrepreneurs to provide such information. It is also early to expect significant impacts as it takes time for incubators to graduate the companies that then create jobs and sales.

The current international dialogue regarding assessment of business development services in general and incubators in particular was discussed with the BID and CMC managements. They are in the process of compiling the data needed on employment, incomes, taxes, and other benefits accruing as a result of tenant training and other services provided by the incubators.

I1. BID/Kyiv

BID/Kyiv addresses four types of clients, who have been in business for at least one and half years:

Taking training courses	121 companies
Assisted to prepare business plans	41
Given training in tech- commercialization	30
Associated companies	134*

Source: BID/Kyiv.

**These firms have short-term relationship with BID/Kyiv though training programs for about 1,300 employees. It cannot be assumed that BID/Kyiv created these jobs.*

Typically, the courses on commercial data collection, communication and negotiation skills (for women), public relations and Internet use are of one-day duration, while the business planning and commercializing innovations are of 40 hours. Consultations are provided on accessing loans from external sources, as there is no in-house facility.

I2. BID/Kharkiv

BID/Kharkiv provides workspace, training, counseling and Internet services to 315 affiliated companies. It is spreading an entrepreneurial culture among scientists. Further it has helpful linkages with the ISC (and its in-house Technopark with 10 companies) as well as with the city administration.

In the period April 1999 to March 2000, MAP is expected to train 450 entrepreneurs in marketing (60 hour courses) and 50 from high-tech companies (256-hour courses). Continuing evaluations on course performances have been positive. Further, participation in the Kharkiv Initiative is expected to prepare and implement an economic development program for the eastern Ukraine. Together with its partner programs such as NewBizNet, Ukrainian-American Business Center, State Polytechnic University and the Kharkiv credit union 'Toloka', KTI now has the staff base and growing experience to create jobs, incomes and innovations.

In conclusion, the Loyola College submission to USAID of June 8, 1997 gave impressive, end of program impact targets for the BID components (CID-Kyiv and KTI-Kharkiv). These projections included:

Loan program guarantees	54 companies, total \$ 1.5 million
No of direct jobs created/retained by companies	4,350
Revenue increases at companies due to BID help	10 times
Return on USAID investment (due to productivity increases, salaries, taxes)	20:1 to 30:1

To date, however, the actual jobs created/retained, return on investment, etc are substantially short of the above projections.

I3. CMC/Lviv

CMC/Lviv has been described by its executive director as “*an incubator and not an incubator*”, meaning that it has some but not all the requirements of an incubator program. The business plan (June 1998) stipulates its two key elements as establishing a loan program toward self-sustainability and local staff development for *a successful shift from expatriate to local management prior to the expiration of grant funds*. CMC is positioned to accomplish these goals.

As estimated by CMC, the outcomes of the loan program are: 48 jobs created, revenues of UAH 3 million and associated taxes of UAH 237,000. The number of jobs ‘sustained’ is given as 236.

J. Financial Sustainability

An objective of the USAID/Kyiv program is to help establish business incubators that will continue to operate and prosper after the current funding is terminated. This section looks at measures underway at the three facilities to achieve cost effectiveness and the approaches to recovering higher levels of expenses from revenues.

J1. BID/Kyiv and BID/Kharkiv

At the team's request, BID/Kyiv prepared an estimate of income and expenses for the period September 1998 to August 1999 by location. This is summarized in Table III-2.

Table III-2: BID Program Revenues and Expenses, 1998-99

	(CID) BID/Kyiv	(KTI) BID/Kharkiv	Loyola
Revenues			
1. Rents	—	1,600	—
2. Training Courses	11,250	9,500	—
3. Fees for services	—	2,074	—
4. Cost sharing*	162,748	96,532	148,232
Total	\$173,998	\$109,706	\$148,232
Expenses			
1. Salary			
- Admin.	36,521	36,082	163,690
- Faculty	22,094	11,819	—
- Consultants**		17,422	578,275
2. Fringe Benefits	4,168	13,255	19,531
3. Travel	—	—	177,493
4. Indirect costs	33,669	600	87,617
5. Equipment	24,695	40,753	26,601
6. Rent***	32,935	1,800	—
7. Direct Costs^	23,758	6,062	77,488
8. Tax	14,043	31,161	—
9. Other Costs	1,792	—	—
Total	\$193,665	\$158,974	\$1,130,795
Excess (deficit)	(\$19,667)	(\$49,267)	(982,563)

Source: BID, Kyiv-Loyola College

* Includes educational programs, computer center, security, etc contributed in-kind by the host.

** For Ukrainian consultants under BID/Kharkiv and U.S. consultants under Loyola.

*** BID leases 140 sqm of space at cost of \$14.3/sqm per month.

^ E.g., supplies, etc.

This indicates that in the 1998-99 period, the overall deficit of the combined operations (BID/Ukraine and Loyola) is just over one million dollars. Rent, training and other fees at Kyiv and Kharkiv (\$11,000 and \$13,000, respectively) cover less than 10 percent of the total expenses. The bulk of the revenues are in-kind contributions as “cost-sharing” from host organizations.

J1a. BID/Kyiv

As BID/Kyiv does not provide work spaces, it has no rental income. (Typically, rents can raise two-thirds or more of annual revenues in a good-size, mature incubator). Its training and consulting activities are increasing and it is planning to expand operations at the proposed technoparks. Contingent on realizing the following projections, BID/Kyiv forecasts a small operating surplus in year 2000.

- The Science and Technology Center in Ukraine has contracted for two training courses on technology commercialization for \$17,000 and three other courses are booked at \$7,000 each.
- Negotiations are said to be underway for conducting training for the National Space Agency, Ukraine Land and Resources Management Center and others. It is expecting to receive significant fees from donors for the proposed Slavuech Technopark development.

- The distance learning/consulting project assumes major income for developing the materials and establishing the network.
- Further, the arrangement underway with the Agio Bank for a loan program for BID members is expected to raise about \$25,000 annually.

J1b. BID/Kharkiv

At BID/Kharkiv the leasable space is limited (185 sqm for 6 companies) and rental income is low. Further, as management is providing services to individual scientists and groups without insisting on fees, this income is also low. For instance, it helps companies to prepare business plans and negotiate loans from the credit union without charging a fee.

BID/Kharkiv revenue and expense estimates for the past year, given in Table III-2 above, shows a shortfall of about \$50,000 last year. For the future, KTI anticipates additional income from its participation in various USAID-funded and other programs: (However, the income from USAID is not assured.)

- | | |
|-------------------------------------------|---------------------------------------------------|
| • US-Ukraine regional Kharkiv Initiative | \$ 50,000 USAID
30,000 services to enterprises |
| • Consulting/training work on MAP | \$110,000 USAID |
| • ‘Virtual business’ and CD-ROM materials | \$ 20,000 USAID |
| • Courses on tech transfer, etc | \$ 25,000 STCU, CRDF, tenants |
| • Tenant rentals and Internet | \$ 20,000 KTI tenants |
| • Counseling on tech transfer, etc | \$ 10,000 Technoparks, etc |

On the basis of the above projections KTI Kharkiv also expects to be financially self-sustaining in the year 2000. If the bulk of revenues expected do actually materialize together with the local staff commitment and low operating costs, this appears to be a possibility. But this may not be realized by March 2000.

J2. CMC/Lviv

At CMC/Lviv the income earning activities are essentially the small loan program (with related consulting fees at three percent of new loans) and some rents from office tenants. In addition, there is some income from paid training and other sources (limited training and advice are included in the rents paid by tenants). The income has been rising in recent quarters, from \$3,344 in 1998 Q 3 to \$13,244 in 1999 Q3, and is expected to double to \$29,549 in 2000 Q3, as shown in Table III-3.

Table III-3: CMC Income Estimates for 1998 and 1999, and 2000 (projected)

Period	Loan interest & fee	Tenant rentals	Training and other	Quarterly revenues	Cumulative total
1998 Q3	648	799	84	3,344	3,385
Q4	1,232	713	34	5,208	8,593
1999 Q1	2,044	2,878	164	9,271	17,864
Q 2	1,694	1,763	511	12,288	30,152
Q 3	2,727	1,500	220	13,244	43,396
Q4	5,618	1,600	400	21,398	64,794
2000 Q1	6,750	1,600	400	25,450	90,244
Q2	7,563	1,600	400	28,251	118,495
Q3	7,792	1,600	100	29,549	148,044
Total	102,820	36,713	8,511	148,044	
	69.5%	24.8%	5.7%		

Source: CMC. Figures for 1999 Q4 and year 2000 Q 1,2,3 are for projected income.

CMC expects to be self-sustaining after the present USAID grant ends in September 2000.

Based on information provided (October 15, 1999), CMC projects its sources of funds for the current year (fiscal yearend 9/30/2000) at \$517,000 while its use of funds is estimated at \$438,000, providing a surplus of around \$80,000.

SECTION IV

The Findings

Following visits to each of the incubators and interviews with management and others, the members of the assessment team had discussions to arrive at their findings. These are summarized below to the extent that they could be verified.

A. BID/Kyiv — Center for Innovation Development

The management team consists of scientists with scientific research experience. The BID Coordination Office and the newly established American Representative Office (ARO) at Baltimore, USA should be able to promote specific technology sourcing and collaboration opportunities. However, more practical help has yet to be given and results realized in the form of Ukrainian technologies licensed, foreign direct investment secured, and joint ventures finalized in Ukraine and abroad.

Intensive courses on technology transfer issues have been prepared and conducted, such as the recent training program on ‘Commercialization of Innovations’ for STCU/Kyiv and ITCU/Moscow. Due to its technical base, BID is well advanced in data base management and electronic connectivity for its members. It is initiating arrangements for distance consulting and learning. With IMI as the main local sponsor, instruction on business skills that scientists generally lack is being incorporated into the training programs. Changes in mentality have been initiated together with business planning and networking skills.

To promote inter-actions among its tech-based business members, the Business Club meets every month. Further, good linkages have also been established with other learning centers, American Chamber of Commerce and related institutions abroad. BID appears to have good support from the State Committees and agencies in the S & T field.

BID’s focus on commercialization of technology is warranted by Ukraine’s considerable scientific base and by the rapid technological progress worldwide. However, this should not be at the neglect of applying knowledge for social transformation, better health, cleaner environment and employment-creating services.

The delay in starting a credit operation within the incubator has blocked the use of the funds available for this purpose, the income stream that this could develop, and the opportunities for much-needed finance for its members. Without workspace within the facility, BIC/Kyiv was described as a “*distributed incubator*”; however, it is essentially a support center for promoting technological innovation.

B. BID/Kharkiv — Kharkiv Technologies Incubator

Like its associated Kyiv facility, BID/Kharkiv has a technology focus with good support from Loyola College, the Ukrainian coordination office and the American representative office, and its

founders, the Institute of Single Crystals. It is well located in the city center, in space provided by ISC.

Good linkages have been established with the ISC Technopark tenants within the same building, the Kharkiv State Polytechnic University, the American Business Center, the oblast and city administrations, and partner programs such as NewBizNet, Alliance and Raider (a private education service). It also assists nascent incubators such as the Tractor Company. KTI is especially involved with women-oriented activities such as the Kharkiv City Women's Fund and the Iowa State University supported Re-training of Women Scientists Program.

KTI is a partner in the Kharkiv Initiative, for which it has designed special training programs on SME development in the region. It is also a partner in the Management Assistance Program. KTI has been actively promoting Internet service for its members as well as ISC.

Limited leasable space and few resident members provide little rental income. BID/Kharkiv should urgently re-negotiate with its founders for more space, preferably contiguous with its existing operations. The present layout does not encourage continuous dialogue between management and the members or among the members, which is an essential feature of good incubator planning.

Currently, the fees charged for its training programs are low, partly because its members have limited funds and due to a culture that hitherto expects free services. No fees are charged for the assistance to secure credits, for instance. With this low level of cost recovery, the prospects of financial sustainability are very weak. Special efforts are needed to charge reasonable fees for services rendered and to explore new avenues for raising revenues.

A loan program has been started in cooperation with the Kharkiv Trade Union 'Toloka'. This is still in its infancy. Its development has to be accelerated, so KTI members can use an in-house revolving fund and KTI itself derives some income from this operation. Further, information and help has to be organized by both KTI and CID on accessing finance by tenants from the 30 plus existing financing agencies for SMEs in Ukraine.

For both BID incubators, the costs on expatriate support are high, on the order of half the total grant of \$3.1 million.

C. CMC/Lviv — Counterpart Meta Center

The facilities and management of CMC project the image of a business-like operation, led by a team with business experience. Its reporting and monitoring activities are professional. CMC has collaboration arrangements with local, regional and international organizations and has shared its experience with business development organizations in Nizhni Novograd and Sarajevo.

The use of common office facilities is well appreciated by the tenants. Member satisfaction would be improved by more counseling and training specific to their needs as well as their ability to use the kitchen for limited periods.

CMC credit guarantees are for relatively short periods (up to 12 months), limited in value for a modern small enterprise (average about \$6,000), with interest totaling around 57% (banks charge about 10% more), and collateral coverage of 125% to 150% (banks require even more). Bad debts are low, with one default of about \$4,700 only. The program is expected to disburse about \$444,000 to 64 clients and to earn about \$148,000 in interest and fees by the end of September 2000. In addition, CMC plans to raise about an additional \$100,000 from other sources in the future to expand the planned loans from \$25,000 a month to \$40,000 a month. The success in implementing the loan program raises significant revenues (around 70 percent of total).

But with almost half of CMC professional staff deployed on the loan operation, this diverts resources from the prime incubation tasks of providing better training, counseling, information and networking services for early-stage tenant ventures. The future focus must be on better support to them. As the total staff now exceeds the number of tenants, an expansion of space and services could be achieved without significant addition to the existing team.

CMC has taken the prudent steps of owning, renovating and providing stable utility systems for its operations in a good location. This helps attract tenants while real estate appreciation expands its asset base. Given its limited workspace and desks, the incubator has 100 percent occupancy and a long waiting list. If it were possible to secure funds from some external source for acquiring an additional floor and to finance the renovation from savings on the international costs, then the net leasable space for tenants could be trebled to about 1,000 sqm. Though the benefit-to-cost of investing in additional space must be assessed, a re-allocation of assets would significantly enhance the services provided and number of businesses served, to the overall benefit of the Lviv economy.

As with the BID incubators, the current Ukraine situation makes it difficult to estimate indirect benefits of CMC. Undoubtedly though there is some multiplier effects of the BID and CMC incubators.

Based on figures provided by CMC, of the \$1.6 million grant, local salaries and operating expenses account for less than 20 percent, physical facilities and the loan fund represent about 30 percent, and management and support from Counterpart International represent about half. This is considered high compared to international standards. With almost a year to go on the grant project, the results anticipated in Counterpart's original technical proposal have not yet been realized.

SECTION V

Drawing Conclusions

The conclusions outlined below by the assessment team are based on the research findings and the team's exposure to and experience with business incubation developments and operation in both industrial and developing economies.

A. Planning

A1. Business Planning

The National Business Incubation Association (USA) on its tenth anniversary (1996) said about business incubators: “A business incubator’s main goal is to produce successful firms that will leave the program financially viable and freestanding. Management guidance and consulting suitable for young growing companies is critical to the definition of an incubator. Incubators usually also provide clients’ access to appropriate rental space and flexible leases, shared basic business services and equipment, technology support services and assistance in obtaining the financing necessary to company growth”.

As noted, BID/Kyiv is essentially a technology innovation center. CMC/Lviv is primarily a small business credit operation. BID/Kharkiv is yet to expand its incubation workspace and services. The nurturing of start-up and early-stage business has not been given priority in the design and operations of all three facilities. They can not yet be considered as full-fledged incubators according to accepted incubator norms. They are still far from becoming efficient business operations to serve as dynamic models for the businesses they serve.

The planning of an incubator and the types of services to be provided should be based on surveys of entrepreneur needs, the financial and management requirements, the quantifiable measures of performance and the milestones in the implementation process, as part of a feasibility exercise. While some preparatory work was done before the award of contracts and work plans submitted thereafter, no proper assessments of entrepreneur profiles and needs appear to have been done at any of the incubators. Nor were adequate measures taken to develop a wide consensus of support from the local communities and state governments. As a consequence, the pilot incubators have developed in an opportunistic manner, without the means for rigorous monitoring of their progress and outcomes, and without timely, remedial actions to re-focus their operations and services on the tasks of creating new enterprises, employment, incomes and innovations.

Among incubator management, tenants and government officials there is little sense of ownership. As a result, it is easy to turn to the donor rather than make serious efforts to raise income from rents and services, from the government authorities and from other donors.

A2. Focus

From the outset, the energy and resources of the incubators were not focused on developing workspaces and support services to nurture select new ventures. Each facility must now strengthen its support to members based on local circumstances. That is, nurture entrepreneurs and incubate enterprises. Incubators are a means to that end, and this tenet has to be reinforced in any subsequent expansion and operation of the incubator program.

A3. Organization and Management

While managing boards and advisory groups are in place, they do not appear to have effectively guided incubator operations or mentored tenants. The governance structures do not include a broad-based board of directors comprising representatives of the private sector, universities, professional community and financing institutions.

Further, most of the management was designated by the host institutions, not through a competitive process. The managers have good experience in their own fields and have acquired basic incubator management skills through training and on the job, as is customary in incubators the world over. Key persons from the management teams, the boards and city officials need more exposure and orientation to incubation operations and business practices in a market economy.

The management staffs at the incubators are large in numbers (about 10 on average). It should be possible to expand operations without increasing staff strength but by strengthening staff competencies. At both CMC and BID/Kharkiv the total staff is larger than the number of tenant companies. CMC has had a resident US manager since inception and all incubators have had several months of service by US expert volunteers through the Alliance.

Further, each operation is supported by US based staff and consultants. Such a large deployment of expatriates is not justifiable when there are skilled Ukrainians available, needing supplementary training in incubator management practices. Typically, at U.S. incubators the staff size is 3 to 5, but in some developing country situations a somewhat larger staff may be justified as salary costs are low and there is the need to train more people in management. But this cannot be a permanent feature, as the incubator expansion should be accomplished without significant additions to staff.

The process for selection of tenants is not as rigorous as desired particularly when the facilities are currently subsidized and the demand far exceeds the available space. Many of the businesses in the incubators are marketing outposts for existing manufacturing activities located elsewhere, rather than developing innovative knowledge-based products for the domestic and export markets.

The staff and financial resources deployed at the home bases of the U.S. partners is high (half or more of the total grants). In addition, several work-months of expert-volunteers from Alliance have been utilized at low costs to the three projects. Overall, the costs are high, making it difficult to become an effective and sustainable service provider. The management teams need to be continuously trained and monitored to run the business incubators as businesses.

B. Operations

B1. Facilities and Services

The leasable spaces at KTI, Kharkiv (185 sqm) and CMC , Lviv (300 sqm) are very small, making it difficult to derive significant rental income toward sustainability. BID/Kyiv has no space for resident members and has now been appropriately re-named as the ‘Center for Innovation Development’. At Kharkiv the building space has not been fully renovated or laid out to promote inter-actions among tenants. In refurbishing space for incubators, the layout design should be such that two-thirds or more of gross space can be used to raise rental revenues.

Without assessments of the needs of prospective tenants, the services and programs to help the tenants have yet to be developed within the incubator and by networking with external professionals. While the centers are well located in business districts, at Kharkiv security checks hinder access to the incubator while at Lviv the absence of an elevator makes the entry arduous.

All three incubators have only minimal document centers where members can access business magazines, current trade and technology information, management, strategic planning and marketing books, financial newspapers and the growing body of publications on SME/incubator development. In a knowledge society, the availability of data, information and news are the prerequisite for rapid business development, both on the Internet and in hard copy.

Management resources have to be prioritized to place greater emphasis on client assistance, proactive counseling and monitoring that will result in company survival and growth. The linkages to professional networks within local communities can be further strengthened. The facilitation of access to finance by the companies has been needlessly delayed at the BID incubators. On the other hand, at CMC this has become the dominant activity (and source of income) to the relative neglect of other service functions. An appropriate balance is needed.

The counseling, training, networking and information services being provided to members and affiliates need to be enhanced. Ukrainian and international donor concerns with preserving the environment, promoting women entrepreneurs and generating employment should be purposefully addressed.

Incubator work spaces and facilities are poorly designed and severely limited in size and scope. As discussed, typically an incubator needs a gross initial space of around 2,000 sqm., of which about three-quarters should be leasable space to collect rent and allow for flow and interaction among tenants. As it happens, the rentable space at BID/Kharkiv and CMC/Lviv is only one-third of the required area. The lack of shared kitchen facilities, storage spaces, telephone lines are problems needing attention.

Regarding innovations, BID cites such examples as Tavex which has developed computer games and security systems, TechnoKom which has won the tender for a German project, and Ordana which is non-sparkling drinking water (see Annex 7). While these innovations are commendable they are not commensurate with the scientific potential in Ukraine.

There are limited exchanges of information and experience between members of each incubator. In the U.S. this is a source of a fair amount of business. Nor is there much exchange among the three USAID incubators or between them and the other incubators/support centers. This is a tremendous lost opportunity. For example, the BID incubators have not benefited from CMC's experience with its credit program. Similarly, BID/Kharkiv's Business Club experience is a useful and adaptable tool. None of the three incubators were aware of the good work being done by the Belaya Tserka incubator.

B2. Operations

Services being provided to members are limited, mainly comprised of some training courses and little by way of information or counseling. For these services only partial or no fees are charged. In interviews with members, they generally expressed satisfaction with use of fax/copier/computers /Internet but said they did not receive much other support.

Members must be selected to conform to the incubator's objectives, have the potential to grow and create jobs in value adding, knowledge based products and services. The current process consists of filling out an application form, with limited examination of management and marketing capabilities, a preliminary business plan or other requirements. Those outside the facility who undertook a short training course were often counted as 'affiliates'.

B3. Monitoring and Evaluation

It is important to engage in continuous evaluation of operations to modify and enhance the services as the incubator and its tenants mature. At the beginning of the USAID incubator program in Ukraine, the Request for Assistance (April 1997) stressed the importance of sustainability, impact/results and the leveraging of non-USAID resources, giving these the highest points in its evaluation criteria. Further, the RFA had called upon applicants to *'budget sufficient funds to allow reporting on the results and impact of the Activity and not just outputs'*. While the quarterly reporting on performance and finance required by USAID has been comprehensive, it did not include the data needed for measuring program effectiveness.

Because of assured financing, there seemed to be less incentive for managers to work hard on developing new, creative ways of raising revenues. The reasons often given for not implementing some good practices were that the management was too busy in the initial year of operations. Priorities, however, have to be set from the start.

B4. Effectiveness and Financial Sustainability:

As is now recognized, different BDS can recover varying levels of operating costs, from 50 percent to 100 percent plus. In the assessment team's experience, incubators that offer adequate space fully leased and desired and professionally delivered services to a select group of tenants can recover about two-thirds of its costs (and more) in two or three years after the start of operations. Then, depending on the business environment and the resourcefulness of the incubator management, operating break-even could be achieved thereafter.

At the BID incubators, the investment, expenses and income have not been structured with a clear perspective of approaching financial self-reliance in a stipulated time frame. At both BID and CMC the investment and operating costs of roughly \$ 2 million per incubator are at least two times higher than could have been achieved through careful design and prudent financial management. Further, approximately half the total grants have gone to expatriate services and salaries. The release of USAID funds in a manner calibrated to demonstrated performance and based on local needs could have been more cost-effective.

Some possibilities suggested to BID Kyiv and Kharkiv were (1) introduce, with support from the oblast Economic Bureau and American Chamber of Commerce, “*Corporate Friends of BID*” Clubs whereby say 10 large corporations, local and international operating in the region, pay annual subscriptions of \$ 2,000 to \$5,000 to mutual advantage, and (2) collect legitimate fees for services rather than the present mode of ‘humanitarian aid’. (3) utilize other creative financing, such as equity in tech-based member companies, barter and leasing arrangements, and (4) for Kharkiv to negotiate with ISC for additional space on the same floor to increase its leasable area to say 1,000 sqm.

While the forecasts by BID, Kyiv are up beat, on present indications the achievement of financial sustainability by March 2000 is unlikely. Nevertheless, it can play an important role as a nodal center in the national innovation system. If it can reduce its international support costs and focus its energy on a limited portfolio of technology commercialization, it could mobilize the needed local income and donor support toward sustainable operations in the future.

While achieving operating break-even may require more time, the planning for sustainability must be vigorously pursued from the outset.

CMC is determined to achieve financial sustainability by September 2000 when the USAID grant ends. Given its profitable loan operations and local staff development, this is certainly possible, but at some neglect of other essential services for tenants. CID should enlarge its impact by doubling its workspace to serve more members, and by enhancing the quality and scope of its counseling and training services. In the future its success will be measured by the success of its tenants and affiliates.

Given the cross-subsidization by the profitable loan operation, CMC is expected to become self sustainable by the end of the USAID grant.

B5. Business Incubation Image

By allocating large amounts up-front in the incubator program, the management has had less incentive to improve their services, earn more income from rentals and fees, conserve their funds or seek additional resources from city governments and other creative financing. The images have been created in the local communities of large expenditures without commensurate returns, and of an US-driven initiative without the full participation of local public or private stakeholders.

Without full involvement of the local community, it is easy to blame shortcomings on others, and to seek additional resources from the US without struggling for local funds, and to be satisfied with poor services without serious internal efforts.

The USAID program continues to have the image of “American incubators”, with little sense of ownership by the local management, community or city governments. This is a recipe for poor performance.

C. Conclusion

Overall, what has been achieved of the three pilot incubators is the start of a transformation in the mind-set of those who have participated in the training programs. The BID/Kyiv Business Club has reinforced the new ethic of marketing and networking. In its 8 monthly meetings in 1999, club members have made presentations on their company products, met with the American Chamber of Commerce, learned about Japanese management practice, and the value of good public relations. The results were expressed by one Club member: *“Earlier we were scientists who worked to produce research results; now we work to make and sell goods for which the market has a need.”*

As the regulatory and business environment for SMEs improves in Ukraine, the need for effective business development systems will increase. Business incubators should be one additional modality to supplement the other service providers. This USAID incubator program has been underway for about two years; such programs take three to four years to mature, when the graduated businesses can be expected to grow — some exponentially, others slowly, while yet others may fail. However, this would only happen if the current operating practices at BID and CMC were modified significantly, drawing upon the lessons learned in Ukraine and abroad.

SECTION VI

Recommendations — Looking Ahead

The final section proposes a policy framework for USAID/Kyiv's incubator program in Ukraine and suggests possible future actions to take based on the findings and conclusions of the assessment of the three incubators and the team's global experience with business incubation good practices.

A. Supportive Framework

The successful development and operation of the Ukraine national business incubator program requires an intensification of the policy reforms already underway with the support of donors, including USAID/Kyiv. Actions are required at five levels:

1. *Macroeconomic support.* Macroeconomic policies and legislation must be more supportive of small enterprise development in general and of business incubation and other services that nurture private entrepreneurship in particular. The framework conditions start with competitive markets; developed stock markets; financial and accounting systems; honesty in the government establishment; budgetary discipline with controllable inflation and currency parities; growing productivity and competitiveness to help expand markets, incomes and exports, particularly of knowledge-based products; and investments in education, health, social services, security and environmental protection. Brazil and Republic of Korea provide examples of the energy being applied to overcome financial crises and launch the countries on rapid growth trajectories.
2. *Microeconomic support.* Speedier reforms (legislative, regulatory and tax) are essential to promote SME development. The new legislation should clearly define the roles of BICs and other business development services, enable them to acquire cost-free premises from city councils while still charging rents to their tenants, and give them defined tax exemptions. Incubators and their tenants require a tax structure that is fair and not burdensome. Importantly, a clear understanding is needed of the potentials and limitations of the incubation modality as just one component of the overall small enterprise development strategy.
3. *SME (hard and soft) infrastructure support.* The technical and business environment has to actively promote the process of venture creation – a hazardous process in any country, more so in one trying to make a rapid transformation to a market economy. The success of Poland and the Czech Republic is due in part to their purposeful move toward creating the ambience in which supportive services such as business incubators and their SME tenants can grow. This calls for special measures to:
 - Develop reliable communication, transportation and utility systems;
 - Protect all forms of property;
 - Promote a culture which encourages measured risks for high rewards;

- Implement efficient procedures for registration, compliance, tax inspections, etc.;
 - Enhance the security of the community; and
 - Strengthen institutions which can provide accurate statistics, promote linkages with private and state industry, universities and research institutes;
4. *Financial support.* While small enterprises and their support services are essentially in the private sector, they need initial financial support from governments, stakeholders and donors. This is the practice in all countries – OECD, restructuring and developing. The massive support provided by countries such as Israel and China to promote an innovative culture and to increase the proportions of technology-based product exports is now giving impetus to their economic growth. Where institutions need assistance, international donor agencies can play a role in transferring skills and providing a worldwide view on innovative arrangements. Donor support is however an interim measure for assisting governments and sponsors to strengthen their indigenous capabilities to mobilize needed resources.
5. *Local support.* The small business constituency international assistance to SME development creates can be used to leverage local support and accelerate the process of policy reform, if this assistance is used wisely to catalyze growth while avoiding dependence. A participatory process should help develop the metrics of sustainability and quantified impacts, on which incubator performance can be monitored and assessed. Such continuous monitoring provides the information for maintaining donor support and building local support for change. This is important as vocal support for business incubation from the highest levels within the public sector and from the beneficiaries, the SMEs, helps to bring down barriers to growth. For example, the interest of incubator tenants in Uzbekistan became a force in leveraging more friendly policies for the private sector; within a few months from the start of the program a Presidential Decree granted special recognition and tax-free status to the new incubator program.

The First Summit on Small Enterprises in Ukraine, October 1, 1999, was significant in the dialogue it created with SME stakeholders nationwide. It gave broad indications of the tasks ahead for the new government in Ukraine. But strategies have to be translated into national and regional policies, policy instruments and regulations, supported by financial resources at the city and oblast administrations. These should be based on continuing consultation with the community, state and federal levels, with the industry, utilities and social sectors, and importantly with the associations representing small business and incubation industry interests.

B. Recommendations on Incubator Development

The Ukraine incubator program can benefit from the lessons provided by business incubation activities in other countries. Some of these lessons, as discussed in Section II.C and Annex E are outlined below. To reiterate, the notion of good practices in business incubation means that lessons from elsewhere should not be *adopted and applied* straight away. However, these lessons may be *adapted and modified* as permitted to specific local conditions in Ukraine.

1. *Homework.* Prerequisites to future support for business incubation include a complete business plan, local involvement in the plan, and a specific decree from the city

administration to provide in-kind contributions and other support. It is recognized that economic conditions in Ukraine make it difficult for state and local officials to always honor various promises, written or otherwise, of support. Still, Belaya Tserkva IBI (see Annex E), which has a business plan, and others have succeeded in securing a fair amount of financial and in-kind contributions from local agencies.

2. *Buy local.* To the extent feasible, target the bulk of resources at the local level to create the needed management and technical competencies. If the declining resources of donors and governments are not used prudently to develop local capacities, then any business support mechanism will become unsustainable. Limited UN assistance for business incubation in China, for what is now a successful incubation program, targeted, first, proper planning and preparation and, second, local incubation management training.
3. *Create ownership.* From the outset, donor assistance should be directed toward creating ownership and responsibility for the new program by the local agency concerned. Future support should empower the local sponsors and managers to take prime responsibility for the success of the program, with advice from the expatriate experts where requested, strict monitoring by the donor and participatory evaluation by independent experts, donor and beneficiary. The words of Lao Tzu on governance about 500 BC are also relevant to international cooperation today: *‘Go to the People. Start with what they know; Build on what they have. But with the best leaders, when the work is done, the task accomplished, the People will say: We have done this ourselves’.*
4. *Champion the cause.* The prompt implementation of SME development programs requires a ‘champion’ at the highest level and strong local partners in a supportive city administration. Several opportunities exist to build a base of support from which to champion the cause of SME development in general and business incubation in particular.
 - Build on the BIC and business development services nuclei already created;
 - Strengthen groups which have demonstrated commitment and knowledge to incubation;
 - Identify private voluntary organizations in new cities where there could be potential support; and
 - Educate oblast and city economic development agencies on modern ways to support SMEs, incubators and technology parts through intensive Ukraine-based seminars and study tours abroad.
1. *Calibrate funding.* Match donor funds to the needs and performance of the incubator program, rather than provide all up-front. Investments in new incubators can be organized on a competitive basis, as was done on the World Bank loan for incubators in Poland. Where appropriate, support to operating costs can be activity-based. Rather than committing large sums initially, an alternative would be to provide a series of small grants based on specific objectives and processed through a mix of competitive submissions and unsolicited bids.

These could be followed by continuing support based on monitoring of performances. A similar approach through a work order mechanism is already being used on some of the Business Development Centers in Ukraine.

2. *Network.* Look outwards toward networking in all directions, both intra- and inter-nationally. With near costless communications and globalization of markets, the need and benefits of continuous interactions are enormous, for the incubator and for its tenants. The International Business Incubator program in China is a case in point. The success of the technology program in Israel is due in some measure to the small local market that forces the enterprises to export and form alliances abroad.
3. *Alternative incubators.* Two possibilities exist, for-profit incubators and composite incubators. **For-profit incubators** require the involvement of the private sector from the beginning in the establishment and operation of the incubator. The private sector has much to offer in terms of mentoring incubator tenants, sub-contracting opportunities, and demonstrating corporate responsibility. The three Mission sponsored incubators could be encouraged to initiate such a move during the last months of USAID funding. Further, they could mobilize the involvement of private companies through a corporate club of mutual interest as was done in Brazil where the Sao Paulo Federation of Industries runs a dozen business incubators.

Integrated composite enterprise incubators build their competency around the Internet. With the Internet, the small company can mimic the large through strategic alliances while the large acquire attributes of the small by spin-offs and out-sourcing of supplies and services. Incubators have to look beyond traditional forms and reach out to larger numbers of ventures through the Internet, to the entrepreneurial university and the learning enterprise. As the Internet moves on from e-commerce, to e-business and on to e-education, it provides a platform for convergence, connecting business services and venture seed capital. Combining the traditional with the new, an integrated composite incubator would create additional income from rental revenues, generate a stream of deferred income through equity participation in tenant companies, facilitate the process of distance learning and consulting, and serve as a ‘living laboratory’ where the effectiveness of training and counseling provided can be verified and improved.

C. Proposals for USAID/Kyiv's Business Incubation Program

The problems facing the start and operation of small business in Ukraine have been severe, particularly the tax system and its tax police, the lack of investment and working capital, the bureaucracy and the low levels of demand for SME products. USAID/Kyiv has been at the forefront of international assistance activities to formulate policy measures, micro-finance and business support mechanisms for small business development. The on-going incubator program complements these efforts. In this context and based on this assessment, suggestions are made below to assist USAID/Kyiv in formulating a revised strategy of support to business incubator development in Ukraine. The suggestions below taken together could form an overall national incubator program for continuing USAID involvement.

C1. Build on the Three Pilot Incubators and Other Incubator Initiatives

Dedicated promoters, often women, have initiated incubator like arrangements that do good work based on voluntary efforts and with very limited resources. For instance, Ms. Luba Maksymovych has 3 tenants and 12 affiliates in a small space (300 sqm) provided by the Lviv Polytechnic State University. At the Kharkiv City Women's Fund, Ms. Lily Kim and her team of volunteers have innovative support activities for women.

The pilot incubators at Lviv, Kyiv and Kharkiv have been in operation for about two years. It normally takes three to four years for incubator management to develop effective services and to establish a reputation that could attract more tenants and support. The pilot incubators have positive aspects as mentioned; however, without some continuing assistance these efforts may continue to fall short of expectations, decline or even disappear. Activity-based support could be considered for specific tasks, such as:

- Continued training of Ukrainian staff through hands-on practical apprenticeships at comparable incubators.
- Participation by well prepared managers in selected incubator conferences to become familiar with good practices on incubator operations, improving services to members, raising revenues through creative financing arrangements, and other emerging trends.
- Pioneering new and innovative incubation modes, such as cyber-incubation to reach out to larger numbers of entrepreneurs through the Internet.
- Establishing a proper documentation unit at each of the three incubators, with complete sets of books, publications, and software.

It is proposed that the Mission consider continuing its support to the three pilot incubators but in a slightly different mode. This support would be deployed primarily through the local Boards of each incubator, and with management responsibility on the Ukrainian side. At this stage, they can identify their own needs, with selective US inputs as required. Concurrently, USAID/Kyiv should design a support program for building on early-stage incubator variants through small grants. This again can be on the basis of competitive bids for selected outputs, or as activity-based funding on projects that these groups propose from the bottom-up.

C2. Promote an Effective Business Incubator and Support Center Association

A functioning, service-oriented association of Ukraine business incubation, innovation and service centers can be a mechanism for better networking, training, information dissemination, international cooperation and advocacy. The options need to be studied. The existing incubator association, to which the Soros group has provided some support, could be strengthened or linked to the new BSC association started by NewBizNet Kharkiv, or alternatively, a new association formed which would also include technology parks, as has been done in Mexico and Brazil.

Once initiated and rooted, financial resources for such associations come mainly from registration fees paid for such things as attendance at the annual conference, sale of publications and training courses. Until then, donor support would be for the purposes of:

- Organizing an annual conference to be hosted in turn by one of the Ukraine incubators.
- Producing a quarterly newsletter to inform members of innovations in incubator planning and operations, forthcoming training courses/conferences in Ukraine and abroad, news of importance to the incubator community, recent statistics, etc.
- Publication or translation of selected book titles of direct relevance to the incubation industry.
- Annual Directory of incubators and parks.
- Supplementary support to the association secretariat, i.e, one bi-lingual secretary and a part-time bookkeeper.

USAID should consider the best course of action for strengthening a business incubator association and supporting it for specified tasks.

C3. Prepare a Strategic Expansion Plan

Various models of incubation have been tested in Ukraine and a basic understanding of the essential concepts now exists among the development practitioners (although misconceptions and false expectations also persist). In the context of the imperative to start new ventures while growing the existing ones, the time is opportune to expand the business incubator program. The United Kingdom, Germany, TACIS, UNDP, SOROS and others have or plan activities in the field of business incubation. Based on the experience available and the momentum generated by these programs, it should be possible to double the number of incubators from less than 10 presently to 20 in the next four years. The strategic plan would

- Look at what actually exists nationwide and what can be learned.
- Undertake a preliminary review of 20 potential sites (one or two in each oblast) to ascertain whether the pre-requisites exist or can be readily developed. These include the provision of building and other in-kind support from local agencies, the possible sponsors, the pool of entrepreneurial talent likely to be available, and linkages to universities, industrial complexes, research institutes and communities.
- Make a preliminary assessment of the preferred locations and possible alternative buildings within them, using a rating scale of weighted factors.
- Identify five priority sites for possible Mission supported incubators, with different objectives and modes.

This would be followed in the next stage by the preparation of business plans for selected sites based on stipulated criteria and by support to the planning, implementation and initial operations of the new incubators. A similar approach has been adopted on the expansion of the Indonesia and Egypt incubator programs.

USAID/Kyiv should consider the preparation of a strategy incubator expansion plan to help identify the local conditions and locations that offer the best chances of success.

C4. Financial and Technical Support for New Incubators

The process of planning and starting a business incubator has four steps: preparatory, informational study tour, seed capital fund, and initial operations.

C4a. Preparatory

This phase typically involves:

- Feasibility analysis and business plan prepared by local experts and supplemented by external assistance as necessary.
- Consensus and commitments of supplementary resources by local government/municipality/ university and private business.
- Identification of the local managing board, the selection and training of the management team.
- Design and renovation of a vacant building space to be provided.
- Procurement of furniture and office equipment.
- Pre-incubation and selection of prospective tenants.
- Accessing finance for tenants, possibly through a ‘venture catalyst’ fund.
- Mobilizing a network of service providers.
- Formulating procedures for initial incubator operations.

During the above preparatory process, the types of incubator configurations appropriate for each location would be analyzed. Different modes and target groups could be developed, for instance: incubators focused on women entrepreneurs, agri-business, computer software and ‘New Media’ applications, bio-medical/bio-technologies, a cyber-incubator, or a private for-profit incubator.

C4b. Study Tour

As part of, but apart from, the preparatory phase and later in the process, a well prepared study tour of successful incubator systems can help cement important rhetorical and financial support

for a local incubator movement. Such a tour would target, say, 10 senior state officials from the central and oblast governments directly connected to incubator operations who would visit selected countries, e.g., US, Brazil, China, Poland, for 2 weeks to view incubator operations and discuss key issues on state policy for support to incubators.

C4c. Seed ‘Venture Catalyst’ Fund

While a variety of financing agencies exist in Ukraine to provide asset-based finance for SMEs, practically no equity seed capital funds are available. Yet, this is the kind of funding (\$100,000 to \$300,000, primarily as equity) that knowledge-based enterprises require, before they become attractive to the typical venture capital operation. It is suggested that a study be undertaken on the feasibility of such a fund targeted to the needs of early-stage incubator members.

C4d. Initial Operations

Once an incubator is started, the main tasks for management in which support can be provided are to:

- Develop counseling, training and information services.
- Create linkages to a network of professionals.
- Pursue sources of finance for the incubator and tenants.
- Induct additional tenants.

Support and monitor the tenants to enhance their chances of success and graduation.