

## IPP Technical Evaluation

**US Partners(s):** University City Science Center

**NIS Partners(s):** A/O Racad, Donetsk State Technical University (DSTU),  
Lviv Institute of Management (LIM)

**Location of site visit(s):** Donetsk, Lviv

**Date of visit(s):** Donetsk: November 5-7  
Lviv: November 10-11

**Date report submitted to IREX:** December 6, 1996

### **A) Discuss the strongest aspects of the technical and professional work being done by this partnership.**

It should be noted that the partnership in Lviv is more mature than the partnership in Donetsk. LIM appears to have a deeper understanding of its own needs and how these needs should be met. LIM used the opportunities offered under this grant much more efficiently than DSTU. This was most likely due to a number of factors; notably the presence for a year and a half of a US Peace Corps volunteer at the Institute, as well as the Institute's prior work with other grants and donors.

- Co-development of courses

The most useful aspect of this partnership for both Donetsk and Lviv was the co-development of courses by Ukrainian and US professors in Philadelphia. This produced new business courses that combined the experience of the West with the practical knowledge of Ukraine.

- Training of LIM staff in the US

Additional benefits were observed which resulted from the training received in the US by non-academic interns. The equipment received from the US was also helpful. Again, these benefits were more pronounced in Lviv than in Donetsk.

- Technology Promotion Center in Lviv

The most impressive project in Lviv was the newly established Technology Promotion Center. Although it is a new organization, its energy, dedication, and accomplishments are evident.

### **Discuss the weakest aspects of technical and professional work being done by this partnership.**

- The US and Ukrainian organizations as partners

The Ukrainian and American organizations have not been acting as true partners for most of this grant's duration. It does not appear that the Ukrainian partners were sufficiently involved in the design and writing of the grant. This has been detrimental to the level of commitment of the Ukrainian partners. Information about the grant's goals, plans, and budgets was not shared with the Ukrainian partners until very recently. The partnership has suffered from a basic lack of understanding, from cultural differences, and from technical difficulties (such as ready access to e-mail in Donetsk). There is a sense, especially in Donetsk, that the partners have just started to understand what they require from each other. Part of this newly gained understanding is the result of recent facilitation efforts by IREX staff.

- Communication

The partnership suffers from a lack of communication between the Ukrainian partners in Lviv and Donetsk. It is clear that these organizations do not consider themselves joint partners in this grant, but independent grantees of the University City Science Center. In fact, some of the activities undertaken by the two organizations are so similar that they could greatly benefit by cooperating and exchanging information.

This institutional partnership suffered from trying to do too much too fast. It would have been more beneficial to try to do less at the beginning. This would have allowed the partners to become better acquainted and to develop a sustainable communication process.

- Short demonstration courses

Most individuals interviewed gave low marks to the short demonstration courses, largely because local entrepreneurs found the courses to be irrelevant or too basic. The courses were held in the summer when Ukrainian professors were away on holidays, thus no local teaching capacity was being built. (This observation will be expanded upon in the Training section below.)

- LaSalle University

Ukrainian trainees were disappointed with their work at LaSalle University. The University's Small Business Development Center closed its doors mid-way through this partnership. Other trainees found that the working conditions at LaSalle were non-conducive to learning due to limited access to equipment and study space.

### **Recommendations for Improvement:**

- Faculty and staff development

Faculty and staff development of the two organizations should continue. However, the goals of the partnership should be reviewed and revised with the Donetsk partners to ensure that the staff being developed will be beneficial to the University.

- Communication

Communications between the partners would greatly improve if Donetsk were equipped with better e-mail capabilities. At present, there is only one e-mail address in Donetsk and one computer from which this e-mail may be accessed. The partners would also benefit from more frequent meetings and communications between themselves.

- Short demonstration courses

The demonstration seminars should continue only if topics can be agreed upon in advance by the partners and if the seminars are co-developed by Ukrainian and US faculty members. This should ensure relevancy to Ukrainian audiences and the improvement of the local capacity to conduct these seminars in the future.

**B) What do the Russian or Ukrainian partners see as the "criteria for success" for their partnership project activities? How close are they to attaining them?**

It was difficult to determine what the Donetsk State Technical University considers to be a success. DSTU is only now beginning to understand how this type of a grant can be utilized. The SBDC (Small Business Development Center) and course development at DSTU appear to be satisfactory. The courses developed in the US by the trainers from Donetsk are quite usable. These courses are already being implemented in Donetsk and are also being organized for a paying audience. The SBDC suffers from a lack of direction. However, it has decided to work on developing a course with UCSC on "How to find investments and work with potential investors". The SBDC is confident this course will bring in much needed revenue.

Rocad is interested in developing ties to the US and in earning revenues from the activities of the SBDC. Rocad is confident that its association with the UCSC will continue beyond the life of this grant and has already started working with UCSC on developing relationships with other organizations. It is difficult, however, to justify the need for Rocad's continued involvement with the SBDC or with this grant. Their role as coordinator is no longer as essential as it originally was.

LIM is mostly concerned with the development of the Technology Promotion Center and the training of its staff and faculty. The Technology Promotion Center is well on track and has begun to reap benefits from its staff, which should continue to be cultivated.

**Recommendations for Improvement:**

The grant in its entirety (e.g. activities and goals) should be fully reviewed in Donetsk. Grant activities now reflect what the US partners believe the DSTU's needs are. It is important for the driving force in this grant to be the Ukrainian partners rather than the US partners.

The role of Rocad should be reviewed. What is the benefit of their continued participation in this grant?

Judging from the business projections of the Technology Promotion Center, it is evident that they expect to lose money for the next couple of years, but it is not evident where the additional funding will be found. It is of the utmost importance to help the Center to find funding.

**C) Describe the technical merit and appropriateness of the following program components:**

**1. Training**

- Short Demonstration Courses - Both locations

These courses were held during the summer when most Ukrainians were on holidays and were unable to shadow the US faculty members. The courses proved unpopular with audiences. Most of the participants were students, not entrepreneurs as originally anticipated. The courses were poorly received because they were considered by the Ukrainians to be too fundamental and not suited to Ukrainian businesses concerns. This situation was compounded by the fact that the Ukrainian partners did not properly convey their dissatisfaction with the courses, while the US partners did not make the proper attempt to understand the evolving needs of their Ukrainian partners.

The Ukrainian participants received the courses on high technology licensing well, and judged them to be useful. However, the courses were too short and covered a very narrow aspect of technology commercialization, mostly focusing on licensing agreements.

- US Based Training

The quality of the US based training seemed to depend mostly upon which US organization hosted the trainees. In some locations a permanent place to work was unavailable, and at times, trainees felt as if they were intruding (probably because no clear training plan had been developed to have US trainers ready to receive them). All participants praised the pre-departure orientation as being very useful, especially the meetings with American business people, banks, and other institutions. Most participants commented on the positive effect the internship had on their English language abilities.

New staff of the SBDC in Donetsk found the shadowing of consultants very useful. The staff found it beneficial to see how SBDCs are organized in the US.

LIM felt that it was not given the opportunity to take full advantage of the grant to develop their staff and faculty. LIM believed that it should have been given the opportunity to send only LIM staff members rather than being forced to put them into open competition with all of Lviv. The Institute validly complains that this hurt their sustainability efforts.

There was a sense that Donetsk found it difficult to find suitable candidates to participate in the training. For example, one of the trainees was the son of Vyacheslav Ignatov, International Director of DSTU. The role of this trainee after his return has not been defined. In fact, he does not seem to have had any further affiliation with the activities

covered by this grant. Although it did limit the pool of possible trainees, it was beneficial to use Ukrainian faculty members that had a demonstrable command of English. This meant that they were able to absorb information quickly, communicate fluently, and were unencumbered by an interpreter.

- Development of business courses in the US by Ukrainian and US Professors

One of the most beneficial aspects of this partnership has been the co-development of business courses in the US by Ukrainian professors. The courses developed by this method are a good combination of new business theory and Ukrainian practicality. Most of the courses were co-taught with US professors which led to a transfer of skills and knowledge. Most Ukrainian trainees reported that as a result of their training, they have changed their teaching methods to incorporate the use of handouts, overheads, and theoretical reading for independent study. Group work and practical work are assigned during classes. In addition, the Ukrainian professors have started to use computers for presentations and exercises. An example of the courses being taught is Dr. Solod's "Using Computers to Solve Problems". This course is being taught to business students in Donetsk.

The trainees did not feel as if they had enough control over the decision of which courses they would be working to co-develop. They didn't know what courses were available, which made it difficult for them to make an informed decision.

### **Recommendations for Improvement:**

- Short Demonstration Courses - Both locations

It would have been beneficial to first survey the local business communities to make needs assessments. In addition, course content should have been agreed upon by both the US and Ukrainian partners. For maximum benefit, courses should have been co-developed and co-taught by Ukrainian and US faculty members.

The courses offered were judged to have been too general. Therefore it would be beneficial to make subsequent courses more specific. Courses that might be offered in the future are: "Marketing", "Market Research", "Writing a Practical Business Plan", and "The Internet". LIM was particularly interested in a course on "How to Write Cases".

The course on commercialization was well received. It can be expanded to cover all the steps in the commercialization of technology; e.g., market research.

- US Based Training

A work-plan should be developed ahead of time for Ukrainian trainees. The receiving organization needs to ensure that trainees will have the necessary access to resources such as local staff, workplace, and equipment.

The training of the SBDC trainees could have included more work with the consultants to better understand how exactly the process should be conducted.

It might have been beneficial to have trainees arrive before the semester started so that they could undergo orientation activities and then begin studies at the same time as the regular students.

- Development of business courses in the US by Russian and US Professors

LIM faculty staff members stayed for a longer period of time in the US than Donetsk staff members, who would also have benefited from a longer stay. It would be beneficial if visiting trainers from the US could stay for a much longer period of time. This would allow time to tailor course development to local realities and needs. It would be advantageous to the Ukrainian partners if the US partners worked with them to develop a whole course in the field of business and technology transfer.

Some of the Ukrainian professors felt that their work with US businesses was more like an excursion. They would have preferred it to be more intensive. A short internship would be beneficial, and would allow them to understand how business in the West works. In fact, it might be of great benefit for the US and Ukrainian partners to work together in developing a business case.

## **2. Products**

- What is a Business Plan?

This product is an inadequate effort that has not taken into account the Ukrainian audience. Much more effort should have gone into explaining concepts, the reasoning behind the various sections, and some insight as to how the information is to be gathered. Much better publications are already available in Russian. A number of these publications have been developed using USAID funding, thus they should be available free of charge to other USAID grantees. The Business Development Program in Russia for example has developed a publication using a Russian sample business plan, "The Business Plan Writing Guide". Likewise, a guide on finding investment is also available.

- Business Definitions

The business definitions list is a good compilation of often used business terms that have been well translated. It should be noted that there are good business and economics dictionaries already available in Russia. Due to the similarity between Russian and Ukrainian, it would have been easier to translate from the Russian into Ukrainian than from English into Ukrainian.

- Course Material for Market and Industry Analysis by Visiting US Professors

This course is well written and is a good introductory course on marketing and analysis. It is in Russian and, from a review of the material, it appeared that participants were to bring an actual case to the session to be discussed. This probably made the course more relevant to the Ukrainian audience.

- Business Plan and Marketing Materials for the Technology Promotion Center

The Business Plan and Marketing Materials for the Technology Promotion Center is an ample working document. From interviews with Center staff, it was apparent that it had been written with heavy input from them, which made it not just a document but a realistic plan of action. It is most impressive that the Center has in fact already followed most of the action steps outlined in this business plan and it is up to date with its projections. Most of the promotional material is quite good and is already being used by the Center in its marketing efforts.

- Using Computers for Decision Making

This course was developed in the US by DSTU professor Dr. Vladimir Solod. It is mostly in Russian. The material is clear and well presented, and should be useful to the audience. However, there are no Ukrainian examples used. Dr. Solod indicated that he has started to teach the course and will change the presentation further once he had a chance to "test" it.

### **Recommendations for Improvement**

- Business Plan and Marketing Materials for the Technology Promotion Center

The promotional materials include a flyer that begins with: "The Scientific Community is Looking for You". This flyer is too westernized and too forward for the Ukrainian audience. This flyer would most likely make local scientists apprehensive. While other promotional material is being used by the Center, this particular flyer is not.

- Course Material for Market and Industry Analysis by Visiting US Professors

The course is generally well written. A minor improvement could be to format the document to be more user friendly if it is to be used again.

- Using Computers for Decision Making

The course is generally quite useful. A column about Ukrainian management style could easily be added. An interesting complement to this particular course would be the adaptation of existing software on decision making on computers for Ukrainian use.

### **3. Resource and Learning Centers**

- Video conferencing capabilities - Donetsk & Lviv

The video conferencing equipment does not work properly due to poor line quality. Although connection between Ukraine and United States can be established, the phone lines are so poor that the line is dropped (disconnected) within a few minutes. As this is a relatively short connection time, video conferencing is not yet a feasible means of communicating or training.

### **Recommendations for Improvement**

Use other modes of communication until the situation with local telephone lines improve.

#### **4. Consulting Services**

- Small Business Development Center - Donetsk

The SBDC in Donetsk is in its infancy. The Director, Mr. Yuri Ladyzhevski, is uncertain as to what direction the SBDC should take, which services the Center should offer, and how it will become self-sustaining. This lack of direction has been attributed to the type of training that was received in the US, since the SBDC that was observed there was being heavily subsidized by the government. The Center is located in a small room and has not yet received equipment.

- Technology Transfer Program - Donetsk

The DSTU has formed a group to try to commercialize the technology that the university has developed. The group was the result of two seminars on technology transfer that were held at the university and has only just started operations. The group submitted 20 technologies to UCSC and has had indication from them that some of the technologies are of interest to organizations in Latin America. It does not yet have a permanent place of operations. It is difficult to judge the progress of this group as not much has yet been accomplished.

- Technology Transfer Center - Lviv

The Technology Transfer Center in Lviv is located in a 15 sq. meter office, in the center of the city, not far from a number of academic institutions. The Center has a staff of three energetic and dedicated professionals, and has at its disposal a computer, a scanner, printer and a telephone. The Center is small but well organized and it has 47 clients already. The Center has developed a realistic business plan that it has been following. It has developed marketing materials such as a brochure, and has been busy marketing itself. The Center has just entered into an agreement with a local newspaper to publish information about the Center and the Center's clients.

The Center uses a confidentiality agreement and a licensing agreement with its clients. Clients apply for assistance by filling out forms and signing a confidentiality agreement. Information provided by the clients will eventually go into the UCSC database. The Center's clients are scientists who are not able to directly pay for the Center's services. They will be charged a commission if the commercialization of their technology is successful.

This aspect of the grant is quite successful. The Center is operational with a good staff, a realistic plan that is being followed, and a growing clientele base. The Center started its operation quite late into the life of this grant. It is not clear where the Center will receive the additional operational funding it requires.

- Use of MBA interns

The use of MBA interns for this partnership has been fraught with pitfalls. The MBA interns did not speak Ukrainian and came during the summer when it was difficult to fully utilize their business skills. A plan for how these interns should be used has not been decided upon by the partners. Only the intern that was sent to Lviv was perceived by the Ukrainians to be truly useful.

## **Recommendations for Improvement**

In Donetsk, there are three Centers to be established as part of this grant. These Centers should share a location which would result in savings of resources such as space, staff time, and equipment. The smoother flow of information and communication will foster an increase in the operational efficiency of these Centers.

- Small Business Development Center - Donetsk

As was mentioned earlier, this Center is in its infancy and will most likely not survive unless given an injection of additional resources (time, money, and additional staff training). The SBDC needs assistance to put together a business plan and marketing materials. The Center would benefit from the purchase of additional resources such as directories, dictionaries of business terms and the like. One interesting resource material that should be looked into is the US SBDC series, which is available at a very reasonable price. This series may have already been translated to Russian (USAID in Moscow would know about this). The Donetsk Center should be put into contact with other business support Centers across Ukraine.

Another possible recommendation would be to review the feasibility of injecting significant resources into the SBDC in Donetsk and perhaps using these same resources to support other stronger aspects of this grant.

- Technology Transfer Center & Program in Donetsk and Lviv

The technology transfer initiatives in Donetsk and Lviv should exchange information. For example, Lviv has developed a template licensing agreement, which Donetsk is planning to develop.

The Lviv Center was particularly keen on the technology seminar which was given and would welcome an opportunity to organize these seminars again. They would like to use more of their staff and input in order that the Center can continue to offer this seminar themselves. The Center would also benefit from reviewing its costs to see cuts could be made (notably, rent). In addition, if the grant is to end very soon, the Center should begin to search for alternate sources of financing.

- MBA interns

The use of MBA interns has been a contentious issue with other programs. It is very important to ensure that dedicated, mature, and experienced interns are chosen to avoid having the intern become a burden to the organization. Every attempt should be made to

enlist interns that already speak Ukrainian or Russian. Interns should be prepared to come during regular semester time. It would be beneficial for the US university to provide extra incentive by awarding credits for work done in Ukraine. A realistic and useful work-plan that the Ukrainian partners in particular feel comfortable with should be drawn up by both sides before the interns depart for Ukraine. To obtain the full benefit from the work of a US intern, they should work with a Ukrainian consultant as a team so that a transfer of skills takes place and western expertise is augmented by knowledge of Ukrainian realities.

**D) What additional technical assistance do you believe the Russian or Ukrainian side could use to improve their work in general?**

- Use resources already developed in Russia

In terms of development and donor assistance, Ukraine is approximately two years behind Russia. This means that there have been materials, programs, and resource centers developed in Russia that Ukrainian partners could use in their work. There is quite a bit of work being done in Russia in the area of technology transfer by USAID and TACIS. There are high technology incubator associations and an association of technopolises. There is a rich pool of both Russian and US trainers who are working with training materials already adapted for this region in this field.

- Improve communication

If work is to continue with Donetsk within this partnership, then DSTU's e-mail capabilities should be improved such that every participant has access to e-mail. At the moment in Donetsk, there is only one e-mail address and one computer through which it can be accessed.

- Additional information resources

Both sites could benefit from additions to their library of business and economics texts and reference materials.

**E) What new directions do you see as a natural follow-on for this project? Are there others working in the sector that this group might contact and/or collaborate with?**

Both sites would benefit from additional development of courses. They would especially gain from working on a curriculum for business education together with their US partners (maybe even a joint program) and then from using it as a template for deciding which courses should be co-developed in the future.

LIM is also interested in developing their capacity to offer Business English courses and in becoming a TOEFL testing Center.

The following organizations will be useful for this partnership to contact:

Russian Association of Technopolises: Based in St. Petersburg; it deals with high technology aspects of business.

National Business Incubator Association (US)

Russian Association of Business Incubators: Based in Dubna, not far from Moscow; it conducts training and work on improving incubators.

"Incubator": A USAID funded program in Russia supporting the commercialization of technology.

TACIS: A technology transfer program for Russia that is based out of the Moscow State University.

American Business Centers (ABCs): Most look for partners for their US clients and organize trade missions of US companies.

Trade Facilitation Offices (TFOs): Every western country except the US has these offices that are sponsored by the UN and the government to assist developing countries to export their goods.

MBA Enterprise Corp.: A US organization that sends experienced volunteers that have just graduated from an MBA program at a selected US accredited institution to work for a year as consultants in the NIS, Eastern Europe, and developing countries.

Citizen's Democracy Corp (CDC): A USAID funded program that sends volunteer US business specialists on one week to three month assignments to the NIS.

International Executive Services Corp (IESC): Partially funded by USAID; this organization provides the services of volunteer retired executives to companies in developing countries.

The Business Development Program (BDP): The BDP has produced many business and economics books, brochures, and guides in Russian. These should be available free of charge to grantees. It published a business plan writing guide in Russian and produced a "Consultant's Tool Box" which contains a lot of resource information materials. In addition, it has the complete SBDC publications, some of which may have already been translated into Russian. These would be of benefit to Donetsk where Russian is predominant.

The Business Collaboration Center (BCC): Was set up by USAID in Russia to act as a clearing house of information for all USAID funded business development programs; the BCC has information about all the different business support centers and incubators in Russia. In addition, it has collected a library of many business related materials that have been produced in Russia using USAID funding.

**F) How do you assess the partnership's sustainability plan? What is your sense of how close the partners will be to meeting these goals?**

Both sites are not as sustainable as planned. Donetsk is especially behind. There is a sense that Donetsk, in particular, has only now started to realize the potential inherent in this grant. None of the Donetsk Centers are past the start-up stage and the staff is uncertain as to how they will continue past the rapidly approaching end of the grant.

LIM in Lviv is in much better shape. The Institute has already started charging for many courses and has an established paying client base of students. Also, LIM appears to have more initiative. For example, visiting professors are, if they are good, brought back using grant monies or other resources.

### **G) Other comments:**

As part of this grant, equipment is being purchased for the Ukrainian partners. This has caused difficulties with local tax laws that do not recognize technical assistance as tax exempt. This problem may be solved by shipping the equipment to USAID and then drawing up a zero cost long term lease with the Ukrainian institution. This would allow the partnership to save money by saving on taxes in the US and in Ukraine.

Dr. Majid Tavana was cited by many as an exceptional specialist and professor.

LIM greatly benefited from the full time presence of a US Peace Corp volunteer, Ms. Nikki Lemley, who has been working closely with them for the past one and a half years. LIM has also benefited from past experience of working with other donors which gave it more of an understanding of how to work within this grant.

### **Meetings held, locations visited, events attended**

Ihor Gruba, Project Coordinator, ROCAD

Vyacheslav Ignatov, DTSU International Director

Michael Utilov, Intern, Technology Transfer Group, DTSU

Yuri Ladyzhevsky, Deputy Director of SBDC in Donetsk

Gennady Manerov, Director of SBDC, Donetsk.

Julia Verchionova, SBDC staff member

Vladimir Solod, Developed Course, DSTU

Pavel Levin, Developed Course, DSTU

Serhiy Hvozdirov, Project Director, LIM

Oksana Koulakovska, Project Coordinator, LIM

Nikki Lemley, Peace Corps, LIM

Ihor Katerniak, Director, LIM Technology Promotion Center

Andrii Beyzik, Developed Course, LIM

Rostyslav Goy, Developed Course, LIM

Ihor Nikolin, Head of International Department, LIM

Technology Transfer Center in Lviv

SBDC in Donetsk