

PROJECT CONCEPT PAPER

Joint Master in Information Security and Data Management (ISDM)

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Key Action 2: Capacity Building in the Field of Higher Education 2015.

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Specific Objectives of the project

This proposal aims to develop a new master program to bridge the gap of knowledge and build competencies of the Palestinian society with the know-how for information management, quality, privacy and security in various aspects of life. It will provide resources and training for academic staff including facilities to develop the program modules. The project will transfer the know-how and best practices from Europe to Palestine, through proposing a joint MSc in Information Security and Data Management (ISDM). This project will focus on developing the academic modules and tutorials to establish a joint MSc degree in the partners' universities. In other words, the project aims to develop teaching staff capacity building and graduate students in four main areas (information management, Information security, IT Laws and Rules, and Computer forensics), which are the main challenges in implementing any service either in private or public sector.

Rationale

Not only industries and governmental institutions but also the universities in Palestine suffer the scarcity of the basic knowledge on information management, strategy, quality, privacy and security. These issues are important for public, private and non-profit organizations. By getting the information management right, this will result in reducing administrative labor cost- less actual time moving information around and outside the enterprise. This saves massive amounts of staff time and labor cost. It also reduces wasted time and mistakes – access to constantly updated information from an easy to locate source - prevents repetition of work on out of date documents.

Getting the proposed project will improve the skills of the teaching staff in information protection and management. These skills will be disseminated to other institutions in Palestine and Jordan through the membership of other Palestinian and Jordanian

Universities in the consortium. The project will also empower academic staff and graduate students by providing the required facilities for MSc projects.

This project will facilitate better collaboration, which means Palestinian and Jordanian staff will work closely with their European counterparts and build up expertise in the areas of security and information management. Information management also helps with compliance of regulations, which will lead to reduce the cost of audits. Information security and privacy including data protection, copyrights and intellectual properties are of high priority in the Palestinian and Jordanian societies private and public sectors.

Ethics, Copyright and Intellectual Property Issues in Computing and Privacy and Information Security Concerns represent a crucial necessity for the Palestinian universities, industry and community as a whole. The public and the private sectors in Palestine are not fully aware of the importance of having a national framework of ethics and professional conduct to enhance the quality of service and protect the overall society from computer, internet and social media crimes. The universities in Palestine are not embedding these issues in their pedagogical curricula and do not pay fully attention of these concerns. The industry also shows lack of understanding and application of the intellectual property and privacy and information security concerns. IT strategy and management is also essential in strategic planning for institutions and enterprises.

Quality of the partnership

As identified above, the most important issues, which need to be addressed, are: information management, Information security, IT Laws and Rules, and Computer forensics. The EU partners are among the most qualified and knowledgeable institutions in Europe in these areas. They will help in developing the required modules. The Palestinian partner universities are among the most qualified universities in Palestine (PTUK and AAUJ), not only in scientific qualifications, but also in project management, links with society, and they are geographically distributed for maximum benefits. The Jordanian partners, Princess Sumaya University for Technology (PSUT) and Irbid National University (INU) are also qualified partners and serve the middle and northern parts of Jordan. They already have required resources to enhance the participation in the project. The consortium partnership has been constructed carefully to provide necessary expertise for developing a quality program and the supporting research requirements.

Partners on the EU side:

List of all the European partners

United Kingdom

The University of Manchester UoM

Greece

University of Piraeus Research Center

Harokopio University of Athens HUA

France

Spain

Partners on the Regional side:

Palestine

Palestine Technical University (PTUK)

PTUK is a state flourishing university in Palestine. It seeks to turn on graduates holding high quality technical and research abilities to meet the needs of the market. It also aims at launching programs based on partnership with the private and public sector to achieve economic and social developments. As the only state university in west bank, the university aspires to occupy an elevated status among the local, regional and international universities, through offering high quality technical education in many fields such as:

- Computer Engineering
- Applied Computing
- Computerized Banking and Financial Sciences
- Accounting Information Systems

Arab American University – Jenin

AAUJ offers distinguished education in disciplines most relevant to the needs of the Palestinian community. AAUJ utilizes advanced teaching techniques including information technology, and practical training with internship programs that equip graduates with the necessary training to succeed in a competitive job market in the following fields:

- Computer Information Technology Department
- Computer System Engineering (CSE)
- Multimedia Technology Department
- Computer Science Department
- Telecommunication Engineering (TCE) Department
- Computer Networks and Information Security
- Operation Management
- And many other related departments

Jordan

Princess Sumaya University for Technology (PSUT)

Irbid National University (INU)

PROJECT CONCEPT

The project main aim is the capacity building of the faculty members through developing and implementing a Joint MSc degree in Information Security and Data Management with the Partners Universities, consistent with EU. The project will foster the transfer of state-of-the-art knowledge and best practices from Europe to Palestine. Also it aims to increase the capacity buildings of Palestinian professors to teach and develop courses on information security and IT management. The project objectives will be achieved through developing twelve MSc courses with advanced tutorials that will be delivered throughout the MSc study period to professionals (partner ministries, engineers and academics). In particular, the project aims at capacity building in four main areas (information management, Information security, IT Laws and Rules, and Computer forensics).

The project outcomes are:

- a. The development of the proposed MSc program's curriculum in cooperation with the partner universities.
- b. Capacity building of Palestinian and Jordanian academic staff by training a number of the teaching staff to become the teaching core of the newly established MSc program.
- c. Equipping laboratories to be utilized by graduates during their studies
- d. Establish links with Palestinian, Jordanian and European local industry to provide ideas of relevant MSc projects and placements for graduates
- e. MSc modules to be taught jointly by staff members from Local and European institutions during the implementation stage
- f. Staff members from the consortium will embark on joint research in areas of common interest. This includes the supervision of MSc students' projects.
- g. Improving the management skills of Data Centers in Palestinian and Jordanian institutions.

Description of the project

As stated above, governmental bodies, enterprises, and universities in Palestine are suffering from the lack of knowledge and implementation in information management, Information security, IT Laws and Rules, and Computer forensics, which is a national priority and vital for the Palestinian society. The goal of the project is to fulfil this gap by transferring state-of-art knowledge from Europe to Palestine. This will be done by developing a set of

tutorials that will be delivered to professionals in ministries and companies, and academic modules that will be introduced to the curricula of the partner universities.

A needs assessment will be conducting first to identify the Palestinian and Jordanian needs and lack of expertise in information management, quality, security and privacy and ethics, computer forensics and IT strategy management. The needs assessment will include public and private sectors. Study tours of Palestinian and Jordanian professors to the EU partners will be organized after that, in order to gain knowledge and identify learning resources. Then, these professors in collaboration with EU partners will develop 12 academic modules, based on the specified needs to run the program. The materials will be ready in month 18 for review in order to ensure vertical and horizontal quality, and 6 months for program accreditation.

Work Plans

Work Plan	Type of work	Title of work Package	Start	End
WP1		Exploration of EU teaching and research practises, preparing the roadmap for our project and development of joint working protocols	1	6
WP2		Program Design for the four areas	7	8
WP3		Developing the courses for the four tracks	9	18
WP4		Getting the accreditation for the MSc program	19	24
WP5		Preparation of laboratories with the required equipment.	19	24
WP6		Quality control and managing the project	1	36
WP7		Exploitation of the project and sustainability plan	7	36
WP8		Launching the program: Selecting eligible students and teaching the first 6 MSc courses.	25	34
WP9		Dissemination and workshop for scientific output results	30	35

During the 36 months, the activities of the consortium will be:

1. Exploration of EU teaching and research practises and development of joint working protocols (WP1)

(A1.1) Plan and assess the needs for information management

The Palestinian and Jordanian needs for information management will be specified with an active involvement of the partners from public and private sectors. These needs will be prepared in in month 3.

(A1.2) Organize study tours to the EU partner universities

A group of eight Palestinian and Jordanian staff members from the consortium universities will visit the EU partners (in month 5) to learn about this topic. The EU partners will contribute with seminars, case studies, best practices, learning resources, available teaching materials and laboratory exercises.

(A1.3) Workshop will be held in Jordan

One of the Jordanian universities will hold a workshop for the consortium universities to draw the roadmap of the project. The program outline will be put and the tasks will be assigned for the next working package.

2. Program Design (WP2)

(A2.1) Plan and assess the needs for Security

The Palestinian and Jordanian needs for Information security will be specified with an active involvement of the partner ministries and security and intelligence bodies. These needs will be delivered in month M7.

(A2.2) Organize study tour at (EU partners)

A group of twelve Palestinians and Jordanians will visit EU universities to learn about twelve topics (which cover the MSc courses) and find case studies of best practices, learning resources, available teaching materials and laboratory exercises.

3. Courses Design (WP3)

(A3.1) Developing 2 Data Management Courses

Jordanian Partners will develop two courses (based on the needs in needs assessment) and share it with (EU partners) who will contribute and give feedback. Three technical meetings will be held in (month 08 and month 11) to discuss progress. Each course will include presentations, case studies of best practices and exercises.

- Information management, Architecture and principles course (Deliverable 3.1)
- Document management and Document Engineering course (Deliverable 3.2)
- Knowledge management and knowledge transfer tutorial (Deliverable 3.3)
- Personal information management tutorial (Deliverable 3.4)

(A3.2) Develop 3 courses in information Security

Palestinian Partners will develop one tutorial and one course (based on the needs in Deliverable 2.1) and share it with EU partner who will actively contribute and give feedback. Three technical meetings will be held in (Month 08 and Month 11) to discuss progress. The tutorial and course will include presentations, case studies of best practices, and hands-on exercises. The outputs of this activity are:

- Security tutorial (Deliverable 3.5)
- Security and Cryptography Course (Deliverable 3.6)

(A3.3) Develop 2 courses for Information Privacy and Ethics

The Palestinian needs for information privacy and Ethics will be specified with an active involvement of the public and private sector. These needs will be delivered in Deliverable 3.1 in month M3.

(A3.4) Organize study tour at EU University

A group of four Palestinians from (PTU and other Palestinian partners) will visit the EU Universities to learn about this topic. The EU Universities will contribute with seminars and best practices, learning resources, and available teaching materials.

(A3.5) Develop 3 courses on Data management

- Professional and Personal Ethics in Computing Course (Deliverable 3.3)

(A3.6) Develop one course in Computer Forensics

(A3.7) Develop 6 elective courses from which the student has to choose three out of them

Plan and assess the needs for Social Media and IT Laws and regulations

The Palestinian needs for social media laws and regulations will be specified with an active involvement of the public and private sector. These needs will be delivered in Deliverable ??? in month M3.

Palestinian Partners will develop one tutorial and one course (based on the needs in Deliverable ???) and share it with EU University who will actively contribute and give feedback. The tutorial and the course will include presentations and case studies of best practices. The outputs of this activity are:

- Social media and IT laws and regulations handbook and tutorial (Deliverable ???)
- Social media laws and IT regulations Course (Deliverable ???)

4. Getting the accreditation (WP4)

(A4.1) Preparing the needed documents that follows the PA regulations and rules.

(A4.3) Develop 1 tutorial and 1 course on social media and IT laws and regulations

5. Laboratories (WP5)

(Activity 5.1) Organize study tour to the EU Universities.

(Activity 5.2) Assess the needs of each university according to the courses they will teach

(Activity 5.3) Bids, installation for the required equipments and software

(Activity 5.4) Training on using the labs

6. Quality Control and management (WP6)

Activity 6.1: Evaluate Material content

The content of the tutorials and courses will be evaluated vertically and horizontally. The vertical review will focus on the up-to-date, soundness, and teachability, of each tutorial and course with be satisfied the needs specified in (Deliverable ???, Deliverable ???, and Deliverable ???). The horizontal evaluation assures the comprehensiveness, relatedness, and contribution of all materials to the general objective of the project. A peer review strategy will be adopted. Only EU partners can be involved in this evaluation, however, a face-to-face review meeting of all partners in Month 13 will be organized to discuss the comments and the updating process. The evaluation of the tutorials will be documented in Deliverable 6.1 and the courses in Deliverable 6.2, in Month 13.

Activity 6.2: Evaluate Material delivery & impact

To monitor the quality of the tutorials impact and delivery, interviews and questionnaires will be designed and used. The evaluation will be conducted in Month 17, directly after the delivery of the 1st session of the tutorials. Courses delivery will be evaluated in the same way in Month 20. The evaluation of the tutorials will be documented in Deliverable 8.2 and the courses in Deliverable 6.3.

Activity 6.3: Evaluate dissemination & sustainability

To control the quality of activities, internal reports about the finished activities will be submitted to a quality committee, who will perform active evaluation. These evolutions will be documented and reported in Deliverable ??? in Month 23. The website will be evaluated against accessibility, usability, up-to-dateness, and reliability; visiting lectures against number of attendees, and so on.

Activity 6.4: Organize Kick-off and management meetings

The Kick-off will be organized in M1 at the coordinating partner. A steering committee will be established to meet every 6 months (Month 1, Month 6, Month 13, Month 18, and Month 21) and review the progress and make necessary decisions. The first and last meetings will be held at the coordinating partner.

Activity 6.5: Manage admin and financial issues

The project will be managed and coordinated by the coordinating and submitting partner. The management include: Planning activities; monitoring progress; and, facilitating communication. Financial transactions for all partners will be centrally managed at the coordinating partner. Each partner will receive and manage its disbursement, but will regularly report to the coordinating partner.

The outputs of this activity are:

- Periodic Progress and Management Report (Deliverable 9.1) in Month 1, Month 7, Month 13, Month 18, and Month 24
- Periodic Financial report (Deliverable ???) in Month 12, Month 24

7. Exploitation of the project (WP7)

(Activity 7.1) Extend the portal with Web 2.0 functionalities

To create a social community, the Portal will be extended with Web 2.0 collaboration features (blogs, tags, polls, etc.) in both Arabic and English, making a two way of communication with the society and professors. A special forum for students will be hosted to encourage the discussions and seek ideas for research projects or thesis topics. These functionalities will be released in Month 10 and will fully function (Deliverable 7.1) in Month 15.

(Activity 7.2) Promote the project outputs after it ends

The developed courses promoted to other universities in Palestine, and the developed tutorials will be maintained and delivered again to the society at large, through the partners' Continuing Education Centres. A progress report (Deliverable 7.2) on these activities will be derived in Month 22.

8. Launching the program: Selecting eligible students and teaching the first 6 MSc courses. (WP8)

9. Dissemination (WP9)

(Activity 9.1) Develop Web Portal

A Web Portal will be established and hosted at the PTU University sever. The partners will create its functionalities and contents. A first release will be in Month 19, and the final (Deliverable 9.1) in Month 22. It will support basic functionalities, document management, registration of trainees, and RSS. The content will be published in English and Arabic.

(Activity 9.2) Publish leaflets

Leaflets will be designed and published to grab the attention of the society to the developed tutorials. Five thousand copies (in Arabic and English) will be printed in Month 22 (Deliverable 9.2).

(Activity 9.3) Organize national workshops

Two specialized workshops will be organized to cover the main themes (Information management, information quality, information privacy Security, and Legal-Informatics), in order to present the project outputs to other ministries, institutions, and industries. The 2nd

workshop will be held in M35, and will be open for anyone to attend. The workshop will be announced and followed by a news item in local media. A report (Deliverable 9.3) on this activity will be delivered in Month 35.

7. Sustainability (WP7)

8. Quality Control and Monitoring (WP8)

9. Project Management (WP9)