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ICT CASE Project guideline

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1. Purpose of the document

Purpose of this document is to have an overview of all steps taken in handling of the project ICT CASE – ICT Academy in on place, from definition of needs of ICT cluster members and project writing to project finalization. It includes all steps in project implementation, along with precise description of those steps. Also, it contain obstacles that project team encountered in implementation of the project, along with the solutions that project team came up with in confronting those obstacles.

The use of this document will enable standardization of certain actions, as well as help making procedures, thus saving time in project implementation in years to come, and help foresee possible problems and introduce the way to evade or minimize them.

2. Project start – up

This section explains how the idea for ICT Academy came up, and first steps in order to create tailor – made educational course for companies – members of Vojvodina ICT Cluster. It depicts how the need for new employees of cluster members prompted Vojvodina ICT Cluster to act on members behalf, definition of project ICT Academy, its goals, needed funds to start it up and final preparations in order to suit the needs of cluster members. At the end of this process, the ICT project was created.

a. ICT Labor market assessment

Mr. Milan Solaja, head of Vojvodina ICT Cluster, in usual meetings with representatives of company members of Vovjodina ICT Cluster, noticed that some of the companies have problem with lack of workforce. Since the members VOICT experience constant growth in employees number in the period of year 2010 – 2013, it was obvious that there was a constant need for work force in the ICT field. Although limited in an overall number, the Serbian ICT workforce consists of highly qualified ICT graduates/engineers who require reasonable labor costs. Nevertheless, the overall number limitation was an important aspect that supported the establishment of vocational academies. VOICT have performed (during the first semester of 2013) detailed research with clusters' members about ICT SMEs needs for employing reliable youngsters with sophisticated IT knowledge and/or background. The research included questionnaire with 24 questions divided into several groups, where two particular questions were dedicated towards clusters members active participation in the future Cluster Academy project. In total, 13

companies from VOICT have fulfilled the questionnaire, where cluster management realized the necessity and importance of providing additional service for the members, when it comes to IT education and training. Based on the conducted research the Academy – ICT CASE project has been initiated. VOICT companies have grouped their needs into several categories and almost all of them have need for data base and web experts, as well as for various IT developers in the areas of mobile applications. Since they have been cooperating with many international partners (both outsourcing and product development concepts) for many years now, the experience has shown that there is always constant need for such kind of IT experts. Majority of companies included in research have stated that they are usually headhunting their future employees via personal contacts and recommendations. It is important to mention that more than 50% of companies at the time were willing to employ the IT junior staffs who have attended vocational IT courses. They have stated that sometimes they do not need to see an official university degree in IT area, but they certainly would like to participate in vocational courses (by choosing attendees and lecturers) and with professional training of possible employees.

Key issues noted by cluster members were:

- No modules and courses with up to date information and knowledge created
- Generations of students needs 6-12 months to take over their role in ICT companies since there is not real internship
- Academic community is, due to nature of academic knowledge, more orientated towards theoretical knowledge, while, at the same time, there is a rising need in ICT sector for new employees with better practical knowledge. Due to the mentioned constraints, there is a discrepancy in provided theoretical knowledge and market needs. Besides that factor, there is also number of people that don't want to go to university because they want to start working as soon as possible.
- Interest of general public for ICT, but also institutions is not enough, since there is more space to leverage ICT industry

Cluster members identified 4 main fields of IT specialists that they were lacking:

- Web developers
- Mobile Application developers
- Front End developers
- Database administrators

Situation on IT labor market at the time showed that IT experts were in the great demand. Namely, only 86 IT experts with IT educational background, out of which 42 with university degree. Only 5 of those were actual programmers, with 33 of them being electrical engineers for computer tech. That was a signal that the problem was definitely

on the supply side of the labor market. Noticing a large gap between the needs of cluster members and current market situation, Vojvodina ICT Cluster decided to set up the ICT Cluster Academy as a project under the name ICT CASE.

Main tasks:

- Survey among cluster members about the current need of new employees (Annex no 1)
- Assessment of current situation on labor market concerning unemployed IT experts
- If there is a lack on a supply side of IT labor market, commence the project

b. Defining project goals and outcomes

Keeping in mind results from the survey among cluster members and in direct contact with them, Vojvodina ICT Cluster team decided to develop an elaborate project concerning ICT Academy. Main goals of the academy were defined as follows:

- To create a tailor – made course, according to the specific needs of cluster members
- To narrow the gap between cluster members as potential employers and attendees of the academy as potential employees through internship program
- To enable interns to gain necessary experience in top IT companies of the region, thus providing them with practice so often sought by the employers

The outcomes that were to follow from the first edition of the ICT Academy were defined as follows:

- To have a curriculum that suits the needs of cluster members
- To have at least 10% of employed graduates after the end of the ICT Academy
- To prove the concept of ICT Academy
- To empower ICT sector and connect it with different stakeholders

In order for these goals to be achieved, the VOICT set up a project team consisting of VOICT members and university employees with management background. This was done in order to cover both organizational and technical aspects of the project.

The projected number of attendees was 40 at maximum, due to the need of individual work with attendees from the lecturers. Also, member companies assessed that that number is optimal in order for every attendee to have good internship.

According to detected IT specializations that were lacking, project team decided that there will be four modules in total. At first it was planned to have more specialized courses for each course, but later the project team dropped that idea in order to provide all attendees with better basic knowledge needed to become employees in IT sector.

Main tasks:

- Set clear goals before the start of the project
- The results must be in favor of cluster members
- Number of employed graduates as key performance indicator

c. Project budgeting

With set outcomes and goals, along with assessed needs for a successful project, team performed financial forecasting of the project budget. Team took into consideration all possible actions and made a realistic budget. The main expenditures planned were for lecturers, for Oracle software to be used on Database administration course and for closing ceremony. Project team collected at least 3 offers for each service done by subcontractor (catering and printing costs). Income came only from attendees. As for income, the only income was from the attendees themselves. They were obliged to pay a 10.000 RSD, a symbolic sum. This was done in order to raise the feeling of commitment to the Academy among future attendees. Before the enrolment, attendees needed to sign a document in which they agreed to pay the whole sum for the one participant if they decide to drop out of the Academy, also a security measure in case that an attendee drops out of the Academy (Annex no 2). The commitment was important since project team predicted that there will be higher number of applicants than open places, so the motive for enrollment can be cheap price of the course.

Main tasks:

- Make financial plan as realistic as possible
- Make attendees to commit themselves to the Academy in someway

d. Lecturers selection procedure

Lecturers were selected after the open call published by the VOICT on its internet site (Annex no 3). The requirements for lectures were experience of teaching at high education institution and participation on projects connected to the IT sector. Candidates

for lecturers were obliged to provide CV and to send proposed curriculum and outcomes of learning for each course they have been applying.

After the call was closed, project team, together with company representatives, were to make selection among the candidates. As there were 4 candidates, each applying for one course, the decision was made easy. They signed contract to provide the services for the project (Annex no 4).

Main tasks:

- Set an open call for lecturers where they apply for a course which is predefined
- Set basic requirements for lecturers
- Make a selection committee consisting of project team and representatives of companies
- Select the lecturers

e. Curriculum creation

Although the main courses were predefined, each lecturer had a task of creating a curriculum according to their preferences. Lecturers needed to take into consideration that some of the attendees didn't had any contacts with the IT. However, the pressure was put to transfer as much knowledge to attendees in short time period. Second requirement was that attendees had to gain hands – on approach as much as possible. All lecturers made adjustments to their regular courses that they were holding at the University Of Novi Sad Faculty Of Technical sciences, to meet those demands.

Main tasks:

- Clearly present requirements to lecturers
- Ask for curriculum in advance

Lessons learned-Project start-up

Setting up ICT CASE proved to be more of a challenge than the project team anticipated. Due to the USAID both strict guidelines and help, project team managed to set up clear tasks, guidelines and project outcomes. Activities planning was of utmost importance in order to set up correct timeplan and budget. Budgeting was done following good practice and for every budget line project team made an estimation of cost, as well as collection of different offers. Curriculum creation proved to be the only point where improvement can be made, and communication between selected lecturers and representatives of cluster members should be improved.

3. Application stage

In this stage of the project it is time to apply all the written stuff into the action. It can be overwhelming, but the first thing that should be done is short term objective planning. In this stage, there are some objectives that are overlapping with their timelines, so a good team dedication should also be present.

a. Media campaign

Media campaign started with announcement for the media (Annex no 5). This document should contain all the relevant information about the Academy, but media centric, including project sponsors, project aim (to re-educate and employ the unemployed), and who is doing all that, so short information about the organizers, and basic information for future attendees on how can they apply and deadlines.

After that, more detailed info should be posted on a website. Either dedicated or sub section of the organizer web site (in our case), where there will be short curriculum description, short description of the program timeline (when the lectures will be held, and when the internships will take place), who can apply, until when, and how. In our case application period was 1 whole month. This will serve as a information for future attendees, but also as information for some media websites and news outlets that didn't cover the original announcement, since unemployment is always a relevant topic.

Since this was organized in ICT area, future attendees requested more information, so a 2-way communication had to be built. We've made a dedicated email address for questions, and also made a Facebook page that contained relevant information, where anybody could ask questions.

Main tasks:

- Create informational media announcement
- Provide information on the website
- Use other channels of communication (social media)

b. Attendees selection procedure

This stage effectively starts as soon as the info was published. There were lots of questions coming via email, and most of them were in the first week of the announcement. Then the project team could see where the information was weak,

and what more possible candidates wanted to know. We've made an excel sheet with all questions, and with all the answers, to make sure that all would get the same exact information. Excel document contained the time stamp when did the question arrived, when it was answered, and by whom in the project team. That way, we made sure all questions were answered in timely manner. Also all the relevant info in form of FAQ was posted on the Facebook page, and it was very popular among the visitors.

Main tasks:

- Organize project team so no question is left unanswered
- Provide all the information in a clean and clear way

c. Access exam creation

The access exam was the second criteria used to chose future students of the academy. We decided that the test should be in form of online questionnaire, since organizing the live test would require logistic expenses. The test itself was made in five parts. First part was general IT/logical knowledge and reasoning, and it was made by external expert hired for this task. All of the questions were multiple choice type of questions. Other four parts of the exam were made by the lecturers of the Academy, each part from their respected field (module). So the test looked like this(Annex no 6):

- 14 questions from the Logical reasoning
- 13 questions from the general IT knowledge
- 8 questions from the field of basic programming
- 6 questions from the Mobile Dev Module
- 3 questions from the Database Module
- 4 questions from the Web Dev Module
- 3 questions from the Front End Module
- TOTAL of 51 questions

Each question was valued as 1 point, and maximum was 51 points. The test itself was made using Google Forms, and it was easy to collaborate and results are easy to read and organize.

Main tasks:

- Create a fair exam
- Make sure that technical part of exam can be conducted
- Have lecturers involved in exam creation
- Have a good time management, since every step has a short deadline

d. Application procedure

The candidates were required to send their CV and motivation letter. We reviewed both, scoring certain aspects such highest level of education achieved, employment status (in favor of those unemployed), and background information (interests and other engagements). We stored all the data from the candidates to shared folder, so it was accessible to whole project team, due the transparency and faster work. They had 4 weeks to send us the required documents via email. We received almost 150 applications.

Main tasks:

- Define a clear and simple application procedure
- Get all the applications and categorize them in a clean way

Lessons learned-Application stage

Since the goal of the stage was to create a positive media buzz, from the number of applicants it can be concluded that project team was successful in obtaining and keeping attention of potential attendees in this stage. The test was created by a professional with the help of lecturers, as it was to be a combination of logical questions and IT related questions, and was done via internet. However, during implementation, inconsistency could be noted among attendees, as some of them with high entry scores didn't show understanding of lecture materials as they were supposed to. English proficiency also showed as a problem, as some attendees that passed entry exam had problems following lectures or getting their way through IT, as IT requires good English proficiency. In order to avoid those problems in next generation, entry test will be done in English language in controlled environment. Also, ICT CASE project will keep its orientation towards unemployed.

4. Lecture stage

Lectures were the first “hands – on” experience for attendees on the academy. That created a nice buzz among attendees, and a high motivation among them could be noticed. At that point it was important not to let reached level of motivation to fall.

a. Lecture venues

Venue for lectures has already been decided upon project submission level. Educational center, along with Novi Sad Business Incubator, was selected as most suitable venue since it has an adequate premises and classrooms. Since there were two different group sizes (one large group and later four smaller groups), two different types of premises were required: one large enough to accommodate up to 50 attendees together with necessary infrastructure for laptop usage and lecture equipment, and four smaller classrooms for up to 16 attendees, also with necessary infrastructure. Necessary infrastructure includes enough place for a laptop and a notebook on a table, access to electricity (direct or extension cords), wireless internet access with good signal and projectors for lecturers. Educational center provided one large premise with 50+ seats and three smaller classrooms with 20 seats. All premises at Educational center had almost everything required for lectures, as well as one small premise on Novi Sad Business Incubator. The large premise in Educational center was lacking extension cords, and the project team obtained a large number of extension cords. Project team at first also considered Faculty of Technical Sciences; however project team decided not to continue on that idea. The main reason was that there was a possibility of timetable clashes, especially on Friday, since most classrooms at the faculty are occupied until late in the evening. Also, the wireless internet connection can be a problem at the Faculty. The only downside of Educational center was its relative inaccessibility, since the area where it is stationed is not well connected with public transportation.

Due to booking of lecture hall in Novi Sad incubator prior to the start of the project, two lectures from module that originally run on that premise were held at premise of Educational center.

Main tasks:

- Enough room for all attendees

- Enough classrooms for smaller groups
- Prior to every weekend, contact the representatives of venue to remind them and check the availability
- Classrooms equipped with lecture equipment and necessary infrastructure

b. Lecture dynamics

Lectures were set to be held every Friday afternoon (16h-20h) and Saturday morning (9h-13h), since the Academy was also opened for students and employees who usually have different obligations during weekdays working hours. Draft of the schedule was composed to fit with eventual lecturers obligations and the University. Also, bigger holidays were also taken into consideration, and no lectures were held during those days. First four courses, out of which three were obligatory for all attendees and one which was module course, were meant to finish before the summer break and start of the internship, which was 14th of July. Due to the possibility that, if everything done according to plan, courses could be finished three or four weeks before the planned break, the project team decided to implement so called “back – up” weekends. In case that, due to the lecturers obligations on faculty, it is not possible to hold lecture, the back – up weeks could be used to keep lectures according to schedule, without the need to pile up lecture material. Last course, second module course, was planned to start after the internship, which was after 1st of September.

For lecture dynamics on lectures itself, the project team didn't imposed strict rules upon lectures. They were able to adjust the dynamics according to their own needs and to the needs of the attendees. The main concern of the project team was that lecturers should adjust the lectures according to the average knowledge of the group as a whole, for which lecturer said it was hard to achieve, as the group was of quite diverse previous knowledge.

Some attendees which were students found Friday a bit problematic, since some of them had an afternoon lectures at the university. However, the project team specifically stated in open call the lectures schedule, and there was no consideration to adjust start of the lectures to those attendees. Later on, attendees mostly found that lectures with harder working tempo suited them better. At the end, all attendees had more than 80% of lectures attended.

Main tasks:

- Fix the schedule before the open call for attendees

- Communicate the schedule at the open call
- Make sure that lecturers adjust the lecture dynamics according to the group

c. Lecture following and reporting

Lecture following was done by a member of a project team which was always present at the premise of the lectures. Project team member assignment was to collect evidence of lectures and attendance, as well as to make sure all lectures passed in adequate manner. Project team member collected attendance sheets, took pictures of lectures, helped with problems such as with locked computer and distribution of classroom in latter stages of lectures. The most important time for a project team member to be at the premise was at the beginning of the lectures, as most of the situations that needed reaction happened in first hour of lectures. It was of biggest importance that project team member had mobile phone numbers of all lecturers and representatives of Educational center, where lectures were held, since some problem can be solved only with their help.

Main tasks:

- Project team member is to issue attendance list and take photos
- Project team member to be at the premise for some time after start, so it can react to problems that could arise during lectures
- Mobile phone numbers have to be exchanged before the start of lectures

d. Exams

Exams were planned as a check attendees adoption of new knowledge and skills. Plan was to hold exams two weeks after each course. After first exam the project team was in a problem, since not all attendees passed the exam. Also, what the project team didn't foresee at the time of project submission was that attendee cannot take exam on the exact date due to their own personal issues. Because of that, in coordination with lecturers, it was decided that for each course there will be two exam periods, with second exam period usually after one month of last lecture. Some attendees that didn't pass exams on second exam period asked for third exam period. We took into consideration their suggestion, however, due to the time constraints and venue constraint, and that

there was already more exam periods that planned, project team decided not to implement third exam period.

Exams were not unified, as each lecture had its own way of knowledge check. However, all of the exams included practical work through which lecturers could assess acquired knowledge and skills of each attendee. Since the goal of the academy was to, in quick and efficient way, create new workforce for IT companies with adequate skills, this way of examination was considered better than standard ways of examinations.

After the examination, each lecturer sent to project team grades or points for each attendee. Since the project team didn't make uniformed classification scale, it was a bit problematic to put grades from different lectures on the same scale.

Main tasks:

- Organize at least two exam periods for each course
- Make sure that exams are more practice – orientated
- Make the same classification scale for all exams

e. Attendees division on different modules

After the first three compulsory lectures, the attendees could decide upon the module which they wanted to take, and choosing their next two courses in that way. By the project it was planned that attendees will be evenly distributed among all four modules (database administrator, web developer, front end developer, mobile application developer). After the beginning of third lecture members of the project team informed attendees about each of available module and asked each attendee to send an email to project team ranking their preferences in modules they would like to take. After collecting all of attendees responses, it was planned to assess them and distribute attendees according to the success in passing first two exams (the project team couldn't take into consideration the third exam, as the exam was done after the first module course has started). However, after collecting all responses, the project team decided to allow everybody to enroll on their preferred module, due to the fact that the biggest module still had less than 20 attendees, which was maximum due to the classroom constraints. At the same time, first responses from internship companies started arriving. Noticing that the sought – after module distribution for internship companies is somewhat similar to attendees distribution, the project team gain a confirmation that decision to allow every attendee to enroll on preferred module was good. This was a bit lucky, because the situation could be different and thus inflicting problems.

Main tasks:

- Collect preferences from companies prior to module divisions
- Present the attendees with number of places on each module and the procedure for selection
- Collect all preferences and current exam scores of each attendee
- Rank attendees according to exam scores, then divide them according to their preferences – attendees with better scores have right to choose first
- Inform attendees about the module that they are continuing on

Lessons learned-Project start-up

Together with internship, lecture stage presented most important activity concerning attendees. Since ICT CASE was to have more hands - on approach, the project team will consider remarks made by professors that it was hard to devote attention to each attendee on first three courses. Although cluster members were quite satisfied with most of the interns, better communication should be established between cluster members and lecturers in order to adjust the content of the lectures so it can better suit the needs of cluster members, as mentioned before in chapter 2. In that way ICT CASE can continue in its pursuit of excellence.

f. Lecture follow - up

Lecture follow – up was easy, with direct communication between members of the project team with lecturers on one side, and attendees on other side. Lecturers sent exam results to project team, and project team processed and stored exam scores. Everything needed for further reporting to the grantor was collected on the spot, including attendance sheets and pictures, by the project team. Project team also made small survey among attendees in order to receive feedback about lectures and lecturers themselves. The results were high for three out of four lecturers, while one lecturer receiving lower scores, but still in domain of very good.

Main tasks:

- Collect and store all exam scores from lecturers
- Store all evidences of lectures
- Create feedback for attendees
- Collect and process feedback answers

- Write periodical reports on lectures

5. Internship stage

The internship stage was probably the part of the Academy attendees were looking for the most. They were already looking at the list of the cluster members, and some of them even tried contacting the companies themselves, and that created few problems for the project team. But the swift communication with the cluster members is the key in this stage.

a. Companies application procedure

When the project was in its initial stage, a lot of cluster members (companies) were excited about the idea of interns and possible new employees joining them. However as the time passed, and after the information we shared with them about the knowledge Academy attendees got until then, some of the companies backed up, and did not want to participate in the internship program. So the company team made a invitation to all cluster members with information about the candidates, their received knowledge so far. Some of the companies requested meeting with the project team and the lecturers. After that meeting, where a lot of technical things were said (technologies that companies use, and technologies that lecturers were lecturing to attendees), we had basic list of the companies interested in the internship part of the project. Some of them however could not host interns in the time we planned (summer months), but we agreed that September and October would also be fine, if that is ok with attendees.

Requirements that were asked from the companies to take part in the internship program were:

- Internship must last at least 6 weeks
- A member of the company team must act like a mentor during the internship
- Short report on interns work must be sent to the project team

Main tasks:

- Have a good and open communication with companies about internship (what do they expect from interns)
- Organize a meeting with technical staff from the companies and lecturers

b. Company – intern matching

This was pretty hard and stressful part of the project for the team, and this should have been avoided, and handled more easily.

First step for the matching was to get all the information from the companies who responded to the Call to participate in the program (explained before). The most important info was how many interns was that company ready to host. Based on that info, we've build a list of companies, and sent them out the list of the attendees. The list of attendees contained their CV and motivational letter (shared folder), as well as the grades that were awarded to that attendee during the course of the lecturers and exams. Information about their chosen module was also provided. Companies then chose which attendees are right for the internship at their respective companies. There was a rule first comes, first served, but the companies that wanted to host more interns were given the right of first pick.

Some of the companies handpicked the attendees from the list, while other just said that they need certain number, so the project team would pick interns for them. In that case, project team tried to pick different attendees, in terms, not all the great ones, but also not all the ones with lesser grades, a mix of both. The idea was that they will work in teams, so the ones with better grades will push the ones with lesser grades.

This system created a problem for us, when we published the matchmaking results in the Facebook group. Some attendees were satisfied, and some were not. They started asking questions on how they ended up in the company A while the other person ended up in the company B. As we had very friendly approach from the start in communication with them, some of the attendees took advantage of this, spamming us with emails and demanding that we move them to another company for internship. We could tell them that they weren't picked by the companies because they had lower grades than the other attendees, but we decided not to do that. We decided that our decisions were final, and asked them to base their opinions about the companies after the first week of internship. Of course, after the first week, mostly everybody was very satisfied with the companies they got matched with.

Main tasks:

- Provide the best possible matches without entering in too much discussion with attendees
- Provide all the info companies request, so they can pick the best suited interns for them

c. Internship following and reporting

The part of internship following and reporting was very easy and straight forward. We had received emails from the companies, from the mentors in the companies, stating that interns are there, they are coming to work, and doing their tasks. We also followed the conversation and impressions from the attendees on the Facebook group. The interns were obliged they would make a small report on their internship. We sent them a Word template for that (Annex no 7). Some of them respected the template; some used the company's template. We did not insist on template use. The deadline for this report was 2 weeks after they finish their internship.

Main tasks:

- Check if all interns are present at their workplaces (first day)
- Get all the reports needed for project documentation

d. Internship follow - up

The main activity here was to get evaluation of the interns, by their mentors and the companies. Evaluation was based on few basic questions:

- Did the intern had the enough knowledge for all the internship tasks
- Did the intern bring any new value to your company
- Would you employ some of your interns now, or would you consider employing them

We got this info trough mostly communicating via emails with companies representatives, and some meetings with them.

Main tasks:

- Get all the evaluations for all attendees
- Get all the evaluations from all mentors
- Categorize the evaluation

Lessons learned- Internship

Good communication between companies providing internships and project team is really important. If there is a problem in communication, supply (interns) and demand (companies) will not match and we won't have good internships. Don't get too involved with explaining the team's decisions to the attendees. That just leads to loss of project time. Make a system of matchmaking and stick with it.

6. Closing ceremony

Closing ceremony presented the most important event concerning media exposition and marketing for the whole project and its stakeholders. It put a lot of stress on a project team, as it was very important to maintain a good image the Academy garnered in previous actions, as well as to be the starting point for a next promotional period. The closing ceremony was pushed back a month after it was planned, but that was due to the fact that, in order to attract as much as possible media attention, there was a need for a number of distinguished guests to be on the premise at the same time. During waiting, many attendees became impatient.

a. Media campaign

Media campaign started a week before the closing ceremony. Press releases were created ten days before the closing ceremony, and they were distributed to media two days before the ceremony. The press release itself was a call for media to be at the event itself and contained basic information about the Academy (Annex no 8). In coordination with press office of Vojvodina government, the partner of graduation ceremony, more local, regional and national media was reached. The most important was the presence of USAID mission in Serbia chief, Ms. Azza El – Abd, and deputy prime minister of Vojvodina government, Mr. Miroslav Vasin. Besides them, several media took interest in stories from attendees and lecturers themselves. At the end, around 10 media houses transferred the news, including most important local and

regional TV stations and newspapers, as well as two newspapers with national coverage.

Press-clipping was done in order to follow – up on the media buzz created. All reviews were positive, which was the goal of this marketing campaign.

Main tasks:

- Create press release containing basic information about the project at least a week before the closing ceremony
- Distribute the press release couple of days before the event
- If possible, use contacts with strong media office and invite keynote speakers that carry strong media attention
- Press – clipping of every mentioning

b. Venue selection

Venue for closing ceremony was chosen in cooperation with representatives of Vojvodinian government. Project team asked for venue with places for 80 guests (45 participants + 30 guests). The venue needed to be representative and good for taking pictures and videos (adequate light, places for banners etc.). Vojvodina government, being a partner in this part of the project, offered one of the ceremonial rooms, with which project team agreed upon. In front of the room there was place for more banners, and it was used as a venue for interviews with attendees and lecturers. Later the space in front of the room was used for a cocktail. The only possible problem was that the room itself was not big enough to sit all 80 guests, but that didn't represent any major problem concerning the flow of the ceremony itself.

Main tasks:

- Calculate the number of guests
- Organize a cocktail for estimated number of guests
- Prior to ceremony, check the room and immediate premises, to exploit place for media material (banners etc.) to maximum
- Couple of hours before the ceremony, place all media material

c. Protocol

Protocol was made to maximize a given time and to make sure everything passes in good order. Project team kept in mind the necessary media exposure of VIP guests, and as such they were given most time for interviews by the media, both before and during the actual awarding of certificates to the attendees. During the team meeting, it was decided that project leader, Mr. Solaja, will lead the closing ceremony. Before the actual awarding of certificates (Annex No 9), time was left for individual interviews by VIPs, attendees, lecturers and head of Vojvodina ICT cluster, the bearer of the Academy project. After that, time was planned for media statements for both Ms. El – Abd and Mr. Vasin. After the media statements, both VIP guests made an address to the attendees, and presented them with certificates. At the end, Mr. Solaja, leader of the project, presented the award for excellence to the graduate with highest exam scores. Because the protocol was made and well communicated before the event itself, the whole closing ceremony passed in good order.

Main tasks:

- Protocol should be made keeping in mind the time for both individual interviews and press statements by the VIP guests before the actual ceremony (or after if agreed upon that with all stakeholders)
- Nominate the leader of the whole ceremony
- Print certificates couple of days before the whole event
- Make a reward for the best graduate (or graduates)
- Communicate the protocol few days before the event with main stakeholders in order to adjust it if necessary
- Don't improvise – stick to the protocol as much as possible

Lessons learned- Closing ceremony

Good protocol and good execution of the protocol are the keys to a good closing ceremony. Know the times, the key speakers and the key events of the ceremony. Make sure that everyone involved knows them too. Work in advance with guests and guest speakers (grantors, government officials) so they too can respect your protocol. Be flexible as a team, but respect the scheduled times. Make sure that the protocol itself is flexible enough to withstand some downtime (someone is late, weather conditions etc..).

7. Communication

Communication inside the project team was very easy task mostly done by email to all members of the project team. The team meetings were held before all the major stages of the project. The communication with sponsor was also around the milestone dates, mostly by email, while some more urgent matters were handled by phone. During the team meetings and meetings with sponsors, minutes were taken.

Communication with lecturers was done by email and by team meetings. The meetings were before the first lecture and after the test result comes in. They reported all the tests they held, and the results they gathered. This was also an easy job, since the lecturers were very adaptive and willing to participate in this project.

Communication with attendees was done by email and inside the Facebook group. It was very fast and fluid, sometimes a bit more relaxed than we wanted (they asked too many questions, some irrelevant). We also did have meetings with them 10 minutes before the lecture starts, where we would answer some ongoing questions and inform them on the tasks ahead.

Main tasks:

- Keep the in team communication as lean as possible, but do communicate on daily basis
- Keep the communication with attendees on the professional level and don't get too involved in their personal problems (every opinion about the academy is crucial, but some just want special attention)
- Keep the communication with grantor as timely as possible

Lessons learned- Communication

Have a fast and clean communication without the disturbances. Make sure that you have dedicated team members in charge of different things. No one should know all the details, but as a whole team, you should have all the info. Communicate directly with team members in charge. Keep the communication with the attendees on a professional level, and don't get too involved with their personal questions and needs (out of the project scope).

8. Project reporting

As for every project, there is a need to periodically check the status of the project. During ICT Academy that was done on monthly and milestone level.

Monthly reporting was done in a short manner, only presenting current status of the project, as well as obstacles that were arising from day-to-day work. Monthly reporting was only done in descriptive manner.

Milestone reporting was obligatory by the contract, more important and, as such, demanded longer preparation and bigger commitment of the project team. It demanded more detailed reporting on project progress, as well as evidences of preformed actions. It also included financial part of the reporting, which included evidences of all payments and contributions made by the grantee, VOICT. Due to sometimes conflicting schedule, the project team experienced problems to submit milestone reports on time, however, at the end, all milestone reports were submitted to the grantor with all necessary evidences. The representatives of grantor were of great help, providing project team with feedback and helping to create milestone reports in the right manner.

Main tasks:

- Create a base of evidences, so when one project team member is unavailable, the evidences are available to other team members
- Collect all evidences on time
- Keep a track with the project with regular small reports
- Keep a track on budget spending and achieved results with milestone reports

Lessons learned-Project reporting

ICT CASE project was extremely useful for Vojvodina ICT Cluster regarding best practice sharing with USAID in terms of punctual and precise project reporting. It is of great importance for the grantee institution to provide reports above and beyond the grant agreement contract. This initiative was proposed and strongly encouraged by USAID. By doing so, VOICT project team was keeping record about all the important issues for the project and the possibility for missing the most important deliverables/milestones and financial records was reduced. Performing activities project has prescribed only is not sufficient - appropriate reporting has to accompany all project activities.

9. Procurement

Procurement for the project was done obeying the grantor rules. In the project proposal there was procurement timeline, so project team knew what needs to be procured in every milestone. The only thing that needs special attention during the procurement process is VAT handling. Some firms that acted as service providers for the project (catering and printing services) are not in the VAT. So contribution was not possible, as there is no VAT to pay.

Other than that, all procurement was very straightforward.

Main tasks:

- Follow the project proposal document
- Get all the invoices and all proof of purchase
- Since this is a service project, make procurements needs as low as possible

Lessons learned-Procurement

The most important lesson learned regarding procurement is that negotiation process with international corporations that are supposed to provide some elements needed for project realization has to be scheduled much in advance. It is mainly due to their complicated and long lasting internal communication protocols, so they are rather less flexible and fast in decision making as SMEs and business organizations (i.e. clusters) are.

10. Project follow - up

In order to prove the concept of the Academy, there is a need to monitor several factors.

Most important ones are:

- Career status of graduates
- Satisfaction level of cluster members
- Number of applicants for next edition of the Academy

Career status will be followed through regular surveys among alumni of ICT Academy. This will be done through survey creators and keeping contact with alumni through different contacts (mail, social networks). It is important to follow career status of alumni as they can be the best representatives of the success of the ICT Academy concept.

Cluster members will be included in follow-up through regular contacts between VOICT team and cluster members. Their satisfaction level is also considered as a key performance factor as ICT Academy was brought up in order to fulfil their needs.

Number of applicants for the next edition of the ICT Academy will show that the project created positive media buzz, as well as there is still interest among the target population. The project team already received dozens of inquiries about next enrollment, before any call, so it can be presumed that there is big demand on the market for this type of educational course.

Main tasks:

- Stay in contact with alumni
- Periodically check their employment status
- Ask for a feedback from cluster members, especially among those which provided internship and hired some of the alumni
- Try to achieve at least the same number of applicants for the next generation

Lessons learned-Project follow-up

Sustainability of ICT Academy is definitely one of the major strategic goals for VOICT - there is a proven need by VOICT members (and wider ICT community in Serbia) that youngsters educated are capable to compete for the open positions ICT companies are announcing. Therefore, VOICT project team has to monitor carefully the performance of the first enrolled ICT Academy generation, so it can more precisely implement the process in the future. The most important lesson learned for project team regarding follow-up is that all the attendants have to be asked frequently about their professional progress.

11. Lessons learned-Overall

As always, there were mistakes made during the project that will definitely be avoided in the next generation, as project team got more experience on how to work on this kind of project.

Main lessons learned:

- Good initial communication between what companies want (what type of interns), and what lecturers can provide
- Professional level of communication between the team and attendees is a must (do not get too attached in their personal stories)
- When procuring the software, have all the details, and have a technical personnel (lecturer for instance) present at the procurement talks
- Store and organize all the information as you get it, don't let it pile up
- Work with your grantor, ask them for help and guidance often, as it makes your reporting so much easier
- Make a good entrance exam, make it more difficult, and you can get better quality candidates, since the demand is high