	Application Form **Selection: 2015** **KA2 –** Cooperation for innovation and the exchange of good practices – **Capacity Building in the field of Higher Education**

Call for Proposal EAC/A04/2014

Promotion of Innovation Culture in the Higher Education in Jordan (INVENT)

DETAILEDDESCRIPTION OF THE PROJECT

(To be attached to the eForm)

Version 1 – 1.10.2014

PART D - Quality of the project team and the cooperation arrangements

D.1. Organisations and activities

This part must be completed separately by each organisation participating in the project (applicant and partners).

Partner number		**P1**
Organisation name & acronym	Jordan University of Science and Technology (JUST)	
D.1.1 - Aims and activities of the organisation		
Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).		

Jordan University of Science and Technology (JUST) is a comprehensive, state-supported university located on the outskirts of Irbid, in northern Jordan, 70km north Amman, the capital city of Jordan. JUST was established in 1986 as an autonomous national institute of higher education with the main objective of producing outstanding professionals in specializations that match the needs of Jordan and the region. Since its establishment, JUST has been at the forefront of higher learning in the Arab World. It also maintains a high reputation among the Middle Eastern universities due to its faculty and administrative staff, multi-disciplinary educational system and broad diversity of students. The university was described as the best scientific institution in the Kingdom by King Abdullah II during his last visit, and it was ranked as the top research university in the country, and amongst the top 50 universities in the Islamic World, according to a study carried out by the Statistical, Economic and Social Research and Training Center for Islamic Countries (SESRIC).

JUST is considered today as one of the region's leading universities in teaching and research. The number of students has increased significantly since the university's establishment. Today JUST has more than 800 full-time faculty members, with 24,000 undergraduate and 1800 graduate students, about 25% of them are from more than 60 nationalities, rendering it the most cultural-diverse university in Jordan. The university provides a wide range of advanced degree programs at the undergraduate and graduate levels, many of them are not offered by any other Jordanian university. At the present time, the university comprises 12 faculties (Medicine, Engineering, Science & Arts, Pharmacy, Dentistry, Agriculture, Veterinary Medicine, Architecture, Information Technology, Applied Sciences, Nursing and Graduate Studies) and 55 departments offering 42 undergraduate programs and 95 postgraduate programs. These programs are constantly reviewed to improve their quality and to ensure that the students are always updated with the latest scientific skills and knowledge. All departments, faculties and service units are working together to ensure that the education we offer is both supportive and rewarding.

Internationalization is an essential element for the future development of Jordan University of Science and Technology. JUST is advancing its internationalization through the implementation of advanced science and technology, modern communication technologies, and through interaction with communities around the world. During the last 5 years, JUST was involved in more than 15 international (mainly EU) projects. JUST has 13 research and services centers and laboratories to cope with the rapid advancements in science and technology.

Please describe also the role of your organisation in the project (limit 1000 characters).

JUST will be responsible for leading the project, managing the budget and preparing interim and final reports, and communication between the consortium members. It will also be in charge of formulating a, methodology, and tools for the project implementation; issuing tasks, working plans and guidelines; monitoring the progress of the partners; revising and approving the project's schedule of meetings and tasks; and assessing the progress of the other partners towards their allotted goals. JUST has a long experience with coordinating international projects includes EU project, particularly TEMPUS projects. JUST will participate in the establishment of the centers in each Jordanian university according to the standards set by the EU partners. JUST will participate and in the dissemination of results of common work on the project and to ensure the development of the INVET Project.

D.1.2 - Operational capacity: Skills and expertise of key staff involved in the project	
Please add lines as necessary.	
Name of staff member	*Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.*
Prof. Fahmi Abu Al-Rub	**Fahmi Abu Alrub**, Professor of chemical and biochemical engineering, former Dean of Research at JUST and Key Expert **at the EMUNI University-Slovenia**. **Prof. Abu Al-Rub** is partner in five EU projects (1 EPI and 4 TEMPUS Projects) with a budget exceeding 7,000,000 EURO. Abu Al-Rub is the local coordinator for the ENPI project "NET KITE - Cross-border NETwork to foster Knowledge-intensive business Incubation and TEchnology transfer." **Prof. Abu Al-Rub** was the key expert and coordinator to establish the first Master's Program in the World on De-Pollution of the Mediterranean which was supposed to be hosted by three European Universities. Prof. Abu Al-Rub has reformed the Deanship of Research at JUST to establish the TTO and externally funded office to manage and secure external funds. Prof. Abu Al-Rub was the Vice Dean of Engineering at JUST from 2006-2009. His responsibilities included quality and accreditation of all engineering programs at JUST, curriculum development, and budget. Prof. Abu Al-Rub has supervised the preparation of all Engineering Departments at JUST and the University of Jordan for ABET. He supervised the revision of the curricula of all departments to meet ABET requirements. He has active research in Engineering Education, Curricula Reforming, Environment, Renewable Energy, Biofuels, and Wastewater Treatment. He has more than 80 publications on Education, Environment, and Wastewater Treatment, and renewable energy.
Prof. Ahmed Elbetieha	Professor Ahmed Elbetieha is Vice President of JUST. He is a professor of Cellular and Molecular Biology. He was the Dean of the faculty of Graduate Studies, and Dean of Faculty of Science and Arts. He has good experience on establishing new programs including both practical and theoretical components. He published in the field of Developmental, cellular and Molecular Biology around 50 scientific papers in peer reviewed international journals. He is an active member in several editorial boards in reputed journals. He supervised more than 20 master students. Currently He is engaged in applying quality assurance at JUST to become a world-class university.
Prof. Osamah Haddad	Prof. Osamah Haddad is a professor of Mechanical Engineering since 2006 and is currently the dean of scientific research at Jordan University of Science and Technology (JUST). He received his Ph.D. from Illinois Institute of Technology (IIT)-USA, in 1995. He spent a sabbatical year as a visiting researcher in the Hessert center for aerospace research at Notre-Dame university (ND)-USA in 2002-2003, where he worked on research projects funded by NASA and NSF. Besides, he is/was an active member on the editorial board and the organizing committees of many prestigious international journals and conferences. In addition, he is a reviewer for many well-known journals and acted as a guest editor twice. He has published more than 40 papers in international conferences and peer reviewed journals.

For any EU grants on previous calendar year please fill the following table, if any?

Programme or initiative	Reference number	Beneficiary Organisation	Title of the Project
TEMPUS VI	543948-TEMPUS-1-2013-1-ES-TEMPUS-JPCR	University of Deusto	Tuníng Middle East and North Africa (T-MEDA)

TEMPUS VI	543833-TEMPUS-1-2013-1-EG-TEMPUS-JPCR	Arab Academy for Science and Technology & Maritime Transport	Excellence in Nanoscience Education for the MENA Region
TEMPUS VI	543820- TEMPUS-1-2013-1-JO-TEMPUS-JPHES	The University of Jordan	Capacity Building of Personnel in Jordanian Olive
TEMPUS V	530332-TEMPUS-1-2012-1-JO-TEMPUS-JPCR	Princess Sumaya University for Technology	Modernising Undergraduate Renewable Energy Education: EU Experience for Jordan (MUREE)
TEMPUS V	530632-TEMPUS-1-2012-1-SE-TEMPUS-JPCR	Linköping University	EU-EG-Jo Joint Master Programme in Intelligent Transport Systems (JOINTS)
TEMPUS IV	511069-1-TEMPUS-2010-1-IT-JPCR	Università di Roma Sapienza	Master on Sustainable Development and Renewable Energy (MANSUR)

Partner number		P2
Organisation name& acronym	The University of Jordan, UJ	

D.1.1 - Aims and activities of the organisation
Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).
The University of Jordan (UJ) was established in 1962, since then it has applied itself to research and community research knowledge. UJ offers 63 international programs at the undergraduate level, and 132 international programs at the graduate level in all field of specialization. Also It offers 32 doctoral programs and 87 master programs. The essential components of most of the programs offered are based on dialogue, applied research, creative thinking, field work, practical training, combined with modern teaching techniques. JU has been involved in many international projects, particularly, TEMPUS projects, where UJ has been coordinating and partnering in five TEMPUS projects.   JU has established many research and community services centers, and has been very active in promoting the scientific research among its staff and students,
Please describe also the role of your organisation in the project (limit 1000 characters).
- Developing the abilities of the staff who will lead the innovation in the universities   - Creating a framework for the lifelong learning in Jordan   - Improving connections between higher education, industry, and society   - Satisfying industry and economical needs by empowering target groups with limited access to research resources   - Developing the innovation centers and to ensure that efforts are not duplicated   - Participating in surveying and benchmarking activities

D.1.2 - Operational capacity: Skills and expertise of key staff involved in the project *Please add lines as necessary.*	
Name of staff member	*Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.*
Prof. Ahmed Al-Salaymeh	Ahmed Al-Salaymeh is t a Professor at the Mechanical Engineering

	Department. He received his Ph.D. degree from Friedrich Alexander University in Erlangen, Germany in 2001. He organized and participated in many workshops, seminars and conferences in the field of Energy, Renewable Energy and Green building. He is also an expert in the Field of Energy Regulation. He is Certified Energy Manager CEM, and Certified Carbon Reduction Manager CRM. He is the local coordinator for Tempus projects on the establishment of Master program on sustainability and the renewable energy and the grant holder for tempus project establishment of a master program in environmental engineering and climate change, in addition to other 4 tempus projects
Dr. Ahmad Sakhrieh	Dr. Ahmad Sakhrieh is an Associated Professor at the Mechanical Engineering Department, the University of Jordan. He is currently the department chairman. He received his Ph.D. in Mechanical Engineering (Combustion) from Lehrstuhl Für Technische Thermodynamik Friedrich-Alexander University, Erlangen-Nürnberg, with thesis on Reduction of Pollutant Emissions from High Pressure Flames using an Electric Field. He got his Master and Bachelor from the mechanical engineering department at the university of Jordan in 1995 and 1997. He worked as assistant Professor in Mechanical Engineering at Al-Hashmite University in Jordan between 2007 and 2011. He has 25 published papers.
Prof. Nazzal	Prof. Mohammad Hamdan has a Ph.D. in Mechanical Engineering from Washington State University (Pullman) (USA), an M.Sc. in Mechanical Engineering (Combustion & Energy) from the University of Leeds, United Kingdom. B.Sc. in Mechanical Engineering from the University of Wales (Cardiff), United Kingdom. He is a full professor since 1995 and he worked as Engineering sector Advisor at Higher council for science and technology. He is currently the dean of Faculty of Engineering, Al-Zaytoonah University, Amman Jordan. He published over ninety five papers in international journals and his research experience is alternative fuels, combustion and pollution, heat transfer and renewable energy.

For any EU grants on previous calendar year please fill the following table, if any?

Programme or initiative	Reference number	Beneficiary Organisation	Title of the Project
Tempus	543879-TEMPUS-1-2013-1-GR-TEMPUS-JPCR	The University of Crete	Development of Interdisciplinary Minor Programmes on Climate Change and Sustainability Policy- CLIMASP"
Tempus	543820-TEMPUS-1-2013-1-JO-TEMPUS-JPHES	The University of Jordan	Capacity Building of Personnel in Jordanian Olive Industry
Tempus	544333-TEMPUS-1-2013-1-JO-TEMPUS-JPCR	German Jordanian University	Curriculum and Skill Development in Vision Rehabilitation
Tempus	544491-TEMPUS-1-2013-1-ES-TEMPUS-SMGR	Fundació per a la Universitat Oberta de Catalunya	Enhancing Quality of Technology-Enhanced Learning at Jordanian Universities
Tempus	544514-TEMPUS-1-2013-1-IT-TEMPUS-SMGR	Alma Mater Studiorum Università di	RecoNow - ENPI South: Knowledge of recognition procedures in ENPI South countries

		Bologna	
ENPI	II-B/2.1/0875	SADECO, Sanitation Córdoba S.A. (Ltd.)	Sustainable Mediterranean Old Towns, SMOT

Partner number		**P3**
Organisation name& acronym	Mutah University (MU)	

D.1.1 - Aims and activities of the organisation

Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).

Mutah University was established in1986 in the southern part of Jordan. It has 13 faculties including 44 academic departments. The number of graduate and undergraduate students currently enrolled at the university exceeds 24,000 students; were 20% of those students come from more than 50 countries, with more than 700 faculty members. In 2011, Mutah University has begun to make its mark in the QS World reputation. One of the most active center among these centers in the Energy Center, Dead sea studies and water which are involved in all activities related to energy. Mutah University has been involved in many activities related to renewable energy activities on national and international levels. Beside the research activities in different aspects on renewable energy systems; solar thermal including CSP technology, PV, wind energy and bio-energy, Mutah University enrolled in several international activities.
1. Mutah University has been involved in two TEMPUS projects on Renewable Energy: Modernizing and establish a Master program in Renewable Energy and over 10 student have recently been graduated Undergraduate Renewable Energy Education: EU Experience for Jordan, MUREETEMPUS-EU, 2012-
2. Master on Sustainable Development and Renewable Energy, TEMPUS-EU, 2010-2014.
Based on these two projects a new graduate program in the Mechanical Engineering on Renewable Energy and Sustainability has been established in 2012, and the curricula of the BSc. In Mechanical and Electrical Engineering Programs have been revised to include modules on renewable energy.

Please describe also the role of your organisation in the project (limit 1000 characters).

- Developing the abilities of the staff who will lead the innovation in the universities
- Creating a framework for the lifelong learning in Jordan
- Improving connections between higher education, industry, and society
- Satisfying industry and economical needs by empowering target groups with limited access to research resources
- Developing the innovation centers and to ensure that efforts are not duplicated
- Participating in surveying and benchmarking activities

D.1.2 - Operational capacity: Skills and expertise of key staff involved in the project
Please add lines as necessary.

Name of staff member	*Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.*
Prof Omer Maaitah	Prof in civil engineering. He get his PhD in Civil Engineering, School of Arch & Civil Engineering - University of Bath1999, United Kingdom At present dean of faculty of engineering. Published over 40th paper, member in the Institute of Jordan Engineers since 1992, British Geotechnical Society (BGS) since 1999, and Arab Organisation for Human Right. In addition being the contact person in tempus project (joint ITS, 530632-TEMPUS-1-2012-1-SE-TEMPUS-JPCR). Organizing and participating in many workshops, seminars and conferences in the field of Energy, Renewable Energy and Green building.
Thafer Assaraira	Professor Thafer Y. Assaraira is currently holding the position of the Vice President for International Relations and Quality Assurance at Mutah

	University, Jordan. As a professor of English and American Literature, Professor Assaraira obtained his Phd from Ohio University, USA, in 1998 and his MA from the University of Missouri-Kansasa City, USA. He has more than 25 publications in national and international refereed journals. His extensive administrative experience includes the Dean of the College of Arts, the Vice Dean of the College of Arts, the Head of the English Department, the Head of the Foreign Languages Department, the Language Centre Director and the Assistant Dean. His research and teaching interests include American Literature, Literary Criticism, comparative literature, Existential Literature, and World Literature. He supervises the Quality Assurance Standards at Mutah University.
Dr Yazeed Al-Sbou	Dr. Yazeed Al-Sbou is an Associate Professor in Computer Engineering and Science, Mutah University. Currently, Dr. Al-Sbou is the Head of the Computer Engineering Dept. College of Engineering, Mutah University. He received his PhD in Computer Engineering from Sheffield Hallam University (UK), 2006, BSc and MSC in Electrical Engineering/ Telecommunications from Mutah University and University of Jordan in 1997 and 2001, respectively. Dr. Al-Sbou has more than 8 years of teaching experience in higher education. His research interests include Quality of Service, Wired and wireless Networking performance evaluation, Image Processing, Cognitive radio Networks. Dr. al-Sbou is serving as TPC and reviewer for several international journals and conferences.
Dr saif Nawaiseh	Saif Enad Alnawayseh is Assistant Professor in Telecommunication Engineering. PhD holder in advanced Telecommunication Engineering, Swansea University, UK. At present; dean assistant, for quality assurance and industry affairs, Faculty of Engineering, Mutah University, 2013. Also, member of Jordanian Engineering Society and Member of IEEE.

For any EU grants on previous calendar year please fill the following table, if any?

Programme or initiative	Reference number	Beneficiary Organisation	Title of the Project
TEMPUS V	530332-TEMPUS-1-2012-1-JO-TEMPUS-JPCR	Princess Sumaya University for Technology	Modernising Undergraduate Renewable Energy Education: EU Experience for Jordan (MUREE)
TEMPUS V	530632-TEMPUS-1-2012-1-SE-TEMPUS-JPCR	Linköping University	EU-EG-Jo Joint Master Programme in Intelligent Transport Systems (JOINTS)
TEMPUS IV	511069-1-TEMPUS-2010-1-IT-JPCR	Università di Roma Sapienza	Master on Sustainable Development and Renewable Energy (MANSUR)

Partner number		**P4**
Organisation name& acronym	Princess Sumaya University for Technology (PSUT)	
D.1.1 - Aims and activities of the organisation		
Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).		

Founded in 1991, Princess Sumaya University for Technology (PSUT) is the only private and non-profit university in Jordan.It is owned by the Royal Scientific Society (RSS), the foremost applied research center in Jordan.Like RSS, PSUT is part of El Hassan Science City located in Amman, Jordan. PSUT''s main mission is to educate students and qualify them to pursue careers in the fields of information and communications technology (ICT), electronics, computer engineering, communication engineering, and business. PSUT offers Bachelor of Science (B.Sc.) degrees in Computer Science, MIS, Business Administration, Computer Graphics and Animation, Computer Engineering, Electronics Engineering, and Communications Engineering. Also, Masters of Science (M.Sc) degrees are conferred in Computer Science and Environmental Management as well as Global Master of Business Administration (MBA) in collaboration with Lancaster University in the United Kingdom. Being part of El Hassan Science City, PSUT strives to create a culture of entrepreneurship among its students. PSUT is licensed and all its programs are accredited by the Jordanian Higher Education Accreditation Commission.

PSUT continues to expand its curricula to offer the advanced education and expertise demanded by local and global business communities. Several new degree programs are being considered at the undergraduate and graduate levels including Bachelor of Science (B.Sc.) degrees Software Engineering, Entrepreneurship and Technology Management, and Power and Energy, and Master of Science (M.Sc.) degrees in Computer Security and Criminology and Electrical Engineering.

PSUT strives to be the leader in building the ICT and electronics sectors in Jordan and a research platform for Jordanian industry. Simply put, our goal is to have PSUT be "the university of the future" where highly qualified and talented students are educated and ready to join competitive markets in the 21st century and beyond. We at PSUT promote excellence, scholarship, commitment, innovation and entrepreneurship that drive the private sector.

Please describe also the role of your organisation in the project (limit 1000 characters).

PSUT has long history in handling issues innovations and entrepreneur through different initiatives it has participated in. However, PSUT as a leading university in ICT in Jordan has a full staff capacities to run out this project at its premises and in Jordan as a whole. It will participate in developing the abilities of the staff who will lead the innovation in the universities, improving connections between higher education, industry, and society, and developing the innovation centers and to ensure that efforts are not duplicated. I will also participate in all the activities of the project.

D.1.2 - Operational capacity: Skills and expertise of key staff involved in the project
Please add lines as necessary.

Name of staff member	*Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.*
Prof. Dr. Wejdan abu Elahaija	She received her B.Sc. degree in electrical engineering from Jordan University of Science and Technology (JUST), Irbid, Jordan and PhD degree in electrical machines from Queen University of Belfast (QUB), Belfast, UK. In 2000, she joined the Department of Electronics Engineering, Princess Sumaya University for Technology (PSUT), as an Assistant Professor. She has been promoted to Associate Professor in 2006. She held the position of President's Assistant for quality Assurance during 2007-2010. In September 2009, she has been the Head of the electronics Engineering Department. Since September 2011, she has been the Dean of King Abdullah II School for Engineering. Her research interests are primarily in the field of electrical machines and drives.
Dr. Omar Hasan	Graduated from New Mexico State University, USA, 1996. Currently with the department of Communications Engineering at PSUT. He has supervised and participated in many Erasmus Munds projects 2009-2015. He also participated in many Tempus projects.
Dr. Yazan Al Quda	Yazan A. Alqudah received his PhD degree from The Pennsylvania State University, USA in 2003 in electrical engineering. He joined Intel corporation,

	Oregon in 2003 as senior technologist where he worked with Logic technology development (LTD) and Mobile wireless groups (MWG). In his capacity, he led the development of LTD yield analysis system and the development and integration of WiMAX technology. Dr. Alqudah received three Intel's recognition awards in 2005 and 2007 for his successful efforts. Since 2008, he has been with the communication engineering department at Princess Sumaya University for Technology as an associate professor. Dr. Alqudah is a senior member of IEEE and is WiMAX RF certificated. He serves on the editorial board for Journal of Communications and Networks. In 2014, he won best Researcher Award at PSUT. His current research interests include broadband optical wireless communication, WiMAX deployment and performance, Yield Analysis and software architecture and development.
Dr. Belal Sababha	Belal H. Sababha is the Computer Engineering Department Chair and an Assistant Professor of Electrical and Computer Engineering at Princess Sumaya University For Technology (PSUT). He is also a Co-Founder of the Intelligent and Embedded Systems Research Group at PSUT. Before joining PSUT he worked as a Powertrain Controls Senior Engineer at Chrysler Group LLC. Belal holds a PhD degree in Electrical and Computer Engineering – Embedded Systems. He has taught electrical and computer engineering undergrad and grad courses at various universities in the US and Jordan. Dr. Sababha has extensive experience in embedded systems design, control algorithm design and software development with applications related to Gasoline Engine Controls and Unmanned Aerial Vehicles (UAVs). He is a consultant in the fields of Embedded Systems and UAV design and control for various governmental and commercial firms. His research concentration areas are UAV development, Biomedical instrumentation, sensor communication, routing in wireless ad hoc networks, embedded RTOS, CAN networks, distributed embedded systems, graceful degradation in embedded systems, rapid prototyping, and machine vision. Moreover, he has several years of experience as an ICT Director. He is a member of IEEE-RAS, ASME, AIAA, JEA and a Senior Member of IEEE.

For any EU grants on previous calendar year please fill the following table, if any?

Programme or initiative	Reference number	Beneficiary Organisation	Title of the Project
TEMPUS V	530332-TEMPUS-1-2012-1-JO-TEMPUS-JPCR	Princess Sumaya University for Technology	Modernising Undergraduate Renewable Energy Education: EU Experience for Jordan (MUREE)

Partner number		**P5**
Organisation name& acronym	Applied Scientific Research Fund (ADRF)	
D.1.1 - Aims and activities of the organisation		
Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).		

ASRF, established in 2011, helps innovators bring their ideas into business reality. Penelope Shihab, founder of MonoJO biotech; a unique biotech company in the region, started ASRF to support young entrepreneurs like herself to build their ideas and start their own companies. From her experience, innovators do not tend to find the initial support they need to continue their projects, especially in the healthcare sector.

Young innovators come to ASRF with their ideas and a small research about their potential applications. ASRF then helps them with the following steps: capacity building, mentorship, seed funding, and providing needed connections. ASRF tends to assist innovators in applying for their patents, build their prototypes, and commercialize their outcomes.

Please describe also the role of your organisation in the project (limit 1000 characters).

ASRF will help in providing trainings, workshops, and lectures to students and lecturers. ASRF will conduct student competitions in innovation research and ideas and winners will have their projects funded by ASRF. ASRF will participate in all the activities within the projects.

D.1.2 - Operational capacity: Skills and expertise of key staff involved in the project
Please add lines as necessary.

Name of staff member	*Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.*
Jamil AlKhatib	Mentor and Trainer in innovation skills. Masters Degree in Innovation.
Penelope Shihab	Founder of Monojo, an innovative biotech research in Jordan
Abeer Awad	Mentor of ASRF's innovators
Jamil AlKhatib	Mentor and Trainer in innovation skills. Masters Degree in Innovation.

For any EU grants on previous calendar year please fill the following table, if any?

Programme or initiative	**Reference number**	**Beneficiary Organisation**	**Title of the Project**

Partner number		**P6**
Organisation name& acronym	Hochschule für Technik, Wirtschaft und Kultur Leipzig HTWK Leipzig	

D.1.1 - Aims and activities of the organisation

Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).

For more than two hundred years, the Leipzig University of Applied Sciences (HTWK Leipzig) and its predecessors have been providing high-quality, career-relevant education in a diverse range of fields through innovative courses, excellent teaching and state-of the art facilities

Today, with about 7000 students, HTWK Leipzig ranks among Germany's largest universities of applied sciences. Providing practice-oriented, career-relevant education in short and intense courses of study that lead to accredited bachelor's and master's degrees is HTWK Leipzig's trademark feature. Our curricula have been designed to meet rapidly evolving industry needs, preparing students for high-level professional practice in fields such as engineering, business, social science and cultural studies.

The university uses E-learning and audio/ video communication their experience in European and regional projects, e.g. the OPAL system. Various E-services, developed by scientists and students of HTWK Leipzig contributing for use in the projects were already presented during international fairs from 1997 to 2014:

E-learning tools, E-library, E-government, E-publishing, E-payment, a-/vconferencing.	

Please describe also the role of your organisation in the project (limit 1000 characters).

HTWK Leipzig , has a high expertise in field of the Innovation in Education project and managed similar actions and will assist in transfer of experience of current German Innovation in Higher Education to partner countries; will participate in creation of common adapted model of Innovation Culture for partner countries; will help in enriching information base of partner country Innovation in Education with data from EU database along with studying experience of partner country Innovation in Education. HTWK will also be responsible for dissemination of results of common work within the project.

HTWK Leipzig will transfer the important major (curricula, pedagogies and assessment, teacher training, ICT and digital media, and educational culture and leadership) for creative learning and innovative teaching. The experience of HTWK is based on its works in Tempus-projects like JointLAB","InterCollegia","InterSCAN","EduVisIM", "EU-TraCeFer", "UnIvEnt" and "STEP".

D.1.2 - Operational capacity: Skills and expertise of key staff involved in the project
Please add lines as necessary.

Name of staff member	Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.
Prof. Dr. Prof. h.c. Klaus Haenssgen	Professor for Information Systems and Multimedia Technologies. Very experienced in E-learning, multimedia communication, Distance Elearning,e-services development. He was the coordinator in 7 Tempus projects and in 6 EXIST SEED innovation projects, especially also projects for graduates and their career development. He was working together with partners of several research institutions and industry on e-service projects, computer and network projects and content development, funded by German and Saxony ministries (e.g. HSP, HWP) and by private companies (e.g. R+V, IBM, DRV).
Dr. Riyadh Qashi	Involved in different international projects. Performs research in area of computer networks, quality of service and routing protocols. Experience with IT projects, e-learning systems, development and restructuring of computer networks. Was a PhD student in HTWK Leipzig and University Leipzig 2008-2011. During his study he was using many contacts to enterprises for applying the results of his work.

For any EU grants on previous calendar year please fill the following table, if any?

Programme or initiative	Reference number	Beneficiary Organisation	Title of the Project ☒
Tempus	511337-TEMPUS-1-2010-1-DE-TEMPUSJPHES	HTWK Leipzig	Enhancement of role of universities in transfer of innovations into enterprise", "UnIvEnt
Tempus	530626-TEMPUSJPHES	Nablus University	"STEP ", Strengthening University-Enterprise linkage in Palestine

Partner number		P7
Organisation name& acronym	*University of Deusto (UD)*	

D.1.1 - Aims and activities of the organisation
Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).
The University of Deusto, over 125 years HEI. It is a non-profit university, with 11,000 students, of which 15% are international. UD combines a high level of internationalization with excellence in teaching It is remarkable for its capacity to combine a number of contrasting elements: local roots and global challenges, historic awareness and concerns for the future, leadership engagement and social commitment, intellectual rigour and experienced based learning, competition and cooperation, tradition and innovation. UD is one of the 18 universities accredited by the Spanish Ministry of Education as an International Campus of Excellence from 2015. Deusto is internationally renowned for its capacity in the Social Sciences and Humanities, law, economics and business administration, engineering, education and psychology as well as social work, tourism, languages, communication and international relations. Its 6 faculties, located in three campuses (Bilbao, San Sebastian & Madrid) are characterized by their capacity for both internal & external collaboration. UD offers 23 Bachelor Degrees 5 Double Degree, 39 Master Programmes, 12 Executive Masters, 10 Doctoral Programmes. The University of Deusto is striving for internationalisation, without excluding other regions, and demonstrates a clear commitment to Europe and Latin America, having signed agreements with more than 200 universities. Approximately 1,300 students and more than 50 professors take part in mobility programmes. The faculties are also involved in European programmes. Deusto has developed strong experience in Project Management since 1989, coordinating large projects such as the 49 EMAction2 contracts as coordinator & partner, 1 EMAction3 with the coordination of 3 networks, 5 Erasmus Mundus Masters Programmes, 2 Marie Curie Initial Training Networks, a Thematic Network (Humanitarian Net), several Intensive Programmes and, Tuning projects in different regions of the world.
Please describe also the role of your organisation in the project (limit 1000 characters).
UD has an unquestionable knowledge of the Tuning Project and of ways how to develop it in different regional and field contexts. UD will provide the TUNING methodology and approaches for the implementation of competence-based learning, in order to promote innovation culture in the higher education in Jordan and to foster collaboration between academic institutions and the industrial sector. Tuning experience in the consultation process with different stakeholders including employers, as well as possibility to develop transparent and comparable study programmes, will enable students and teachers to apply their research results, and improve the organization of scientific-research activities and transfer of innovation projects. Tuning experts from UD will facilitate and consult their Jordanian colleagues in the process of creation of accessible information database of innovations at Jordanian universities, delivering a base for the improvement of the educational processes.

D.1.2 - Operational capacity: Skills and expertise of key staff involved in the project	
Please add lines as necessary.	
Name of staff member	*Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.*
Pablo Beneitone	*He is the Director of Tuning Academy at the University of Deusto since 2013 and he has a large experience running several international projects (ALFA, TEMPUS, Erasmus Mundus).*

For any EU grants on previous calendar year please fill the following table, if any?

Programme or	**Reference number**	**Beneficiary**	**Title of the Project** ⊠

initiative		Organisation	
ERASMUS +	11 2014-1-ES01-KA203-004892	Universidad de Deusto	Hands on Entrepreneurship in Higher Education
ERASMUS +	2014-1-BE01-KA203-00091	NOHA Association	European Universities on Professionalization on Humanitarian Action
ERASMUS +	2014-1-ES01-KA201-004966	DEUSTOTECH-LEARNING	Make World: learning Science through Computational Thinking
ERASMUS +	7 2014-1-ES01-KA203-004496	Universidad de Granada	DEVELOPING ALL -ROUND EDUCATION DARE +
Negotiated Tender	EAC-2013-0390	Unuversidad de Deusto	Tuning India Feasibility Study

Partner number		P8
Organisation name & acronym	University of Cyprus - UCY	

D.1.1 - Aims and activities of the organisation

Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).

UCY is the leading research University in Cyprus that aspires to promote scholarship and education standards of excellence through teaching and research. More than 7000 students (undergraduate and graduate) currently undertake studies are the UCY. The Univeristy has 8 faculties, 22 departments and 11 research units at UCY, including a Research Centre on Sustainable Energy. UCY is currently managing competitive research funds that exceed the 50 million Euro mark. Recently, it has revised its research policy in order to increase the efficiency of the University to utilize research funding and opportunities, and to better promote research initiatives in Cyprus. The new policy adopts the EC declarations for balancing basic and applied research, and provides the necessary administrative support to the academic and research staff. The Electrical and Computer Engineering department is the largest department in the School of Engineering and it strives to provide high quality degree programs at undergraduate and graduate levels. One of its main priorities is to develop further its research portfolio in the field of renewable energy sources and in particular solar energy, thus utilising Cyprus' high solar resource.

Please describe also the role of your organisation in the project (limit 1000 characters).

UCY competences in relation to the project proposal are:
-support to start-up, business creation and incubation
-entrepreneurship education
-support technology transfer from HEI to companies, especially within productive clusters, through innovative start-ups and within an open innovation framework
-availability of technology labs and technical assistance for product development and rapid prototyping

D.1.2 - Operational capacity: Skills and expertise of key staff involved in the project
Please add lines as necessary.

Name of staff member	*Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.*
George E. Georghiou	Dr George Georghiou received his BA, MEng, MA in 1996 and his PhD in

	1999 from University of Cambridge. He is currently an Associate Professor at the University of Cyprus (UCY) and the leader of PV Technology laboratory at Department of Electrical and Computer Engineering of UCY. He was a university lecturer and the undergraduate course leader in Electrical Engineering at the University of Southampton, and a Research Advisor for the Electricity Utilization, University of Cambridge. Dr Georghiou is currently a member of the CENELEC and IEC TC82 committees on PV and is acting as an expert evaluator for FP7 energy proposals as well as being a member of CIGRE and the European Solar Energy Industrial Initiative. He also represents Cyprus on the FP7 Energy Committee, SET plan committee and the European Mirror Group. Dr Georghiou is coordinating and participating in a number of research projects relating to renewable energy education initiatives (TEMPUS), pilot smart net metering projects for increasing renewable energy penetration in the Mediterranean (MED programme, LIFE+), and others.
Maria Hadjipanayi	Dr. Maria Hadjipanayi received her BSc in Physics (2001) from the University of Cyprus and her DPhil (PhD) in Condensed Matter Physics (2006) from the University of Oxford. Her research interests lie within the area of fundamental and applied physics of novel materials which are promising for future energy-efficient technological applications, especially in the field of solar energy. She is currently a researcher at the Photovoltaic Technology group in the Department of Electrical and Computer Engineering of the University of Cyprus working on the investigation of the optoelectronic characteristics and photovoltaic performance of novel solar cell devices as well as focusing on grid integration and energy policy research.
George Makrides	George Makrides, a Cambridge University graduate, has completed his PhD at the University of Cyprus, where he studied the performance of various different commercial static as well as tracked flat-panel and concentrator photovoltaic systems. He is currently a researcher at the Photovoltaic Technology Laboratory of the UCY. The work he is undertaking forms part of a comparative study conducted as a joint project between the University of Cyprus and IPE Stuttgart with the aim to establish the loss processes and degradation of different technologies under real field conditions.
Venizelos Efthimiou	Dr Venizelos Efthymiou from Cyprus is a holder of the UMIST university degrees: BSc in Electrical Engineering and Electronics, Master of Science (MSc) in Power Systems and Doctor of Philosophy (PhD). He worked for the Electricity Authority of Cyprus from March 1979 up to November 2013 and he left the Company from the post of Executive Manager Networks and from the post of Manager of the Distribution System Operator of Cyprus. He is a member of the Steering Committee of the SmartGrids European Technology Platform, a member of the Steering Committee of PV Technology Platform, a substitute member of the Board of Directors of EURELECTRIC, a member of the DSO Committee of EURELECTRIC, chairman of the Research Centre FOSS of the University of Cyprus and chairman of CIGRE Cyprus.
Alexander Phinikarides	Alexander Phinikarides earned his BSc in Electrical Engineering from the University of Cyprus in 2007 and went on to gain his MSc in Microelectronic Systems Design from the University of Southampton in 2008. During his last year at the University of Cyprus, he earned the award for the best undergraduate senior design project, titled "The design and implementation of a stand-alone photovoltaic system with data logging and remote monitoring via the internet". He has worked closely with the PV Technology of the UCY in the past and knows the test site and the technology.

Vasiliki Paraskeva	Vasiliki Paraskeva is currently undertaking her PhD at the University of Cyprus, PV Technology laboratory. She is studying the characterization protocols of various different photovoltaic cells for CPV applications. Work so far includes the characterization of cells with the methods of ellipsometry, UV-VIS-NIR spectroscopy, electroluminescence and pump-probe techniques.
Minas Patsalides	Minas Patsalides received his BSc degree from the University of Cyprus and currently is a PhD candidate at the Department of Electrical and Computer Engineering, University of Cyprus. Minas has obtained the top mark of his year from the Department of Electrical and Computer Engineering, University of Cyprus. His research interests include measurements and analysis of power quality events, renewable sources of energy and applications of ArcGIS Systems in the evaluation of measurements of electromagnetic fields. Minas has great expertise in the fields of PV technology, power electronics, power systems modeling, smart meters, new inverter standards, surge protection devices, power saver unit evaluation, monitoring as well as the implementation of storage in conjunction with PV grid connected systems.
Ioannis Koumparou	Ioannis Koumparou, received his BEng degree in Electrical and Electronic Engineering from the University of Leeds in 2012.He continued his studies at the same university receiving the MSc(Eng) in Electrical Engineering and Renewables Energy Systems with distinction in 2013. He is currently a doctoral researcher at the Photovoltaic Technology Group, Department of Electrical and Computer Engineering. His research interests include the areas of Photovoltaic, Smart Grids and PV Net metering.
Nikolas Philippou	Nikolas Philippou earned his BSc in Electrical Engineering from the University of Cyprus with distinction in 2012. He continued his studies obtaining the MSc in Energy and Sustainability with Electrical Power Engineering from the University of Southampton with distinction. He is currently a PhD researcher at the University of Cyprus, in the Photovoltaic Technology laboratory, Department of Electrical and Computer Engineering. His research interests include the areas of photovoltaics, Smart Grids, Demand Side Management and power quality.
Michalis Papastavrou	Michalis Papastavrou is currently a Technician at the Photovoltaic Research Laboratory of the University of Cyprus mainly involved in the installation, monitoring, data analyzing and maintenance of PV solar systems. Since 1997, he has been the Technical Director and co-founder of Telelysis Communications Limited, a telecommunications company in Cyprus dealing with PBX telecom systems (analogue, digital and IP), audio and video conferencing, networking and telephony integrations with home automations. For the period from 2003 to 2010, Michalis has acted as a freelance associate technician for the Cyprus Army on ESM Radar Systems. He is a holder of Higher Diploma in Electrical Engineering from the Frederick Institute of Technology in Cyprus.

Programme or initiative	Reference number	Beneficiary Organisation	Title of the Project ⊠

Partner number			**P9**
Organisation name& acronym	*CONSORZIO ARCA (ARCA)*		

Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).

ARCA is a no-profit consortium established in 2003. Members of ARCA are the University of Palermo, Easy Integrazione di Sistemi and Associazione SINTESI. As a business incubator located within the University Campus of Palermo, ARCA intends to be an instrument of economic development able to boost the growth and success of innovative business ideas by means of a structured network of resources and services.The access to ARCA Incubator is reserved to new companies with a high technological profile that include both academic groups and external subjects interested in developing relationships with university research centres. So far more than 35 innovative companies have got benefit from ARCA incubation and business support services.In addition to fully equipped spaces, ARCA offers also assistance to strategic planning, marketing support, administrative and tax consulting, fund raising, managerial mentoring and access to technology labs in the field of electronics, graphics, mechanical prototypes design and optical research support product design and choices of industrialization techniques.The fields of interest of ARCA incubated start-up companies are: eco-design and eco-compatible materials, techniques for the re-use of water: innovative desalination systems, wind energy, geothermal energy, energy saving and efficiency, remote sensing, GIS, cultural heritage information technologies and diagnostic tools, medical imaging, biotechnologies, software for agronomic services, marine environment technologies, yachting design.From 2005 ARCA is a sponsor of Start Cup Palemo business plan competition, organized in the frame of National Innovation Prize, Italy.ARCA is a member of the Mechatronics Productive District in Sicily grouping more than 150 companies.ARCA is a partner of the EEN – Enterprise Europe Network, a node for ENoLL – European Network of Living Labs and member of SDSN Sustainable Development Solutions Network.

Please describe also the role of your organisation in the project (limit 1000 characters).

ARCA competences in relation to the project proposal are:
-support to start-up, business creation and incubation
-entrepreneurship education
-support technology transfer from HEI to companies, especially within productive clusters, through innovative start-ups and within an open innovation framework
-availability of technology labs and technical assistance for product development and rapid prototyping
ARCA will lead dissemination activities and capitalization of results and will promote e-participation events in Jordan b̲ on the IT aided town meeting methodology

D.1.2 - Operational capacity: Skills and expertise of key staff involved in the project

Name of staff member	*Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.*
Fabio Maria Montagnino	**Fabio Maria Montagnino** is ARCA Managing Director, with more than twenty years of experience in the field of entrepreneurial development and technology innovation management. He is working in the field of business development and innovation since 1993. Graduated in Physics in 1991, after a period spent in the University of Palermo as a Research Fellow in biophysics, he started to work for private companies in the development of new technologies and business opportunities. In 1996 he is among the founders of Easy Integrazione di Sistemi. His job in Easy has been the management of business development and special projects. In particular, he has coordinated the TICONZERO business incubator project, in cooperation with BIC Sicilia, funded through a UE Global Grant, that has activated more than 20 start-up companies in the IT field. He is currently the president of TICONZERO Consortium

Elizabeth Parisi	CEO of the private founding member of ARCA Consortium, she coordinates incubation services, managerial training activities and project administration. Graduated in Physical Science, after a job experience at BIC – Business Innovation Centre, Sicily, since 1996 she is the CEO of Easy Integrazione di sistemi s.r.l., a small company specialized in IT services. She has been project manager of several projects dealing with software development, with expertise in human resources management, technical and financial management and R&D activities. She has been also responsible for the introduction of Total Quality Management in the company. In 1999 she started up a small incubator of IT and communication companies called Ticonzero. In 2003 Easy Integrazione di Sistemi has founded ARCA consortium and she has been in charge for business planning and strategic planning activities. She has worked as trainer and tutor in many Master courses and upper technical vocational education & training courses
Monica Guizzardi	Graduated in Psychology, she is mainly skilled in assessment or evaluation of aptitudes, competences, professional interests, cognitive aspects and individual personality, defined through specific tests and questionnaires. She is also skilled in project preparation and management of activity programmes and call for proposals of the European Commission and Regional/National funding such as: Socrates, Leonardo da Vinci, Youth, Tempus, ESF, IFTS.
Silvana Di Bono	She holds a degree in Foreign Languages and has more than 20 years of experience in EU projects design, management and evaluation. She has a specific expertise in the set-up and coordination of transnational partnerships. She has also collaborated with the Research Division of the University of Palermo both in support and technical assistance to project design and developing additional skills in financial reporting and administration, especially in the frame of FP7 and Structural Funds. She contributed to the design and implementation of several Leonardo da Vinci, MED and ENPI CBC MED projects. She has participated as VET expert in four CEDEFOP study visits (1999 – 2005 – 2010 -2014) and carried out a three- month work experience in Sweden, University of Linkoping.

For any EU grants on previous calendar year please fill the following table, if any

Programme or Initiative	Reference Number	Lead Beneficiary Organisation	Title of Project
ENPI CBC MED programme	II-B/1.1/0068	ARCA	NET KITE – Cross-border NETwork to foster Knowledge-intensive business Incubation and Technology transfer
CIP-EIP Consultation ENT/CIP/10/B/N01C00	IT 150329	MONDIMPRESA	BRIDG€conomies – Business Relays for Innovation and Development of Growing €conomies
MED	1CAP-MED12-10	COMUNE DI PRATO	CREATIVE MED
ENPI CBC MED programme	I-A/2.3/174	ARCA	STS-Med Small scale thermal solar district units for Mediterranean communities
Lifelong Learning Programme – Leonardo da Vinci Thematic Networks	518802-LLP-1-GR-LEONARDO-LNW	ACTION SYNERGY	CREDNET – Network for the Accreditation of the managerial skills
MED	1G-MED08-454	Rethymno Chamber of Commerce	SMILIES –Small Mediterranean Insular Light Industries Enhancement and Support

Partner number		P10
Organisation name& acronym	*Paulo & Beatriz – Consultores Associados, Lda (P&B)*	
D.1.1 - Aims and activities of the organisation		
Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).		
Paulo & Beatriz – Consultores Associados, Lda (P&B) is a private company created in 2002 that is specialised in providing training and technical services in food safety and food quality. The company has a large experience in providing training and developing programmes in innovation, quality and food safety management system. The company has been actively involved since its foundation in the area of Innovation Management Systems (NP 4457), Quality Management Systems (ISO 9001) and in the area of Food Safety Management Systems (ISO 22000, BRC Global Standard - Food, IFS – International Food Safety). P&B has carried audit more than 1000 audits, supported the implementation of more than 40 quality, food safety and innovation management systems in companies from the sector and delivered more than 120 training in this fields over the last 10 years.		
Please describe also the role of your organisation in the project (limit 1000 characters).		
To participate in all the activities of the project, particularly in training on innovation.		
D.1.2 - Operational capacity: Skills and expertise of key staff involved in the project		
Please add lines as necessary.		
Name of staff member	*Summary of relevant skills and experience, including where relevant a list of*	

	recent publications related to the domain of the project.
Paulo Baptista	Paulo Baptista, is a chemical engineer with a PhD in Biotechnology (area of Food Processing). He is Director of P&B. Currently he works with food companies providing consulting, auditing and training services mainly in the area of quality, food safety and innovation. He had coordinated a study for development and expansion of Incubator of Instituto Pedro Nunes in Coimbra (Portugal). Previously he has been Director of Sociedade Portuguesa de Inovação, S.A. and Head of Food Technology Centre of College of Biotechnology of Portuguese Catholic University - a technological centre of interface between Academia and Industry in Portugal. As the Head of the Food Technology Centre he was responsible for the global coordination of the R&D activities/services to agro-food companies and for the participation in national and European R&D projects. He is author of book in area of innovation: "Innovation in Products, Processes and Organisations" and co-author of books "Innovation and International Development of Enterprises" and SMEs Challenges within Knowledge Economy. He had participate in several TEMPUS projects that aimed to promote the partnership and establishment of interface structures between universities and enterprises such as FOODLINKS, UNIVENT and EQIWBC projects.
Maria Beatriz Marques	Maria Beatriz Marques, is a chemical engineer with a specialization in Quality Management. She is a Managing-Partner of P&B: Currently she works with companies providing consulting, auditing and training services mainly in the area of quality and innovation. He had been involved in the implementation of several quality and innovation management system in companies. She had participated in TEMPUS projects that aimed to promote the partnership and establishment of interface structures between universities and enterprises such as the FOODLINKS and EQIWBC project.

For any EU grants on previous calendar year please fill the following table, if any?

Programme or initiative	*Reference number*	*Beneficiary Organisation*	*Title of the Project* ⊠
TEMPUS	515788-TEMPUS-1-2011-1-JO-TEMPUS-JPCR	University of Jordan	Curriculum Development for Master Program of Environmental engineering and Climate change (MAPEC)
TEMPUS	511337-TEMPUS-1-2010	Leipzig University of Applied Sciences	Enhancement of role of universities in transfer of innovations into enterprise (UNIVENT)
TEMPUS	158714-TEMPUS-1-2009-HES-TEMPUS-JPHES	University of Lleida	Improving Academia - Industry Links in Food Safety and Quality (FOODLINKS)
TEMPUS	159173-TEMPUS-2009-DE-TEMPUS-JPCR	University of Weihenstephan	EU Based Course in Foodstuff Expertise & Quality Control

Partner number		**P11**
Organisation name& acronym	*CREATIVE THINKING DEVELOPMENT (CRE.THI.DEV)*	

D.1.1 - Aims and activities of the organisation
Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).
CRE.THI.DEV. is a non-profit company aimed at community development through the research and development of action plans, focused on the local and social economies, mainly on the fields of life-long learning, environmental protection, employment and local development, throughout Greece. The company establishes close cooperation with local and regional authorities, government authorities including the Chamber of Commerce and business associations in order to promote innovation, entrepreneurship and sustainable development through research and the raising of awareness in local communities towards available development projects. In this framework the company organizes and promotes studies and research projects, participates in European projects, cooperates with universities, companies, government authorities, technological centers and organizations, vocational training centers and business associations, focusing on the exchange of knowledge, technology and innovation. CRE.THI.DEV has 10 members and a big network of scientists from various disciplines. CRE.THI.DEV was established in 2012, from D. Papakonstantinou, Managing Director, for 19 years, and Board Advisor, for 5 years, of ELKEDE TECHNOLOGY & DESIGN CENTER SA, a semi-public organization with European and international orientation. ELKEDE supported small and medium size companies of many sectors of industry by organizing and offering life long learning seminars and programs, transfer of knowledge and innovation, quality control and certification of products and solutions for the protection of the environment and participated as leader or partner in many EU funded research projects.
Please describe also the role of your organisation in the project (limit 1000 characters).
CRE.THI.DEV will bring together Universities that participate in the project and enterprises from Greece that have developed or implemented innovations. With its members' experience from the transfer of innovation to Small and Medium Sized Enterprises (SMEs), CRE.THI.DEV will organize the participants' visits as well as their practical on-site training during which entrepreneurs will discuss and transfer their experiences, their difficulties and solutions and their perspectives when dealing with innovations.

D.1.2 - Operational capacity: Skills and expertise of key staff involved in the project
Please add lines as necessary.

Name of staff member	*Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.*
Dimosthenis Papakonstantinou	*Dimosthenis Papakonstantinou, Administrator of CRE.THI.DEV, has worked in ELKEDE, Technology & Design Centre as its Managing Director (1985-2004) and as Board Advisor (2004-2009). (ELKEDE was an RTO under the authority of the Ministry of Development, with European and International orientation, for the support of small and medium size enterprises of many sectors of industry. Its activities and services included a) training, b) waste prevention and waste treatment solutions services, c) quality control and certification of products, d) chemical analysis of effluents, e) technical assistance and f) Health and Safety services). From 1985 to 2011, D. Papakontantinou participated in many European research, technology, quality, training and environmental projects, offered technical assistance to Shoe Institutes and Industry in India, Ukrain and Mauritius and participated in a MEDA Project for the creation of a Footwear Manufacturing College in Turkey.* *As member/President for 20 years of consulting committees and working groups of the Ministries of National Economy and Development he has experience in the definition and elaboration of specific measurements for the realization of programs at national, regional and sectoral level. He has a Bachelor of Science in Chemistry (University of Athens, Greece), a Diploma in*

	Leather Technology (Nene College Northampton, UK) and an MA in Design Management from De Montfort University of Leicester
Maya Dimitriadou	Maya Dimitriadou has worked in ELKEDE, Technology & Design Centre for 20 years. During this period, she participated in SPRINT projects for Clean Technologies and Quality Assurance in the Leather Industry as well as in the development of Quality Systems in footwear industries, managed the project "Improvement and development of the infrastructure of ELKEDE" for the Quality Department, trained the personnel of SMEs on "CE Marking for PPE". As Quality Manager (1994-2011) of the Accredited Testing Laboratory of ELKEDE, she participated in the development and implementation of the Quality System. As Certification Officer of ELKEDE for CE marking of Personal Protective Equipment (1996-2003), she was responsible for the operation of the Office and its preparation for notification. As Manager of Quality Department (2002-2011) of ELKEDE, she drafted the Business Plans for 2006-2007 and 2008-2013, organized training seminars to the Furniture sector, participated in the Creation of the EU-KOSGEB Shoemaking Institute, in Turkey, and the preparation of its testing laboratory for accreditation, coordinated ELKEDE's participation in the training Project «Quality Assurance in Production" for entrepreneurs from Moldavia, Georgia, Ukraine, Serbia, Albania, and Egypt, set the basis for cooperation with a Testing Laboratory in China in the field of PPE Certification. She holds a BSc. in Biology (University of Athens, Greece).
Agni Vytanioti	Agni Vytanioti, member of CRE.THI.DEV, has worked in ELKEDE, Technology & Design Centre S.A. from 1989-2006, as responsible for the administration, coordination and execution of many European training projects for many sectors of industry. (FORCE, COMETT, EUROTECHNET, EUROFORM, PETRA, NOW, INTERREG, INTEGRATED PROJECTS LEONARDO, ADAPT , EQUAL). In the framework of these projects she has collaborated with professional and training bodies in Greece and Europe. From 2006-2011 she was the Director of KEK ELKEDE, the Vocational Training Institution affiliated to ELKEDE. She was responsible for the collaboration with the National Organization for Accreditation of Qualifications & Vocational Guidance and for the accreditation of KEK. She holds a BSc in Mathematics (University of Athens, Greece) and an MBA (Henley University).

For any EU grants on previous calendar year please fill the following table, if any?

Programme or initiative	Reference number	Beneficiary Organisation	Title of the Project ⊠
ERASMUS PLUS	2014-KA202-EL01-001557	Ecological Recycling Society, Greece	Local Authorities Waste Prevention Training - LAWPreT
ERASMUS PLUS	554167-EPP-1-2014-1-IT-EPPKA2-KA	Link Campus University, Italy	Textile and Clothing Knowledge Alliance. Future textile and clothing managers for export, marketing, innovation, sustainability and entrepreneurship oriented companies / TECLO

Partner number		P12
Organisation name&	Almotahida Education Group (Almotahida)	

acronym	

D.1.1 - Aims and activities of the organisation

Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).

Almotahida Education Group (Almotahida), established in 1997, is a provider of turnkey education solutions for K-12 and vocational schools, lifelong learning centres and public libraries. Those solutions could include anything from customized curriculum development to creating interactive enrichment materials; equipping and integrating a smart school with technology and tools; and improving usage of your own materials by digitizing print and developing interactive lessons and quizzes. Additionally, we offer optional training on all our products and services, or we can develop proprietary training workshops for your school or organization.
Almotahida collaborates with select world-class technology and education companies to offer unique products to our clients and localized versions when possible.

Please describe also the role of your organisation in the project (limit 1000 characters).

• Share the management of the project activities.
• play significant role in the dissemination and sustainability of the project
• participate in the organization and managing the project Courses
• Participate in the monitoring of the project, planning the activities and participation of the implementation of them
• To participate in surveying and benchmarking activities

D.1.2 - Operational capacity: Skills and expertise of key staff involved in the project
Please add lines as necessary.

Name of staff member	*Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.*
Prof. Mohammad Hamdan	*Ph.D. in Mechanical Engineering from Washington State University (Pullman) (USA) in 1985. M.Sc. in Mechanical Engineering (Combustion & Energy) from the University of Leeds, United Kingdom. B.Sc. in Mechanical Engineering from the University of Wales (Cardiff), United Kingdom .He was promoted to the rank of full professor in 1995 and worked as Engineering sector Advisor at Higher council for science and technology. He was acting dean of engineering at the University of Jordan (1997-2001), and acting dean of engineering at Hashemite University (2001-2003). He was on unpaid leave from University of Jordan and worked as acting Dean of Engineering at Al-Zaytoonah University of Jordan (2009- 2014). Starting from September of 2014, he is back Currently to University of Jordan. He published over 115 in international journals and conferences most of which in the field of renewable energy. His research interests are renewable energy, alternative fuels, combustion and pollution and heat transfer*
Dr. Fahmi Al Balawneh	*PhD. in Curriculum and Instruction,Mathematics from Amman Arab University (2007). he is Executive Manager of Almotahida Education Group (1/11/2014-present). he was Academic Consultant and evaluator for the curriculum Development Department in Almotahida Education Group (17/5/2014-30/10/2014). he was Academic assessor in Association of Queen Riana Al Abdulla Award for Excellence in Education(2014). he was Associate, CEO and General Manager in Madameen for Human Resources Development (2013-2014). he was E-learning Instructor for postgraduates and M.S students in University of Creative Science (Part time) (2013-2014). he was Assistant Professor and Head of Child Education Department in Isra University (2008-2013). he was Mathematics teacher in Jordan International School for Girls (2007-2008). He was Mathematics Teacher Ministry of Education in Amman (2001-2007). he was Elementary and Secondary Mathematics Teacher in Ministry of Education in Oman (1997-2001). He was Mathematics Teacher Ministry of Education in Amman (1995-1997).*

Eng. Eman Abdelhafez	*M.Sc. in Mechanical engineering from the University of Jordan (2009). Currently she is the Director of Quality assurance office at the engineering Faculty since 2011. Her research interest are microelectromechanical systems (MEMS), Microfluid, and energy. She has published fourteen articles most of them in the fields of energy and Artificial intelligence. Currently she is a member of a research team working of four funded projects in the areas of solar energy, hydrogen production and Hybrid Fuel-Cell/Battery system. she took Quality Management and Excellence Diploma/ Certified Quality Manager in 2013. She is Certified Six Sigma Green Belt (CSSGB).*
Eng. Ayat Salem	*Bsc. in Computer engineering from Al-Balqa Applied University (2009). she is Freelancer Project Manager building web and mobile apps from December 2013. she was Quality Assurance Engineer at InCube Company,Amman Office from May 2010 to August 2013. she was Computer Trainer in Halaqat Ta'aleem Program for Iraqi &Jordanian youth, with Amideast and USAID, from August 2007 to August 2008. she was Trainer in (TOT) for Trainers of second Link of Halaqat Ta'aleem Project 2007.*

For any EU grants on previous calendar year please fill the following table, if any?

Programme or initiative	Reference number	Beneficiary Organisation	Title of the Project ☒

Partner number		P13
Organisation name& acronym	*Amman Chamber of Industry "ACI"*	
D.1.1 - Aims and activities of the organisation		
Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).		

-Amman Chamber of Industry 'ACI' was established in 1962 as a non profit/ non governmental

organization that that aims to be centre of excellence at national and regional level in the field of

 supporting and developing the Jordanian industries .

-ACI is one of the major socio economic organizations in Jordan and has around 9,000 members.

-ACI serves its members through organizing several programs and activities.

-Regarding the activities related to the project, ACI organizes and funds the following programs:

1.Engineering Graduation Projects Linkage Program with the Industrial Sector, where engineering

graduation projects for bachelor degree are conducted based on the demands specified by the factories.

2.An awards of engineering graduation projects implemented at the industrial sector. This award is

Organized between Amman Chamber of Industry and Jordan Engineers Association.

 3. Faculty for Factory Program. Through this program University Professors conduct consultancy and

research assignments based on the demands specified by the factories.

Also, ACI was a project member of TEMPUS IV Project Number 517065 "Middle East Partnership in

Sustainable Engineering, which was in partnership with group of Jordanian, European and Palestinian

Universities.

This project aimed to develop the education and training in the area of maintenance engineering and

Management. Through this project

In addition to the above, ACI organizes several programs and services available to its members covering
Several areas such as:

1. Specialzed advisory and consultancy services.

2. Energy savings and renewable energy projects.

3. Quality, standards and international conformity certifications.

4. Awareness workshops and seminars.

5. Training courses covering several management, business and financial topics.

6. Organzing participation in trade delegations and exhibitions.

Also, In order to represent the needs and follow up the issues related to its members, ACI cooperates and
network with several Jordanian organization from both public and private sectors which deal with
economic development issues, such as Ministries, Chambers of Industry, Chambers of Commerce,
Universities, Vocational Training Institutions and Sector- Based Associations. Also ACI cooperates with
Several International Development Agencies.

Please describe also the role of your organisation in the project (limit 1000 characters).

1. Promotion of project activities to the industrial sector..
2. Information dissemination to its members.
3. Organizing awareness workshops targeting the industrial sector.
4. Facilitate linkages between the universities and target industries.
5. Planning, coordination and follow up activities related to the project.

D.1.2 - Operational capacity: Skills and expertise of key staff involved in the project
Please add lines as necessary.

Name of staff member	*Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.*
Eng. Fadel Allabadi	-M.Sc. Degree of Industrial Engineering. -More than (20) years of experience in the area of industrial development, consultancy, business development and technical support.
Eng. Razan Khazaleh	M.Sc. of Industrial Engineering - (3) years of experience in the area of manufacturing and production management. -(2) years of experience in the area of industrial development projects.
Eng. Bashar Qteashat	B.Sc. Degree of Industrial Engineering -(2) years of experience in the area of industrial development.

For any EU grants on previous calendar year please fill the following table, if any?

Programme or initiative	*Reference number*	*Beneficiary Organisation*	*Title of the Project* ⊠
Middle Eastern	*TEMPUS IV Project*	*From Jordan:*	*Middle Eastern Partnership in*

Partnership in Sustainable Engineering	Number 517065-TEMPUS-1-20111-1-SI-TEMPUS-JPCR	Amman Chamber of Industry, German Jordan University, University of Jordan From EU: Royal Institute of Technology, Technical University of Berlin, University of Ljubljana From Palestine: Birzeit University, Al Najah University, Palestinian Federation of Industries	Sustainable Engineering

Partner number		**P14**
Organisation name& acronym	*Al Urdonial Lil Ebda (AULE)*	

D.1.1 - Aims and activities of the organisation

Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).

AULE is the main sponsor of entrepreneurship outside Amman, it work in business incubation and in helping people in the targeted areas to start their added value projects, it started it work in 2007
AULE has five business incubators and three liaison offices in different governorates

Its role is to be a long term development tool for local communities and Jordan in large and to participate in achieving socio-economical development

 main objective is to focus on enterprise development creating dynamic competitive environment for entrepreneur and gives them an advantage resulting from innovation and creativity

Please describe also the role of your organisation in the project (limit 1000 characters).

1.Promotion of project activities to the industrial sector..
2.Information dissemination to its members.
3.Organizing awareness workshops targeting the industrial sector.
4.Facilitate linkages between the universities and target industries.
5. Planning, coordination and follow up activities related to the project.

D.1.2 - Operational capacity: Skills and expertise of key staff involved in the project
Please add lines as necessary.

Name of staff member	Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.
Mohammad AlAmoush	Over the past (14) years, Mr. Alamoush has acquired valuable technical and

	managerial experience at the public and private sectors in the areas of International Cooperation, Project Evaluation, Policy Advising, Business Development, Education Organizations Management, Strategic Planning, Budgeting and Financial planning, Decentralization, Researches Implementation, Executative Education, Local Economic and Enterprises Development, Municipal and Governorates Development, Governance, Employment, Democracy, Poverty Alleviation, Project Management, M&E, Sustainability Management (Water, Energy, waste, and Environment), and Urban Planning. Mr. Alamoush has been working at Columbia University Middle East Research Center (CUMERC) as a Manager of the Institute for Sustainable Development Practices (ISDP). ISDP aims to address crucial sustainable development issues such as government policies, employment, poverty, socioeconomic challenges, and education in Jordan and the Middle East region through implementing different programs in the areas of capacity building, research, and policy support.
Ohoud Dmour	Over the past 10 years Eng. Dmour has acquired valuable technical and managerial experience at public and private sector in the areas of business development, strategic planning, local economic and enterprise development, and water treatment. Eng. Ohoud has worked in Al Urdonia Lil Ebda (AULE) as Business Development officer aims to set the strategies and plans that enable AULE to support economic development in the governorates and to be key accelerator of the sustainable development in the target area, this is through collecting economic, industrial and demographic information that may be relevant to the sustainable development. And preparing the economic studies and analyzing the current studies regarding the work field and give recommendations, participate in the strategic planning band marketing planning of the AULE and through helping Entrepreneurs from local community to get grants through helping them in writing projects proposals to be applied to EU funded programs (grants)

For any EU grants on previous calendar year please fill the following table, if any?

Programme or initiative	Reference number	Beneficiary Organisation	Title of the Project ⊠
ENPI CBCMED	*I-A/2.3/234*	*Barcelona Official Chamber of Commerce, Industry and Navigation*	*Strategic Hubs for Analysis and Acceleration of Mediterranean Solar Sector*

Please copy and paste tables as necessary

Please copy and paste tables as necessary

List of Associated Partners

(Where applicable)

These organisations may provide the consortium with facilities or assistance that enhances the quality of work, but they cannot be responsible for core activities of the project (e.g. management, coordination, monitoring, leader of a work group etc.). **No financial contribution from the project grant will be allocated to these organisations.**

Ref.nr	Name of organisation	Type of institution	City	Country	Role in the project

Please insert rows as necessary

D.2. Cooperation arrangements, management and communication

This part must only be completed once by the applicant.

D.2.1 - Project management

Please define the organisation of the implementation of the project and the division of tasks between the partners. Please explain the allocation of resources for each activity. Explain *also* how the tasks are distributed amongst the partners and how project "ownership" is ensured *(limit 3000 characters).*

The project will be managed in such a way as to promote a sense of ownership and motivation for each of the partners. JUST will be the project coordinator and responsible for the overall operation of the project and its smooth running, financial and administrative management including the preparation of budget and reports, timeliness and accomplishment. The structure of the project management will consists of: Project Coordinator (PC), Management Team (MT), Project Steering Committee (StC), Scientific Team (SC).

PC will supervise and coordinate all activities, ensuring that all partners are working towards the same objectives; contractually, technically and administratively and strictly collaborating with the Management Team. The PC will ensure that all partners' contributions meet the Work Plan expectations.

The PC will be responsible for: representing the consortium towards the EC, ensuring effective flow of information between partners, ensuring the implementation of the agreed action plan to the agreed standards and deadlines, ongoing evaluation of project activities and reporting on project progress to the EU, and defining and identifying the project deliverables for the Commission from the inputs received by participants.

The MT will be composed of the PC and the administrative service, a Monitoring Expert, and Finance Expert. The MT will work closely with the PC. The MT will be responsible for: managing and monitoring the project activities and resources, ensuring the collaboration and communication to EC and among partners, ensuring the consistency between the development and the strategic objectives of the partners, collecting and transmitting the project deliverables to the Steering Committee, and the participants, monitoring any significant difference between planned and actual advancement of participants' work, particularly with respect of project results and deliverables, reviewing the reports (both scientific and financial ones) to verify consistency with the project tasks before transmitting them to the EC.

The StC, chaired by the PC, will be composed by one member of each partner and will supervise the implementation of the whole programme. The StC is the project operational decision-making and arbitration body, which will implement the provisions of the Grant Agreement and shall decide on the following matters: strategic orientation of the project; identification of the Foreground that could be the subject matter of protection and consequential decisions on dissemination and exploitation activities; allocation of the co-ownership shares over Foreground obtained by several participants; acquisition of

rights from third parties, if applicable; take all decisions required for the successful progress of the project; implement the scientific decisions and orientations, taken by the coordinator, by redefining the work plan and schedule and/or re-defining partner roles, contributions and budgets; elaborate progress reports on the state of advancement of each work package; monitor any significant difference between planned and actual advancement of participants' work, particularly with respect of project results and deliverables; in case of default by a contractor, to propose to the Steering Committee to review participants roles and budget as well as any new entity to replace the defaulting contractor.

The SC, composed by Leaders and Co-leader of Scientific WPs will supervise all scientific activities, managing the actions of all partners, deciding appropriate strategies, monitoring the achievement of final results. The SC will plan the scientific activities through a specific plan and timetable, scheduling tasks and roles for the preparation and carry out of the scientific contents. SC will be also responsible for the training on research methodology.

The preparation and carrying out of the training activities will be assigned to the Training & Technical Group (TTG) in which representatives of all partners will participate. TTG will report its progress also to the coordinator.

D.2.2 - Cooperation and communication arrangements of the consortium

Please explain the overall project and partnership management making specific reference to the management plan and how decisions will be taken. Please describe how permanent and effective communication and reporting will be ensured as well as the measures put in place for conflict resolution (limit 2000 characters).

An efficient intra-consortium communication will keep all the participants fully informed of the project status, the planning and all other issues, and therefore the synergy of the co-operation between them will increase. At the Kick-off meeting, each partner will nominate at least two individuals who can be contacted. This will ensure that temporary absences of single persons will not impede the progress of the project. In general, relevant information will be sent to the PC, who will then forward it to the partners involved in the specific action(s). Direct partner/partner communications flows will be set up in those cases where an increase in efficiency can be achieved. At each meeting, and based upon the detailed work plan for the project relevant period, the efficiency of the communication system will be reviewed. Regular meetings involving the most of the committees (6-monthly basis) will be held.

Each Work Package Leader will be responsible for the detailed co-ordination and reporting of specific WP. If needed, meetings of the partners involved in the WP will be organized and chaired by the Leader. For each deliverable, within the WP, the Leader will assign direct responsibility either to himself or to an associate individual. A list of individuals responsible for each deliverable will be forwarded to the Scientific Coordinator. The work package Leader is, in the first instance, the person who will be contacted by the PC as part of the monitoring of progress towards completion of the deliverables and of the assigned WP. At the end of each project period, each partner will report to the WP Leader he is involved in and for which he has performed tasks during the reporting period, on progress of the activities within the agreed work packages. The WP Leader will forward a consolidated progress report to the Coordinator. He/she will also prepare a report at the achievement of each milestone, describing the actual results obtained, and discussing it in relation to the project specific objective and a WP report at the completion of the WP. The SC Coordinator will consolidate and distribute the progress reports, the detailed mid-term report, and the final project report.

The MT operates to organize and schedule project activities through bi-yearly operational work plans, of coordination meetings, inputs and outputs of the overall project. The MT will organize the StC meetings requesting regular reporting from all partners.

A web based collaboration platform will be implemented by the coordinator for the project. This Internet site will be secured, and will enable the consortium to have a very efficient diffusion of the information connected to the release of minutes, deliverables, reports and exchanges between partners.

A partnership agreement (PA) explaining the terms, conditions, right, and duties of each partner will be signed between the PC and each partner representative. This agreement will the reference in case of conflict; in case of conflicts, the coordinator will make decisions after discussing the matter with all partners. If the conflict is of strategic importance for the successful completion of the project it will be

brought to the StC which will take the final decision after voting, with the vote of the coordinator counting double if necessary for achieving majority. In all cases, the PA will be the reference.

PART E - Project characteristics and relevance

E.1. Why does the consortium wish to undertake this project?

Please outline the motivation behind your project, clearly identifying the specific needs or problem/s which it intends to solve. Explain how the project proposal fits within the development strategies of the Partner Countries involved and how it addresses the priorities defined at national / regional level. Also explain why this/these problem/s were selected instead of others. In particular, explain how the area of intervention has been explored to guarantee that the project is offering something new compared to the existing situation. Where applicable, explain any synergy with other EU initiatives should be highlighted (limit 5000 characters).

This project concentrates on strengthening and enhancing the role of higher education institutes and universities in innovation capacity building, technology transfer and commercialization of applied scientific research outcome in Jordan. Because of the limitation in natural resources and the relatively weak innovation-based industries, Jordan is expected to face economic difficulties during the next few years. Moreover, the rapid growth in population due to the normal increase and the forced migrations due to the political unrest in the region are expected to put the Jordanian economy under substantial pressure. The Jordanian economy is a developing-economy with most of its GDP comes from the services sector. The current national strategies focus on enhancing manufacturing and raising production in order to achieve a sustainable economic growth. According to the most recent (2013-2017) National Policy and Strategy for Science, Technology and Innovation, the weak coordination between the stakeholders of innovation, the lack of innovation and entrepreneurship culture, and the technological backwardness are some of the obstacles and weaknesses that hinder the contribution of innovation in the Country's economy. We believe that creation of an environment for innovation is essential for Jordan in order to build a knowledge-based economy.

The focus in this project is on innovation and its requirements and tools. It is relatively simple to convince a private and/or governmental funding agency in Jordan to fund an applied or even a basic scientific research project. However, when it comes to innovation and entrepreneurship, funding becomes impossible. The partners in this project have made serious efforts in building models for innovation and technology transfer. For examples, at Jordan University of Science and Technology, and some other Jordanian universities, there are technology transfer offices (TTO). However, these offices main task is to complement the task of the Deanship of Research, and they do not go beyond the University fences.

Generally speaking, In Jordan, universities are expected and supposed to be in a leading position in issues related to technology transfer and innovation fostering. Thus, in order to take the innovation and technology transfer in Jordan to the next level, we want to promote the innovation culture in these universities and create strong partnership with Jordanian industrial and business sectors. This will be achieved by expanding and enhancing the connection between the scientific research findings, enterprises and business sector and building effective partnership with the well-known universities and innovation centers in Europe. There is a big gap between the scientific production in Jordan and the business sector; this can be related to the weak contact between the academic and industrial sectors, the small market size, and belief in many small businesses that there are no needs for improvement and development. These problems can be overcome by building an informational and infrastructural system that can determine the needs of the local market and link it with the research priorities, creating a mechanism that can help the enterprises to work on innovative bases and establishing a training course/system for innovation and entrepreneurship culture.

Please describe briefly how your project proposal was prepared (e.g., capitalising on previous experiences, based on achieved outcomes in former projects, following previous cooperation amongst the consortium members, etc.) (limit 1000 characters).

In 2009-2010, an SRTD fund for the Higher Council for Science and Technology was designated to establish 10 Technology Transfer Offices. An office was established at JUST, which was part of the Deanship of Research, where the INVENT coordinator was the Dean. The office focused on issues related to research and patents within JUST. There was no real communication with the industrial and business communities to identify a mechanism for collaboration. The other TTOs were even less productive where they did not provide and contribution neither to the university nor to the society. JUST has been a partner in an ENPI project: "NET KITE - Cross-border NETwork to foster Knowledge-intensive business Incubation and TEchnology transfer", which emphasizes on the role of young researchers in innovation and business creation. During the implementation of this ENPI project, we realized that there is great potential for innovation in Jordan that can lead to creation of businesses; businesses that are R&D and innovation driven. However, there are scattered efforts that cannot build a basis for such a process. One of the Jordan's priorities is the innovation in higher education, but there is no clear strategy to achieve this goal. The consortium in the INVENT project has experience in designing and implementing a strategy that can lead to promotion of innovation in HEis in Jordan and real partnership with the industrial and business sectors. HTWK Leipzig and P&B have a very good expertise in field of the Innovation in education projects and managed similar actions for other regions. ARCA has been the incubator for many R&D ideas and helped the University of Palermo in the advancement of entrepreneurship culture. Working with these partners on other projects and during our visits to their institutions where they presented success stories they have achieved was the motive to prepare this project. We realized that the EU experience can benefit Jordan in implementing its R&D and Innovation Strategy.

If your proposal is based on the results of one or more previous projects / networks, please provide precise references to this / these project(s) / network(s) in the table below.

Reference number	II-B/1.1/0068		
Project dates *(year started and completed)*	2013-in progress	2013-in progress	2013-in progress
Title of the project	NET KITE - Cross-border NETwork to foster Knowledge-intensive business Incubation and TEchnology transfer		
Coordinating organisation	ARCA		
Website	http://www.netkite.eu		
Password / login if necessary for website			

Please summarise the project outcomes and describe (a) how the new proposal seeks to build on them and, (b) how ownership / copyright issues are to be dealt with (limit 1000 characters).

"NET KITE - Cross-border NETwork to foster Knowledge-intensive business Incubation and TEchnology transfer", emphasizes on the role of young researchers in innovation and business creation. The main output of this project is to identify 50 innovative ideas presented by young researchers. The applicants of test six ideas will be trained in EU business incubators. Another output is to train faculty for two weeks in the incubators. We believe that these people will be the assets for the INVENT project, and will contribute into the success of the INVENT project. While the Net Kite project focuses on individuals; young researcher, INVENT focuses on institutions and center. Thus, the copyright of NetKite is protected. The coordinator and another partner of the Net Kite project are part of INVENT project.

Please copy and paste tables as necessary.

E.2. Rationale for the setting-up of the consortium

Please explain why the selected partners are best suited to participate in this European project. Describe innovative and or complementary skills, expertise and competences within the consortium directly relating to the planned project activities. If associated partners are involved, please explain their role in the project and the added value to the consortium(limit 3000 characters).

The Consortium is designed to provide a combination of outstanding teaching and academic resources and business incubators/R&D institutions. Moreover, the consortium involves institutions, which have not yet benefitted from any EU project (ASRF, Almotaheda). Most of the partner universities have extensive experience of EU and wider international cooperation, both in terms of academic/ educational expertise and technical capacity/experience in project management, required to carry out all aspects of the project work programme. They have extended capacity in terms of staff and equipment in order to meet the training and programme development needs, as well as financial resources to handle and manage the project and its budget. As coordinator, JUST has a successful record participating in international projects, specifically the EU projects. During the last five years JUST has participated in 6 TEMPUS projects, 7 ENPI Projects, and 2 FP7 projects, in addition to more than 10 USAID projects and 4 QNRF projects. Prof. Abu Al-Rub, former Dean of Research and former Vice Dean of Engineering, the coordinator of the project, has participated in 4 TEMPUS projects and 1 ENPI project. The ENPI projects that Abu Al-Rub is participating is focusing on promotion of innovation among young researchers. JUST has set up the necessary infrastructure and procedures with experienced administrative and support staff for this purpose. It has also developed the relevant expertise needed for the academic and financial management of these projects. Dr. Abduallah Qdah, Finance Director is participating in 6 ENPI projects.

As a business incubator located within the University Campus of Palermo, ARCA intends to be an instrument of economic development able to boost the growth and success of innovative business ideas by means of a structured network of resources and services. So far more than 35 innovative companies have got benefit from ARCA incubation and business support services. UCY has recently established the Diogenes Business Incubator University of Cyprus, which aims at enhancing collaboration between UCY and the business community as well as promoting innovation and entrepreneurship culture among young researchers. JUST has had close cooperation with ARCA, UCY through an ENPI project on promotion of innovation among young researchers. HTWK Leipzig , has a high expertise in field of the Innovation in Education project and managed similar actions for other regions. JUST has close collaboration with HTWK through ERASMUS+ projects. (P&B) is a private company that has a large experience in providing training and developing programmes in innovation. Both HTWK and P&B have collaboration in similar actions for other region. UD has an excellent knowledge of the Tuning Project and of ways how to develop it in different regional and field contexts. This approach can be used to promote innovation culture in the higher education in Jordan and to foster collaboration between academic institutions and the industrial sector. JUST and UD are currently collaborating in a TEMPUS project on Tuning approach in Engineering and Nursing. CRE.THI.DEV. is a non-profit company aimed at community development through the research and development of action plans, focused on the local and social economies, mainly on the fields of life-long learning, environmental protection, employment and local development, throughout Greece. JUST and CRE.THI.DEV. are collaborating on many EU project preparations. All JO universities have been cooperating with each other and have been partners in Tempus projects before and the connection has been based on the relationship between individual members of the team based on previous knowledge or cooperation. PSUT has extensive experience in securing and managing EU projects. PSUT, JUST, JU, and MU are collaborating TEMPUS projects. ASRF help researchers by providing capacity building, mentorship, seed funding, and needed connections. Almotahida Education Group (Almotahida), will provide its experience in fostering the concept of lifelong learning as an outcome from all modules to be developed.

E.3. European added value
Please describe the benefits of and need for European cooperation. Please describe also why the results cannot be achieved through national, regional or local funding (limit 1000 characters).

The successful implementation of this project depends mainly on training Jordanian staff and exposing them to the European experience in establishing and managing CTIs. Thus, the EU cooperation is crucial for the successful implimentation of this project. Our EU partners in the academia, incubators, R&D, and private sectors have proven track record in this field. Partners from the EU academia will provide their experience in implementing similar projects in other regions. Busniess incubators and R&D institutions will provide their experience in establishing incubtors and in setting up strategies for collaboration with the industry. Training will be conducted by EU partners in EU countries and in Jordan.

The use of Electronic Town Meeting (ETM) methodology for e-participation events, successfully tested within previous EU funded projects (i.e. PARTERRE, NET KITE), will be introduced to JO partners via INVENT proect. The ETM is a participative methodology generated in the USA at the beginning of year 2000 to allow democratic interaction and discussion among a huge number of participants on issues of public interest, such as reform laws or local policies. The aim of these e-participation events, to be organized in Jordan under the direction of the EU partners, will be to explore the needs for nanotechnology in the different industries in Jordan. EU partners will train the staff from the Jordan partners on site to act as facilitators during the town meetings.

Erasmus+ is a very suitable tool for this project as it provides for and supports upgrading of facilities necessary for the implementation of innovative practices, transfer of expertise from Europe to Jordan, the creation of flexible learning paths and the use of digital learning.

E.4. Innovative character

Indicate what the project is offering that is new and what are the main innovating elements (limit 2000 characters).

Firstly, INVENT project responds to one of Jordan's priorities in promoting innovation and R&D to boost economy. Thus, it responds to the need for a professional profile able to work with an interdisciplinary approach that integrates knowledge and expertise in R&D on one hand, and in innovation-driven business on the other hand. Currently, Jordan appears to lack integration in these fields, resulting in difficulties in bridging the gap between the HEIs and the business community.

INVENT project will be among the first projects that private business and public academic institutions work together to bridge the gap between them. The creation of the 6 CTIs in Universities and non-academic institutions of Jordan that is proposed through INVENT is totally new for the country. Such structures and facilities exist in Europe many years and have been proven very successful and supportive for the growth of national economies. The international dimension that Universities in Jordan strongly promote as well as the need of changing the traditional functioning of market and economy in Jordan has led them to the acknowledgment of the urgent need for the establishment and development of such facilities. The hesitation of entrepreneurs to invest in innovative products and services, the lack of connection between scientific research results and the needs of business and economy, the disappointment of researchers from not seeing the results of their research being implemented and the lack of proper support to investors and enterprises for the sustainable development of businesses that produce innovative products and services are some of the obstacles that exist in Jordanian society. The establishment of the CTIs will set a strong basis for overcoming these obstacles and changing the mentality in the country. These offices will offer services necessary for the raising of awareness for the benefits of investing in innovations. Specialized training courses and seminars to all interested parties (students, researchers, businesses, investors, authorities) as well as customized support for the successful commercialization of innovations will be two innovative elements of INVENT.

Another innovation element of the INVENT project is the database that will be constructed through the project which will collect all research results that have been produced as well as the technological needs and the needs of businesses, functioning thus as a connection between the market and the universities is a new service that will be developed through this project.

In terms of methodology, the use of the Electronic Town Meeting (MET) in seeking the perception of the stakeholder regarding innovation in Jordan is an innovative aspect in Jordan. This will encourage other organizations and companies to use such a methodology in their consumer research studies.

PART F - Quality of the project design and implementation

F.1. Aims and objectives

Please define the concrete aims and objectives of the project and describe the ways in which the situation set out under the previous section (Part E) will be changed (limit 3000 characters).

This project aims at institutionalizing innovation, technology transfer, and capacity building within the Jordanian universities so that they become a pillar in the development of the national economy. This will help to utilize the abundant scientific research production in two ways; first by giving the chance to the researchers to apply their research results, and second by providing clear view of the technological need of the local industries so that the research and researchers priorities can be well identified. To achieve the aforementioned objectives, a reliable database of the innovative research projects at the universities and the problems facing the enterprises and needs, an innovative solution will be created. Another important objective of this project is to enhance the sector of innovation and technology transfer through capacity building of staff and raising the awareness of the innovation importance among the university's researchers and the local businesses.

The project aims and objectives will be achieved via establishing Centres for Transfer of Innovation (CTI) at selected Jordanian universalities. The centres will help in implanting and further development of the National Policy and Strategy for Science, Technology and Innovation which is the base of all currently on going and planed innovation support activities. The development of a framework for supporting entrepreneurs to help them getting their innovative ideas transferred into the markets is very essential. This framework may serve as a common model of Innovation and technology transfer centres in Jordan, to establish cooperation between representatives from researcher, student and business sectors and investors. INVENT project will enable the CTI to support reality-related introduction of research results into the educational processes and industrial application.

Another important objective of this project is the development of economic thinking and interest to use of innovation by entrepreneurs and business community to form a base for human development in the sector of innovation and technology transfer through personal training and raising the awareness of the innovation importance among the university researchers and the local businesses.

F.2. Project activities and Methodology

Please define the activities proposed and the working methodology (project activities/developments including educational and training content and pedagogical approach) to be used for achieving the objectives, including major milestones, measurable indicators, etc. (limit 6000 characters).

Jordan has realized the relevance of economic education of entrepreneurs for development of economy and makes arrangements for education of entrepreneurs and producers. One of the efficient ways for achievement of this objective is organization of innovation Centers similar to the Centers that exist in Europe. However, Jordanians partners do not have not have enough experience in the establishment of such Centers. For an effective functioning of CTIs it is important to have a precise representation of strategy, methodology, mechanism, form and means of innovation and training activity of such Centers. The overall objective of the project is the introduction of innovation and application centers in universities, in order to enable teachers to apply their research results, to improve the organization of scientific research activities and transfer of innovation projects and new technologies into enterprises via creation of accessible information database of innovations at Jordanian universities, delivering a base for the improvement of the educational processes and forming of an understanding of entrepreneurs in innovation usage necessity in their own businesses.

INVENT project is multinational and its duration is 3 years.

The basic results of the project activities are the establishment of four Centers for transfer of innovations (CTI) at the Jordanian universities (JUST, JO, MU, PSUT) and departments at non-academic organizations and institutions (ASRF, AULE). Their activity is provision of entrepreneurs with innovations for introduction into process of production. Work on equipment of the offices will be carried out within the

first 4 months.

The next activity is learning of European experience by staff of CTIs and other organizations. The experience of EU partners is included as important activity to the project. This activity is carried out in two forms: distance consultations and face-to-face consultations. These consultations are carried out by specialists from EU countries by means of web-conference and correspondence via Internet. Staff and trainers of CTIs fromJordan take part in these conferences. Consultations include discussion of a wide range of issues of equipment of CTIs; creation of web-site and database; organization and carrying out of trainings; creation of a common model of CTIs; management, monitoring and sustainability activities of the project. Training of trainers and acquaintance with experience of EU co-beneficiaries is carried out in EU countries. The reason for this fact, is that face-to-face practical training is the most efficient form of training. 3 study-visits are planned. Each visit is directed to studying of experience of one European country. It is important to study the experience of each Center of all EU partners, since all of them have similarities and uniqueness in their experience. Thus, training of CTI staff in EU will involve (mobilities: 1st year - 16 flows PC to EU (average 6 days each); 2nd year - 16 flows Jrdan to EU (average 6 days each); 3d year - 16 flows from Jordan to EU (average 6 days each).

After summarizing of all European CTI models one effective model for each CTI of Jordan will be elaborated.

The main activity of the project is the functioning of the Center. The Center collects information on innovations, which is provided by CTIs of EU partners and scientist and researchers of JO universities. All collected information is kept in the data-base, which is placed in created one web-site of CTI of Jordan countries. Web-site is a multifunctional facility which presents all activity of the CTIs, helps to keep contacts with all beneficiaries, is effective in studying needs of entrepreneurs in innovations, practices distance consultation activities for entrepreneurs, stores information about innovations in form of database, makes it possible to search and find customers for services which are provided by CTIs; is an effective dissemination tool. Entrepreneurs who apply to the web-site are able to leave information on needs of their enterprises for innovations in a special section of the web-site. Furthermore, this information turns into topic of scientific researches. Students of universities will be involved in research activity. The content of the web-site will also work as a data-base of innovations. Data-base stores information which is provided by European co-beneficiaries, university researchers and scientists. In addition information on innovations from HCST, information from scientific journals and magazines and result of student researches will be stored in the database. Links to other web-sites providing information on innovations will be also placed. Thus, the web-site will assist in distribution of innovation ideas of researchers and this will promote finding customers to these innovations. Thereby, the database of Jordan CTIs will be regularly updated. The objective of linking of science with enterprise will be achieved respectively. Producers with a developed economical thinking are interested in the use of innovation in their business. Therefore, a training activity will be organized onsite. Association of entrepreneurs of Jordan, who participate in this project (Almotahida, JCI, AULE, HCST) have big experience in organization of economic trainings. One of their mission within the project is gathering and inviting participants for these trainings and assisting trainers of CTI in conducting trainings. The training courses are: Using IT in search of information on innovations, the usage of innovations in process of storage, accounting and audit of enterprises, effective methods of management and marketing in enterprises, preparation of business projects.

Trainers create and develop modules – content, methodic, means for training for each training course. Materials of trainings will be reproduced and distributed among businessmen for self-education. By this way the training activity will involve a bigger audience.

Consulting activity is meant by individual consultations for entrepreneurs and researchers at CTIs. Consultant receives application of entrepreneurs for innovation and links them with the specialist. That is how the working groups will be formed and these groups will make plans for joint activity, define the location, time, means for implementation of researches and experiments. University students will be taking active part.

Correctly organized quality control guarantees timely and effective performance of the activities, which are planned in the project. Activity will be supervised by JUST via Internet quarterly, by local coordinators, by staff of CTIs responsible for monitoring daily. The results of monitoring are summarized and sent to JUST as reports every 6 months.

Management will be carried out by coordination meetings (mobilities: 64 flows PC to EU (average 6 days), 26 flows EU to PC (average 6 days), daily control of the project (via INTERNET), calculation and control of the budget. JUST, ARCA, and HTWK will be responsible for management of the project. Financial management will be the responsibility of JUST. Coordinated activity on management of the project will promote effective performance of the planned activities and to guarantee high result, efficiency, quality of activity of the Center. In the long term this would be reflected in creation of conditions for the further sustainability of the project that is the major components of the activity of the project. The StC plays the important role in project management. This committee is necessary for coordination of joint activity and the decision of general issues. It is a very important factor, especially for this project, considering a big number and a variety of organizations involved in it. In case of occurrence of unforeseen circumstances the additional coordination meetings will be organized.

F.3. Budget and cost effectiveness

Please describe the strategy adopted to ensure that the proposed results and objectives will be achieved in the most economical way and on time. Explain the principals of budget allocation amongst partners. Indicate the arrangements adopted for financial management and what co-financing modalities are planned (limit 3000 characters).

A special attention was given to effective usage of the budget in INVENT to achieve its objectives in a most cost effective manner. The financial costs of the project have been calculated so as to make optimal use of the resources applied for. The main part of the resources is to be spent on reaching the project objectives. This was accomplished through successful planning and development strategy of goal achievement. The work schedule distributes tasks among partners in a realistic way and the budget provides for an efficient use of available resources within the partnership. Cost effectiveness has guided the project definition in all its aspects. Therefore, only necessary items for implementation of the project were selected as equipment, priority was given to key activities - creation of data base, web-site and equipment for teaching. The use of tender procedures will be followed to enhance transparency and achieve better results. Equipment cost is kept well below the 30% limit while staff cost well below 40%. For communication, Skype, E-mail an ICQ will be used. This effective usage of communication means allows to minimize the number of external mobilities (only one travel is planned to each EU country and the delegation of participants of mobilities was accurately planned). Mobility also was minimized by arranging activities so that staff performs multiple tasks such as monitoring, dissemination, promotion and financial management on a single visit. Expenses for internal trips were also minimized taking into consideration the close distance between the CTIs and branch departments. These mobilities will be co-financed by the partners' institutions. Effective planning of funds for training for entrepreneurs will be achieved through wide coverage of a big number of participants in trainings. Minimization of the staff cost is achieved by participation of qualified staff members, who are able to implement various activities and have a good experience in working with EU projects. The allocation of budget to different partners has been based on the different tasks, activities and inputs required to produce the outcomes and deliverables. The Jordanian universities needs have been the guiding factor in allocation of equipment, printing and publishing budget.

The financial management of the project will be based at JUST with an experienced manager in overall charge. In addition to EU rules and regulations, INVENT will be subject to financial and auditing rules of JUST. A bank account in each EU partner institution will be opened and one in Jordan to facilitate payments and large items of expenditure will be paid directly from JUST in accordance with internal rules, and with constant consultation with the National Erasmus+ Office in Jordan. Every account will be checked in financial and factual correctness. Annual budget planning and request of quittance for every bank transfer are intended. To ensure an efficient financial management, the project foresees periodic reporting from all levels of management structure. To ensure balanced distribution of tasks and finances, the introduction of Partnership Agreement between coordinator and every beneficiary is envisioned from very beginning of the project.

F.4. Quality control and Monitoring

Please explain what mechanisms have been put in place for ensuring the quality of the project and how the evaluation will be carried out.Please define the specific quality measures established, as well as the benchmarks and indicators foreseen to verify the outcome of the action. Make sure that the information in this section is consistent with the project Logical Framework Matrix (limit 3000 characters).

INVENT considers the aim of the quality management is to identify points that need improvement and take corrective actions promptly. Moreover, for the NANO project, quality management is an ongoing procedure that starts at the beginning of the project and is carried out for the whole project implementation period. Both results and processes of the project are going to be evaluated.

To achieve these objectives, a specific quality management, monitoring and evaluation system will be developed by the Quality Committee (QC), which will be formed during the kick-off meeting. The QC will be composed of and chaired by CRE.THI. DEV. with 2 consortium members from EU and 2 from Jordan. The duty of the QC is to monitor and evaluate the progress of the project and to ensure that all its activities are carried out properly according to European Standards and Guidelines for Quality Assurance and ensuring proper execution of the project to achieve its objective.

The QC will design a proper evaluation process and be responsible for creating a set of indicators. In coordination with the project manager and other project consortium members, the QC chair (Quality Manager) will set criteria for the selection of members of the "External Evaluator or Monitor".

CRE.THI. DEV, as chair of the QC, will monitor the project at different points using different types of evaluation including exploratory evaluation to support the process, and experimental and quasi-experimental study designs to evaluate the outcomes. Summative final evaluation will include an impact study and a benchmarking study to evaluate the quality of the resulting courses, labs and training.

The monitoring and evaluation procedures will monitor the project execution through monitoring reports which will be edited each 6 months. The project Logical Framework matrix will also be useful tools for this purpose. The evaluation strategy implements therefore the function of internal control of the project, that is a process designed to provide reasonable assurance of the achievement of objectives with regards to: effectiveness and efficiency of operations, reliability of financial reporting, and compliance with applicable laws and regulations. It implies adequate allocation of tasks and duties within the partner organizations and regular checks. The evaluation strategy will include appropriate tools, such as questionnaires, interview grids and check-lists, devised to assess on an ongoing basis project relevance, efficiency and impact, to measure progress throughout its life cycle, to determine if the project responds to main target groups' needs, to measure the level of satisfaction of beneficiaries of project activities, to determine how project impacts on social communities, and to evaluate unexpected results and control all processes.

An intermediate and a final report will be elaborated, showing the first impact on organizations, and beneficiaries involved. A comparison among impact and objective of the Action will be made explicit.

External Evaluator or Monitor will conduct constructive evaluation by working according to the terms of reference and 'rules of engagement' set by the project Quality Manager and the manager of the project. The External Evaluator will advise and train partner universities to use suitable tools of evaluation for the sustainability of the program quality. The expert will write intermediate reports, one each 6 months, and a final report, to readdress the project in case of going off from indicated objectives and methodologies. The evaluators will conduct the evaluation beginning of 2017, to give the project consortium time for improvement and adaptation.

PART G - Impact, dissemination and exploitation, sustainability

G.1. Expected impact of the project

Please explain who will use these project outputs / products / results and how the consortium will reach them. Describe how the target groups (including participating institutions, stakeholders) will be reached and involved <u>during the life of the project</u> and how the project will benefit the target group at local, regional, national and or European level. Please structure your description according to the different levels of impact and stakeholders (limit 3000 characters).

The target groups to which actions will be addressed are:
-staff and trainers of CTI, who will benefit from a database of innovation, consultation with EU partners, mobility, training and study visits;
-researchers and post graduate students, who will benefit from the enhancement of innovation and entrepreneurship programmes;
- Technicians from industry who will benefit from innovation training, technology agreements with R&D centres for joint projects, testing and demonstration activities.
The project will achieve the end users through tailored channels:
- young researchers and students by circulating information in the universities, contest of ideas, alerts on international mobility and training opportunities on business modelling, participation in the web communities, etc.;
- business men and professionals, providing them with opportunities for access to the research facilities, giving clarifications on IPR issues, uploading a set of business challenges on the web tools, participating in town meetings;
- scientists, bridging the scientific production with the business sector, conveying information on events, conferences, publications and technical reports, uploading a set of technology solutions on the web tools, participating in town meetings;
- policy makers, being informed through press releases and dissemination seminars, consulted through thematic meetings, participating in town meetings, drawing up memoranda of understanding.
The participants in training and mobility actions will facilitate the set-up of a favourable environment to develop business projects and exploit the innovation potential of ideas, making available upgraded research facilities for carrying out research and prototyping activities. The most appropriate methodological approach to motivate people to entrepreneurship will be applied, using innovative and practice-based methods, stimulating innovative mindsets among young people and enhancing their creativity.
The CTI staff will get better conditions to facilitate the access of companies to research results.
This will improve the innovation capacity building (both technical and managerial) of local communities, because through aggregation models (productive districts, technology clusters, academia-industry partnerships) innovation ecosystems will be supported, new business investments will be encouraged and the whole territorial system will become more stable, dynamic and mature, thus generating qualified jobs and slowing the brain drain process.
In general terms, within a global framework in which the speed of the connection between knowledge and market is decisive to sustain innovation, the project intends to give a contribution to how to implement an efficient and effective use of knowledge for the generation of economic value.

Please describe how the target groups (including participating institutions, stakeholders) will be reached <u>after the project is finished</u>(limit 3000 characters).

Final beneficiaries from the project activities will be:
- the research centres attracting more investments in technology transfer and getting advantages from transnational networking,
-the business communities, SMEs territorial districts and sectoral clusters, who will get the results of an increased flow of knowledge from labs to industry
- young people leaving the higher education system, increasing their employment opportunities through

business creation and modernization of existing companies.

The team of facilitators, trained through the project, will assist the technology transfer process from then onwards and establish a long lasting network of cooperation among the labs and institutions involved.

Sustainability of the project experience after the end of EU funding will depend on the assumption of an operational/business model through which the consolidated CTI can provide, at least partially, to their self-financing, relying not only on possible public resources for R&D, but on research contracts and commissioning by private individuals, on service fees to conduct technology transfer and training activities, on royalties for patents developed and any capital gains from sale of shares in spin-off through contacts with investors. They will attract talents and catalyze innovative processes and will definitely create economic value for local industrial supply chains.

The consultation with policy makers will allow, during and at the end of the project, to maximise mainstreaming and integration of project results into national and regional policy frameworks (for instance, piloting innovative precommercial procurement procedures). Lessons learnt from past experience suggest that participatory events such as the town meetings, tailored to Mediterrean areas and already tested successfully in Jordan, represent a valuable arena to embed ideas in the planning process and enhance processes of cross-cultural exchange, mutual learning and joint decision-making that will extend beyond the project from which they started.

Overview of short and long term impact indicators

Please add rows as necessary according to indicators

Short term impact	Target groups/potential beneficiaries	Quantitative indicators	Qualitative indicators
Established CTI	Students, faculty members, enterprises	Number of CTIs established	The equipment available in the CTIs
Trained staff	Staff of the CTIs	Number of trained staff	The training modules and courses implemented
Promotion of Innovation	Students, faculty members, enterprises	Number of enterprises registered in the CTIs	Involvement of enterprises in the activity of the CTIs
Workshops and training programs in innovation	Students, faculty members, enterprises	Number of people participated in these events	Topics discussed and taught in these events

Long term impact	Target groups/potential beneficiaries	Quantitative indicators	Qualitative indicators
Partnerships	Universities and enterprises	Number of partnerships	Terms and conditions of these partnerships
Shift from fundamental oriented research to applied oriented research	Students, faculty members	Number of applied research projects and number of publications in applied research	Type of research
Establishment of business incubators	Universities and enterprises	Number of business incubators established	Staff qualifications
Establishment of Spin-off companies	Universities and enterprises	Number of spin-offs established	Sectors of the spin-offs

G.2. Dissemination and exploitation strategy

Please explain how the dissemination will be organised and how exploitation activities will ensure optimal use of the results within the project's lifetime and after. Explain the roles, responsibilities and target groups(limit 3000 characters).

A dissemination plan will be drawn up by the WP leader and discussed within the Scientific and Supervising Committee for the final approval by the Steering Committee. It will focus on three main threads:

a) promoting innovation culture in the Jordan universities,

b) linking universities with the business sector,

c) fostering the entrepreneurial attitude of young people.

In the first case, informative workshops will be held at University departments and informative materials will be distributed using an interactive approach to elicit ideas during the info sessions and to encourage an ice-breaking climate among participants to share knowledge. A coordinated layout for the information campaign will increase visibility for the project and the partnership who promotes it. Students and researchers will be involved for an active role during the events and also for the choice of most appropriate channels and tools for communication. In process of dissemination results of the activity of Centres and departments, achieved during project activity will be represented and distributed to a public. Results will be presented as publications, advertising of activity of the Centres in mass media, carrying out of seminars and conferences, distribution of results through a web site, and by participation in exhibitions and fairs. Presentation of results will serve as means of distribution of the information on activity of the project and will provide a continuous communication with visitors of a web-site.

In the second case, e-participation events will be organized to get the scientific community in touch with the business world through joint discussion and decision-making on some proposed themes. The town meeting methodology for e-participation events, successfully tested within previous EU funded projects (i.e. PARTERRE, NET KITE), is a participative methodology generated in the USA at the beginning of year 2000 to allow democratic interaction and discussion among a huge number of participants on issues of public interest, such as reform laws or local policies. The aim of these e-participation events, to be organized in Jordan under the direction of ARCA, will be to explore existing barriers to entrepreneurial growth in innovative sectors, to research-based business incubation, to interactions between public and private organizations in the technology transfer process, and will let emerge how the local communities may help to boost the process. The staff from the Jordan partners will be trained on site by ARCA to act as facilitators during the town meetings.

Through the web tools, matchmaking between business challenges and innovative solutions will be enhanced and supported professionally. Good practices referred to the CTI model and activities will be publicized in order to attract clients from the business system for the science and research offer and the technology transfer facilities and expertise that the Jordan universities can make accessible.

In the third case, the web site will host a repository of information on innovation models and tool-kits for assisting the process from the generation and development of business idea to the start-up of a new company, whereas the social media will favour the circulation of ideas, the knowledge of key events or support programmes and mutual learning

Exploitation of results foreseen as dissemination and transfer of main project results and development of new related products, ensuring sustainability – establishment of efficient CTIs, national and international recognition and term basis. It will be ensured by participation in the project of main stakeholders and decision-makers – Deans of Faculties, accreditation agencies, and employers.

G.3. Sustainability

Explain how the impact of this project will be sustained beyond its lifetime. Please list the outcomes that you consider sustainable and describe the strategy to ensure their long lasting use beyond the project's life - financially, institutionally and policy level. Also explain how the results will be mainstreamed and multiplied in the sector of activity and in the participating institutions. Describe the strategy foreseen to attract co-funding and other forms of support for the project (limit 2000 characters).

Key stakeholder groups will include future program funders, policy makers, enterprise networks, business districts. Several initiatives promoted by the partnership will converge to raise awareness among territorial stakeholders about the opportunity offered by the deployment of innovation networks between R&D performers and private players to generate technology transfer flows, knowledge-based companies and definitely more qualified jobs for young people. Mapping in progress the stakeholders

interested in the project results will help to customize the approach, to get them actively involved through ongoing consultation and to prepare follow-up actions under the end of EU funding.

Final dissemination events will present to the general audience the project outcomes, whereas thematic meetings with policy makers will be used to show the lessons learnt, the benefits gained and the return on investments of innovation in the academic system and joint actions gathering public and private actors. As a result, Memoranda of Understanding will be drawn up and signed by local authorities, higher education institutes, business communities and research/innovation centres to foster technology transfer and innovative entrepreneurship through a Territorial Living Lab approach cantered on creativity and co-design. It is envisaged that these agreements could be taken into account by policy makers in the strategic planning documents.

From the financial sustainability point of view, the consolidation of a qualified scientific and technological offer from the Universities will increasingly attract private funding, as business actors will be able to find within the academic system the expertise, research infrastructure and/or technical equipment needed to satisfy their innovation needs at a cost-effective ratio. The training programmes developed within the project will be also structured for further replication thanks to the combination of thematic contents and interdisciplinary sessions.

LOGICAL FRAMEWORK MATRIX – LFM

Wider Objective: *What is the overall broader objective, to which the project will contribute?*	*Indicators of progress:* *What are the key indicators related to the wider objective?*	*How indicators will be measured:* *What are the sources of information on these indicators?*	
• Foundation of research and application centres in PC universities • Enabling teachers to provide their research results enterprises, improvement of organization of scientific-research activities • Creation of accessible information database of innovations and research results at universities of PC countries • Transfer of innovation projects and new technologies into enterprises and education • Delivering a base for the improvement of the link between universities and industrial partners • Development of partnerships with enterprises.	• Research and application centers in PC universities founded • Information database in Centres for Transfer of Innovations (CTI) at partner country universities created • Research results and innovations provided enterprises • Cooperation of producers and businessmen with CTI • Partnerships with enterprises developed	• Quantity and quality of the content of existing and used information (Gigabytes) on research and practical applications and inclusion of talented students • Number of research projects and scientific works in the database • Number of entrepreneurs who used the database of innovations at CTI • Number of contracts with industrial companies Number of students, who make an internship with these companies	
Specific Project Objective/s: *What are the specific objectives, which the project shall achieve?*	**Indicators of progress:** *What are the quantitative and qualitative indicators showing whether and to what extent the project's specific objectives are achieved?*	**How indicators will be measured:** *What are the sources of information that exist and can be collected? What are the methods required to get this information?*	**Assumptions & risks:** *What are the factors and conditions not under the direct control of the project, which are necessary to achieve these objectives? What risks have to be considered?*
• Establishment of the Centres for Transfer of Innovations (CTI) at JUST, UJ, MU, PSUT, AULE, and ASRF in Jordan • Training of specialists in EU countries for CTI • Creation of an effective common model of CTI for Jordan • Creation of accessible information database of innovations and research	• Centres for Transfer of Innovations (CTI) at JUST, UJ, MU, PSUT, AULE, and ASRF are established • Review the specifications and documents of the CTI common model • Information database of innovations and research results created • Presentation of innovations and	• Number of trained specialists for CTI • Number of industrial enterprises who used the information database of innovations and research results • Number of joint research projects and scientific works in the database • Number of common projects of universities and enterprises • Number of students worked on	Assumptions: • The JO partners and governmental authorities realize the importance of having CTIs to help in the economic development of the country. • Interest and actions of businessmen on introduction of innovations into production process • Interest of enterprises on contacts

results Jordan • Enabling the CTI for supporting reality related introduction of research results into the educational processes and industrial application • Transfer of cooperation experience of university and enterprises into High education system of Jordan and too enterprises • Cooperation between representatives of enterprises, researchers and students • Development of economic thinking and interest to use innovations and research results from entrepreneurs and businessmen	research results to entrepreneurs for introduction into the production process • Presentation of industrial projects used innovations and research results from CTI • Updated courses in the high education program • Realization of the Centres activities according to the developed plan • Results of the external and internal monitoring carried out by European partners about conformity of the activity of the Centres to the plan	common projects • Number of updated courses in the high education program • Number of conferences and seminars between representatives of enterprises, researchers and students	with universities • All partners have clear responsibilities and ready to accomplish their assigned tasks and there is an effective communication between the management team in the project • All participants of the project have experience in implementation of Erasmus + or similar projects • Risks: • Lack of interest from enterprises to use the information database of innovations • Unavailability and lack of experience from businessmen and entrepreneurs on introduction of innovations into production process • Lack of financial support to secure the sustainability of CTIs • Difficulties in purchase of planned equipment • Low level of motivation of staff for training in EU • Political stability in the country and neighbouring countries • Lack of interest in attending the conference in Jordan

Outputs (tangible) and Outcomes (intangible):	Indicators of progress:	How indicators will be measured:	Assumptions & risks:
*Please provide the list of concrete DELIVERABLES - outputs/outcomes (**grouped in Workpackages**), leading to the specific objective/s.:*	*What are the indicators to measure whether and to what extent the project achieves the envisaged results and effects?*	*What are the sources of information on these indicators?*	*What external factors and conditions must be realised to obtain the expected outcomes and results on schedule?*
• • (PREP)1. Identification of skills needed for capacity building • (DEV)2. Establishment and equipment of CTIs • (DEV)3. Adapting the experience of European Center for transfers of innovations by the staff of the PC CTI • (DEV)4. Activity of the Centers and departments •(QPLN)5. Quality control and monitoring. •(EXP)6. Exploitation and sustainability • (DISS) 7. Dissemination •(MNGT)8. Coordination and management	• Skills needed for capacity building are identified • Equipment bought and installed, software installed, CTIs worked • Trained specialists worked in CTIs • Information database created und maintained • The number of research projects in the information database grew • Informative project website • Materials publication about the CTI common model • Training courses for the working with the information database carried out • Results of monitoring and quality control • Leaflets and promotional materials disseminated • Publication of information about activities of CTIs • Participation in fairs, exhibitions, seminars, training methodical conferences • Distribution of tasks among partners settled Consortium meetings held on schedule	• Report on skills needed • CTIs equipment inventories • Number of trained specialists • Number of research projects in the database • Number of working groups consisting of university professors , students and entrepreneurs • Number of enterprises used the information database • Number of developed training modules and carried out courses • Reports on project activities • Publications about activities of CTIs • Number of carried out fairs and exhibitions, seminars, training methodical conferences • Project coordinators reports • Number of students involved in the research projects • Project balance and funds • Number of participants in discussion groups, workshops, conferences	Assumptions: • Availability of free rooms for the centers • Departments of universities have a relevant experience in cooperation with entrepreneurs • European partners have experience in the creation of centers for transfer of innovations • CTI staff consists of qualified scientists • All participants of the project have experience in implementation of Erasmus + or similar projects • Authorities are interested in creation of the model and in the establishment of CTIs Risks: • Difficulties in purchase of planned equipment • Low level of knowledge, skills of entrepreneurs at the moment of using the innovation data-base at the Centers.Difficulties in purchase of planned equipment • Low level of motivation of scientific staff members for research • External factors that can hinder the project's implementation: political and social stability in the Country and

			in the Region
Activities: *What are the key activities to be carried out (**grouped in Workpackages**) and in what sequence in order to produce the expected results?* **WP1:** 1.1 Review local market needs for qualified people in the field of innovation and entrepreneurship 1.2 Identify training needs for officers of CTIs 1.3 Prepare a report that serves as the road map for the implementation of the project **WP2:** 2.1 Development of Long-Term Capacity Building Plan 2.2 Selection of Training Staff 2.3 Consultations with the Jordanian co-beneficiaries 2.4 Training of trainers for participation at CTIs	**Inputs:** *What inputs are required to implement these activities, e.g. staff time, equipment, mobilities, publications etc.?* **WP1:** • Staff: 110 days JUST, 10 days UJ, 45 days MU, 10 days PSUT, 15 ASRF, 10 days ARCA, 10 days Almotahidah, 10 days JCI, 10 days AULE, 10 days HCST • Other cost: are related to publishing and printing and will be co-financed. **WP2:** • Staff: 85 days JUST, 30 days UJ, 30 days MU, 33 days PSUT, 15 ASRF, 10 days ARCA, 30 days HTWK, 5 days UD, 23 days UCY, 24 days ARCA, 24 days P&B, 15 days CRE.THI.DEV., 15 days Almotahidah, 10 days JCI, 10 days AULE, 10 days HCST • Mobility: 48 flows (average 6 days each) PC-EU; • Other cost:		**Assumptions, risks and pre-conditions:** *What pre-conditions are required before the project starts? What conditions outside the project's direct control have to be present for the implementation of the planned activities?* **Assumptions:** • CTI s staff has enough experience on choosing, purchasing, installation • There are high qualified IT specialists in the staff of CTIs. • Existing of experience in innovation`s transfer and training at EU partners • High interest of PC in learning foreign experience • Existing of experience in innovation`s transfer by EU partners • Availability of qualified staff on IT in the CTIs • Availability of highly-qualified trainers • Competence of staff in sphere of innovations • Experience of EU partner

WP3: 3.1 Establishment of center offices and departments 3.2 Hardware equipment at the Centers 3.3 Installation and adjustment of software **WP4:** 4.1 Creation of web-site and support its functioning 4.2 Creation of database of CTIs and support function 4.3 Training activity 4.4 Consulting activity **WP5:** 5.1 Establish the Quality committee 5.2 Develop a monitoring, evaluation, and quality plan 5.3 Write progress reports that elaborate the progress of the project and address it to the project coordinator 5.4 Hire External Monitor **WP6:** 6.1. Developing a dissemination and exploitation plan 6.2. Elaboration of project image and dissemination materials 6.3. Organizing workshops and info-days 6.4. Organizing an Electronic Town Meeting	Publishing and printing and will be co-financed. **WP3:** • Staff: 50 days JUST, 30 days UJ, 30 days MU, 30 days PSUT, 15 ASRF, 45 days HTWK, 5 days UD, 10 days UCY, 10 days ARCA, 10 days P&B, 10 days CRE.THI.DEV., 5 days Almotahidah, 0 days JCI, 5 days AULE, 0 days HCST • Equipment list: JUST: 40 PC, 10 Laptop, 10 Netbook, 1 file, server, 25 UPS, 40 web cameras, 5 External, HDD Portable, 5 Flash Cards, 40 Headsets, 1 Speaker SubWoofer System, 6 Laser, printer, 50 cartridges with toner, 10 Scanner, 5 Multimedia Projectors, 2 Screen for projector, 1 video camera, 1 digital photo camera, 1 ADSL-Modem, 1 Switch, 1,WiFI-Router, 1 Net cable, 50 Connectors, 25 external LAN sockets, JU: 20 PC, 2 Laptop, 2 Netbook, 1 file, server, 20 UPS, 20 web cameras, 5 External, HDD Portable, 5 Flash Cards, 20 Headsets, 1 Speaker SubWoofer System, 2 Laser, printer, 50 cartridges with toner, 2 Scanner, 1 Multimedia Projectors, 2 Screen for projector, 1 video camera, 1 digital photo camera, 1 ADSL-Modem, 1 Switch, 1,WiFI-Router, 1 Net cable, 50 Connectors, 20		organizations in innovation transfer • Interest and actions of businessmen on introduction of innovations into production process • Interest of universities in strengthening of links between science and production • State authorities are been interested in creation of a model of CTIs • Availability of a big range of journals and magazines dedicated to innovations in partner countries • Ability of using mass media for dissemination • Actuality of topic of the seminars for a public at large • Availability of innovation technologies of PC partner for participation in fairs and exhibitions • Experience of staff of PC university on organizing and carrying out of international conferences within the framework of Erasmus+ project Risks: • Low inflow of innovations. • Low level of motivation of inventors • Low level of willingness to get innovations of entrepreneurs • Assumptions: • CTI s staff has enough experience on choosing, purchasing, installation and• There are high qualified IT specialists in the staff of CTIs.

6.5. Organizing Local Final Conference 6.6. Developing a sustainability plan **WP7:** 7.1. Organizing the Kick-off Meeting and other consortium meeting 7.2. Establishment of management and operational structures 7.3. Establishment of Training and Technical Group (TTG) 7.4. Hiring External Auditors 7.5. Reports	external LAN sockets MU: 20 PC, 2 Laptop, 2 Netbook, 1 file, server, 20 UPS, 20 web cameras, 5 External, HDD Portable, 5 Flash Cards, 20 Headsets, 1 Speaker SubWoofer System, 2 Laser, printer, 50 cartridges with toner, 2 Scanner, 1 Multimedia Projectors, 2 Screen for projector, 1 video camera, 1 digital photo camera, 1 ADSL-Modem, 1 Switch, 1,WiFI-Router, 1 Net cable, 50 Connectors, 20 external LAN sockets, PSUT: 20 PC, 2 Laptop, 2 Netbook, 1 file, server, 20 UPS, 20 web cameras, 5 External, HDD Portable, 5 Flash Cards, 20 Headsets, 1 Speaker SubWoofer System, 2 Laser, printer, 50 cartridges with toner, 2 Scanner, 1 Multimedia Projectors, 2 Screen for projector, 1 video camera, 1 digital photo camera, 1 ADSL-Modem, 1 Switch, 1,WiFI-Router, 1 Net cable, 50 Connectors, 20 external LAN sockets • Other cost: Publishing and printing and will be co-financed. **WP4:** • Staff: 150 days JUST, 30 days UJ, 30 days MU, 30 days PSUT, 15 ASRF, 50 days HTWK,		• Existing of experience in innovation`s transfer and training at EU partners • High interest of PC in learning foreign experience • Existing of experience in innovation`s transfer by EU partners • Availability of qualified staff on IT in the CTIs • Availability of highly-qualified trainers • Competence of staff in sphere of innovations • Experience of EU partner organizations in innovation transfer • Interest and actions of businessmen on introduction of innovations into production process • Interest of universities in strengthening of links between science and production • State authorities are been interested in creation of a model of CTIs • Availability of a big range of journals and magazines dedicated to innovations in partner countries • Ability of using mass media for dissemination • Actuality of topic of the seminars for a public at large • Availability of innovation technologies of PC partner for participation in fairs and exhibitions • Experience of staff of PC university on organizing and carrying out of

	15 days UD, 10 days UCY, 25 days ARCA, 29 days P&B, 15 days CRE.THI.DEV., 30 days Almotahidah, 5 days JCI, 5 days AULE, 10 days HCST • Mobility: • Mobility: 18 flows (average 6 days each) PC-EU, 10 EU-EU, 2 flows (average 6 days each) EU-PC • Subcontractor: Web Developer Expert • Other cost: Publishing and printing and will be co-financed. **WP5:** • Staff: 64 days JUST, 40 days UJ, 35 days MU, 30 days PSUT, 10 ASRF, 10 days HTWK, 10 days UD, 10 days UCY, 10 days ARCA, 29 days P&B, 20 days CRE.THI.DEV., 30 days Almotahidah, 10 days JCI, 4 days AULE, 40 days HCST • Mobility: 18 flows (average 6 days each) PC-EU, 10 EU-EU • Subcontractor: External Monitor • Other cost: Publishing and printing and will be co-financed. **WP6:** • Staff:		international conferences within the framework of Erasmus+ project Risks: • Low inflow of innovations. • Low level of motivation of inventors • Low level of willingness to get innovations of entrepreneurs • Other risks are related to eventual social or political stability in the region that may affect Jordan and mobility towards and from the Country

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130 days JUST, 100 days UJ, 80 days MU, 80 days PSUT, 80 ASRF, 1 days HTWK, 1 days UD, 1 days UCY, 56 days ARCA, 1 days P&B, 1 days CRE.THI.DEV., 80 days Almotahidah, 60 days JCI, 60 days AULE, 60 days HCST

- Mobility:
2 flows (average 4 days each) EU-PC
- Subcontractor:
 External Monitor
- Other cost:
 Publishing and printing and will be co-financed.

WP7:
- Staff:
510 days JUST, 150 days UJ, 125 days MU, 130 days PSUT, 45 ASRF, 110 days HTWK, 125 days UD, 125 days UCY, 120 days ARCA, 3 days P&B, 100 days CRE.THI.DEV., 100 days Almotahidah, 90 days JCI, 40 days AULE, 30 days HCST
Equipment:
- Mobility:
24 flows (average 6 days each) EU-PC
36 flows (average 6 days each) PC-EU
- Subcontractor:
Auditors
- Other cost:
 Publishing and printing and will be co-financed.

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WORKPLAN

Please use the model provided. Applicants are expected to complete a <u>one-page work plan for each project year</u>.

For each year of your project proposal, please complete a work plan indicating the deadlines for each outcome and the period and location in which your activities will take place. Please create additional work plan tables if further space is needed.

The same reference and sub-reference numbers as used in the logical framework matrix must be assigned to each outcome and related activities.

Activity carried out in the Programme Country: **=** (E.g. activity in France for two weeks in the first month of the project 2= under M1)

Activity carried out in the Partner Country (ies): **X**(E.g., activity in Tunisia for three weeks in the second month of the project: 3X under M2)

WORKPLAN for project year 1

Ref.nr/ Sub-ref nr	Activities Title	Total duration (number of weeks)	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12
5.1	Establish the Quality committee	1		x										
7.1	Organizing the Kick-off Meeting	1		x										
7.2	Establishment of management and operational structures	1												
7.3	Establishment of Training and Technical Group (TTG)			x										
7.4	Hiring External Auditors	6				3x,3=								
6.1	Elaboration of project image and dissemination materials	8					6x,2=							
1.2	Identify training needs for officers of CTIs.	4							4x					
3.1	Establishment of center offices and departments	6							6x					
3.2	Hardware equipment at the Centers	16							16x					
6.1	Dissemination and exploitation plan	8							2x,6=					
6.2	Planning, image and dissemination activities	8							8x					
1.5	Prepare a report that serves as the road map for the implementation of the project	6								6x				
2.1	Development of Long-Term Capacity Building Plan	6								3x,3=				
5.2	Develop a monitoring, evaluation, and quality	4								4=				
5.4	Hire External Monitor	4								4=				

2.2	Selection of Training Staff	**3**								**3x**				
2.4	Training of trainers for participation at CTIs	**5**									**5=**			
6.3	Workshops and Info-days	**8**										**8x**	
6.4	Organizing an Electronic Town Meeting	**3**										**2x,1=**	
7.7	Financial and Administrative Management	**52**	**4x=**	**4x=**	**4x=**	**4x=**	**4x=**	**4x=**	**4x=**	**4x=**	**4x=**	**4x=**	**4x=**	**4x=**
7.9	Consortium meeting	**2**						**=**					**=**

WORKPLAN for project year 2

Ref.nr/ Sub-ref nr	Title	Total duration (number of weeks)	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12
	Activities													
5.3	Write progress reports that elaborate the progress of the project and address it to the project coordinator	**4**						**2x,2=**						
4.2	Creation of database of CTIs and support function	**10**						**5x,5=**						
4.3	Training activity	**8**								**8x**				
4.4	Consulting activity	**8**								**8x**				
2.4	Training of trainers for participation at CTIs	**5**									**5=**			
5.3	Write progress reports that elaborate the progress of the project and address it to the project coordinator	**4**												**2x,2=**
5.3	Write progress reports that elaborate the progress of the project and address it to the project coordinator	**4**						**2x,2=**						
4.2	Creation of database of CTIs and support function	**10**						**5x,5=**						
4.3	Training activity	**8**								**8x**				
7.7	Financial and Administrative Management	**52**	**4x=**	**4x=**	**4x=**	**4x=**	**4x=**	**4x=**	**4x=**	**4x=**	**4x=**	**4x=**	**4x=**	**4x=**
7.8	Submission of Intermediate report	**6**						**6x**						
7.9	Consortium meeting	**2**						**=**						**x**

WORKPLAN for project year 3

Ref.nr/ Sub-ref nr	Title	Total duration (number of weeks)	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12
	Activities													
5.3	Write progress reports that elaborate the progress of the project and address it to the project coordinator	**4**						2x.2=						
2.4	Training of trainers for participation at CTIs	**5**							5==					
6.5	Organizing Local Final Conference	**8**									8x			
6.6	Developing a sustainability plan	**10**									10x			
5.3	Write progress reports that elaborate the progress of the project and address it to the project coordinator	**52**	4x=	4x=	4x=	4x=	4x=	4x=	4x=	4x=	4x=	4x=	4x=	4x=
7.7	Financial and Administrative Management	**52**	4x=	4x=	4x=	4x=	4x=	4x=	4x=	4x=	4x=	4x=	4x=	4x=
7.8	Submission Final Reports	**4**												4x
7.9	Consortium meeting	**2**					=				x			

PART H - Work packages

Please enter the different project activities you intend to carry out in your project. Make sure that the information in this section is consistent with the project Logical Framework Matrix.

H.1. Description of work packages, outcomes and activities

Work package type and ref.nr	PREPARATION		1
Title	ANALYSIS OF TRAINING NEEDS		
Related assumptions and risks	The assumption: is the involvement of all partners. The JO partners and governmental authorities realize the importance of having CTIs in Jordan and their strong impact to Jordan economy, educational, and society development. Risks: are related to all external factors that can hinder the project's implementation: political and social stability in the Country and in the Region.		
Description	Preparation WP include analysis and identification of the training needs of future workers in innovation and entrepreneurship promotion centers in collaboration with enterprises and industrial bodies (Jordanian and European). Project stakeholders will be identified. A common questionnaire will be distributed to all stakeholders. The survey will be analysed to identify the needed skills and the methodology to follow in running the CTIs. Then integration of analysis of training needs with European experiences and methodologies will take place. Final report on skills and the methodology, and the needs identified will be prepared. The document will become the common manual in the WP relating training of the staff in EU partners' institutions.		
Tasks	1.1 Review local market needs for qualified people in the field of innovation and entrepreneurship. 1.2 Identify training needs for officers of CTIs. 1.3 Prepare a report that serves as the road map for the implementation of the project		
Estimated Start Date (dd-mm-yyyy)	15-10-2015	Estimated End Date (dd-mm-yyyy)	15-4-2016
Lead Organisation	JUST		
Participating Organisation	All JO partners, ARCA		

Deliverables/results/outcomes

	Work Package and Outcome ref.nr	1.1	
Expected Deliverable/Results/ Outcomes	Title	Questionnaire and report on Training Needs in the labour market	
	Type	☐Teaching material ☐Learning material ☐Training material	☐Event ☒Report ☐Service/Product
	Description	A common questionnaire will be distributed to all programmes stakeholders. The questionnaire, a multiple choice and free answer format, will be focused on the elaboration of real training needs for the future workers, in CTI offices. A final report will be elaborated.	

	Due date	15-04-2016
	Languages	Arabic, English

Target groups	☐Teaching staff ☐Students ☒Trainees ☐Administrative staff ☐Technical staff ☐Librarians ☒Other
	If you selected 'Other', please identify these target groups. Jordanian companies, enterprises, employment agencies and associates involved in the field of innovation and entrepreneurship*.*
Dissemination level	☐Department / Faculty ☐Local ☒National ☐Institution ☐Regional ☒International

Work package type and ref.nr	DEVELOPMENT	2
Title	Training of trainers for participation at CTIs	
Related assumptions and risks	The assumptions are that staff remain interested in undertaking training periods in EU universities, business incubators, and companies, and that existing commitments allow such visits. The main risk is that staff may be prevented from leaving the region at the allocated time due to difficulties in obtaining visas and leaves from their universities, institutions, companies.	
Description	The aim of this activity is to learn from European experience by staff of CTIs and authorities. Nowadays, the government of Jordan realized the relevance of economic education of entrepreneurs for development of economy and makes arrangements for education of entrepreneurs and producers. The objective is to develop a capacity building and staff development in the field of innovation and entrepreneurship. After the analysis of WP1, a training program will be prepared by ARCA to enhance the skills of Jordanian staff in running CTIs. One of the most efficient ways for achievement of this objective is the organization of innovation Centers similar to the Centers, which exist in Europe, but Jordan does not have enough experience in establishment of such Centers. For an effective functioning of CTIs it is important to have a precise representation of strategy, methodology, mechanism, form and means of innovation and training activities of such Centers. Therefore, learning of experience of European partners is included as an important activity to project. This activity is carried out in two forms: distance consultations and face-to-face consultations.	
Tasks	2.1 Development of Long-Term Capacity Building Plan; 2.2 Selection of Training Staff; 2.3 Consultations with the Jordanian co-beneficiaries 2.4 Training of trainers for participation at CTIs	
Estimated Start Date (dd-mm-yyyy)	15-04-2016	**Estimated End Date (dd-mm-yyyy)**	15-04-2017
Lead Organisation	ARCA, P&B	

Participating Organisation	All partners	

	Work Package and Outcome ref.nr	2.1	
Expected Deliverable/Results/ Outcomes	Title	Long-Term Capacity Building Plan	
	Type	☒ Teaching material ☒ Learning material ☒ Training material	☐ Event ☐ Report ☒ Service/Product
	Description	This long-term capacity building plan and vision aims at developing human resources and upgrading skills and capacities of university professors in the field of innovation and entrepreneurship. All EU partners will assist the partner universities develop this plan during a 3-day roundtable discussion to be held at HTWK at month 7.	
	Due date	15-7-2016	
	Languages	English	
Target groups	☐Teaching staff ☐Students ☒Trainees ☐Administrative staff ☒Technical staff ☐Librarians ☐Other		
	If you selected 'Other', please identify these target groups. (Other target groups are represented by authorities from PC - directors and top managers of enterprises, who were involved in the project as branch departments. They are customers of innovations; they have privilege to assist effective sustainability		
Dissemination level	☐Department / Faculty ☒Institution	☐Local ☐Regional	☒National ☒International

	Work Package and Outcome ref.nr	2.2
Expected Deliverable/Results/ Outcomes	Title	Selection Training Staff
	Type	☐ Teaching material ☐ Event ☐ Learning material ☒ Report ☒ Training material ☐ Service/Product
	Description	10 Teaching and technical staff from all Jordanian partner universities, and 1 staff from each Jordanian non-academic partners will be selected, according to pre-defined criteria. Each of these members of staff will be trained during a 1-week training visit to ARCA, P&B, and UCY. Training materials (traditional and online) will be prepared and customized to Jordanian needs. CRE.THI.DEV, and HTWK will help the Jordanian universities set the criteria of selection.
	Due date	15-7-2016

	Languages	English
Target groups	☒Teaching staff ☐Students ☒Trainees ☐Administrative staff ☒Technical staff ☐Librarians ☐Other	
	(Other target groups are represented by authorities from PC - directors and top managers of enterprises, who were involved in the project as branch departments. They are customers of innovations; they have privilege to assist effective sustainability	

Dissemination level	☐Department / Faculty ☒Institution	☐Local ☐Regional	☒National ☒International

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	2.3	
	Title	Consultations with the Jordanian co-beneficiaries	
	Type	☐ Teaching material ☐ Learning material ☒ Training material	☒ Event ☒ Report ☐ Service/Product
	Description	Consultations are carried out by specialists from EU countries by means of web-conference and correspondence via Internet. Staff and trainers of CTIs from Partner countries take part in these conferences. Consultations include discussion of a wide range of issues of equipment of CTIs; creation of web-site and database; organization and carrying out of trainings; creation of a common model of CTIs.	
	Due date	15-7-2016	
	Languages	English	
Target groups	☒Teaching staff ☐Students ☒Trainees ☐Administrative staff ☒Technical staff ☐Librarians ☐Other		
	(Other target groups are represented by authorities from PC - directors and top managers of enterprises, who were involved in the project as branch departments. They are customers of innovations; they have privilege to assist effective sustainability		

Dissemination level	☐Department / Faculty ☐Institution	☐Local ☐Regional	☐National ☒International

Expected	Work Package and	2.4	

Deliverable/Results/ Outcomes	Outcome ref.nr		
	Title	Training of trainers for participation at CTIs	
	Type	☐ Teaching material ☐ Learning material ☒ Training material	☒ Event ☒ Report ☐ Service/Product
	Description	Training of staff of CTI in EU is carried out for this. Training of trainers and acquaintance with experience of EU is carried out in EU countries. This is explained by the fact, that face-to-face practical training is the most efficient form of training. It is important to study the experience of each Center of all three EU universities because all of them have similarities and uniqueness in their experience and expertise.	
	Due date	15-8-2017	
	Languages	English	
Target groups	☒Teaching staff ☐Students ☒Trainees ☐Administrative staff ☒Technical staff ☐Librarians ☐Other		
	(Other target groups are represented by authorities from PC - directors and top managers of enterprises, who were involved in the project as branch departments. They are customers of innovations; they have privilege to assist effective sustainability		
Dissemination level	☐Department / Faculty ☐Local ☐National ☐Institution ☐Regional ☒International		

Work package type and ref.nr	DEVELOPMENT	3
Title	Establishment and equipment of the CTIs	
Related assumptions and risks	Assumption: All participants of the project have experience in implementation of Erasmus+ or similar projects. CTI s staff has enough experience on choosing, purchasing, installation and using of equipment. There are high qualified IT specialists in the staff of CTIs. Risks: Difficulties in purchase of the needed equipment	
Description	The basic result of project activity is the establishment and equipment of the centers for transfer of innovations (CTI) at Jordanian universities and departments at non-academic organizations. Their activity will be to maintain businessmen with the innovations for introduction into the process of production. The centers will be created at 5 universities (JUST, UJ, MU, PSUT). The establishment of departments of these centers are planned at one non-profit Applied Research Fund (ASRF). These offices will be equipped for functioning of the centers and their departments. Work on equipment of the offices will be carried out within the first 4 months. 2 staff members competent in IT will be responsible for equipment of the offices of CTI.	

Tasks	3.1 Establishment of center offices and departments 3.2 Hardware equipment at the Centers 3.3 Installation and adjustment of software		
Estimated Start Date (dd-mm-yyyy)	01-12-2015	**Estimated End Date (dd-mm-yyyy)**	01-03-2016
Lead Organisation	HTWK, PSUT		
Participating Organisation	JUST, UJ, MU, ASRF,		

Deliverables/results/outcomes

<table>
<tr><td rowspan="7">Expected Deliverable/Results/ Outcomes</td><td>Work Package and Outcome ref.nr</td><td colspan="3" align="center">3.1.</td></tr>
<tr><td>Title</td><td colspan="3">Establishment of center offices and departments</td></tr>
<tr><td rowspan="3">Type</td><td colspan="2">☐ Teaching material</td><td>☐ Event</td></tr>
<tr><td colspan="2">☐ Learning material</td><td>☐ Report</td></tr>
<tr><td colspan="2">☒ Training material</td><td>☒ Service/Product</td></tr>
<tr><td>Description</td><td colspan="3">Each co-beneficiary who will establish a CTI or branch department provides 1 office room with the furniture, in order to procure the working environment</td></tr>
<tr><td>Due date</td><td colspan="3">01-07-2016</td></tr>
<tr><td></td><td>Languages</td><td colspan="3">English</td></tr>
<tr><td rowspan="2">Target groups</td><td colspan="4">☒ Teaching staff
☒ Students
☒ Trainees
☒ Administrative staff
☒ Technical staff
☐ Librarians
☒ Other</td></tr>
<tr><td colspan="4"><i>If you selected 'Other', please identify these target groups</i>
Other target groups are represented by authorities from PC - directors and top managers of enterprises, who were involved in the project as branch departments. They are customers of innovations; they have privilege to assist effective sustainability</td></tr>
<tr><td>Dissemination level</td><td>☐ Department / Faculty
☒ Institution</td><td>☒ Local
☐ Regional</td><td>☒ National
☐ International</td></tr>
</table>

<table>
<tr><td rowspan="7">Expected Deliverable/Results/ Outcomes</td><td>Work Package and Outcome ref.nr</td><td colspan="3" align="center">3.2.</td></tr>
<tr><td>Title</td><td colspan="3">Hardware equipment at the Centers</td></tr>
<tr><td rowspan="3">Type</td><td colspan="2">☐ Teaching material</td><td>☐ Event</td></tr>
<tr><td colspan="2">☐ Learning material</td><td>☐ Report</td></tr>
<tr><td colspan="2">☒ Training material</td><td>☒ Service/Product</td></tr>
<tr><td>Description</td><td colspan="3">Delivery and installation of the equipment.
Implementation of installation activity and adjustment of the equipment in the prepared rooms.</td></tr>
<tr><td>Due date</td><td colspan="3">01-07-2016</td></tr>
<tr><td></td><td>Languages</td><td colspan="3">English</td></tr>
</table>

Target groups	☒ Teaching staff ☒ Students ☒ Trainees ☒ Administrative staff ☒ Technical staff ☐ Librarians ☒ Other
	If you selected 'Other', please identify these target groups. Other target groups are represented by authorities from PC - directors and top managers of enterprises, who were involved in the project as branch departments. They are customers of innovations; they have privilege to assist effective sustainability
Dissemination level	☐ Department / Faculty ☐ Local ☐ National ☒ Institution ☐ Regional ☐ International

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	3.3.	
	Title	Installation and adjustment of software	
	Type	☐ Teaching material ☐ Learning material ☒ Training material	☐ Event ☐ Report ☒ Service/Product
	Description	Installation and adjustment of software for needs of the project. Installation of local network.	
	Due date	15-10-2016	
	Languages	English	
Target groups	☒ Teaching staff ☒ Students ☒ Trainees ☒ Administrative staff ☒ Technical staff ☐ Librarians ☒ Other		
	If you selected 'Other', please identify these target groups. Other target groups are represented by authorities from PC - directors and top managers of enterprises, who were involved in the project as branch departments. They are customers of innovations; they have privilege to assist effective sustainability		
Dissemination level	☐ Department / Faculty ☐ Local ☐ National ☒ Institution ☐ Regional ☐ International		

Work package type and ref.nr	**DEVELOPMENT**	**4**
Title	Activity of the Centers and departments	
Related assumptions and risks	Assumptions: - Availability of experience in innovation`s transfer at EU partners - Availability of qualified staff on IT in the CTIs	

	Risk: - Low inflow of innovations. - Low level of motivation of inventors
Description	The main activity of the project is the functioning of the Centers. The Centers collects information on innovations, which are provided by CTIs of EU partners, and scientist and researchers of PC universities. All collected information is kept in the data-base, which is placed in a created web-site of CTI of partner countries. The Center is the data-base for information on needs of enterprises in innovations. Furthermore, this information turn into topics of scientific researches. Students of universities and other youth from ASRF will be involved in research activities. The database of the partner country CTIs will be regularly updated. Producers with a developed economical thinking are interested in using innovation in their business. Therefore, a training activity will be organized at CTIs at PC universities. Almutaheda and VRE.THI.DEV. have excellent experience in organization of economic trainings. One of their mission within the project is gathering and inviting participants for these trainings and assistance to trainers of CTI in conducting of trainings. The training courses are: using IT in search of information on innovations, the usage of innovations in the process of storage, proceeding of agricultural products and provision of their transportation, accounting and audit of enterprises, effective methods of management and marketing in enterprises, preparation of business projects.
Tasks	4.1 Creation of web-site and support its functioning 4.2 Creation of database of CTIs and support function 4.3 Training activity 4.4 Consulting activity

Estimated Start Date (dd-mm-yyyy)	15-4-2016	**Estimated End Date (dd-mm-yyyy)**	15-10-2018
Lead Organisation	HTWK		
Participating Organisation	All partners		

Deliverables/results/outcomes

	Work Package and Outcome ref.nr	4.1.	
Expected Deliverable/Results/ Outcomes	Title	Creation of web-site and support its functioning	
	Type	☐ Teaching material ☐ Learning material ☐ Training material	☐ Event ☐ Report ☐ Service/Product
	Description	The web-site helps to keep in contact with all beneficiaries, is effective in studying needs of entrepreneurs in innovations, practices distance consultation activities for entrepreneurs, stores information about innovations in form of database, makes it possible to search and find customers for services which are provided by CTIs; is an effective dissemination tool. Entrepreneurs who apply to the web-site are able to leave information on needs of their enterprises for innovations here.	
	Due date	15-10-2016	
	Languages	English	

Target groups	☒ Teaching staff
	☒ Students
	☒ Trainees
	☒ Administrative staff
	☒ Technical staff
	☐ Librarians
	☒ Other

	If you selected 'Other', please identify these target groups.
	All groups, who are interested in innovations and in activity of CTIs (scientists, entrepreneurs, etc.)

Dissemination level	☐ Department / Faculty	☐ Local	☐ National
	☒ Institution	☐ Regional	☐ International

	Work Package and Outcome ref.nr	4.2	
	Title	Creation of database of CTIs and support function	
	Type	☒ Teaching material	☐ Event
		☒ Learning material	☐ Report
		☒ Training material	☒ Service/Product
Expected Deliverable/Results/ Outcomes	Description	The data-base stores information which are provided by European co-beneficiaries, university researchers and scientists, information on innovations from JO partners, information from scientific journals and magazines and result of student researches. Links to other web-sites providing information on innovations will be placed. the database of the partner country CTIs will be regularly updated. The objective of linking of science with enterprise will be achieved respectively.	
	Due date	15-4-2017	
	Languages	English	

Target groups	☒ Teaching staff
	☒ Students
	☒ Trainees
	☒ Administrative staff
	☒ Technical staff
	☐ Librarians
	☒ Other

	If you selected 'Other', please identify these target groups.
	All groups, who are interested in innovations and in activity of CTIs (scientists, entrepreneurs, etc.)

Dissemination level	☐ Department / Faculty	☐ Local	☒ National
	☒ Institution	☐ Regional	☒ International

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	4.3
	Title	Training activity

	Type	☒ Teaching material	☐ Event
		☒ Learning material	☐ Report
		☒ Training material	☒ Service/Product
	Description	Training activity will be organized onsite and in 6 directions. It is planned to carry out these trainings at the regional districts of PC. Duration of each course is 4 hours. Trainers create and develop modules – content, ethodics, and means for training for each training course. In addition, the materials of trainings will be multiplied and distributed among the businessmen for self-education. By this way the training activity will involve a bigger audience.	
	Due date	15-6-2017	
	Languages	English	
Target groups	☒ Teaching staff ☒ Students ☒ Trainees ☒ Administrative staff ☒ Technical staff ☐ Librarians ☒ Other		
	If you selected 'Other', please identify these target groups. All groups, who are interested in innovations and in activity of CTIs (scientists, entrepreneurs, etc.)		
Dissemination level	☐ Department / Faculty ☒ Institution	☐ Local ☐ Regional	☒ National ☒ International

	Work Package and Outcome ref.nr	4.4	
	Title	Consulting activity	
	Type	☐ Teaching material	☐ Event
		☐ Learning material	☐ Report
		☒ Training material	☒ Service/Product
Expected Deliverable/Results/ Outcomes	Description	Consulting activity is meant by individual consultations for entrepreneurs and researchers at CTIs. Consultant gets the application of entrepreneurs for innovation and links them with the specialist. That is how the working groups will be formed and these groups will make plans for joint activity, define the location, time, means for implementation of researches and experiments	
	Due date	15-8-2017	
	Languages	English	
Target groups	☒ Teaching staff ☒ Students ☒ Trainees ☒ Administrative staff ☒ Technical staff ☐ Librarians		

	☒ Other
	If you selected 'Other', please identify these target groups. All groups, who are interested in innovations and in activity of CTIs (scientists, entrepreneurs, etc.)
Dissemination level	☐ Department / Faculty ☒ Local ☒ National ☐ Institution ☐ Regional ☒ International

Work package type and ref.nr	**QUALITY PLAN**	**5**
Title	Project assurance and efficiency	
Related assumptions and risks	Assumptions are related to the effectiveness of the involvement of all partners in the assigned tasks. Risks are related to the carry out of the project itself.	
Description	A specific monitoring and evaluation system will be set up by the Quality Committee (QC) to provide constant and clear information about the effectiveness of carrying out the action to the management, allowing the optimization of resources and redirection of activities which can be affected by problems. A set of qualitative and quantitative indicators will be applied through monitoring instruments such as questionnaires, interview grids and check-lists. High attention will be paid to the involvement of all actors concerned, underlining the importance of the contribution of each body involved. Six-months monitoring reports will be elaborated and addressed to the Project Coordinator. As for internal evaluation, an intermediate and a final report will be elaborated, showing the first impact on organizations, territories and beneficiaries involved. A comparison among impact and objective of the action will be made explicit. Special quality criteria will deal with training activities, defining performances and standards. An external Evaluator (Monitor) will be hired to verify the quality of the project, the achievement of milestones and objectives, and evaluates the results of each WP based on the mid-term and final report as well as on audits with the project partners at one project meeting in beginning of 2017.	
Tasks	5.1 Establish the Quality committee 5.2 Develop a monitoring, evaluation, and quality plan 5.3 Write progress reports that elaborate the progress of the project and address it to the project coordinator 5.4 Hire External Monitor	
Estimated Start Date (dd-mm-yyyy)	17-11-2015	**Estimated End Date (dd-mm-yyyy)**	01-10-2018
Lead Organisation	CRE.THI.DEV, MU	
Participating Organisation	All partners	

Deliverables/results/outcomes

Expected Deliverable/Results/	Work Package and Outcome ref.nr	5.1.

Outcomes	Title	Quality Committee	
	Type	☐Teaching material ☐Learning material ☐Training material	☐Event ☒Report ☐Service/Product
	Description	The Quality Committee will be composed of five members, two from Europe (UNIPA, ix-Factory), two from Jordan (MONOJO, Almuahedah), and one quality manager from CRE.THI. DEV. The latter is organizing the quality measures like peer reviews, external accreditation and evaluation surveys. The quality committee will design a proper evaluation process and be responsible for creating a set of indicators. In coordination with the project manager and other project consortium members, the Quality Committee chair (Quality Manager) will set criteria for the selection of members of the "External" Monitor.	
	Due date	15-11-2015	
	Languages	English, Arabic	
Target groups	☒Teaching staff ☐Students ☐Trainees ☒Administrative staff ☐Technical staff ☐Librarians ☐Other		
	If you selected 'Other', please identify these target groups. *(Max. 250 characters)*		
Dissemination level	☐Department / Faculty ☒Institution	☐Local ☐Regional	☐National ☒International

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	5.2.	
	Title	Monitoring, Evaluation and Quality Plan	
	Type	☐Teaching material ☐Learning material ☐Training material	☐Event ☒Report ☐Service/Product
	Description	A quality management, monitoring and evaluation system will be set up to. This system will be developed by the QC which will be formed during the kick-off meeting, encompassed of and chaired by CRE.THI. DEV. with 2 consortium members from EU and 2 from Jordan. The quality committee will design a proper evaluation process and be responsible for creating a set of indicators. The monitoring and evaluation of the project will take into account measures of the European Standards and Guidelines for Quality Assurance. Selected measures will be implemented within the first year of project duration by CRE.THI.DEV. The evaluation will concern all work-packages. In coordination with the project manager and	

		other project consortium members, the Quality Committee chair (Quality Manager) will set criteria for the selection of members of the "External" Monitor.
	Due date	10-06-2016
	Languages	English, Arabic
Target groups	☒Teaching staff ☒Students ☐Trainees ☒Administrative staff ☐Technical staff ☐Librarians ☐Other	
	If you selected 'Other', please identify these target groups. *(Max. 250 characters)*	
Dissemination level	☐Department / Faculty ☐Local ☐National ☒Institution ☐Regional ☐International	

	Work Package and Outcome ref.nr	5.3	
Expected Deliverable/Results/ Outcomes	Title	Reporting	
	Type	☐Teaching material ☐Learning material ☐Training material	☐Event ☒Report ☐Service/Product
	Description	Monitoring six month reports will be addressed to the management to support the decision making process. Evaluation reports will be elaborated at midterm and at the end of the Action.	
	Due date	Every six months	
	Languages	English, Arabic	
Target groups	☒Teaching staff ☐Students ☒Trainees ☐Administrative staff ☒Technical staff ☐Librarians ☐Other		
	If you selected 'Other', please identify these target groups. *(Max. 250 characters)*		
Dissemination level	☐Department / Faculty ☐Local ☒National ☒Institution ☐Regional ☐International		

	Work Package and Outcome ref.nr	5.4	
Expected Deliverable/Results/ Outcomes	Title	External Monitor	
	Type	☐Teaching material ☐Learning material ☐Training material	☐Event ☒Report ☒Service/Product

	Description	External evaluator with scientific expertise in the fields as well as EU projects will be selected by the QC. She/he will verify the quality of the project, the achievement of milestones and objectives, and evaluates the results of each WP based on the mid-term and final report as well as on audits with the project partners at one project meeting in beginning of 2017.
	Due date	15-06-2016
	Languages	English, Arabic
Target groups	☒Teaching staff ☒Students ☒Trainees ☒Administrative staff ☒Technical staff ☐Librarians ☐Other	
	If you selected 'Other', please identify these target groups. (Max. 250 characters)	
Dissemination level	☐Department / Faculty ☐Local ☐National ☐Institution ☐Regional ☒International	

Please copy and paste tables as necessary.

Work package type and ref.nr	DISSEMINATION & EXPLOITATION	6
Title	Dissemination, exploitation of results, and sustainability	
Related assumptions and risks	Assumptions are interest and participation of target groups such as students, companies and local authorities. Risks are related to low interest of targets.	
Description	A dissemination plan will be drawn up by the WP leader (ARCA) and discussed within the Scientific and Supervising Committee for the final approval by the Steering Committee. It will focus on two main threads: promoting the reformed curricula, and raising the awareness of the importance of nanotechnology in the educational institutions and the industry. This project is expected to become autonomous after the implementation phase and bring on multiplier effects on education, economic and environment. The sustainability of the Action can be figured out at different levels: a) the preliminary needs analysis; b) the structure of the courses; c) training activities; d) access to labour market. Moreover, sustainability is strictly linked to financial, institutional, social and environmental issues. A sustainability plan will be elaborated at month 7 by ARCA and JU, under the supervision of project's steering committee.	
Tasks	6.1. Developing a dissemination and exploitation plan 6.2. Elaboration of project image and dissemination materials 6.3. Organizing workshops and info-days 6.4. Organizing an Electronic Town Meeting 6.5. Organizing Local Final Conference 6.6. Developing a sustainability plan	

	Estimated Start Date (dd-mm-yyyy)	15-04-2016	Estimated End Date (dd-mm-yyyy)	20-9-2018
Lead Organisation	ARCA, UJ			
Participating Organisation	All JO partners			

Deliverables/results/outcomes

<table>
<tr><td rowspan="6">Expected Deliverable/Results/ Outcomes</td><td>Work Package and Outcome ref.nr</td><td colspan="2" align="right">6.1.</td></tr>
<tr><td>Title</td><td colspan="2">Dissemination and exploitation plan</td></tr>
<tr><td rowspan="2">Type</td><td>☐ Teaching material
☐ Learning material
☐ Training material</td><td>☐ Event
☒ Report
☐ Service/Product</td></tr>
<tr><td>Description</td><td colspan="2">ARCA, the WP leader will draw up a dissemination and exploitation of the INVENT project. The plan will be discussed within the Scientific and Supervising Committee for the final approval by the Steering Committee.. The plan will focus on three main threads:
a) promoting innovation culture in the Jordan universities,
b) linking universities with the business sector,
c) fostering the entrepreneurial attitude of young people.</td></tr>
<tr><td>Due date</td><td colspan="2">15-5-2016</td></tr>
<tr><td>Languages</td><td colspan="2">English</td></tr>
<tr><td rowspan="2">Target groups</td><td colspan="3">☒ Teaching staff
☐ Students
☒ Trainees
☒ Administrative staff
☐ Technical staff
☐ Librarians
☐ Other</td></tr>
<tr><td colspan="3"><i>If you selected 'Other', please identify these target groups.</i>
Other target groups are represented by authorities from PC - directors and top managers of enterprises, who were involved in the project as branch departments. They are customers of innovations; they have privilege to assist effective sustainability</td></tr>
<tr><td>Dissemination level</td><td>☐ Department / Faculty
☐ Institution</td><td>☐ Local
☐ Regional</td><td>☐ National
☐ International</td></tr>
</table>

<table>
<tr><td rowspan="3">Expected Deliverable/Results/ Outcomes</td><td>Work Package and Outcome ref.nr</td><td colspan="2" align="right">6.2</td></tr>
<tr><td>Title</td><td colspan="2">Planning, image and dissemination activities</td></tr>
<tr><td>Type</td><td>☐Teaching material
☐Learning material
☐Training material</td><td>☐Event
☒Report
☒Service/Product</td></tr>
<tr><td></td><td>Description</td><td colspan="2">Elaboration of project image and dissemination materials:
To diffuse the project information a logo and coordinated image to make the Action easily recognizable and to mark each document, deliverable and product and different</td></tr>
</table>

		multilingual (English and Arabic) Brochures elaborated for informing stakeholders on events and for awareness rising on innovation and entrepreneurship will be elaborated.
	Due date	15-5-2016
	Languages	English, Arabic
Target groups	☒Teaching staff ☒Students ☒Trainees ☒Administrative staff ☒Technical staff ☐Librarians ☐Other	
	If you selected 'Other', please identify these target groups. *(Max. 250 characters)*	

Dissemination level	☐Department / Faculty	☐Local	☒National
	☒Institution	☐Regional	☒International

	Work Package and Outcome ref.nr	6.3
	Title	Workshops and Info-days
	Type	☐Teaching material ☒Event ☐Learning material ☒Report ☐Training material ☒Service/Product
Expected Deliverable/Results/ Outcomes	Description	Informative workshops and info-days will be held at the Jordanian Universities and informative materials will be distributed using an interactive approach to elicit ideas during the info sessions and to encourage an ice-breaking climate among participants to share knowledge. A coordinated layout for the information campaign will increase visibility for the project and the partnership who promotes it. Students and researchers will be involved for an active role during the events and also for the choice of most appropriate channels and tools for communication.
	Due date	15-9-2016
	Languages	English, Arabic
Target groups	☒Teaching staff ☒Students ☒Trainees ☒Administrative staff ☒Technical staff ☐Librarians ☒Other	
	If you selected 'Other', please identify these target groups. Other target groups are represented by authorities from PC - directors and top managers of enterprises, who were involved in the project as branch departments. They are customers of innovations; they have privilege to assist effective sustainability	

Dissemination level	☐Department / Faculty ☒Institution	☐Local ☐Regional	☒National ☒International

	Work Package and Outcome ref.nr	6.4
Expected Deliverable/Results/ Outcomes	Title	Organizing an Electronic Town Meeting
	Type	☐Teaching material ☒Event ☐Learning material ☒Report ☐Training material ☒Service/Product
	Description	An e-participation events will be organized in Jordan to get the scientific community in touch with the business world through joint discussion and decision-making on some proposed strategies to promote innovation and bridge the gap between academia, business community, and society. The town meeting methodology for e-participation events, successfully tested within previous EU funded projects (i.e. PARTERRE, NET KITE), is a participative methodology generated in the USA at the beginning of year 2000 to allow democratic interaction and discussion among a huge number of participants on issues of public interest, such as reform laws or local policies. The aim of these e-participation events, to be organized in Jordan under the direction of ARCA, will be to explore existing barriers to entrepreneurial growth in innovative sectors, to research-based business incubation, to interactions between public and private organizations in the technology transfer process, and will let emerge how the local communities may help to boost the process. The staff from the Jordan partners will be trained on site by ARCA to act as facilitators during the town meetings. Through the web tools, matchmaking between business challenges and innovative solutions will be enhanced and supported professionally. Good practices referred to the CTI model and activities will be publicized in order to attract clients from the business system for the science and research offer and the technology transfer facilities and expertise that the Jordan universities can make accessible.
	Due date	15-9-2016
	Languages	English, Arabic
Target groups	☒Teaching staff ☒Students ☒Trainees ☒Administrative staff ☒Technical staff ☐Librarians ☒Other	
	If you selected 'Other', please identify these target groups. Other target groups are represented by authorities from PC - directors and top managers of enterprises, who were involved in the project as branch departments. They are customers of innovations; they have privilege to assist effective sustainability	

Dissemination level	☐Department / Faculty ☒Institution	☐Local ☐Regional	☒National ☒International

	Work Package and Outcome ref.nr		6.5
	Title	Local final conference at JUST	
Expected Deliverable/Results/ Outcomes	Type	☐Teaching material ☐Learning material ☐Training material	☒Event ☐Report ☐Service/Product
	Description	A Final conference, will be organized at JUST after the end of project. The Seminar will allow the meeting between project members and stakeholders to promote the next edition of the INVENT project.	
	Due date	15-09-2018	
	Languages	English, Arabic	
Target groups	☒Teaching staff ☒Students ☒Trainees ☒Administrative staff ☒Technical staff ☐Librarians ☒Other		
	If you selected 'Other', please identify these target groups. Other target groups are represented by authorities from PC - directors and top managers of enterprises, who were involved in the project as branch departments. They are customers of innovations; they have privilege to assist effective sustainability		
Dissemination level	☐Department / Faculty ☒Institution	☐Local ☐Regional	☒National ☐International

	Work Package and Outcome ref.nr		6.6
	Title	Sustainability Plan	
Expected Deliverable/Results/ Outcomes	Type	☐Teaching material ☐Learning material ☐Training material	☐Event ☒Report ☐Service/Product
	Description	This project is expected to become autonomous after the implementation phase and bring on multiplier effects on education, economic and environment. The sustainability of the Action can be figured out at different levels: a) the preliminary needs analysis; b) the structure of the courses; c) training activities; d) access to labour market. Moreover, sustainability is strictly linked to financial, institutional, social and environmental issues. A sustainability plan will be elaborated at month 7 by and MU, JU, under the	

		supervision of project's steering committee. The plan will set guidelines for orienting the implementation of all activities following a sustainability perspective.
	Due date	10-10-2017
	Languages	
Target groups	☒Teaching staff ☒Students ☐Trainees ☒Administrative staff ☐Technical staff ☐Librarians ☒Other	
	If you selected 'Other', please identify these target groups. Other target groups are represented by authorities from PC - directors and top managers of enterprises, who were involved in the project as branch departments. They are customers of innovations; they have privilege to assist effective sustainability	
Dissemination level	☐Department / Faculty ☐Local ☒National ☒Institution ☐Regional ☐International	

Work package type and ref.nr	**MANAGEMENT**	**7**
Title	Management and Operational Structures	
Related assumptions and risks	Assumptions: 1) All partners have clear responsibilities and ready to accomplish their assigned tasks; 2) There is an effective communication between the management team in the project; and 3) local and regional stability. Risks: are related to eventual social or political stability in the region that may affect Jordan and mobility towards and from the Country.	
Description	Coordinator of INVENT is JUST which is responsible for the overall management of the project and the partnership. JUST will be responsible for its implementation according to ERASMUS+ rules, managing the budget, formulating methodology and tools for project implementation, allocating tasks, issuing working plans and guidelines, monitoring progress according to schedule, issuing of reports, organization of meetings and contacts with the Commission. The structure of the project management will consists of: Project Coordinator (PC), Management Team (MT), Project Steering Committee (StC), Scientific Team (SC), and Quality Committee (QC), in addition to Training and Technical Group (TTG). An external auditor will be assigned by each partner to guarantee the compliance with EU regulations and project budget line. The MT will be composed of the PC and the administrative service, a Monitoring Expert, and Finance Expert. PC will supervise and coordinate all activities, ensuring that all partners are working towards the same objectives; contractually, technically and administratively and strictly collaborating with the Management Team. The PC will ensure that all partners' contributions meet the Work Plan expectations. The PC will be responsible for: representing the consortium towards the EC,	

	ensuring effective flow of information between partners, ensuring the implementation of the agreed action plan to the agreed standards and deadlines, ongoing evaluation of project activities and reporting on project progress to the EU, and defining and identifying the project deliverables for the Commission from the inputs received by participants. Responsible for strategic decisions, as well as for the authorization of purchases will be the Steering Committee (StC). Members of the StC will be the project coordinator and representatives from the rest of the partners. The StC will meet twice a year in order to discuss the project progress ensuring its completion according to the schedule and its objectives. The supervision of scientific and technical activities so that they meet the project's objectives and a high level of quality will be assigned to the Scientific and Supervising Committee (SC) where experts from all partners will participate. The SC will report its progress to the coordinator. The QC will be responsible for developing a system for quality, monitoring, and evaluation. The QC will be chaired by an EU partner, and 2 members from JO and two members from EU partners. The preparation and carrying out of the training activities will be assigned to the Training & Technical Group (TTG) in which representatives of all partners will participate. TTG will report its progress also to the coordinator. Permanent and effective communication with all partners will be ensured with the use of a restricted access area of the project website where all project documents will be uploaded. Communication will take place also through face to face meetings, skype meetings, e-mails and telephone contacts. In case of conflicts, the coordinator will make decisions after discussing the matter with all partners. If the conflict is of strategic importance for the successful completion of the project it will be brought to the StC which will take the final decision after voting, with the vote of the coordinator counting double if necessary for achieving majority.
Tasks	7.1. Organizing the Kick-off Meeting and other consortium meetings 7.2. Establishment of management and operational structures 7.3. Establishment of Training and Technical Group (TTG) 7.4. Hiring External Auditors 7.5. Reports

Estimated Start Date (dd-mm-yyyy)	15-10-2015	**Estimated End Date (dd-mm-yyyy)**	15-10-2018
Lead Organisation	JUST		
Participating Organisation	All partners		

Deliverables/results/outcomes

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr		7.1
	Title	KICK-OFF MEETING	
	Type	☐Teaching material ☐Learning material ☐Training material	☒Event ☐Report ☐Service/Product
	Description	The Kick-off meeting will be the first context for sharing the planning among partners and taking decisions about	

		the Action as a whole. It will be held in Jordan during month 1 and will last four days; participants' representatives of all partners and all managing structures will participate. A specific session will be devoted to administrative staff for a clear sharing of the rules for expenditures.
	Due date	15-11-2015
	Languages	English, Arabic
Target groups	☒Teaching staff ☐Students ☒Trainees ☒Administrative staff ☒Technical staff ☐Librarians ☒Other	
	If you selected 'Other', please identify these target groups. Other target groups are represented by authorities from PC - directors and top managers of enterprises, who were involved in the project as branch departments. They are customers of innovations; they have privilege to assist effective sustainability	

Dissemination level	☐Department / Faculty	☐Local	☒National
	☐Institution	☐Regional	☒International

	Work Package and Outcome ref.nr		7.2
	Title	Establishment of MT and StC	
Expected Deliverable/Results/ Outcomes	Type	☐Teaching material ☐Learning material ☐Training material	☐Event ☒Report ☐Service/Product
	Description	The MT and StC will be established during the kick-off meeting, which will be during month 1 of the project. The MT will be comprised of the PC and the administrative service, a Monitoring Expert, and a Finance Expert. The StC committee will be composed of one professor from JUST, as Project Coordinator, and one representative for each partner. The following documents will be drawn: 1. StC Regulations concerning the rules of each representative, the methodology and strategy to reach the project objectives 2. StC agenda. StC will meet six times during the project and will produce six meeting reports.	
	Due date	15-11-2016	
	Languages	English, Arabic	
Target groups	☒Teaching staff ☐Students ☒Trainees ☒Administrative staff ☐Technical staff ☐Librarians		

	☒Other	
	If you selected 'Other', please identify these target groups. Other target groups are represented by authorities from PC - directors and top managers of enterprises, who were involved in the project as branch departments. They are customers of innovations; they have privilege to assist effective sustainability	
Dissemination level	☐Department / Faculty ☐Local ☒Institution ☐Regional	☒National ☒International

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	7.3
	Title	Establishment of Scientific and Supervising Committee (SC)
	Type	☐Teaching material ☐Event ☐Learning material ☒Report ☐Training material ☐Service/Product
	Description	The SC will plan the scientific activities through a specific plan and timetable, scheduling tasks and roles for the preparation and carry out of the didactics and scientific contents. The SC will meet twice a year, for yearly planning and for evaluating the results achieved. SC will lead TTG's activities, through scientific support.
	Due date	15-06-2016
	Languages	English, Arabic
Target groups	☒Teaching staff ☐Students ☒Trainees ☒Administrative staff ☐Technical staff ☐Librarians ☒Other	
	If you selected 'Other', please identify these target groups. *(Max. 250 characters)*	
Dissemination level	☐Department / Faculty ☐Local ☒Institution ☐Regional	☒National ☒International

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	7.4.
	Title	Operational staff
	Type	☐Teaching material ☐Event ☐Learning material ☒Report ☐Training material ☒Service/Product
	Description	The operational staff will be charged with the day-by-day responsibilities, facilitating the work and optimizing time and communication; all components will belong to JUST. The Project coordinator will assign roles and time scheduling, being responsible for operational direction. A Financial Coordinator will assure the clear application of rules and an optimized financial management.
	Due date	01-11-2015

	Languages	English, Arabic		
Target groups	☒Teaching staff ☐Students ☒Trainees ☒Administrative staff ☐Technical staff ☐Librarians ☒Other			
	If you selected 'Other', please identify these target groups. Other target groups are represented by authorities from PC - directors and top managers of enterprises, who were involved in the project as branch departments. They are customers of innovations; they have privilege to assist effective sustainability			
Dissemination level	☐Department / Faculty ☒Institution	☐Local ☐Regional	☒National ☒International	

	Work Package and Outcome ref.nr		7.5.
Expected Deliverable/Results/ Outcomes	Title	Establishment of Training and Technical Group	
	Type	☒Teaching material ☒Learning material ☒Training material	☐Event ☒Report ☐Service/Product
	Description	The TTG, composed of one professor and one assistant for each partner University, will be elected according to the following criteria: I) Expertise in Nanotechnology; II) Previous experience in international projects, particularly TEMPUS or Erasmus+ projects; and III) Availability to ensure continuity in implementing the activities carried out by TTG. The TTG will prepare and carry out joint training activities at the Jordanian Universities. Once established, the TTG members and the methodology to be followed, the operational steps will be followed. A preparatory meeting is foreseen to harmonize the content elaboration. TTG will meet once a year to take operational decisions concerning the application of the methodology chosen, content elaboration and all operational aspects of teaching activities, facilities and technologies. TTG will effectively carry out the survey about local needs and about university facilities, also elaborating the contents on the basis of the guidelines provided by the SC.	
	Due date	15-06-2016	
	Languages	English, Arabic	
Target groups	☒Teaching staff ☐Students ☒Trainees ☒Administrative staff ☐Technical staff ☐Librarians ☐Other		

	If you selected 'Other', please identify these target groups. Other target groups are represented by authorities from PC - directors and top managers of enterprises, who were involved in the project as branch departments. They are customers of innovations; they have privilege to assist effective sustainability
Dissemination level	☐Department / Faculty ☐Local ☒National ☒Institution ☐Regional ☒International

<table>
<tr>
<td rowspan="6">Expected Deliverable/Results/ Outcomes</td>
<td>Work Package and Outcome ref.nr</td>
<td colspan="2">7.6</td>
</tr>
<tr>
<td>Title</td>
<td colspan="2">External Auditors</td>
</tr>
<tr>
<td>Type</td>
<td>☐Teaching material
☐☒Learning material
☐Training material</td>
<td>☐Event
☒Report
☒Service/Product</td>
</tr>
<tr>
<td>Description</td>
<td colspan="2">For the financial management of the project, each partner will assign a qualified external auditor to guarantee the compliances with the Erasmus+ financial regulations.</td>
</tr>
<tr>
<td>Due date</td>
<td colspan="2">15-04-2016</td>
</tr>
<tr>
<td>Languages</td>
<td colspan="2">English, Arabic</td>
</tr>
<tr>
<td rowspan="2">Target groups</td>
<td colspan="3">☐Teaching staff
☐Students
☐Trainees
☒Administrative staff
☐Technical staff
☐Librarians
☒Other</td>
</tr>
<tr>
<td colspan="3">If you selected 'Other', please identify these target groups.
Other target groups are represented by authorities from PC - directors and top managers of enterprises, who were involved in the project as branch departments. They are customers of innovations; they have privilege to assist effective sustainability</td>
</tr>
<tr>
<td>Dissemination level</td>
<td colspan="3">☐Department / Faculty   ☐Local   ☐National
☒Institution   ☐Regional   ☐International</td>
</tr>
</table>

<table>
<tr>
<td rowspan="3">Expected Deliverable/Results/ Outcomes</td>
<td>Work Package and Outcome ref.nr</td>
<td colspan="2">7.7</td>
</tr>
<tr>
<td>Title</td>
<td colspan="2">Financial and Administrative Management</td>
</tr>
<tr>
<td>Type</td>
<td>☒Teaching material
☒Learning material
☒Training material</td>
<td>☐Event
☒Report
☐Service/Product</td>
</tr>
<tr>
<td></td>
<td>Description</td>
<td colspan="2">JUST will coordinate technical, financial and administrative management of the project. It will be transparent and accurate in all transactions and will maintain effective communication with all partners. JUST will organise Kick-off meeting and appoint the project staff, complete and submit the intermediate and final reports of the project. External financial auditing will be hired to certify expenditures incurred.</td>
</tr>
</table>

	Due date	15-10-2015, 01-10-2018
	Languages	English, Arabic
Target groups	☒Teaching staff ☒Students ☒Trainees ☒Administrative staff ☒Technical staff ☐Librarians ☒Other	
	If you selected 'Other', please identify these target groups. Other target groups are represented by authorities from PC - directors and top managers of enterprises, who were involved in the project as branch departments. They are customers of innovations; they have privilege to assist effective sustainability	
Dissemination level	☐Department / Faculty ☐Local ☐National ☐Institution ☐Regional ☒International	

	Work Package and Outcome ref.nr	7.8
	Title	Submission of Intermediate and Final Reports
	Type	☐Teaching material ☐Event ☐Learning material ☒Report ☐Training material ☐Service/Product
Expected Deliverable/Results/ Outcomes	Description	JUST management team will prepare, draft and compile progress monthly report and present to the steering committee by email. Once approved, the report will be uploaded into the partner area of the website. Partners will be asked to keep copies of all boarding travel cards, staff cost payments and other transactions. Scanned copies of those will also be uploaded into the website. Intermediate and final report will be submitted to EC on schedule.
	Due date	15-04-2017, 01-10-2018
	Languages	English, Arabic
Target groups	☒Teaching staff ☒Students ☒Trainees ☒Administrative staff ☒Technical staff ☐Librarians ☒Other	
	If you selected 'Other', please identify these target groups. Other target groups are represented by authorities from PC - directors and top managers of enterprises, who were involved in the project as branch departments. They are customers of innovations; they have privilege to assist effective sustainability	
Dissemination level	☐Department / Faculty ☐Local ☐National ☐Institution ☐Regional ☒International	

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	7.9	
	Title	Consortium meetings	
	Type	☐Teaching material ☐Learning material ☐Training material	☒Event ☒Report ☐Service/Product
	Description	Every six months, a consortium meeting will be organized in one country. The meeting will involve all the committees established.	
	Due date	15-04-2017, 01-10-2018	
	Languages	English, Arabic	
Target groups	☒Teaching staff ☐Students ☐Trainees ☒Administrative staff ☐Technical staff ☐Librarians ☒Other		
	If you selected 'Other', please identify these target groups. Other target groups are represented by authorities from PC - directors and top managers of enterprises, who were involved in the project as branch departments. They are customers of innovations; they have privilege to assist effective sustainability		
Dissemination level	☐Department / Faculty ☐Institution	☐Local ☐Regional	☐National ☒International

Please copy and paste tables as necessary.

H.2. Explanation of work package expenditures

Please explain what costs will be associated to each work package and covered by lump sums, flat rates, unit costs, and real costs. Provide information on the travels necessary to complete the workpackage. Detailed information on each travel must be indicated in the Budget Excel table. If purchase of equipment is required, explain how the respective equipment addresses the needs identified in the project. Remember that the specification of each item, including the partner country university/ies at which equipment will be installed, must be detailed in the Budget Excel table. If any subcontracting is considered necessary for the implementation of the project, please explain why the task cannot be performed by the consortium members themselves (limit 3000 characters)*.*

WP1: Analysis of training needs: This WP will be conducted completely in Jordan by the JO partners. Thus local mobility will be needed. The cost associated with this WP will be mainly staff cost (350 staff days) and the cost of the surveys to be used by the study. Total cost of this WP is about 23,000 Euro

WP2: Undergraduate curriculum development: The main cost associated with this WP is the equipment which will be needed for the implementation of the curricula. JO universities, except JUST, do not have any equipment for nanotechnology experiments. The purchased equipment will be property of the consortium, thus, all partners can use all the equipment. MoU will be signed in this regards. Regulation and procedures locally and with respect to EU will be respected in the tendering process. Cost of the Equipment will be in total of 261,000 Euro. Other main cost will be associate with mobility from Jordan to EU with total of 13 mobility flows. Other main associated cost is the staff cost since this WP involves the preparation of the courses and the course materials, and the creation of web platform. Total staff cost is 1075 staff days (about 90,000 Euro). Other associated cost will be attributed subcontracting of web development expert and to printing and publishing.

WP3: Capacity building of Jordanian staff and student: This WP aims at building capacity of Jordanian staff and students in nanotechnology. To achieve this, mobility of staff and students are needed. Total of 40 mobility flows will be needed. The staff cost associated with this WP is for the selection process, workshops and seminars, in addition to the staff cost for the EU partners hosting the JO staff and students. Total staff cost of 925 staff days (about 79,000 Euro). Other associated cost will be attributed to printing and publishing. Total mobility cost for WP2 and 3 which are related to development is 151,000 Euro.

WP4: Quality: The associated cost in the WP is attributed to staff cost and subcontracting costs associated with the cost for the external monitor (13,000 Euro). Total staff cost is 171 staff days (16,000 Euro). Other associated costs are attributed to printing and publishing.

WP.5: Dissemination and Exploitation: The associated costs attributed in this WP are staff cost (390 staff days, about 31,000 Euro, subcontracting cost for the ETM activity (10,000 Euro), 1 mobility of for UNIPA to manage the ETM, and costs of the dissemination and promotion products.

WP6.: Management: The associated costs related to this WP are staff cost (1340 staff days, about 140,000 Euro), mobility related to kick-off meeting (10 mobility flows), final conference in Jordan (10 mobility flows), and a consortium meeting in Palermo, Italy (23 mobility flows), Consortium meeting in Dortmund (23 mobility flows), consortium meeting in Athens (23 mobility flows), Consortium meeting in UBU (23 mobility flows), and the cost of the external auditors for all partners (77,000 Euro), total cost related to mobility in this WP is 68,000 Euro..

*If your project involves a**Special Mobility Strand***, please*explain what support will be required under each budget heading in order to cover organisational costs (such as special needs, exceptional, non-online linguistic support, etc.)* (limit 2000 characters)*.*

H.3 Consortium partners involved and resources required to complete the work package

Indicative input of consortium staff - *The total number of days per staff category should correspond with the information provided in the budget tables.*

Work Package Ref.nr	Partner nr	Partner acronym	Country	Number of staff days[1]					Role and tasks in the work package
				Category 1	Category 2	Category 3	Category 4	Total	
PREPARATION	P1	JUST	Jordan	55	15	0	40	110	Leader of WP. Prepare, distribute, and analyse the surveys. Prepare the report on capacity building.
	P2	UJ	Jordan	0	10	0	0	10	Prepare, distribute, and analyse the surveys.
	P3	MU	Jordan	0	45	0	0	45	Co-Leader of WP. Prepare, distribute, and analyse the surveys.
	P4	PSUT	Jordan	0	10	0	0	10	Co-Leader of WP. Prepare, distribute, and analyse the surveys.
	P5	ASRF	Jordan	3	12	0	0	15	Co-Leader of WP. Prepare, distribute, and analyse the surveys.
	P9	ARCA	Italy	5	5	0	0	10	Participate in the analysis of the collected surveys.
	P12	Almotahedah	Jordan	0	10	0	0	10	Prepare, distribute, and analyse the surveys.
	P13	JCI	Jordan	0	10	0	0	10	Prepare, distribute, and analyse the surveys.
	P14	AULE	Jordan	0	10	0	0	10	Prepare, distribute, and analyse the surveys.
	P15	HCST	Jordan	0	10	0	0	10	Prepare, distribute, and analyse the

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[1] *Please see Programme Guide, Part B for your action, Table A – Project Implementation (amounts in Euro per day) Programme Countries and Table B - Project Implementation (amounts in Euro per day) Partner Countries.*

									surveys.
			SUBTOTAL	63	132	0	40.0	240	
DEVELOPMENT	P1	JUST	Jordan	75	95	65	50	285	MT. Co-Leader of WP. Managing, providing consultations and trainings of staff CTIs of PC. Collect questions from PC CTIs to be analysed by EU partners. Installation of equipment. Organize training workshops and courses on innovation to enterprises. Select staff for training. Follow-up on training. Participate in online consultations, participates in trainings, which are carried out by EU co-beneficiaries
	P2	UJ	Jordan	0	30	60	0	90	Co-Leader of WP. Managing, providing consultations and trainings of staff CTIs of PC. Collect questions from PC CTIs to be analysed by EU partners. Installation of equipment. Organize training workshops and courses on innovation to enterprises. Select staff for training. Follow-up on training.
	P3	MU	Jordan	0	30	60	0	90	Managing, providing consultations and trainings of staff CTIs of PC. Collect questions from PC CTIs to be analysed by EU partners. Installation of equipment. Organize training workshops and courses on innovation to enterprises. Select staff for training. Follow-up on training. Participates in online consultations, participate in trainings, which are carried out by EU co-beneficiaries

15.0

	P4	PSUT	Jordan	3	30	60	0	93	Co-Leader of WP. Managing, providing consultations and trainings of staff CTIs of PC. Collect questions from PC CTIs to be analysed by EU partners. Installation of equipment. Organize training workshops and courses on innovation to enterprises. Select staff for training. Follow-up on training. Participates in online consultations, participate in trainings, which are carried out by EU co-beneficiaries .
	P5	ASRF	Jordan	0	15	30	0	45	Participates in update of the data-base, selects, participate in trainings, which are carried out by EU co-beneficiaries the audience for trainers, directs entrepreneurs to CTI for consultations, makes up facilities for use of data-base by entrepreneurs. Make a list of questions related to the activity of CTI, addresses them to HTWK, participates in online consultations, participates in trainings, which are carried out by EU co-beneficiaries
	P6	HTWK	German y	15	65	45	0	120	Leader of the WP. Managing, providing consultations and trainings of staff CTIs of PC. HTWK gets questions from PC CTIs, analyse them and planned consultations (date, responsible person) and informs. It also provides consultations on problems, that are is in its competence - provides online-conferences and has correspondence

								via Internet. Carries out face to face for the staff of CTI from PC.
P7	UDO	Spain	5	10	10	0	25	Managing, providing consultations and trainings of staff CTIs of PC. Carries out face to face for the staff of CTI from PC.
P8	UCY	Cyprus	15	18	10	0	43	Managing, providing consultations and trainings of staff CTIs of PC. Carries out face to face for the staff of CTI from PC.
P9	ARCA	Italy	5	25	19	0	49	Leader on a WP on capacity building. Managing, providing consultations and trainings of staff CTIs of PC. Carries out face to face for the staff of CTI from PC.
P10	PB	Portugal	5	30	19	0	54	Leader of WP on capacity building. Managing, providing consultations and trainings of staff CTIs of PC. Carries out face to face for the staff of CTI from PC.
P11	CRE.THI.D EV	Greece	5	20	10	0	40	Managing, providing consultations and trainings of staff CTIs of PC. Carries out face to face for the staff of CTI from PC.
P12	Almutahe dah	Jordan	0	35	10	0	45	Participates in update of the data-base, selects, participates in trainings, which are carried out by EU co-beneficiaries the audience for trainers, direct entrepreneurs to CTI for consultations. Participate in online consultations, participates in trainings, which are carried out by EU co-beneficiaries
P13	JCI	Jordan	0	5	10	0	15	Participates in update of the data-base, selects, participates in trainings, which are carried out by EU co-beneficiaries the audience for trainers, direct entrepreneurs to CTI for consultations, makes up facilities for use of data-base

									by entrepreneurs. Participate in online consultations, participates in trainings, which are carried out by EU co-beneficiaries
	P14	AULE	Jordan	0	10	10	0	20	Participates in update of the data-base, selects, participates in trainings, which are carried out by EU co-beneficiaries the audience for trainers, direct entrepreneurs to CTI for consultations. Participate in online consultations, participates in trainings, which are carried out by EU co-beneficiaries
	P15	HCST	Jordan	0	10	10	0	20	Participates in update of the data-base, selects, participates in trainings, which are carried out by EU co-beneficiaries the audience for trainers, direct entrepreneurs to CTI for consultations. Participate in online consultations, participates in trainings, which are carried out by EU co-beneficiaries
			SUBTOTAL	138	483	428	50.0	1099	
QUALITY PLAN	P1	JUST	Jordan	5	40	00	20	65	Will assist in all quality issues according to the demand of Jordan, communicate with the partners in terms of deliverable quality, design quality standards in compliance with the European guidelines for higher education, take care that the Jordanian regulation in higher education are met, advise in Jordanian accreditation regulation, participate in selection of external monitor
	P2	UJ	Jordan	0	40	0	0	40	Will assist in all quality issues according

									to the demand of Jordan, communicate with the partners in terms of deliverable quality, design quality standards in compliance with the European guidelines for higher education, take care that the Jordanian regulation in higher education are met, advise in Jordanian accreditation regulation, participate in selection of external monitor
	P3	MU	Jordan	5	30	0	0	35	Will assist in all quality issues according to the demand of Jordan, communicate with the partners in terms of deliverable quality, design quality standards in compliance with the European guidelines for higher education, take care that the Jordanian regulation in higher education are met, advise in Jordanian accreditation regulation, participate in selection of external monitor
	P4	PSUT	Jordan	0	30	0	0	30	Will assist in all quality issues according to the demand of Jordan, communicate with the partners in terms of deliverable quality, design quality standards in compliance with the European guidelines for higher education, take care that the Jordanian regulation in higher education are met, advise in Jordanian accreditation regulation, participate in selection of external monitor
	P5	ASRF	Jordan	0	10	0	0	10	Will assist in all quality issues according

									to the demand of Jordan, communicate with the partners in terms of deliverable quality, design quality standards in compliance with the European guidelines for higher education, take care that the Jordanian regulation in higher education are met, advise in Jordanian accreditation regulation, participate in selection of external monitor
	P6	HTWK	Germany	0	10	0	0	10	Participation in preparation of Monitoring, Evaluation and Quality Plan. Selection of external monitor. Reports.
	P7	UDO	Spain	0	10	0	0	10	Participation in preparation of Monitoring, Evaluation and Quality Plan. Selection of external monitor. Reports.
	P8	UCY	Cyprus	0	10	0	0	10	Participation in preparation of Monitoring, Evaluation and Quality Plan. Selection of external monitor. Reports.
	P9	ARCA	Italy	0	10	0	0	10	Participation in preparation of Monitoring, Evaluation and Quality Plan. Selection of external monitor. Reports.
	P10	PB	Portugal	0	10	0	0	10	Participation in preparation of Monitoring, Evaluation and Quality Plan. Selection of external monitor. Reports.
	P11	CRE.THI.DEV	Greece	0	20	0	0	20	Leader of WP. Participation in preparation of Monitoring, Evaluation and Quality Plan. Selection of external

								monitor. Reports.
	P12	Almutahe dah	Jordan	0	30	0	0	30	Co-Leader of WP. Participation in preparation of Monitoring, Evaluation and Quality Plan. Selection of external monitor. Reports.
	P13	JCI	Jordan	0	10	0	0	10	Participation in preparation of Monitoring, Evaluation and Quality Plan. Selection of external monitor. Reports.
	P14	AULE	Jordan	0	40	0	0	40	Leader of the QC. Prepare Monitoring, Evaluation and Quality Plan. Selection of external monitor. Reports.
	P15	HCST	Jordan	0	40	0	0	40	Will assist in all quality issues according to the demand of Jordan, communicate with the partners in terms of deliverable quality, design quality standards in compliance with the European guidelines for higher education, take care that the Jordanian regulation in higher education are met, advise in Jordanian accreditation regulation, participate in selection of external monitor
			SUBTOTAL	10.0	340.0	0	20.0	370	
DISSEMINATION & EXPLOITATION	P1	JUST	Jordan	20	60	00	50	130	Prepare dissemination materials. Organize info-days. Coordinate and organize the ETM. Participate in final conference.
	P2	UJ	Jordan	10	40	0	50	100	Co-Leader of WP. Will coordinate and oversee all dissemination activities of the project, prepare the dissemination plan, produce the promotion materials, design and operate the website,

								materials. Organize info-days. Participate in the ETM. Participate in final conference.
P3	MU	Jordan	0	30	0	50	80	Prepare dissemination materials. Organize info-days. Coordinate and organize the ETM. Participate in final conference.
P4	PSUT	Jordan	0	30	0	50	80	Prepare dissemination materials. Organize info-days. Coordinate and organize the ETM. Participate in final conference.
P5	ASRF	Jordan	0	30	0	50	80	Prepare dissemination materials. Organize info-days. Coordinate and organize the ETM. Participate in final conference.
P6	HTWK	Germany	0	1	0	50	1	Participate in final conference.
P7	UDO	Spain	0	1	0	0	1	Prepare dissemination materials. Organize info-days. Participate in the ETM. Participate in final conference.
P8	UCY	Cyprus	0	15	0	0	15	Participate in final conference.
P9	ARCA	Italy	5	1	0	50	56	Leader of WP. Participate and train in the ETM. Participate in final conference.
P10	PB	Portugal	0	1	0	0	1	Participate in final conference.
P11	CRE.THI.DEV	Greece	0	1	0	0	1	Participate in final conference.
P12	Almotahida	Jordan	0	50	0	30	80	Prepare dissemination materials. Organize workshops. Participate in the ETM. Participate in final conference.
P13	JCI	Jordan	0	10	0	50	60	Prepare dissemination materials. Organize workshops. Participate in the ETM. Participate in final conference.

	P14	AULE	Jordan	0	10	0	50	60	Prepare dissemination materials. Organize workshops. Participate in the ETM. Participate in final conference.
	P15	HCST	Jordan	0	10	0	50	60	Prepare dissemination materials. Organize workshops. Participate in the ETM. Participate in final conference.
			SUBTOTAL	35	290	00.0	480	855	
MANAGEMENT	P1	JUST	Jordan	270	90	50	100	510	Project management. Financial and technical management. Member of all committees. Prepare all the needed reports to EC. Prepare all consortium meetings.
	P2	UJ	Jordan	30	40	0	80	150	Will attend the kick-off and all other meetings and participate in project activities, supply staff, resources and information as and when requested by the project grant holder, nominate one staff member to the SC and Scientific Committee each, and contribute to the intermediate and final reports of the project.
	P3	MU	Jordan	20	25	0	80	125	Will attend the kick-off and all other meetings and participate in project activities, supply staff, resources and information as and when requested by the project grant holder, nominate one staff member to the SC and Scientific Committee each, and contribute to the intermediate and final reports of the project.
	P4	PSUT	Jordan	20	25	0	80	130	Will attend the kick-off and all other meetings and participate in project activities, supply staff, resources and

									information as and when requested by the project grant holder, nominate one staff member to the SC and Scientific Committee each, and contribute to the intermediate and final reports of the project.
	P5	ASRF	Jordan	5	20	0	20	45	Will attend the kick-off and all other meetings and participate in project activities, supply staff, resources and information as and when requested by the project grant holder, nominate one staff member to the SC and Scientific Committee each, and contribute to the intermediate and final reports of the project.
	P6	HTWK	Germany	10	20	0	80	110	Will attend the kick-off and all other meetings and participate in project activities, supply staff, resources and information as and when requested by the project grant holder, nominate one staff member to the SC and Scientific Committee each, and contribute to the intermediate and final reports of the project.
	P7	UDO	Spain	15	30	0	80	125	Will attend the kick-off and all other meetings and participate in project activities, supply staff, resources and information as and when requested by the project grant holder, nominate one staff member to the SC and Scientific Committee each, and contribute to the intermediate and final reports of the project.

	P8	UCY	Cyprus	20	25	0	80	125	Will attend the kick-off and all other meetings and participate in project activities, supply staff, resources and information as and when requested by the project grant holder, nominate one staff member to the SC and Scientific Committee each, and contribute to the intermediate and final reports of the project.
	P9	ARCA	Italy	12	28	0	80	120	Co-manager. Will attend the kick-off and all other meetings and participate in project activities, supply staff, resources and information as and when requested by the project grant holder, nominate one staff member to the SC and Scientific Committee each, and contribute to the intermediate and final reports of the project.
	P10	PB	Portugal	13	20	0	40	73	Will attend the kick-off and all other meetings and participate in project activities, supply staff, resources and information as and when requested by the project grant holder, nominate one staff member to the SC and Scientific Committee each, and contribute to the intermediate and final reports of the project.
	P11	CRE.THI.D EV	Greece	30	30	0	40	100	Will attend the kick-off and all other meetings and participate in project activities, supply staff, resources and information as and when requested by the project grant holder, nominate one staff member to the SC and Scientific

									Committee each, and contribute to the intermediate and final reports of the project.
	P12	Almutahe dah	Jordan	40	30	0	40	100	Will attend the kick-off and all other meetings and participate in project activities, supply staff, resources and information as and when requested by the project grant holder, nominate one staff member to the SC and Scientific Committee each, and contribute to the intermediate and final reports of the project.
	P13	JCI	Jordan	20	30	0	40	90	Will attend the kick-off and all other meetings and participate in project activities, supply staff, resources and information as and when requested by 0the project grant holder, nominate ne staff member to the SC and Scientific Committee each, and contribute to the intermediate and final reports of the project.
	P14	AULE	Jordan	10	10	0	20	40	Will attend the kick-off and all other meetings and participate in project activities, supply staff, resources and information as and when requested by the project grant holder, nominate one staff member to the SC and Scientific Committee each, and contribute to the intermediate and final reports of the project.
	P15	HCST	Jordan	10	10	0	10	30	Will attend the kick-off and all other meetings and participate in project activities, supply staff, resources and

								information as and when requested by the project grant holder, nominate one staff member to the SC and Scientific Committee each, and contribute to the intermediate and final reports of the project.
			SUBTOTAL	515	433	50	430	1478	
			TOTAL	767	1678	478	1020	3993	

Please insert rows as necessary

Subcontracting of tasks to external bodies should be very occasional. The specific competences and particular expertise needed to reach the project objectives should be found in the consortium and should determine its composition. Subcontracting is intended for specific, time-bound, project-related tasks which cannot be performed by the Consortium members themselves.

Tasks that will be subcontracted:

Work Package Ref.nr	Partner responsible for sub-contracting (Acronym)	Country	Number of days (where appropriate)	Brief description of task
WP4	JUST	Jordan		A web design expert will be subcontracted to build an interactive web site for the INVENT project. The Platform will be composed by: the website, Interactive Tools, Communication platform and the IMVENT stakeholders database. The website aims to disseminate information regarding the project, its partners and activities; it will be visualized by any browser and an easy access and use by a disabled person will be foreseen. An Intranet Area, accessible thought user authentication.
WP5	JUST	Jordan		An external evaluator with scientific expertise in the fields as well as EU projects will be selected by the QC. She/he will verify the quality of the project, the achievement of milestones and objectives, and evaluates the results of each WP based on the mid-term and final report as well as on audits with the project partners at one project meeting in beginning of 2017
WP6	JUST	Jordan		An EU expert in conducting and organizing Electronic Town Meeting (ETM) will be hired to organize an ETM in Jordan. This methodology will be used to gather all stakeholders in a one-day mini-conference where importance, needs, SWOT analysis related to nanotechnology will be addressed.
WP7	All	Jordan, Germany, Italy, Greece, Cyprus, Italy, Spain		External Auditors: For the financial management of the project, each EU partner will assign a qualified external auditor to guarantee the compliances with the Erasmu+ financial regulations. For JO partners, one auditor will be hired for all.

Please insert rows as necessary.

PART I – Special Mobility Strand
Applies *ONLY to cooperation projects with partner countries from REGIONS 1, 2 and 3*

Projects may organise mobility activities of students, researchers and staff so far as they support/complement the other activities of the **Capacity Building** project and bring added value in the realisation of the project's objectives. Mobility activities do not constitute the main activities for Capacity Building.

I.1. Relevance of mobility activities
Please describe what kind of mobility activities are foreseen in the Special Mobility Strand, what are their objectives and expected results. Explain how the mobility activities of students, researchers and staff support/complement the other activities of the Capacity Building and bring added value in the realisation of the project's objectives (limit 3000 characters).

I.2. Identification and selection of the participants
Please describe the procedures set up for identification and selection of participants for the mobility activity (limit 1000 characters).

I.3. Preparation and support
Please describe the structure for preparation of the participants for the mobility activity, including specific training or course, linguistic preparation etc. Please explain the support provided in terms of accommodation, insurances, etc. Please explain the quality measures set up in the sending and receiving organisations for monitoring the mobility activity and measures to be taken if the results foreseen are not met (limit 2000 characters).

I.4. Involvement of people with fewer opportunities
Does your project involve people with fewer opportunities?☐YES ☐NO

IF YES, how many participants coming from which countries and organisations would fall under this category? Specify the type of situation of fewer opportunities these participants are facing (limit 2000 characters).

Please explain the nature of the support required and how it will be addressed, so that these persons can fully engage in the foreseen activities (limit 1000 characters).

I.5. Recognition and validation of learning outcomes

Please explain how the project intends to recognise and validate the teaching and/or learning outcomes of the participants (limit 1000 characters).

PART J - OTHER EU GRANTS

Please list the **projects** for which the organisationsinvolved in this application have received financial support from EU programmes.

Programme or initiative	Reference number	Beneficiary Organisation	Title of the Project

Please insert rows as necessary.

*Please list **other grant applications** submitted by your organisation, or by any partner organisation in this project proposal. For each grant application, please mention the EU Programme concerned and the amount requested.*

Programme concerned	Beneficiary Organisation	Amount requested

Please insert rows as necessary.

Please make sure that you <u>fully</u> completed each part of this application form, as follows:

☐   PART D - Quality of the project team and the cooperation arrangements

☐   PART E - Project characteristics and relevance

☐   PART F - Quality of the project design and implementation

☐   PART G - Impact, dissemination and exploitation, sustainability

         ☐   Logical Framework Matrix

         ☐   Workplan

☐   PART H - Work packages

☐   PART I – Special Mobility Strand (where applicable)

☐   PART J - Other EU Grants