ANNEX 4

Erasmus Mundus Action 2 – Strand 1 /

PROJECT SUMMARY SHEET

For Office Use only: - Project Reference	*To be filled only by the Agency* _____

	Title of proposal	**GreenIT for the benefit of civil society**	
		Name of organisation	Country
	Applicant	Universidade de Vigo	Spain
	Co-coordinator	University of Sfax	Tunisia
	Partner 1	Carlos III University of Madrid	Spain
	Partner 2	University of Porto	Portugal
	Partner 3	Polytechnic of Milan	Italy
	Partner 4	UNINETTUNO - International Telematic University	Italy
	Partner 5	Bordeaux 1 University	France
	Partner 6	Telecom SudParis	France
	Partner 7	Hamburg University of Technology	Germany
	Partner 8	Lodz University of Technology	Poland
	Partner 9	University of Chemical Technology and Metallurgy – Sofia	Bulgary
	Partner 10	University of Monastir	Tunisia
	Partner 11	Ibn Tofail University	Morocco
	Partner 12	Abdelmaled Esaâdi University	Morocco
	Partner 13	University Hassan II Casablanca	Morocco
	Partner 14	University of Beni-Suef	Egypt
	Partner 15	Future University	Egypt
	Partner 16	Cairo University	Egypt
	Partner 17	University Abderrahmane MIRA of Béjaïa	Algeria
	Partner 18	University M'Hamed Bougara Boumerdes	Algeria
	Associate 1	Externaliza	Spain
	Associate 2	SocialWare Lab	Spain
	Associate 3	Gradiant	Spain
	Associate 4	GEG – Gabinete de Estruturas e Geotecnia	Portugal (Libya

				delegation)
	Associate 5		CYNAPSYS Software Enterprise	Tunisia
	Associate 6		GreenTIC	Morocco
	Associate 7		Association of Sustainable Innovation in Tunisia	Tunisia
	Associate 8		Association Marocaine pour la Protection du Littoral et Développement Durable (AMPLDD)	Morocco
	Countries targeted		Tunisia, Morocco, Egypt, Algeria, Libya	
	Project duration (months)		48	
	Amount requested (EUR)		4.251.900 €	
Legal Representative (e.g. Rector)		Full name	D. Manuel Fernández Iglesias	
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		Tel/fax	+34 /986 813954 / +34 / 986 813819	
		E-mail	internacional@uvigo.es;ori1@uvigo.es	
Project contact person e.g. project co-ordinator		Full name	Rebeca Pilar Díaz Redondo	
		Postal address	Escuela de Ingeniería de Telecomunicación (s/n) - Campus Universitario de Vigo. 36310, Vigo (Pontevedra) SPAIN	
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Project objective:

The mobility plan in this action was designed with the aim of deploying the horizontal principles of the European Union for economic & social development in Third-Countries through the cooperation in higher education, research & innovation and around the thematic area "Greent IT for the benefit of Civil Society". The proposal promotes European HEI as centres of excellence in learning & research around Green IT and drives this excellence to North Africa countries in order to contribute to their better governance & social cohesion but also to connect Arab countries to the global economy. With this in mind, the following are the 4-fold objectives of this proposal:

1. Economic Development

1.1 Improve capacities of technological innovation and transfer by developing strong links with relevant research & innovation centres.

1.2 Foster competences and skills required by the labour market to reinforce the students' employability.

1.3 Promote training required by Third Countries in order to use Green-IT related knowledge to access to the global marketplace.

2. Social Development

2.1 Promote equal training opportunities for vulnerable groups and socio-economically disadvantaged students, with special emphasis on gender balance which is a main priority in Arab countries, where women historically have been subject to restrictions of their rights.

2.2 Involve HEIs in North Africa to contribute to Third-Countries' national development needs to transform economy and governance.

2.3 Given the especially unfavourable training conditions for women in Arab countries, promote equality between men and women.

2.4 Promote training required by Third Countries in order to use Social Computing & Green-IT to improve governance & social inclusion in the region.

2.5. Contribute to major developments in the areas of: justice, freedom, security and cultural dialogue.

3. Education and Employability

3.1- Contribute to the access to knowledge and education. Offer students training and knowledge in fields with prominent employability options.

3.2 Increase the international visibility of Arab HEI within the European Higher Education Area.

3.3 Establish the basis for defining new Master and Doctoral programmes in the Third-Countries involved, as well as the possibility of defining new coordinated Master and Doctoral programmes among the partners.

3.4 Improve the teaching capacity of the HEIs involved by the exchange of knowledge and experience in the partnership.

3.5. Offer students participating in the mobility professional training.

4. Research & Innovation

4.1 Improve the research capacity in terms of quality and quantity of research output of the partners by transferring know-how and experience between Europe and the Arab countries in Green IT related areas. Contribute to advance the Euro-Mediterranean Higher Education, Science and Research Area, especially in strong innovative areas.

4.2 Enrich and improve the research programmes by the exchange of researchers among the partners.

4.3 Maintain the research network after the end of the European funding.

4.4. Implementation of the ErasmusMundusGREEN social network.

Brief description:

Consortium description and organization model:

This Erasmus Mundus Action 2 Strand 1 partnership for Lot 1 (Algeria, Morocco, Tunisia, Egypt, Libya) will establish a mobility network around Green IT, which involves 10 European partners on the one side and 10 Arab countries partners in the other side. The Arab HEIs are 2 from Tunisia, 3 from Morocco, 2 from Algeria and 3 from Egypt. Because of increasing tensions among various militia groups and political factions, it has been impossible to include any HEI from Libya which could sign a commitment for 48 months. Our action wishes to put special emphasis in dissemination in Libya to attract mobilities from this country, especially for students in vulnerable situations. In order to do that, we have incorporated an associate from Portugal which develops business activities and has a delegation in Libya and will be the link to promote our mobility flows there.

Numbers are balanced to give the maximum priority to the flows from our Third Partner Countries towards the European universities. The number of the expected mobilities has risen from the minimum fixed in the call to 185 as we wish to foster mobility.

All the European partners included in the partnership have a long experience and knowledge and offer high quality undergraduate, master and doctorate degrees, and specialized research in environmental sustainability, energy-efficient computing, renewable energy sources, IT infrastructure, IT industries and marine resources, among other innovative fields. Our project will train students at all levels (71 undergraduate, 46 master, 22 doctorate, 18 post-doctorate) with a focus on the promotion of the development of research and the transfer of that research (with the collaboration of the

associated members) in these fields, thus contributing to training staff in one of the key priorities of the Union for the Mediterranean: the Horizon 2020 "the de-pollution of the Mediterranean" to achieve a cleaner Mediterranean.

The project does not put its only emphasis on exchange of education and research skill, but also in cooperation related issues which advice to incorporate third-countries into the horizontal principles of the European Higher Education Area. With this aim the proposal gives a main role to third countries in the management of the action. So that, the action will be joint coordinated by (1) the Universidade de Vigo from Spain, the applicant, and (2) the University of Sfax from Tunisia, the joint coordinator. The University of Vigo has a large experience in this kind of international projects, as well the University of Sfax, which has actively participated in several European projects. The joint coordinator plays an essential role in the whole process. Because of its knowledge about the idiosyncrasy of the North African countries and its geographical closeness, the joint coordinator is going to maintain an information point to organise the practical issues related to the flows: consulate information and, special requirements of students/staff, etc. The University of Sfax, as joint coordinator will also provide assistance regarding the visa procedures and monitoring, so that students/staff participating in the mobility flows will be able to speed up bureaucracy matters. As regards the EU financing, the Universidade de Vigo will be in charge of the budget management (10 000 euros will be for the University of Sfax joint coordinator) and to make all necessary payments to beneficiaries. We have kept a balanced distribution of tasks and mobility activities among all partners.

The consortium also includes 8 associated members from European countries and from countries in the lot, which are willing to participate in three main tasks: Professional Training; Technology-Transfer; and Publicity & Quality Assurance. First, associated members in the EU countries (Gradiant y GEG) will mainly focus on offering professional training for Third-Countries students. On the other hand, the associated members in the Lot 1 countries (CYNAPSYS, GreenTIC, Association of Sustainable Innovation in Tunisia. Association Marocaine pour la Protection du Littoral et Développement Durable) will mainly focus on know-how transfer from the HEI institutions to the enterprises and society: organizing workshops to spread the knowledge acquired by the Third-Countries nationals involved in mobility; and involving European nationals in giving specialized training. Thirdly, we incorporate 1 associated member Externaliza to actively participate in the quality assurance process. Finally, SocialWare Lab, another associated member, is going to support a social network ErasmusMundusGREEN specifically develop for this project needs.

In order to be operative, our management structure includes a project management team including one coordinator at each of the European and Third partner institutions for general administration and quality issues and one staff member for academic and research matters. For the Universidade de Vigo one technical general coordinator and two-headed staff members for academic-research issues and one quality expert. For the University of Sfax, as joint coordinator, the same structure is fixed. All our HEIs have the same rights and obligations in all the management steps and all have agreed on the Erasmus Mundus Project Assessment, Measuring and Rendering Quality Plan. The main objectives of the plan are: to define the minimum quality requirements for each participant HEIs; to help the participant universities manage the internal processes of quality verification, assessing and measuring; to guarantee the performance of the activities and project deadlines as well as EU project reporting deadlines; to obtain the project's quality level with regard to project deadlines, activities' performance, administrative services, support services, educational and teaching quality; to establish the common systematic to the participant universities to obtain the satisfaction and quality level perceived by the mobility participants. The quality assurance processes will be coordinated by the Quality Experts Team.

Besided involving all HEI partners and associated members in the dissemination of information, and given the increasing presence of Web 2.0 technologies since the Arab spring, we plan to launch a specific social network for the action, the "ErasmusMundusGREEN" which will be integrated with the leading social networks in the lot's countries. To guarantee the success of social publicity, we count on one experienced associated, Social Ware Lab, which have been strongly linked to the social network of the Universidade de Vigo.

Thematic fields of study:

Green computing or Greent IT refers to environmentally sustainable computing or IT. It spans a number of focus areas and activities, including design for environmental sustainability; energy-efficient computing; power management; environment-related risk mitigation; use of renewable energy sources; and eco-labeling of IT products. In a broader view, Green IT tries to convert IT infrastructure in a Green support for the environment but also for the society, that is, to use green IT not only for minimizing the environmental impact but also to maximizing the social benefits (more social & environmental responsibility in the IT industries).

Greening IT for the society refers to employing IT infrastructure to make our society more sustainable. At this respect, data-centre design & location, server virtualization, etc. takes the form of a paradigm shift in IT infrastructure: cloud computing. Not only the green movement, but also the economic situation poses cloud computing in a win-win game all countries should play. In fact, the paradigm shift in IT industry offers the strong possibility of accelerating social and economic development, especially in this time of financial crisis and limited resources. Cloud computing and Green IT allows industry to improve their business operations, increase productivity, and establish a competitive edge in the marketplace. As with consumers and businesses in developed countries, Green IT computing holds tremendous promise for developing countries since it can be employed to promote development initiatives and achieve higher levels of social and economic progress in disadvantaged communities, we can find real examples of that in healthcare, microfinance, disaster recovery, and more outstandingly in the civil participation in the Arab spring. More ambitiously, cloud computing gives to developing countries the opportunity to join the global market since it enables small companies to compete with the bigger ones in terms of IT infrastructure.

Our proposal then covers: Green IT related areas, Business Studies with languages, Business Studies with technology, Accountancy, Financial Management, Tourism, Catering, Hotel Management, Industrial Relations and Personnel Management, Secretarial Studies, Marketing and Sales Management, Management Science, Mechanical Engineering, Electrical Engineering, Chemical Engineering, Civil Engineering, Electronic Engineering, Telecommunications, Manufacturing Sciences (including CAD, CAM, CAE), Materials Science, Aeronautical Engineering, Environmental Sciences, Ecology, Geology, Geography, Mathematics, Statistics, Informatics, Computer Science, Artificial Intelligence, Actuarial Science, Biology, Physics, Chemistry, Microbiology, Biotechnology, Nuclear and High Energy Physics, Biochemistry, Astronomy, Astrophysics, Oceanography, Natural Sciences, Political Science, Sociology, Economics, Psychology and Behavioural Sciences, Social Work, European Studies, Anthropology, Development Studies, Communication and Information, Geodesy, Cartography, Remote Sensing, Soil and Water Sciences, Development Studies and Actuarial Science.

In order to fully exploit the benefits of this new IT model for social & economic development of Third-Countries, EU should invest in training local stakeholders & entrepreneurs with the skills and expertise needed to take advantage of it. Consequently, this project is providing a suitable mobility program to support training and know-how transfer in the aforementioned areas focusing in the EU HEIs and in Third-countries HEIs; always having as guidelines the objectives mentioned in the previous section. As We believe Green IT has a great potential to transform society in a

	sustainable way and, at the same time, cover a wide range of thematic fields (engineering, computer science, business & law) large enough to attract the number of mobilities included in the proposal.
	Mobility Flow:
	(please fill in the tables below in accordance with the concerned lot provision as indicated in the Programme Guide and Guidelines to the Call for proposals)

Type of Mobility	Outgoing		Third country[1]	Incoming			TOTAL
	Europeans			Third-Country nationals			
	Target Group 1	Target Group 2		Target Group 1	Target Group 2	Target Group 3	
Undergraduates[2]	28		DZ	8			71
			EG	10			
			LY			1	
			MA	13			
			TN	11			
Masters	6		DZ	4	2		46
			EG	7	2		
			LY			1	
			MA	8	4		
			TN	8	4		
Doctorates			DZ	3	1		22
			EG	4	2		
			LY				
			MA	5	1		
			TN	5	1		
Post-doctorates			DZ	2			18
			EG	3			
			LY				
			MA	5	1		
			TN	6	1		
Academic staff	16		DZ	2			28
			EG	3			
			LY		1		
			MA	3			
			TN	3			
TOTAL	50	0		113	20	2	185

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[1] Please insert the appropriate country code as indicated in the list of codes in annex 7 of this application form

[2] Undergraduates mobility is covered only under EM A2 Strand 1 and not under EM A2 Strand 2 (please delete the row accordingly)

Third country	Undergraduates	Masters	Doctorates	Post-doctorates	Staff	TOTAL
ALGERIA	8	6	4	2	2	**22**
EGYPT	10	9	6	3	3	**31**
LIBYA	1	1			1	**3**
MOROCCO	13	12	6	6	3	**40**
TUNISIA	11	12	6	7	3	**39**
TOTAL	**43**	**40**	**22**	**18**	**12**	**135**