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## **EUROPEAN COMMISSION**

**Directorate-General Education and Culture** 

# **Tempus application form Joint European Project 2006**

System on chip design

registration number (JEP - nnnnn - 2006) - leave empty

## SUBMISSION PROCEDURE

## Please read the following explanations and instructions concerning the submission of the proposal carefully.

- Only applications using the correct form will be accepted and processed.
- Before completing the form, please read the relevant sections in the Guide for Applicants, which can be obtained from the Tempus website at the following address: <u>http://ec.europa.eu/tempus</u>.
- In the "get involved" section of the website (Actions  $\geq$  Get involved  $\geq$  Application forms) applicants will find the "Frequently Asked Questions" for grant applicants, which is a helpful tool providing relevant answers to the questions arising during the preparation of an application.
- For a better understanding of the administrative approaches used once a project has been selected, applicants are also advised to consult the "manage your project" section of the website (Actions ≥ Manage your project), where the contractual documents and "Frequently Asked Questions" for grant holders can be found.
- The application must be word-processed, using a computer. Hand written applications will not be accepted. Please note that the version of the application sent by e-mail is the authentic one and will be used for assessment purposes; changes made after the submission will not be accepted and considered.
- Applicants should use as application language the operational language of communication between the institutions involved in the project.
- Applications must be sent by e-mail, while all signed original supporting and administrative documents must be sent by registered mail in one package (documents sent separately will not be accepted) at a later deadline. Applications sent by post or fax and supporting and administrative documents sent by e-mail (as PDF documents) or fax will not be accepted.
- The deadline for submission by e-mail is 15<sup>th</sup> December 2006, 23:59 Central European Time. Applicants are strongly advised not to leave the submission of their applications until the last possible moment. Applicants should consider that problems arising can only be dealt with during office hours and that technical support will be guaranteed until 16:00 (Central European time) on 15 December 2006. Applicants are therefore strongly advised to submit applications in a timely manner.
- Sections of the application that are not available electronically such as endorsement letters and CVs of external experts do not need to be sent by e-mail.
- The e-mail-based applications must be sent to:

## JEP2006@etf.europa.eu

• Following the submission of the application by e-mail, applicants will receive an electronic acknowledgement of receipt by 19<sup>th</sup> of December 2006 at the latest, indicating the registration number assigned to the application. This acknowledgement will be sent to the e-mail address from which the application has been submitted.

- The registration number must be indicated in the cover letter accompanying the supporting and administrative documents to be dispatched by post and used in all future correspondence about the project.
- Applicants should not staple the original supporting and administrative documents and should ensure that the reference numbers indicated on the endorsement letters are in accordance with the ones used in section II.
- The deadline for submission of the original supporting and administrative documents is 5<sup>th</sup> January 2007 (date as per post mark). **Only those supporting and administrative documents accompanied by a cover letter referring to a valid registration number will be accepted.** Please note, that applicants will not receive an acknowledgement of receipt for their original supporting documents. However, applicants will be contacted in case these documents should not have reached the ETF by the 01<sup>st</sup> of March 2007.
- The signed original supporting and administrative documents and two copies thereof must be sent in the same envelope, using registered mail to:

### EUROPEAN TRAINING FOUNDATION TEMPUS DEPARTMENT – SELECTION TEAM JEP APPLICATION DEADLINE OF 15/12/06 VIALE SETTIMIO SEVERO, 65 10133 TORINO ITALY

- The original supporting and administrative documents and copies dispatched by post must contain the signed declaration, all the endorsement letters and curricula vitae in case of proposed individual experts as well as the signed legal entity and financial identification forms.
- Applicants should be aware that only postal or courier registration slips indicating the project registration number will be accepted as proof of dispatch.
- Applicants should be aware that upon completion of the selection procedure **all** communication concerning this application (such as information on the decision, the provision of feedback to unsuccessful applicants, etc.) will **solely** take place with the person indicated in this application as "grant applicant" (reference number 1 in section II).
- The information provided in the application is subject to EU legislation on protection of personal data and confidentiality of information. For further information, please check: <a href="http://www.etf.europa.eu/website.nsf?OpenDatabase&Content=http://www.etf.europa.eu/website.nsf?openDatabase&Content=http://www.etf.europa.eu/website.nsf?pages/Legal+notice?openDocument&LAN=EN</a>

## THE APPLICATION FORM

This application form contains features that allow the automatic transfer of information into the database used for the selection and narrows down the possibility of applicants' possible mistakes.

Applicants will find below some explanations on the structure of the form as well as some hints on how to fill it in. Should you nevertheless encounter any problems, do not hesitate to contact the Tempus Department of the European Training Foundation for prompt support, at the following e-mail address: <u>Tempus IT Team@etf.europa.eu</u>

#### How to complete the form:

The structure of the following sections of this form is protected.

- Section I, Declaration
- Section II, Basic Data of the Project, List of Consortium Members
- Section IV, Summary of the Project
- Section V, Funding requirements
- Section VI, Administrative Documents: Legal entities, Financial identification

Applicants are allowed to fill in only the specific fields, which are **highlighted in grey** while the rest of the form is not editable. There are **free-text fields**, where any text can be inputted (ex: <<Example text field>>), and **selection fields**, where you will have to select from a list of predefined values (ex. <<Please select a value>>). As a general rule, in order to type into a field or to select a tick box, click on it with your mouse. You can also easily move from one field to the next using TAB or arrow keys.

In case the requested information is to be provided in the form of a list, you can start a new line after each individual entry by clicking on the "enter" key, within the same field, as in a normal "word" document.

Please note that some fields are automatically filled-in based on your input in other fields. For instance, you will only have to input the project title once on the cover page, and it will be displayed in all other sections of the application requesting this information. In general, you should always fill in the first field, requesting the information, which will then be copied into subsequent sections. We therefore recommend that you fill in the form starting from the cover page.

In order to ease the navigation in the application form, we recommend using the Document Map feature (from MS Word menu, "View"  $\rightarrow$  "Document Map")

Beside these general hints please take the following issues regarding the different sections of the form into account:

#### - Section II, List of consortium members:

The form includes a limited number of "boxes" for participating consortium members and individual experts. Should you plan to involve more consortium members and/or individual experts, please insert their data in the field called: "*Contact details for further consortium members*" and "*Contact details for further individual experts*" including the same information as for the protected "boxes".

#### - Section V, Funding requirements:

The Summary table  $n^{\circ}8$  ("*Summary of project funding requirements*") will be automatically filled in with the total costs of each heading in the relevant tables  $n^{\circ}$  1-6.

Furthermore, within table  $n^{\circ}8$ , the percentage of co-financing of the project will be verified automatically, once the amount to be co-financed is inserted in the proper field in table  $n^{\circ}7$ .

#### **SECTION I: DECLARATION** *To be completed by the Grant Applicant*

The following should be signed by the grant applicant *and* by the legal representative of the grant applicant's institution. *Please note that the Applicant Higher Education Institution must be based in the European Union*.

- 1. We have stable and sufficient resources of funding to maintain our activities throughout the period during which the project is carried out;
- 2. We are not bankrupt or being wound up, are not having our affairs administered by the courts, have not entered into an arrangement with creditors, have not suspended business activities, are not subject of proceedings concerning those matters, and are not in any analogous situation arising from a similar procedure provided for under national legislation or regulations;
- 3. We have the professional competencies and qualifications required to complete the proposed project;
- 4. We have not been guilty of grave professional misconduct proven by any means which the contracting authority can justify;
- 5. We have not been convicted of an offence concerning their professional conduct by a judgement which has the force of res judicata;
- 6. We have not been subject of a judgement which has the force of res judicata for fraud, corruption, involvement in a criminal organisation or any other illegal activity detrimental to the Communities' financial interests;
- 7. Following an award procedure financed by the Community budget, we have not been declared to be in serious breach of contract for failure to comply with the contractual obligations;
- 8. We have fulfilled obligations relating to the payment of social security contributions or the payment of taxes in accordance with the legal provisions of the country in which we are established or with those of the country of the contracting authority or those of the country where the contract is to be performed.

We, the undersigned, certify that the information given above and in the following project proposal is correct to the best of our knowledge, and that the proposal has been endorsed by the relevant authorities representing the consortium members.

We, the undersigned, have taken note that if found guilty of false declarations will receive financial penalties in proportion to the value of the grants in question.

Title of the project:	System on	chip design	
<b>Ref. Nr. 0 - Legal Representative of the Applicant Higher Edu- cation Institution:</b>			Official stamp or seal of the Applicant Higher Education Institution:
First name and surname:	José Manue	l Páez Borrallo	
Place: Madrid Date:			
Position: Vice-Rector for	Internationa	al Relations	
Signature:			
Ref. Nr. 1 - Grant Appli	icant:		
First name and surname:	Octavio Nie	eto-Taladriz	
Signature:			
Place: Madrid		Date:	<b>Application Number:</b> (Reg- istration number obtained after submission)

## SECTION I: ENDORSEMENT LETTERS

• All **consortium members** (except the Grant Applicant's Higher Education Institution) must submit an endorsement letter to confirm their role and willingness to participate in the project; these must be submitted together with the other supporting and administrative documents by the deadline.

Applicants should follow the model below.

## MODEL ENDORSEMENT LETTER **OFFICIAL HEADED PAPER OF THE CONSORTIUM MEMBER** OBJECTIVE: ENDORSEMENT OF THE TEMPUS PROJECT: (FULL TITLE OF THE PROJECT) CONTENT: Give details of the application, confirming the support of the consortium member for the project. Specify the role of the consortium member in the project and give details on the contact person. For a partner country consortium member indicate how the project fits into the development strategy of the consortium member in the context of the reform of the higher education system. Please insert a confirmation sentence stating that the consortium member has read the whole application, including the financial details, and is aware of the specific role it will have in the project. SIGNATURE of the person legally authorised to represent the consortium member POSITION of the person legally authorised to represent the consortium member DATE: please remember that the date must be subsequent to the previous Joint European Project ap-

OFFICIAL STAMP or SEAL of the consortium member

plication deadline.

• For each proposed **individual expert**, a summary CV (maximum of 2 pages) must be included. The CV has to make explicit reference to the expertise to be provided in the framework of the given Joint European Project proposal.

## SECTION II: BASIC DATA ON THE PROJECT

• Title of the project:

System on chip design

#### • Acronym of the project:

SoCD

#### • Specific Objectives of the project:

Improve Electronic integrated ciruit design curricula (system on chip) at masters level by updating/creating courses. Development of laboratory practices and introduction to project fabrication and testing. Teacher-student ratio improvement. Textbook publishing.

#### • **Partner country/ies involved:** (*Please tick* the relevant box/es)

	CARDS								
$\square$	MK - former Yugoslav Republic of Macedonia		ME – Montenegro						
	AL – Albania	$\boxtimes$	RS – Serbia						
	BA – Bosnia and Herzegovina		1244 – Kosovo						
	HR – Croatia								

Tacis							
AM – Armenia		RU – Russian Federation					
AZ – Azerbaijan		TJ – Tajikistan					
BY – Belarus		TM – Turkmenistan					
GE – Georgia		UA – Ukraine					
KZ – Kazakhstan		UZ – Uzbekistan					
MD – Moldova							

MEDA								
EG – Egypt		MA – Morocco						
IL – Israel (on a self-financing basis only)		SY – Syria						
JO – Jordan								

Has the grant applicant institution (Ref. No.:0) previously acted as a grant holder / contractor for a European Commission grant / contract? (*Please select from the button below.*)

No	
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If yes, please provide the registration number of the most recent grant agreement / contract:

Please specify with which Directorate General of the European Commission the project had been carried out:

• Subject area code: (Please refer to the Guide for Applicants Glossary of Codes and to Priorities for the partner countries in order to find out about the code for the relevant subject area, in line with the priorities for the partner country/ies involved). Please insert ONE code only

<<523>>

The proposal had already been submitted in a previous call: No

If yes, please provide the registration number:

- 1.
- 2.
- 3.
- Individual Mobility Grants related to this proposal: (Please list any Tempus Individual Mobility Grant funded in the last 12 months in which any of the consortium members has been involved)

IMG –	IMG -	IMG –
IMG -	IMG -	IMG -
IMG –	IMG –	IMG -

• Reference number of previous Tempus projects in which consortium members have been involved (if any):

JEP - 17028-02	JEP - 15045-2000	JEP –
JEP - 31074-2003	JEP –	JEP –
JEP - 31018-2003	JEP -	JEP -

• Language of application and of future correspondence: (*Please select from the list below*)

## English(E)

• **Type of the project:** (*Please select from the lists below*)

## **Curriculum Development (CD)**

Only projects with a 2 years duration may be submitted for this selection round.

## SECTION II: LIST OF CONSORTIUM MEMBERS

• **Consortium members involved in the project:** (*Please include data on all consortium members involved in the project. Refer to the Guide for Applicants, "Glossary of codes" (part IV, page 44) for the relevant codes assigned to countries, which specifies a two letter code for each country. For Kosovo -1244, the code 12 should be used.*)

Reference number: 0 – Legal representative of the applicant higher education institution								
(same person as listed in the declaration under Ref. nr. 0)								
Title:	Mr.(M)							
First name:	José Manuel			Surnan	ıe:	Páez Borrallo		
Function at organisation:	Vice-Rector for	Internationa	l Rela	tions				
Name of the organisation:	Universidad Pol	Universidad Politécnica de Madrid						
Type of organisation:	University (U)	):						
Erasmus University								
Charter N°								
Legal Status:	Public Sector	(PS)						
Faculty:	E.T.S.I. Telecon	nunicación						
Department:	Ingeniería Electi	rónica						
Country*:	ES			Postal	code:	28040		
Town:	Madrid			CEDEX				
Address:	Avda. Ramiro de	e Maeztu, 7						
Phone:	Country code:	34	City	Code:	91	Phone Nr.:	3363660	
Fax:	Country code:	34	City	Code:	91	Fax. Nr.:	3363664	
E-mail:	director.prog.eu	director.prog.eu@upm.es						

Reference number: 1 – <u>Grant applicant</u>									
(same person as listed in the declaration under Ref. nr. 1)									
Title:	Mr.(M)								
First name:	Octavio			Surnan	ne:	Nieto-Taladriz			
Function at organisation:	Head of Departr	nent							
Name of the organisation:	Universidad Pol	Universidad Politécnica de Madrid							
Type of organisation:	University (U	University (U)							
Legal Status:	Public Sector	(PS)							
Faculty:	Ingeniería Electr	rónica							
Department:	ETSI Telecomu	nicación							
Country*:	ES			Postal	code:	28040			
Town:	Madrid			CEDEX	K				
Address:	Ciudad Universi	taria s/n							
Phone:	Country code:	34	City	Code:	91	Phone Nr.:	3367300/22		
Fax:	Country code:	34	City	Code:	91	Fax. Nr.:			
E-mail:	nieto@die.upm.	nieto@die.upm.es							

Reference number: 2 – Grant co-ordinator									
(fill in only <u>if different from above</u> , otherwise, please leave this section blank)									
Title:	Mr.(M)	Mr.(M)							
First name:	Vančo			Surnam	ne: L	itovski			
Function at organisation:	Professor	Professor							
Name of the organisation:	University of Ni	University of Niš							
Type of organisation:	University (U	University (U)							
Faculty:	Faculty of Electr	ronic Engine	ering						
Department:	Electronics								
Country*:	CS			Postal	code:	18000			
Town:	Niš			CEDEX	K				
Address:	Aleksandra Med	lvedeva 14							
Phone:	Country code:	381	City Code		18	Phone Nr.:	529224		
Fax:	Country code:	381	City	Code:	18	Fax. Nr.:	588447		
E-mail:	vanco@elfak.ni.	vanco@elfak.ni.ac.yu							

Reference number: 3 – Contact person of consortium member									
Title:	Mr.(M)	Mr.(M)							
First name:	Aksenti	Aksenti Surname: Grnarov							
Function at organisation:	Head of e-Techr	Head of e-Technology Centre of Excellence							
Name of the organisation:	SS. Cyril and M	SS. Cyril and Methodius University - Skopje							
Type of organisation:	University (U	University (U)							
Faculty:	Faculty of electr	Faculty of electrical engineering and information technologies							
Department:	Informatics and	computer sc	ience						
Country*:	MK			Postal	code:	1000			
Town:	Skopje			CEDEZ	K				
Address:	Karpoš II bb								
Phone:	Country code:	389	39 City C		2	Phone Nr.:	3099158		
Fax:	Country code:	389	City	Code:	2	Fax. Nr.:	3064262		
E-mail:	grnarov@mt.ne	grnarov@mt.net.mk							

Reference number: 4 – Contact person of consortium member									
Title:	Mr.(M)	Mr.(M)							
First name:	Mark	Mark Surname: Zwolinski							
Function at organisation:	Professor	Professor							
Name of the organisation:	University of So	University of Southampton							
Type of organisation:	University (U)	University (U)							
Faculty:	School of Electr	School of Electronics and Computer Science:							
Department:	Electronic Syste	ms Design							
Country*:	UK			Postal	code:	SO17 1BJ			
Town:	Southampton			CEDEX	K				
Address:	University Road	ļ							
Phone:	Country code:	44	44 City		23	Phone Nr.:	80593528		
Fax:	Country code:	44	City	Code:	23	Fax. Nr.:	80592901		
E-mail:	mz@ecs.soton.a	mz@ecs.soton.ac.uk							

Reference number: 5 – Contact person of consortium member							
Title:	Mrs.(F)						
First name:			Surname:				
Function at organisation:							
Name of the organisation:							
Type of organisation:	< <click here="" s<="" td="" to=""><td>elect&gt;&gt;</td><td></td><td></td></click>	elect>>					
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Reference number: 6 – Cor	Reference number: 6 – Contact person of consortium member								
Title:	Mrs.(F)								
First name:				Surname:					
Function at organisation:									
Name of the organisation:									
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Reference number: 7 – Contact person of consortium member							
Title:	Mrs.(F)						
First name:				Surname:			
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Reference number: 8 – Cor	Reference number: 8 – Contact person of consortium member								
Title:	Mrs.(F)								
First name:				Surname:					
Function at organisation:									
Name of the organisation:									
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E-mail:									

Reference number: 9 – Contact person of consortium member							
Title:	Mrs.(F)						
First name:				Surname:			
Function at organisation:							
Name of the organisation:							
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Reference number: 10 – Co	Reference number: 10 – Contact person of consortium member								
Title:	Mrs.(F)								
First name:				Surname:					
Function at organisation:									
Name of the organisation:									
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Reference number: 11 – Contact person of consortium member							
Title:	Mrs.(F)						
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Reference number: 12 – Co	Reference number: 12 – Contact person of consortium member							
Title:	Mrs.(F)							
First name:				Surname:				
Function at organisation:								
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Reference number: 13 – Contact person of consortium member							
Title:	Mrs.(F)						
First name:				Surname:			
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Reference number: 14 – Contact person of consortium member							
Title:	Mrs.(F)						
First name:				Surname:			
Function at organisation:							
Name of the organisation:							
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E-mail:							

Reference number: 15 – Contact person of consortium member							
Title:	Mrs.(F)						
First name:				Surname:			
Function at organisation:							
Name of the organisation:							
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Reference number: 16 – Co	Reference number: 16 – Contact person of consortium member								
Title:	Mrs.(F)								
First name:				Surname:					
Function at organisation:									
Name of the organisation:									
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Reference number: 17 – Co	ontact person of c	consortium i	memb	oer	
Title:	Mrs.(F)				
First name:				Surname:	
Function at organisation:					
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E-mail:					

\* Refer to the Guide for Applicants, "Glossary of codes" (part IV, page 44) for the relevant codes assigned to countries, which specifies a two letter code for each country. For Kosovo -1244, the code 12 should be used

#### **Contact Persons of further Consortium Members**

Should the number of consortium members exceed 17, please use the following space to add additional members. The following information must be included for each contact person:

*Title, first and surname, position at institution, type of organisation, name of institution, name of fac-ulty, name of department, COMPLETE address, Phone, Fax and e-mail.* 

#### List of proposed individual experts:

Please note that individual experts **cannot come from any of the consortium member organisations**, neither as staff nor as students, as in this case they can be involved in the project directly.

Reference: i – Individual e	expert (from non-	consortium	mem	bers) pro	posed for	r specific task	s in project
(CV must b	e included of a m	aximum of	2 pag	ges)			
Title:	Mr.(M)						
First name:				Surname	2:		
Function at organisation:							
Name of the organisation:							
Type of organisation:	< <click here<="" td=""><td>to select&gt;&gt;</td><td></td><td></td><td></td><td></td><td></td></click>	to select>>					
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Phone:	Country code:		City	Code:		Phone Nr.:	
Fax:	Country code:		City	Code:		Fax. Nr.:	
E-mail:	papan@elab.ntu	a.gr					

Reference: ii – Individual e	expert (from non-	consortium	mem	bers) propos	ed for specific ta	asks in project
(CV must b	e included of a m	aximum of	2 pag	jes)		
Title:	Mr.(M)					
First name:				Surname:		
Function at organisation:						
Name of the organisation:						
Type of organisation:	< <click here<="" td=""><td>to select&gt;&gt;</td><td></td><td></td><td></td><td></td></click>	to select>>				
Faculty:						
Department:						
Country*:				Postal code.		
Town:				CEDEX		
Address:						
Phone:	Country code:		City	Code:	Phone Nr	
Fax:	Country code:		City	Code:	Fax. Nr.:	
E-mail:						

Reference: iii – Individual	expert (from non-	-consortium	n members)	proposed f	or specific task	s in project
(CV must b	e included of a m	aximum of 2	2 pages)			
Title:	Mr.(M)					
First name:			Surne	ame:		
Function at organisation:						
Name of the organisation:						
Type of organisation:	< <click here="" t<="" td=""><td>to select&gt;&gt;</td><td></td><td></td><td></td><td></td></click>	to select>>				
Faculty:						
Department:						
Country*:			Posta	l code:		
Town:			CED	EX		
Address:						
Phone:	Country code:		City Code:		Phone Nr.:	
Fax:	Country code:		City Code:		Fax. Nr.:	
E-mail:				•	· ·	

Reference: iv – Individual	expert (from non-	consortium mer	nbers) proposed f	for specific tasks in project
(CV must b	e included of a ma	ximum of 2 pag	ges)	
Title:	Mrs.(F)			
First name:			Surname:	
Function at organisation:				
Name of the organisation:				
Type of organisation:	< <click here="" td="" to<=""><td>o select&gt;&gt;</td><td></td><td></td></click>	o select>>		
Faculty:				
Department:				
Country*:			Postal code:	
Town:			CEDEX	
Address:				
Phone:	Country code:	City	Code:	Phone Nr.:
Fax:	Country code:	City	Code:	Fax. Nr.:
E-mail:				

Refer to the Guide for Applicants, "Glossary of codes" (part IV, page 44) for the relevant codes assigned to countries, which specifies a two letter code for each country. For Kosovo -1244, the code 12 should be used

#### List of individual experts

Should the number of individual experts exceed 4, please use the following space to add additional experts. The following information must be included for each contact person:

*Title, first and surname, function at institution, type of organisation, name of institution, name of fac-ulty, name of department, COMPLETE address, Phone, Fax and e-mail.* 

#### SECTION III: PROJECT PARTICULARS

This application form requires a general understanding of the Logical Framework Matrix approach and some familiarity with the vocabulary associated with it. Applicants who have never used the approach are therefore advised to familiarise themselves with it and to consult one of the numerous handbooks available on the subject on the internet.

Applicants should note that each proposal will be assessed on the basis of the elements included in this application only. You can include web site references in your application, but the assessment of your proposal will not be based on additional information found on a website and not contained within the application.

#### Please follow the guidelines provided in the Tempus Guide for Applicants, Part IV

In section III you are required to provide detailed information on your project in the form of **narrative parts** and accompanying **tables**; the information provided should not be repetitive but **complementary**. In the narrative sections you are expected to describe aspects of your project from a strategic and methodological point of view whereas in the tables you are asked to enter into greater detail in relation to aspects such as expected outcomes, activities, inputs and budgetary requirements.

#### **III.1 BACKGROUND OF THE PROJECT**

A maximum of four pages A4

#### **III.1a** Partner country/ies problem and needs analysis

In this section you should present the justification behind the project, clearly identifying the specific problems and/or needs on which the proposed project will focus and reasons why these have been selected. Please describe briefly how your project proposal came into being and how it was prepared.

#### **III.1b** Presentation of the consortium and external experts

In this section you should explain why the selected consortium members are best suited to participate in the project and describe their particular expertise in relation to the project objectives.

#### **III.2 THE PROJECT**

A maximum of four pages A4

Having already identified the problems and needs in Section III.1a, in this narrative part you should describe the project which must be clearly and directly related to the identified problems. You must clearly indicate the working methodologies and processes to be used. Applicants should remember to include details on academic content.

## III.3 PROJECT OBJECTIVES, OUTCOMES AND ACTIVITIES (LOGICAL FRAMEWORK MATRIX – LFM)

Please use the model provided. You are expected to complete an LFM (maximum of 2 pages), which represents a synthesis of the project. Details provided in the table should complement the information previously explained in the project narrative (section III.2).

For those identified risks, which are internal to the consortium, such as for example lack of EU language skills of partner country university staff, lack of interest from students, lack of time of university teaching staff, the consortium should foresee and indicate in the application means and activities to counter-act these risks.

#### III.4 Work plan

A one-page work plan for each project year should be completed. Please create additional work plan tables if further space is needed.

### III.1 BACKGROUND OF THE PROJECT

A maximum of four pages A4

#### III.1a Partner country/ies problem and needs analysis:

Please focus on the needs and constraints (a) in the Partner Country(ies), (b) at the PC higher education institution(s) - if relevant please refer to respective legislation and/or regulations. Your information should be specific to the subject of the proposal.

Serbia has passed through a relatively long period of extremely harsh conditions and is now in a phase of intensive transition. A major deterioration is present in all aspects of life, and, particularly, in the education system at all levels. Macedonia being Serbia's neighbour and belonging previously to the former Yugoslavia, has almost the same problems. At the university level, we are faced with the following problems: extensive emigration of the teaching staff; enrolled students are poorly prepared for the coursework; low personal economic standard of the students, meaning less investments in books and private computers to help teaching and give access to the Internet; and low state investment in laboratory and computer equipment, which then becomes inadequate in quantity and quality. As a result of these difficulties, most courses are now purely theoretical. Most modern methods of teaching such as the use of computers in classes, remote learning and e-learning are not available to the general university community. Our universities, which used to be ranked very highly in the world as recently as fifteen years ago, are in decay.

Computer aided design (CAD) of electronic circuits and systems, now referred to as System on Chip Design (SoCD) is one of the most important specializations in the field of electronics. It enables a professional infrastucture to be developed for designing new products in electronics no matter where the production of the components and systems is located. It is our aim to restructure the curricula in order to improve the existing state of affairs and to introduce, for the first time, master's level courses in SoCD at the Departments of Electronics (in Nis) and at the Department of Informatics and Computer Science (in Skopje). We would also like to ensure that the new curriculum allows integration into the European family (in line with the Bologna declaration), and to join the efforts of colleagues from other departments and faculties at the University of Nis and the University of Skopje in implementing similar methods. These general trends have been identified and tested in the developed European countries.

Our Faculties currently provide courses (albeit primarily with theoretical content), at undergraduate and graduate level in almost all areas of electronics, telecommunications and control systems. We aim to develop graduate programs for electronic engineers by adapting the content, structure and methods so that the new programs are compatible with the ECTS. The changes will encompass the master's level courses in SoCD at the partner departments. New teaching methodologies will be introduced, with strong emphasis on practical training of the students, and mandatory student projects in all of the advanced courses. That is especially important when the laboratory work of the students is considered. The concepts of virtual instrumentation and remote learning will be applied. That will substantially increase the level of practical knowledge of the students and, accordingly, the level of aspiration of the local professional community. A modular structure will be introduced and the new curricula will enable student mobility (EU or regional) with full recognition of previous work. Information and communication technology will be widely used to enable students to have access to all information about their courses, grades, lab sessions, etc. Quality control mechanisms will be introduced in order to ensure that the level of teaching at all partner institutions remains at the prescribed level.

It is important to note that, after changes to the Higher Education Laws in both Serbia and Macedonia, the process of the reform according to the Bologna Process has been strongly intensified and supported by all governmental institutions.

The idea for the project came from the applicant, The University of Madrid, following the excellent

experience we (The University of Nis) gained after the realisation of JEP-17028-02. Looking for a complementary faculty in the developing countries we came to the University of Skopje, while the University of Southampton may be considered as leading in the subject and a convenient partner also from the point of view of language.

#### **III.1b** Presentation of the consortium:

Please focus on the elements which are essential for the project (particular expertise, relevant previous experience and contacts beneficial to the project). In case of involvement of external experts, please make reference to their specific expertise and contribution to the project.

The regional consortium members have been chosen according to the local needs of both universities. The contracting institution was chosen to be an institution offering a similar educational level in an EU country (Spain) while having at the same time experience of collaboration with Serbian universities in realization of Tempus projects. They share the problem of teaching in a language not widely spoken in Europe. The University of Southampton was chosen thanks to the very long scientific collaboration of its School of Electronics and Computer Science with the Faculty of Electronics at the University of Nis in the field of CAD. During the last twenty years of collaboration several papers have been published in international journals and a textbook that received excellent reviews especially by the users. Symposia were organized jointly and several tens of mutual visits have taken place.

Previous co-operation between the consortium members represents a sound background for the realisation of this project. The University of Nis and the University of Skopje, and particularly the Faculty of Electronic Engineering from Nis and the Faculty of Electrotechnical Engineering of Skopje, have long history of collaboration in exchange of teaching staff, research projects funded by the federal government of the Socialist Federal republic of Yugoslavia, international projects funded by EU (such as Tempus and the Stability Pact of South East Europe). Formal co-operation with EU Universities is unfortunately not intensive, due to the long period of isolation of Serbia. However, thanks to the former Tempus projects and scientific collaboration between the regional and European Universities we are continuously provided with information and collaborate on the subject review and methods of updating our curricula.

All of the consortium member institutions have experience with TEMPUS and/or other international and national projects. Teaching curricula in all of the member institutions extensively covers the area of SoCD in electronics.

All of the consortium members, except Southampton, have the specific problem that the language in which teaching is performed is not widely spoken in Europe. In that sense the University of Southampton will provide particular help in attaining a higher quality of English usage by the members.

Technical University of Madrid, Dept. of Electronic Engineering

The Technical University of Madrid was established in 1971 under today's name, although most of its centres are more than a century old. It has 250 professors, 3500 undergraduate students, and 350 graduate students. The Department of Electronic Engineering activities are focused in the following areas: analog and digital circuits, microprocessors, microelectronics, CAD for electronic design, high-speed electronics, speech communication, and technology aids for the handicapped.

University of Southampton, School of Electronics and Computer Science

The School of Electronics and Computer Science (ECS) is one of 20 Schools in the University of

Southampton. ECS is one of the largest departments of its kind in the UK, with nearly 100 academic staff (faculty); 1000 undergraduate students; 100 Masters students and 200 research students and research staff. ECS has 10 research groups, ranging from Electrical Power Engineering through Electronic Systems to Multimedia. The School has been rated as one of the top departments in the UK for both electronics and computer science, achieving the highest grading (5\*) in the 2001 Research Assessment Exercise. ECS has also achieved top marks for its teaching quality in recent assessments.

The University is considered to be one of the UK's leading universities. It is a broad-based university, encompassing humanities, social sciences, medicine, science and engineering. The University is home to the UK's National Oceanographic Centre.

#### University of Niš, Faculty of Electronic Engineering

University education in electronics started in 1960. The University was formally established in 1965. In 1968, a separate Faculty of Electronic Engineering was established within The University of Niš. In the meantime, more than four thousand engineers have graduated from the faculty. The faculty staff consists of 150 teaching/research members, with a strong orientation to industry. 350 new students are enrolled every academic year. Systematic reorganization of the teaching process according to the Bologna process started in the year 2004. Teaching is organised in six areas: Automation, Computer Science, Electronics, Industrial Power Systems, Microelectronics, and Telecommunications.

#### University of Skopje, Faculty of Electrical Engineering and Information Technologies

The Faculty of Electrical Engineering and Information Technologies was founded in July 1959 as the Electrical and Mechanical Division in the frame of the Faculty of Engineering in Skopje. Two years later, in September 1961 the Electrical Engineering Division separated from the Mechanical Engineering Division. In September 1965 these divisions established the Faculty of Electrical and Mechanical Engineering. Since January 1977, the Faculty of Electrical Engineering has been a constitutive member of the University "SS. Cyril and Methodius" in Skopje, Republic of Macedonia. In September 2006 the name was changed to the Faculty of Electrical Engineering and Information Technologies. To date, more than five thousand engineers have graduated from the faculty. The faculty staff consists of 120 teaching/research members. This academic year 615 new students were enrolled. Systematic reorganization of the teaching process according to the Bologna process started in the year 2004. Teaching is organized in eight areas: Computer Science and Engineering, Electronics, Telecommunications, Automation and System Engineering, Power Engineering and Automation, Power Systems, Electrical Machines and Apparatuses, Electrical Power Plants and Substations.

#### **III.2 THE PROJECT**

A maximum of four pages A4

The project description should correspond to the needs identified and described under III.1a by focussing on the following points: How does your proposal solve/address these needs and constraints? Who is/are the target group/s of your project? Who are the direct/indirect beneficiaries?

With the idea of restructuring the university system in Serbia and Macedonia according to the standards of the European university system, as specified by the Bologna Declaration, this project will focus on transferring, as much as is possible, the existing experience at the EU consortium members to the beneficiary partner universities. The preliminary objective of the project is the adaptation/creation of the following courses:

- 1. Digital integrated circuit design
- 2. Analogue integrated circuit design
- 3. Mixed-signal integrated circuits
- 4. VLSI design
- 5. Design of RF systems
- 6. Modelling and simulation
- 7. Modelling of electronic circuits and systems
- 8. Testing and diagnosis
- 9. Embedded computer systems
- 10. Wireless and ad hoc computer networks
- 11. Oraganization of computer systems
- 12. Dependability of systems
- 13. Dependability of software
- 14. Highly reliable systems for parallel processing
- 15. Methods of electronic equipment design
- 16. Sustainable electronic design
- 17. Economics of sustainable production

This will be the starting point of the project. The final list of courses will be developed within the project. It is also planned to introduce at least two new courses. At the moment, the responsibility of the Faculty of Electronic Engineering, Nis covers 11 courses. All of the courses will be modified, and will be one-semester courses, according to the requirements of the Bologna Declaration. The final course of studies will be European Credit Transfer System (ECTS) compatible.

EU consortium members will provide the necessary leadership and experience for the project. Consortium members will allow the flow of students from Serbia and Macedonia to the EU universities and back. The returning students will help in further improvement of the course of study at their alma mater.

The proposed changes of the course of study will be warmly welcomed by the students, as it will give them a better quality of education, with much greater practical experience through numerous project works, and, even more importantly, will enable students to finish combined undergraduate and masters studies within a resonable period of time (at the moment it takes, on average, eight years to complete the programme), thus helping the economy of the region on one hand by lowering the price of educating an engineer, and, on the other hand, giving society better educated engineers at a younger age.

The teachers involved in the project will be trained during the proposed Tempus project in order to technically unify the teaching activities and standardise the level of teaching. Also, specific laboratories will be equipped and thus both the teachers and the students will have proper surroundings for implementing project work. The best students, after spending some time at the EU consortium member institutions, will be included in doctoral studies at the regional universities. This will greatly improve the conditions for creating future teaching and research manpower, and thus ensure the sustainability of the system.

During the project, we will achieve the following objectives:

1. Syllabi and curricula of the targeted courses will be restructured and/or completely created, if necessary. According to the newly generated curricula, new textbooks will be created. It is planned that ten professors will participate in this part of the project, and it is expected that ten new books will be published, accompanied by ten laboratory manuals. The targeted courses are both at undergraduate and graduate level. During this part of the project, at least two new courses will be introduced at the regional universities.

2. Laboratories will be modernised in order to provide students with the knowledge they would easily apply in their everyday professional practice. This part of education will be extensively addressed in

new curricula, since laboratory work is the weakest part of the present curriculum. We plan to introduce new equipment, new concepts of laboratory work (such as virtual instrumentation, remote learning, improving student teacher relationship in the laboratory, tailoring the laboratory work according to the student's capabilities and needs), and to create new laboratory exercises, as well as introducing term projects in all advanced courses.

3. Teachers will be educated to implement the new teaching methods. We plan to enable each of the teachers involved in the project to visit the universities in the EU, in order to gain experience, and to transfer and apply it in redesigned courses. In this part of the project, we plan to include students that are about to get their degree in the exchange. Our plan is to include the best of our students, having in mind that most of them will proceed with doctoral studies after they graduate; thus they should be trained according to European standards.

4. Regional libraries will be enriched with new books and laboratory manuals from other universities, to provide a basis for the knowledge transfer. These books and manuals will serve as a model to create new courses and new textbooks that meet requirements of new teaching standards.

5. Student exchange will be provided during the project, in order to get some experience with this process, as proposed by the Bologna Declaration. This is planned to be a part of the testing process for the results obtained, since student exchange should be enabled by curriculum standardisation.

Within the mentioned outcomes, it is planned to introduce a quality control system, in order to keep the experiences obtained during the project in the years to come. It is planned that professors disseminate the knowledge obtained among the partner universities, as well as at other regional universities that plan to establish EE departments.

Management of the project is planned as follows:

1. Consortium meetings are planned twice a year, at an EU consortium member institution at the beginning of each year, and regional universities in the middle of each year, to monitor progress.

2. Progress reports will be made every year, stating the results obtained and the progress made.

3. After the project is completed, a final report will be made and published, indicating all of the results obtained, and all of the procedures required to keep the outcomes in everyday teaching practice.

## III.3 LOGICAL FRAMEWORK MATRIX – LFM

<ul> <li>Wider Objective:</li> <li>What is the overall broader objective, to which the project will contribute?</li> <li>To provide an educational model for System on Chip design (SoCD) in electronics</li> <li>To help regional economies by generating high-quality young professionals</li> <li>To form the basis of integration of the region's universities into the EU family of higher education institutions</li> <li>Specific Project Objective/s:</li> <li>What are the specific objective/s, which the project shall achieve?</li> <li>To create a SoCD in electronics curriculum based on new teaching methods, improvement of the teacher/student ratio, intensive use of lab facilities and IT systems</li> <li>To enable wide-range and continuous cooperation between partner institutions</li> <li>To ensure migration of both students and professors</li> <li>To prepare regional partner universities for education accreditation</li> </ul>	<ul> <li>Indicators of progress:</li> <li>What are the key indicators related to the wider objective?</li> <li>Acceptance of our model by other departments/faculties</li> <li>Economic indicators in the area of electronics</li> <li>Increased number of students at EU and regional universities other than their home institution</li> <li>Indicators of progress:</li> <li>What are the quantitative and qualitative indicators showing whether and to what extent the project's specific objective/s are achieved?</li> <li>Increased interest for studying EE</li> <li>Better efficiency of studies</li> <li>Increased exchange of students</li> </ul>	<ul> <li>How indicators will be measured: What are the sources of information on these indicators?</li> <li>Review of curriculum changes at other departments/faculties</li> <li>Reports of exchange students from a pool of regional and EU universities</li> <li>Survey of major EE employers about their satisfaction with new EE graduates</li> <li>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?</li> <li>University report providing numbers on application rates, effective duration of studies and grade averages</li> <li>Review of unemployment figures for EE</li> <li>Review of teacher and course evaluation by students</li> </ul>	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 con- sidered? • Support from the regional faculties involved
Outputs (tangible) and Outcomes (intan- gible): Please provide the list of concrete outputs/outcomes leading to the specific objective/s, using bullet points, considering the following questions for their defini- tion: What are the envisaged quantifiable and non- quantifiable effects and benefits of the project? What improvements and changes will be produced by the project? 1. Curriculum development 2. Lab restructuring 3. Teacher training 4. Library, inter-partner sharing 5. Pilot student exchange 6. Dissemination	Indicators of progress: What are the indicators to measure whether and to what extent the project achieves the envisaged results and effects? • New course syllabi introduced • New teaching materials (books, lab manuals, web presentations,) • Laboratory facilities installed • Laboratory facilities in intensive use in all courses • Consortium meetings held on schedule • Teachers (re)trained • Students' work at EU Universities recognised • Student satisfaction with revised courses	<ul> <li>How indicators will be measured: What are the sources of information on these indica- tors?</li> <li>Annual report by all consortium members</li> <li>Regional member faculties prospects</li> <li>Lab inventory</li> <li>Minutes of consortium meetings</li> <li>Standard of student grades at EU universities</li> <li>Student feedback questionnaires</li> </ul>	Assumptions & risks: What external factors and conditions must be realised to obtain the expected outcomes and results on sched- ule? • Syllabi for all courses accepted by university authorities

and stadaut an alson as museuments		
and student exchange programm		
Inputs:		Assumptions, risks and pre-conditions:
What inputs are required to implement these activities,		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?
		• Availability of staff members
		• Interest of teachers and students in taking
		part
		• Language skills (especially of regional
		students at non-English speaking EU
		consortium members)
-		
•		
	Inputs:	Inputs:         What inputs are required to implement these activities,         e.g. staff time, equipment, mobilities, publications         etc.?         • 1.         320 Partner countries (PC) professor weeks         10 EU professor weeks         10 PC lector weeks         20 PC technician weeks         20 PC technician weeks         3 notebook PCs, 3 projector, and 3 printers         Publ. costs: 10 books and 10 manuals         • 2.         9 PC professor weeks         39 PC research/teaching assistant weeks         45 PC technician weeks         Lab equipment and components         • 3.         10 PC professor travels E-W, total duration: 10 months         • 4.         16 PC professor weeks         books and periodicals         • 5.         10 student travels E-W, total duration: 10 months         • 6.         4.5 PC professor weeks         0.5 EU professor weeks

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4.2 Purchase library PCs, books and	• 7.		
periodicals	3.5 PC professor weeks		
• 5. Pilot student exchange	0.5 EU professor week		
5.1 Students from regional partners spend a	• 8.		
period of time at EU institutions	12 PC professor weeks		
• 6. Dissemination	2 EU professor weeks		
6.1 Dissemination analysis and action	9.		
planning	24 EU secretary/accountant weeks		
• 7. Sustainability	52 PC secretary/accountant weeks		
7.1 Sustainability analisis and action	2 printers/scanners/photocopiers,		
planning	Final Progress Report publ.		
• 8. Quality control and monitoring	8 one week travels E-W		
8.1 Quality control and monitoring ensured	8 one week travels W-E		
• 9. Management of the project	8 one week travels E-E		
9.1 Future activities planning	4 one week travels W-W		
9.2 Progress reviewed	visas for PC students and professors		
-	(activities 9.1, 3.1, 3.2)		
	16 PC professor weeks		
	6 EU professor weeks		

#### III.4 WORKPLAN

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

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. The same reference and sub-reference numbers as used in the logical framework matrix <u>must</u> be assigned to each outcome and related activities. M1 = first month of the project year; 12 M = 1 year; 4 weeks = 1 M. Please use one symbol (= / X) to represent one week.

	Activities												
Ref. N° /Sub Ref. N°	Title	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12
1.	Curriculum development	0											
1.1	Review of syllabi for all CAD courses at both regional member institutions	XX	XXXX		XX								-
1.2	Make a working list of proposed courses and the course of study				XX	r L							
1.3	Define syllabi for all (old and new) courses					XXXX	====	XXXX	XXX=	XX==	XXXX		
1.4	Develop new teaching materials											XXXX	XXXX
1.5	Publish developed teaching materials												
2.	Lab restructuring					0							
2.1	Existing laboratory facilities investigated					XXX	xxx						
2.2	Purchase of new laboratory equipment							XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
2.3	Lab equipment installation and integration with existing equipment												XXXX
2.4	Training of the laboratory technicians												
2.5	Adaptation of labs to support all courses in 1.2												
3.	Teacher's training						0						
3.1	(Re)training of professors and lecturers from the partner countries						====	====	====	====			
3.2	Training of best students to be teaching assistants												
3.3	Training of new research/teaching assistants by last-year's re- search/teaching assistants												
4.	Library, inter-partner sharing		0										
4.1	Define a list of necessary books and periodicals		XXXX	XXXX									
4.2	Purchase library PCs, books and periodicals				XX								
5.	Pilot student exchange												
5.1	Students from PC partners spend 1 month at EU institutions												
6.	Sustainability	0											
6.1	Sustainability analyzing and actions planning	Х											
7.	Dissemination	0											
7.1	Dissemination analyzing and actions planning	Х											
8.	Quality control and monitoring	0											
8.1	Quality control and monitoring ensured	Х			Х		XX	C C		Х	-		X
9.	Management of the project	0											

#### WORKPLAN for FIRST project year

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9.1	Future activities planned (consortium members meeting)	XX=			XX	x			
9.2	Progress reviewed				XX	XX			XX
Starting and end	date of Outcome: <b>O</b>								

Starting and end date of Outcome:

Activity carried out in the EU/Candidate Country:

Activity carried out in the Partner Country (ies):

#### WORKPLAN III.4

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

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

M1 = first month of the project year; 12 M = 1 year; 4 weeks = 1 M. Please use one symbol (= / X) to represent one week.

#### WORKPLAN for SECOND project year

	Activities												
Ref. N° /Sub Ref. N	。 Title	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12
1.	Curriculum development												
1.1	Review of syllabi for all EE courses at all regional member institutions												
1.2	Make a working list of proposed courses and the course of study												
1.3	Define syllabi for all (old and new) courses												
1.4	Develop new teaching materials	XXXX											
1.5	Publish developed teaching materials										XXXX	XXXX	XXXX
2.	Lab restructuring												
2.1	Existing laboratory facilities investigated												
2.2	Purchase of new laboratory equipment	XXXX	XXXX										
2.3	Lab equipment installation and integration with existing equipment	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX						
2.4	Training of the laboratory technicians							XXXX	XXXX				
2.5	Adaptation of labs to support all courses in 1.2									XX	XX		
3.	Teacher's training												
3.1	(Re)training of professors and lecturers from the partner countries		====	====	====			====	====	====			
3.2	Training of best students to be research/teaching assistants	====	====	====	====	XXXX	====	====	====	====	XXXX		
3.3	Training of new assistants by last-year's research/teaching assistants					XXXX					XXXX		
4.	Library, inter-partner sharing												
4.1	Define a list of necessary books and periodicals												
4.2	Purchase library PCs, books and periodicals				Х								
5.	Pilot student exchange	0											
5.1	Students from PC partners spend 1 month at EU institutions	====	====	====	====		====	====	====	====			
6.	Dissemination												

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ng and actions planning nonitoring	X	X	X	X	X	X	X	X	x	x	x	XXXX
nonitoring	Х	Х	Х	Х	Х	Х	Х	Х	X	X	x	XXXX
									r-	2 <b>1</b>	2 <b>1</b>	
nonitoring ensured			Х			XX			XX	-	XX	
roject												ł
ning (consortium members' meeting)	XX=								XX	Х		
	Х								XXXX	XX		==
	ning (consortium members' meeting)	ning (consortium members' meeting) XX= X	ning (consortium members' meeting) XX= X	ning (consortium members' meeting) XX= X	ning (consortium members' meeting) XX= X	ning (consortium members' meeting) XX= X		ning (consortium members' meeting) XX= XXX X X XXXXXX				

= Х

Activity carried out in the EU/Candidate Country: Activity carried out in the Partner Country (ies):

### III.5 OUTCOME & ACTIVITY TABLES

The outcome tables enable you to give precise details on each expected outcome and the related activities. You should also provide details on the resources needed for each outcome. Please create additional tables if further space is needed.

The following types of information will be required:

- Please fill in the same title and reference number for each outcome as provided in the Logical Framework Matrix.
- > Please include assumptions and risks for each outcome where relevant.
- Please provide a representative title for each activity together with a sub-reference number, starting and end date.
- An adequate description of each activity; what will be done, when, where and how.
- The consortium member/s or experts who will carry out an activity should be stated, specifying which staff from which of the consortium members will be responsible for and carry out each single activity (e.g.: Senior administrative staff from university A; the rectorate of university B; finance officers from institution C; quality control staff from institution D, etc.). It is not sufficient to merely list some (or all) consortium members.
- For each activity a target group must be clearly identified. A target group is composed of the direct beneficiaries of the activity and could typically include one or more of the following: Academic staff of a given department, university administrative staff, students, trainees participating in a training course. Please quantify your target group and state precisely who they are and where they are located (e.g.: 5 librarians of university A; 20 secondary school teachers, 25 students from the institutions B, C and D; 10 administrators at the Ministry of Education; etc.). This is particularly important for projects in which several Partner Country institutions are involved.
- All the resources (financial, human, material) needed to execute an activity must be described in the "Input" row. The information provided should be specified and itemised. For staff costs please provide information on the kind of staff, where they come from and what the hourly rates are (e.g.: Academic staff from EU institution F x G hours x H Euro). In case of staff and student mobilities, you must indicate the number of people, the direction and duration of each of the mobilities (e.g.: 5 PC staff to EU institution A for B number of weeks). For equipment, you should be as precise as possible on the types of equipment needed for each activity and the number of items (e.g.: 15 computers and 1 network printer).
- For each outcome you should indicate the types of expenditures that will be necessary by filling in the "related costs" table at the end of this section. You should not duplicate expenditure under more than one outcome, as the sum of the total budget required for each outcome should correspond to the totals indicated in Section V, Table 8, 'Summary of project funding requirements'.
  - Overheads should be accounted for only once, under the outcomes and activities table for 'Management of the Project'.

For Dissemination and Sustainability, Quality Control and Monitoring, and Management of the Project, you must also provide a description of the strategy you will adopt.

## OUTCOME/OUTPUT AND ACTIVITY TABLES

Outcome/output title:	Curriculum development			Ref. N°:	1.
Starting date:	15.09.2007.	End date:	31.08	3.2009.	
Related Assump- tions and risks:	<ul> <li>Syllabi for all courses accepted by</li> <li>Possible language problems (Serb</li> <li>33% of all PC staff costs will be f</li> </ul>	bian, Macedonian, Spanish)	mber i	nstitutions	

Activity title:	<i>Review of syllabi for all EE courses at all regional member institutions</i> Sub Ref. $N^{\circ}$ : <b>1</b>			
Starting date:	15.09.2007.	End date:	15.12.2007.	
Description of the activity:	<ul> <li>Representatives of all consortium members will meet (see 9.1.). After a short overview of existing syllability at both regional universities, a detailed plan of activities will be generated.</li> <li>All professors of member departments at regional universities will review in detail the syllability of all existing courses at their departments, as well as all of the courses at EU member universities. In five weeks, with intense inter-university communication and consultations (via e-</li> </ul>			
The consortium member/s or ex- perts who will carry out the activity:	All consortium members will be carrying out the activity. EU consortium members will help the regional members in the review of the already existing curriculum at all three regional universities			
Target group/s:	PC Professors/lecturers			
Inputs:	<ul> <li>(meeting inputs will be covered u</li> <li>10 PC professors, 1 week each, to</li> <li>4 EU professors, <sup>1</sup>/<sub>2</sub> week each, to</li> </ul>	tal 10 PC weeks		

Activity title:	Make a list of proposed courses and t	Sub Ref. N°: 1.2	
Starting date:	15.12.2007.	End date:	30.12.2007.
Description of the activity:	<ul> <li>Regional universities' professors per professor).</li> <li>A list of proposed courses (master and English (10 PC professors, <sup>1</sup>/<sub>2</sub>)</li> </ul>	ers) and courses of study is defi	
The consortium member/s or ex- perts who will carry out the activity:	10 PC professors		
Target group/s:	PC Professors/lecturers		
Inputs:	<ul> <li>10 PC professors, <sup>1</sup>/<sub>2</sub> week each, to</li> <li>10 PC professors, one week, <sup>1</sup>/<sub>2</sub> we</li> </ul>		PC weeks

Activity title:	Define syllabi for all (old and new) courses	Sub Ref. N°:	1.3
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	Application Forms; Tempus Joint El	ropean Project = 15/12/2	.000
Starting date:	01.01.2008.	End date:	31.08.2008.
Description of the activity:	<ul> <li>Starting from the list of courses from for all courses will be made. (10 PC pre- First outlines of syllabi will be analyse per professor)</li> <li>Representatives of all consortium men all three regional universities will be of sors, 6 PC professors, one week)</li> <li>In accordance with the conclusions of professors (at PC universities, 10 PC p</li> <li>Detailed syllabi will be revised period professors, 1 week per professor)</li> </ul>	ofessors, 1 week per profe ad in detail by EU profess abbers will meet (see 6.1.) liscussed. (at the co-ordin the meeting, detailed syster rofessors, 1 week per professors	essor) sors (4 EU professors, 1 week A detailed plan of syllabi at nator university, 3 EU profes- llabi will be generated by PC fessor)
The consortium member/s or ex- perts who will carry out the activity:	All consortium members will be carrying o write syllabi, and EU consortium members	•	tium member universities will
Target group/s:	PC Professors/lecturers		
Inputs:	<ul> <li>10 PC professors, 1 weeks each, total 1</li> <li>4 EU professors, 1 week each, total 4 E</li> <li>(meeting inputs will be covered under a</li> <li>10 PC professors, 1 weeks each, total 1</li> <li>4 EU professors, 1 week each, total 4 E</li> </ul>	EU weeks activity 6.1) 0 PC weeks	

Activity title:	Develop new teaching materials		<i>Sub Ref. N</i> °: <b>1.4</b>
Starting date:	01.07.2008.	End date:	31.07.2009.
Description of the activity:	<ul> <li>Starting from the detailed syllabi from 1.3, 10 textbooks will be written (or revised, where existing). (at PC universities, 10 PC professors, 20 weeks per professor)</li> <li>For each course, laboratory exercises will be devised, necessary software and manuals written (at PC universities, 10 PC professors, 2 weeks per professor, 2 PC lab technicians, 10 weeks per lab technician)</li> </ul>		
The consortium member/s or ex- perts who will carry out the activity:	All consortium members will be carry write textbooks and lab manuals, and		
Target group/s:	PC Professors/lecturers and students		
Inputs:	<ul> <li>10 PC professors, 20 weeks each,</li> <li>10 PC professors, 2 weeks each, t</li> <li>2 PC lab technicians, 10 weeks each, t</li> <li>10 PC professors, 4 weeks each, t</li> <li>3 notebook PCs, 3 projectors, and</li> <li>1 PC professors, ½ week, total ½</li> </ul>	otal 20 PC weeks ach, total 20 PC weeks total 40 PC weeks 1 3 printers	

Activity title:	Publish developed teaching materials			Sub Ref. N°:	1.5
Starting date:	01.062009.	End date:		31.08	2009.
Description of the activity:	<ul> <li>Textbooks and lab manuals will b fessor, 2 lectors, 5 weeks per lector</li> <li>Textbooks and lab manuals will b</li> </ul>	urer)	C profe	ssors, 2 weeks p	per pro-

The consortium member/s or ex- perts who will carry out the activity:	PC Professors (University of Nis, University of Skopje)
Target group/s:	PC Professors/lecturers and students
Inputs:	<ul> <li>10 PC professors, 2 weeks each, total 20 PC weeks</li> <li>2 lectors, 5 weeks each, total 10 PC (lectors) weeks</li> <li>Publishing costs of 10 books and 10 manuals</li> </ul>

RELATED COSTS (for the outcome/output described above)			
Budget Heading	Related Costs in €		
Staff Costs	52812.5		
Cost of Stay, Travel Costs, Institutional Costs			
Equipment Costs	9000		
Printing and Publishing Costs	27000		
Other Costs			
Total Costs	88812.5		

Outcome/output title:	Lab restructuring			Ref. $N^{\circ}$ :	2.
Starting date:	8.01.2008.	End date:	14.00	6.2009.	
Related Assump- tions and risks:	<ul> <li>Possible administrative problems</li> <li>Possible software problems in the will be connected.</li> <li>Possible problems in timing whi exercises planned</li> </ul>	e integration of the system whe	n exist	ing and new equ	1

Activity title:	Existing laboratory facilities investige	ated		Sub Ref. N°:	2.1
Starting date:	08.01.2008	End date:		15.02	2.2008.
Description of the activity:					
The consortium member/s or ex- perts who will carry out the activity:	University of Nis staff				
Target group/s:	PC professors/lectures and students				
Inputs:	<ul> <li>4 PC lab technicians, <sup>1</sup>/<sub>2</sub> week eac</li> <li>1 PC lab technician, 1 week, total</li> <li>1 PC professor, 1 week, total 1 PC</li> </ul>	1 PC week			

Activity title:	Purchase of new laboratory equipme	nt	<i>Sub Ref. N</i> °: <b>2.2</b>
Starting date:	01.03.2008.	End date:	31.10.2008.
Description of the activity:	<ul> <li>In accordance with first syllability exercises will be established at secovered under activity 9.1).</li> <li>After second consortium members ment and computer equipment for assistants, <sup>1</sup>/<sub>2</sub> week per person)</li> <li>In accordance with expected numbers funding, new lab equipment equipment will be unified for all cians, one week per person)</li> <li>Lab equipment and special lab with fined (3 UN and US professors, one order and purchase of lab equipment.</li> <li>At the beginning of each project printing boards fabrication, and fied and purchased/paid for (1 UN)</li> </ul>	econd consortium members' me rs' meeting, UN and US staff w r each course lab exercises (6 b aber of students, available labor for System of chip design co l courses and all student group working conditions for advance ne week per person) hent, first phase (3 UN lab techn ct year, electronics component other material for current need	eeting. Meeting inputs will be vill define necessary measure- UN and US research/teaching ratory area, and limit imposed ourses will be specified. Lab os (3 UN and US lab techni- ed SoCD courses will be de- nician, one week per person) ts, prototype boards, IC and s in laboratory will be speci-
The consortium member/s or ex- perts who will carry out the activity:	All consortium members will be carry purchase new laboratory equipment, a member meeting.		
Target group/s:	PC professors/lectures and students		

	<ul> <li>(meeting inputs will be covered under activity 9.1)</li> <li>6 PC research/teaching assistants, <sup>1</sup>/<sub>2</sub> week each, total 3 PC weeks</li> <li>3 PC lab technicians, 1 week each, total 3 PC weeks</li> </ul>
Inputs:	<ul> <li>3 PC professors, 1 week each, total 3 PC weeks</li> <li>3 PC lab technician, 1 week, total 3 PC week</li> <li>1 PC lab technician, 2 x 1 week, total 2 PC week</li> <li>lab equipment and components</li> </ul>

Activity title:	Lab equipment installation and integr	ration with existing equipment	Sub Ref. N°:	2.3
Starting date:	1.08.2008.	End date:	28.02.20	)09.
Description of the activity:	<ul> <li>Laboratory adaptation for new e weeks per person)</li> <li>Installation of new lab equipmen lab technicians, four weeks per person</li> <li>Integration of new and existing 1 UN and US lab technicians, 4 wee</li> <li>EU consortium members will instant third consortium members' n 9.1)</li> </ul>	t, (2 UN and US research/teacherson) ab equipment (3 UN and US research) eks per person) pect installation of new laborat	ning assistants, 2 UN and esearch/teaching assistant ory equipment during seco	US ts, 3 cond
The consortium member/s or ex- perts who will carry out the activity:	All consortium members will be carry	ving out the activity.		
Target group/s:	PC professors/lectures and students			
Inputs:	<ul> <li>4 PC lab technicians, 2 weeks eac</li> <li>2 PC research/teaching assistants,</li> <li>2 PC lab technicians, 4 weeks eac</li> <li>3 PC research/teaching assistants,</li> <li>3 PC lab technicians, 4 weeks eac</li> <li>meeting inputs will be covered un</li> </ul>	4 weeks each, total 8 PC week h, total 8 PC weeks 4 weeks each, total 12 PC wee h, total 12 PC weeks		

Activity title:	Training of the laboratory technician	S	<i>Sub Ref. N</i> °: <b>2.4</b>
Starting date:	01.03.2009.	End date:	30.04.2009.
Description of the activity:	<ul> <li>Training of the lab technicians t search/teaching assistants, 2 PC la</li> <li>Training of the research/teaching tants, one week per person)</li> </ul>	ab technicians, two weeks per p	person)
The consortium member/s or ex- perts who will carry out the activity:	PC university staff		
Target group/s:	PC professors/lectures and students		
Inputs:	<ul> <li>2 PC research/teaching assistants,</li> <li>2 PC lab technicians, 2 weeks eac</li> <li>6 PC research/teaching assistants,</li> </ul>	h, total 4 PC weeks	

Activity title:	Adaptation of labs to support all courses in	n 1.2	Sub Ref. N°:	2.5
Starting date:	15.05.2009.	End date:	14.00	5.2009.

Description of the activity:	<ul> <li>For each course, laboratory equipment and necessary software will be adopted in two phases (6 UN and US professors, 6 UN and US research/teaching assistants, 2 UN lab technicians, one week per person)</li> <li>Reports will be prepared for the following consortium members' meeting after each phase (6 UN and US professors, <sup>1</sup>/<sub>2</sub> week per person)</li> <li>EU consortium members will inspect suitability of new lab exercises for courses defined in 1.2 during third consortium members' meeting in Nis (meeting inputs will be covered under activity 6.1)</li> </ul>
The consortium member/s or ex- perts who will carry out the activity:	All consortium members will be carrying out the activity.
Target group/s:	All consortium members will be carrying out the activity.
Inputs:	<ul> <li>2 PC professors, 1 week each, total 2 PC weeks</li> <li>6 PC research/teaching assistants, 1 week each, total 6 PC weeks</li> <li>2 PC lab technicians, 1 week each, total 2 PC weeks</li> <li>6 PC professors, <sup>1</sup>/<sub>2</sub> week each, total 3 PC weeks</li> <li>meeting inputs will be covered under activity 6.1</li> </ul>

RELATED COSTS (for the outcome/output described above)		
Budget Heading	Related Costs in €	
Staff Costs	9375	
Cost of Stay, Travel Costs, Institutional Costs		
Equipment Costs	73400	
Printing and Publishing Costs		
Other Costs		
Total Costs	82775	

Outcome/output title:	Teacher's training		Ref. N°:	3.	
Starting date:	01.02.2008.	End date:		30.00	5.2009.
Related Assump- tions and risks:	• Possible problems with finding su at EU Universities	bstitute teachers in PC to teach	cours	es while profess	ors are

Activity title:	(Re)training of professors and lecture	ers from the partner countries	<i>Sub Ref. N</i> °: <b>3.1</b>
Starting date:	01.02.2008.	End date:	31.05.2009.
Description of the activity:	• Each of participating PC professors spends a month at participating EU universities and stud- ies teaching methods. Visits are spread through 1 ½ academic years, such that problems of continuing with normal teaching activities at PC universities are minimised (10 PC professors travel E-W, 10 travels E-W, duration of each: one month).		
The consortium member/s or ex- perts who will carry out the activity:	All consortium members will participate in the activity. The EU members will receive and coach PC professors at their respective EU Universities.		mbers will receive and coach
Target group/s:	PC Professors/lecturers		
Inputs:	• 10 travels E-W, total duration: 10	months	

Activity title:	Training of best students		Sub Ref. N°:	3.2
Starting date:	01.09.2008.	End date:	30.00	5.2009.
Description of the activity:	<ul> <li>During their stay at EU Universit activity 5.1) study teaching and r 3.2) and EU professors (10 studer</li> <li>After the students return to their ing/research assistants during the</li> <li>The trained students assist teachi each).</li> </ul>	esearch methods, guided by the F nts, one month each). universities, they are trained by t next semester (10 students, one n	PC professors (from a their professors to be nonth each).	activity e teach-
The consortium member/s or ex- perts who will carry out the activity:	All consortium members will particip PC students at their respective EU Un versities) will coach PC students (also	niversities, and PC professors (fro	om all participating H	
Target group/s:	PC students			
Inputs:	<ul> <li>10 students, one month each, inpu 10 students, one month each, inpu student.</li> <li>10 students, one semester each, in student.</li> </ul>	at covered by the University from		

Activity title:	Training of new teaching assistants b	y last-year's teaching assistant	ts Sub Ref. N°:	3.3
Starting date:	01.06.2007.	End date:	30.0	06.2009.

Description of the activity:	<ul> <li>Each of the students participating in activity 3.2, after finishing with a semester as a teaching/research assistant, coaches a student from the following class to be teaching assistant for the next semester (10 students, one month each).</li> <li>The "new" research/teaching assistants teach for one semester, after which they coach a student from the following class to be research/teaching assistant for the next semester, and so on, continuing after the termination of the project.</li> </ul>
The consortium member/s or ex- perts who will carry out the activity:	All consortium members from PC will participate in the activity.
Target group/s:	PC students
Inputs:	• All inputs covered by PC participating universities.

RELATED COSTS (for the outcome/output described above)		
Budget Heading	Related Costs in €	
Staff Costs		
Cost of Stay, Travel Costs, Institutional Costs	30000	
Equipment Costs		
Printing and Publishing Costs		
Other Costs		
Total Costs	30000	

Outcome/output title:	Library, inter-partner sharing			Ref. N°:	4.
Starting date:	01.10.2007.	End date:	08.12	2.2007.	
Related Assump- tions and risks:	<ul> <li>Possible language problems</li> <li>Possible communication problem level</li> </ul>	s between libraries based on d	ifferen	ice in the techno	logical

Activity title:	Define a list of necessary books and p	periodicals		Sub Ref. N°:	4.1
Starting date:	01.10.2007.	End date:	30.11	.2007.	
Description of the activity:	<ul> <li>During the first consortium membrused at EU University partners in ner universities will be assessed (</li> <li>PC professors define lists of nece 10 PC professors, <sup>1</sup>/<sub>2</sub> week per professors define lists of nece versity, 10 PC professors, <sup>1</sup>/<sub>2</sub> week</li> </ul>	astitutions will be discussed, an meeting inputs will be covered essary books (activity at each r ofessor) essary periodicals (activity at	d their under espect	relevance for P activity 9.1) ive regional unit	C part- versity,
The consortium member/s or ex- perts who will carry out the activity:	All consortium members will be carry regional members to define lists of ne	•	tium n	nembers will hel	p the
Target group/s:	PC professors/lecturers and students				
Inputs:	<ul> <li>meeting inputs will be covered un</li> <li>10 PC professors, <sup>1</sup>/<sub>2</sub> week each, to</li> <li>10 PC professors, <sup>1</sup>/<sub>2</sub> week each, to</li> </ul>	otal 5 PC weeks			

Activity title:	Purchase library PCs, books and per	iodicals	Sub Ref. N°:	4.2
Starting date:	01.12.2007.	End date:	31.08	8.2009.
Description of the activity:	<ul> <li>PCs will enable staff and studen sources.) (activity at each respect sor)</li> <li>Purchase books (activity at each professor)</li> </ul>	versity for inter-departmental-library nts of all PC participating universi- ive regional university, 3 PC profess respective regional university, 3 PC project year (activity at each respec- ne week per professor)	ties to share libr sors, ½ week per professors, ½ we	ary re- profes- eek per
The consortium member/s or ex- perts who will carry out the activity:	PC professors will be carrying out the	e activity.		
Target group/s:	PC professors/lecturers and students.			
Inputs:	<ul> <li>3 PC professors, <sup>1</sup>/<sub>2</sub> week per prof</li> <li>3 PC professors, <sup>1</sup>/<sub>2</sub> week per prof</li> <li>3 PC professors, 1 week per profe</li> <li>books and periodicals</li> </ul>	essor, total 1.5 PC weeks		

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RELATED COSTS (for the outcome/output described abov	e)
Budget Heading	Related Costs in €
Staff Costs	2000
Cost of Stay, Travel Costs, Institutional Costs	
Equipment Costs	5400
Printing and Publishing Costs	
Other Costs	
Total Costs	7400

Outcome/output title:	Pilot student exchange			Ref. N°:	5.
Starting date:	01.09.2008.	End date:		31.05	5.2009.
Related Assump- tions and risks:	<ul> <li>Ability to involve best students in</li> <li>Language skills (especially of reg members)</li> </ul>	1 0	peaking	g EU consortiun	n

Activity title:	Students from PC partners spend 1 m	onth at EU institutions	<i>Sub Ref. N</i> °: <b>5.1</b>
Starting date:	01.09.2008.	End date:	31.05.2009.
Description of the activity:	<ul> <li>10 students (over 2 semesters) s participating students will be gra completed or are very near comp month at a participating EU Univ mester, participating students wo tion that a normal student exchar to test the introduced ETC system in mind: 1. Efficiency of studies ( (so that each of the areas defined spend one semester teaching at h 3.3), and 4. Language skills. (10 s</li> </ul>	aduate students, or undergradua oletion of their coursework. The versity doing their bachelors or uld be expected to do coursewo age is possible between non-Eng h. The participating students will (GPA, number of passed exams by curriculum from outcome 1 is nome department and to coach t	te students who have either ese students will spend their masters work. In the last se- ork, as a test of the proposi- glish speaking countries, and I be chosen with four criteria per year), 2. Area of interest s covered), 3. Willingness to
The consortium member/s or ex- perts who will carry out the activity:	All consortium members will particip PC professors at their respective EU		nbers will receive and coach
Target group/s:	PC Professors/lecturers		
Inputs:	• 10 travels E-W, total duration: 10	months	

RELATED COSTS (for the outcome/output described abov	e)
Budget Heading	Related Costs in €
Staff Costs	
Cost of Stay, Travel Costs, Institutional Costs	17000
Equipment Costs	
Printing and Publishing Costs	
Other Costs	
Total Costs	17000

#### III.5.1 DISSEMINATION

A maximum of one page A4

Please describe the dissemination strategy the consortium will follow in order to ensure that positive results will be made available both within and outside the Partner Country institutions during the life of the project.

Starting in the second year of the project, the main results of the project will be presented at regional universities, as well as at conferences and symposia.

After the completion of the project, the expected tangible results will comprise: syllabus, textbooks, lab manuals, lab software, lab equipment, etc. The complete package of tangible results will be available to all regional participating universities. In addition, most of the tangible results will be offered to other universities and colleges in the region (Serbia, Montenegro, Kosovo, BIH, Macedonia).

Within these materials it will be emphasized that the new curriculum is ECTS compatible, and thus guarantees academic recognition in the EU and beyond. Furthermore, tutorials and/or summer schools will be held at other similar institutions that show interest in the whole curriculum restructuring, or any part of it. All courses will be prepared in both Serbian and English, to enable foreign students to participate.

The results of the project in form of a detailed information about all courses and degrees will be posted on web sites of all regional participating universities. The information about syllabi developed during this project, all revised courses and their ECTS credits, prerequisites, grading and teaching methods will also be included, as well as general information about the departments, the faculty and the university, student accommodation and administrative procedures necessary to register. The content of these web sites will be updated at least once each semester in both local and English languages. Through these web pages, all interested students and professors will have all the information they need about teaching/studying at participating universities, as well as implementing a similar system at their Alma Mater.

Outcome/output title:	DISSEMINATION		Ref. N°:	6
Starting date:	01.02.2008.	End date:	31.0	8.2009
Related Assump- tions and risks:	<ul> <li>Willingness of non-involved regio</li> <li>Frequency of professional events</li> <li>Local language and political barri</li> </ul>	that will allow for disseminatio	ılts.	

Activity title:	Dissemination analysing and actions planning	ng	Sub Ref. $N^{\circ}$ :	6.1
Starting date:	01.02.2008.	End date:	31.08.2	2009.
Description of the activity:	<ul> <li>In the month just before the mid-year made on how to ensure dissemination of prepared for the meeting (1 PC professor). The report will be discussed at the meetin. The final report will be prepared and it week, 1 EU professor, ½ week).</li> <li>In the last month of the second year, the region conferences and symposia about be held;), 10 travels E-E, 4 days each.</li> <li>In the last month of the project, when all tangible outputs (syllabi, textbooks, laber all universities in the region (Serbia, Monor Content of these websites will be update general information about the department accommodation and administrative prochave the list of all courses and their ECT methods, in order to provide information will be in the local language, as well as in the second seco</li></ul>	the project results. A report, 1 week per report). Ing, and suggestions for im- ncluded in final project actions defined in the re- project results; tutorials and 1 project outputs are avained manuals, library inventor- ntenegro, Kosovo, BIH, and letailed information about web cites of the local pan- ed at least once each sen- ts, the faculty and the uni- redures necessary to reging S credits, syllabi, prerequ- to all interested students	ort stating all actions we provement made (see 9 report (1 PC professor prot will be started (tal and/or summer schools ilable, the whole packa y, etc) will be distribut and Macedonia). It all of the courses and articipating universities. nester, and will contain versity it belongs to, stu- ister. The faculty page usites, grading and teac s. Contents of all web p	vill be 9.1). or, 1/2 lks at s will age of ted to ad the . The n the udent e will ching
The consortium member/s or ex- perts who will carry out the activity:	All consortium members will be carrying out	the activity.		
Target group/s:	PC Professors/lecturers			
Inputs:	<ul> <li>4 ×1 PC professor, 1 week per report, tot</li> <li>(input is covered under 9.1)</li> <li>1 PC professor, total ½ PC week,</li> <li>1 EU professor, total ½ EU week.</li> <li>10 travels E-E, 4 days each</li> <li>3 PC web designers, 12 PC weeks total</li> </ul>	al 4 PC weeks		

COSTS RELATED TO DISSEMINATION	
Budget Heading	Related Costs in €
Staff Costs	1962.5
Cost of Stay and Travel Costs	5500

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	Equipment Costs
	Printing and Publishing Costs
	Other Costs
7462.5	Total Costs

### III.5.2 SUSTAINABILITY

A maximum of half page A4

In this section applicants should refer to activities that will be organised during the project life time and that will lead to the sustainability of project results after the Tempus financing has ended. Factors that contribute to the sustainability of project results such as the accreditation of the new courses and/or curricula; involvement of the private sector and/or other stake-holders for future development and planning; future oriented partnerships between universities, guarantee of future financial resources, preparation and/or setting-up of a business plan for the newly established unit/centre, etc;

- Please describe the long-term perspective for project results, making particular reference to various aspects such as:
- ➢ Financial sustainability (how will activities be financed after the Tempus funding has ended?).
- Institutional sustainability (will structures be established and remain in place so as to allow activities to continue?).
- Sustainability at the policy level where applicable (what will be the structural impact of the project e.g. will it lead to improved methods, procedures, legislation?)

The regional participating universities will provide a continuous republishing service for all published teaching materials. Furthermore, developed lab software as well as purchased lab equipment will remain and will be intensively used after the end of this project. This by itself will ensure the sustainability of the new syllabus. The improvement of the teacher/student ratio will be done by preparing the best students to become teaching/research assistants. These students will have the obligation to train their successors after the completion of the program. All regional participating universities will provide financial support for this activity, thus ensuring financial sustainability after the end of this project.

Finally, the project completion will enable legalisation of the new course of study, in which the ECTS is embodied. The legalisation will compel other regional faculties to restructure their curriculum in a similar manner and integrate into the family of EU institutions.

Outcome/output title:	SUSTAINABILITY		Ref. N°:	7.	
Starting date:	01.02.2008.	End date:		31.08	8.2009.
Related Assump- tions and risks:	<ul> <li>Willingness of non-involved region universities to accept project results.</li> <li>Possible migration of the professor/staff members</li> </ul>				

Activity title:	Sustainability analysing and actions p	olanning	Sub	Ref. N°:	7.1.
Starting date:	01.02.2008. End date :			31.08.200	
Description of the activity:	<ul> <li>The procedure of acceptance of the ties will be started after completion.</li> <li>In the month just before each mide made on how to ensure sustainable prepared for the meeting (PC profine).</li> <li>The report will be discussed at the The final report will be prepared at 1 EU professor, ½ week).</li> <li>During the last year of the project 3.3) will be monitored, and improfessors, 1 week each).</li> </ul>	on of activity 1.3 (1 PC professor- year consortium member meet lity of the project results. A rep ressor, <sup>1</sup> / <sub>2</sub> week per report). The meeting, and suggestions for i and included in final project rep t, the training and work of new t	or, 1 week). ing, detailed oort stating al mprovement oort (1 PC pr teacher-assist	plans will ll actions v made (see ofessor, ½ tants (activ	be vill be e 9.1). e week, vity
The consortium member/s or ex- perts who will carry out the activity:	All consortium members will be carry	ing out the activity.			
Target group/s:	Regional and European Professors/lec	cturers and students			
Inputs:	<ul> <li>1 PC professor, 1 week, total 1 PC</li> <li>1 PC professor, <sup>1</sup>/<sub>2</sub> week per report (Consortium meeting inputs will be 1 PC professor, total <sup>1</sup>/<sub>2</sub> PC week,</li> <li>1 EU professor, total <sup>1</sup>/<sub>2</sub> EU week.</li> <li>(Inputs related to teacher-assistant)</li> </ul>	rt, total 2 PC weeks. be covered under activity 5.1)	universities).		

COSTS RELATED TO SUSTAINABILITY				
Budget Heading	Related Costs in €			
Staff Costs	937,5			
Cost of Stay and Travel Costs				
Equipment Costs				
Printing and Publishing Costs				
Other Costs				
Total Costs	937.5			

### III.5.3 QUALITY CONTROL AND MONITORING

A maximum of half page A4

Please use this section to describe your overall internal and external quality control and monitoring strategies/methods by providing information on the following issues: How will the timely achievement of the planned outcomes be demonstrated/measured in an objective and quantifiable way? Which are the adjustment mechanisms foreseen in case the quality differs from the one expected or the outcomes will not be achieved on time? Please describe the concrete evaluation measures and the identified responsible actors. Typical actions could include for example peer reviews, evaluations and external accreditation or inter-Tempus project coaching.

The first level of quality control will be provided by each regional university. Since it is in their mutual interest to improve curricula, they will put all necessary efforts into achieving the objectives of this project.

The second level of quality control will be performed through contacts with local industry experts. Since this project is in the mutual interest of local industry experts by providing better graduated engineers, they will provide industrial feedback on the revised courses.

The third level of control will be carried out through Consortium members meetings at regional universities, where quality control reports will be presented. Quality control reports will contain assessments on all indicators of progress listed in LFM, as well as the likelihood of achieving the objectives within the proposed time-scale. They will also include an overview of students' comments on their satisfaction with new/revised contents of courses and student exchange programs.

Outcome/output title:	QUALITY CONTROL AND MONITORING		Ref. N°:	8.
Starting date:	01.09.2007. End date:		31.0	8.2009.
Related Assump- tions and risks:	<ul> <li>Possibility of getting industry expert's op</li> <li>Lack of tradition of controlling quality in</li> </ul>			

Activity title:	Quality control and	monitoring ensured			
Ref. No. of outcom	Ref. No. of outcome/s to be assessed: 1., 2., 3., 4., 5.				
Starting date:		01.09.2007.	End date:	31.08.2009.	
Indicators of pro- gress:	<ul> <li>Laboratory facil</li> <li>Laboratory facil</li> <li>Consortium mee</li> <li>Teachers (re)tra</li> <li>Students' work a</li> </ul>	<ul> <li>New teaching materials (books, lab practicals, web presentations,) published</li> <li>Laboratory facilities installed</li> <li>Laboratory facilities intensively used in all courses</li> <li>Consortium meetings held on schedule</li> <li>Teachers (re)trained</li> <li>Students' work at EU Universities recognised</li> </ul>			
How the indicators will be assessed:	<ul> <li>Semi-annual quality control reports will be prepared by each PC University (4 × 3 PC professors for 1 week)</li> <li>Semi-annual quality control reports by each PC University will be presented and discussed at each consortium meeting (see 9.1).</li> <li>EU representatives at consortium meetings taking place in PC will inspect all work done at PC Universities, as well as talk with all students who came back from a semester at EU universities, and students who took new/revised courses (see 9.1).</li> <li>Contracting University will be responsible for the Mid-project and Final quality control reports (2 × 1 EU professor for 1 week). The Final quality control report will be a part of Final project report (see 9.2).</li> </ul>				
Consortium mem- ber/s or experts who will carry out the assessment:	will carry out the second level of control. The third level of control will be done by all EU consor- tium members. Finally, the Contracting institution will be responsible for the Mid-project and				
Inputs:	<ul> <li>4 × 3 PC professors, 1 week each, total 12 PC weeks</li> <li>(Consortium meeting inputs will be covered under activity 9.1)</li> <li>2 EU professors, 1 week each, total 2 EU weeks</li> <li>(Printing and publishing costs are covered under activity 9.2.)</li> </ul>				

COSTS RELATED TO QUALITY CONTROL AND MONITORING			
Budget Heading	Related Costs in €		
Staff Costs	3500		
Cost of Stay and Travel Costs			
Equipment Costs			
Printing and Publishing Costs			
Other Costs			
Total Costs	3500		

### **III.5.4 MANAGEMENT OF THE PROJECT**

A maximum of one page A4

Please describe the **role and responsibility** within the project of **each** consortium member (from the Partner Country(ies) as well as from the EU) and of individual experts (where appropriate).

Applicants should include an estimation of the tasks that will have to be performed in each project year in order to guarantee effective and efficient project management. This section should also make reference to human resource hours for tasks related to project management.

In addition, you should explain how the overall project management will be implemented making specific reference to the management structure in the Partner Country/ies, how decisions will be taken (reference should be made to decision-making mechanisms/bodies and their roles in case of divergent opinions) and how the consortium proposes to ensure permanent and effective communication and reporting.

University of Nis (co-ordinator) will plan and supervise the organisation of all project activities, organise consortium member meetings once a year, and be responsible for project progress reports.

PC consortium members (Universities of Nis, and Skopje) will take active part in the project and implement all decisions at their respective departments.

The Technical University of Madrid (Grant applicant), will supervise all project actions, be responsible for yearly budget reports, and ensure that the financing is in accordance with Tempus rules.

All EU Consortium member institutions will take part in ensuring quality control, and accept students and professors from PC universities for training/education.

Each partner will assign a Representative who will co-ordinate all activities at his/her institution. The appointed Representatives will be responsible for the project progress at their respective institutions.

The decisions are expected to be made by consensus, since there is already very good communication among the consortium members. If an agreement on a certain issue can not be reached by consensus, a decision will be made by majority vote of the Representatives. In the case of a tied vote, the co-ordinating Representative will make the decision.

Effective communication will be ensured by weekly web meetings of the Representatives, frequent informal contacts by e-mail, phone or fax, as well as semi-annual meetings. The annual consortium member meetings will take place at different participating centres, thus enabling better progress monitoring. At the meetings, the Representative of each participating University will present the progress of his/her department and discuss future activities. The Representatives will provide the coordinator with brief monthly updates on progress.

Outcome/output title:	MANAGEMENT OF THE PROJECT		Ref. $N^{\circ}$ :	9.	
Starting date:	01.09.2007.	End date:		31.0	8.2009.
Related Assump- tions and risks:	Possible problems with visas that may tium meetings	cossible problems with visas that may disable some Representatives to participate to the Consolum meetings		onsor-	

Activity title:	Future activities plan	ned (consortium members' meeti	ing) Sub Ref. $N^{\circ}$ :	9.1.	
Starting date:	01.09.2007.	End date:	20.0	6.2009.	
Description of the activity:	<ul> <li>One week consortium member meetings will take place once a year at EU consortium members institutions (2×4 travels E-W + 2×2 travels W-W).</li> <li>One week consortium member meetings will take place once a year at PC consortium members institutions (2×4 travels W-E + 2×2 travels E-E).</li> <li>At the meetings each project participant institution will present its progress and discuss future activities (2×2×1 week EU project report preparation + 2×3×2 weeks PC project report preparation).</li> </ul>				
The consortium member/s or ex- perts who will carry out the activity:	All consortium members will be carrying out the activity.				
Target group/s:	All consortium members				
Inputs:	<ul> <li>2×4 travels E-W, 1 week each, tot</li> <li>2×4 travels W-E, 1 week each, tot</li> <li>2×4 travels E-E, 1 week each, tot</li> <li>2×2 travels W-W, 1 week each, tot</li> <li>2×2 EU professors, 1 week each, tot</li> <li>2×3 PC professors, 2 weeks each,</li> <li>visas for PC students and professors</li> </ul>	al 8 travels W-E al 8 travels E-E otal 4 travels W-W total 4 EU weeks total 12 PC weeks			

Activity title:	Progress reviewed		Sub Ref. N°:	9.2.	
Starting date:	15.02.2007.	End date:		31.0	8.2009.
Description of the activity:					
The consortium member/s or ex- perts who will carry out the activity:	All consortium members will be carrying out the activity.				
Target group/s:	All consortium members				

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Inputs:	<ul> <li>1 PC professor, 2 × 2 weeks, total 4 PC weeks</li> <li>1 EU professor, 2 × 1 week, total 2 EU weeks.</li> <li>Publishing of Final Progress Report</li> <li>1 EU part time secretary/accountant, 2 × 12 weeks, total 24 EU weeks.</li> <li>1 PC part time secretary/accountant, 2 × 26 weeks, total 52 PC weeks.</li> <li>1 printer/scanner/photocopier for each PC university member, total 2 printer/scanner/photocopier</li> </ul>
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COSTS RELATED TO THE MANAGEMENT OF THE PROJECT			
Budget Heading	Related Costs in €		
Staff Costs	19100		
Cost of Stay and Travel Costs	27900		
Equipment Costs	1200		
Printing and Publishing Costs	2000		
Other Costs	3000		
Overheads	8000		
Total Costs	61200		

## SECTION IV: SUMMARY OF THE PROJECT

A summary of the project must be provided in English, French or German and may be included in future Tempus publications. This summary should be a snapshot and should include the main features of your project. Please make sure that the information you provide in this section is consistent with the Logical Framework Matrix.

	<ol> <li>Curriculum development</li> <li>Lab restructuring</li> <li>Teachers' training</li> </ol>
Outputs and Outcomes: (as in LFM)	<ul><li>4. Library, inter-partner sharing</li><li>5. Pilot student exchange</li></ul>
	6. Dissemination
	7. Sustainability
	8. Quality control and monitoring
	9. Management of the project

#### Summary of the Main Features of the Project:

With the idea of integrating PC universities into the European university system, this project will focus on transferring the existing experience at the EU consortium members to the beneficiary partner universities.

The System on Chip curriculum will be developed within the project. The course of studies will be ECTS compatible.

EU consortium members will provide the necessary leadership and experience to the project. Consortium members will allow the flow of teachers and students from the region to EU universities and back. The returning students will help in further improvement of the course of study at their Alma Maters.

Students will warmly welcome the proposed changes of the course of study. It will give them a better quality of education, with greater practical experience through numerous projects. Even more importantly, it will enable students to finish master studies in a reasonable period of time. This, in turn, will help the economy of the region by lowering the price of engineering education and giving the society better educated engineers at a younger age.

The teachers involved in the project will be trained during the project in order to technically unify the teaching activities and standardise the level of teaching. Specific laboratories will be equipped and thus both the teachers and the students will have proper surrounding for implementation of project work. Departmental libraries will be supplied with up-to-date textbooks and periodicals. The best students, after spending some time at the EU consortium member institutions, will be included in the research/teaching staff at the regional universities, as research/teaching assistants or doctoral students. This will greatly improve the teacher-student ratio, which is very poor now. At the same time, these students will train their teaching assistant successors, and thus ensure the sustainability of the system.

Textbooks and lab manuals will be published to cover all the courses.

Quantitative data concerning the training of target groups involved in your project

Number of teaching staff trained or retrained	30
Number of trainers trained	
Number of trainees trained	
Number of administrative staff trained or retrained	0
Number of students involved or trained	30

Please tick the relevant boxes indicating which of these elements are covered by your project:		
Bologna Process	Yes	
Adoption of a system of easily readable and comparable degrees	Yes	
Diploma supplement	Yes	
Adoption of a system based on two main cycles, undergraduate (bachelor) and post- graduate (Master or doctorate)	Yes	
Establishment of a system of ECTS to promote student mobility	Yes	
Promotion of European co-operation in Quality Assurance	Yes	
Promotion of the necessary European dimensions in higher education	Yes	
Lifelong learning as an essential element of the European Higher Education area	Yes	
Promoting the attractiveness of the European Higher Education Area	Yes	
Other credit systems	No	
Modular structure of curriculum	Yes	
Quality Assurance	Yes	
e-Learning	Yes	
University/Enterprise co-operation	Yes	
Links to the labour market in degree programmes	Yes	
Links with other EU education programmes	Yes	
Set up of project website	Yes	
Qualification frameworks	Yes	
Teacher training		
Language	No	
IT skills	No	
Social and intercultural skills	Yes	
Links with VET in		
Adult training	No	
Non-formal and informal education	No	
Active citizenship	Yes	
Occupational guidance and counselling	Yes	

## SECTION V: FUNDING REQUIREMENTS

In tables 1 to 6 you are asked to provide estimates of the Tempus grant you would require to carry out your project (95% of the project costs). Please complete the tables you will find below, assigning costs to the headings Staff costs, Travel costs and costs of stay for staff and students, Equipment costs, Printing & Publishing costs, Other Costs and Overheads.

In Table 7 you are asked to provide a detailed estimation on the amount to be co-financed by the consortium members, which should at least equal 5% of the eligible project costs.

Finally, table 8 presents the summary of the previous tables and will be aggregated automatically from the data you provided. Please note that below the summary table messages will appear, informing you about the compliance with the ceilings outlined in the Guide for Applicants.

Applicants should note that tables 1-6 only refer to the **Tempus grant** and not the overall **project costs**.

Applicants should also note that the **Tempus grant** consists of the operational costs (tables 1-5) and of overhead costs (table 6), which can be allocated up to a flat rate of 7% of the operational costs; whereas the **project costs** consist of the total amount needed for the implementation and realisation of the project and is composed of the Tempus grant plus the co-financing (tables 1-7).

A Tempus grant may co-finance **up to** 95% of the eligible costs of a project. The maximum grant for any project may not exceed:

#### • € 300,000 for a project lasting, in principle, 2 years..

These are **maximum** amounts and any budget plan should demonstrate its consistency with the details of the project description. All amounts must be expressed in Euro ( $\in$ ).

The following ceilings should be applied:

- Staff costs: maximum 30% of the Tempus grant;
- Equipment: maximum 30% of the Tempus grant;
- Overheads / Indirect costs: maximum 7% of the operational costs covered by the Tempus grant.

Applicants should be aware that the non-compliance with the indicated budget ceilings may lead to a lower assessment grade or even the failure of the proposal.

Please do not use any decimals and do not use "thousand separators". The figure "one thousand" should be indicated with consecutive digits: 1000 and <u>NOT</u> 1,000 or 1.000 or 1 000 or 1000,00

#### Table 1:Staff costs

#### the maximum allowed for staff costs is 30% of the Tempus grant

The table below refers to the costs for both the academic and administrative personnel involved in the project.

Please note that local rates must be used. For further details on eligible staff costs please refer to the *Guide for Applicants*.

	F COSTS (please specify what type of activity will be covered and provide a <b>fication</b> in hours for the human resources needed for these activities)*	Amount required from Tempus in €
EUAc	ademic Staff	
1.	EU member professors review the material (a working list of proposed courses) and give comments and suggestions of changes (4 x 18.75 x 26 (6666)	1 2000
2.	26.66666) First outlines of syllabi will be analysed in detail by EU professors (4 x 37.5 x 26.66666)	1. 2000 2. 4000
3.	Detailed syllabi will be revised periodically by the EU professors (4 x 37.5 x 26.66666)	3. 4000 4. 1000
4.	The final report will be prepared and included in final project report (2 x 18.75 x 26.66666)	5. 2000 6. 4000
5. 6. 7.	Mid-project and Final quality control reports (2 x 37.5 x 26.66666) Project report preparation (4 x 37.5 x 26.66666) The Consortium Progress report approval by the contractor university (1 x 75 x 26.66666)	6. 4000 7. 2000
Partne	r Country Academic Staff	
1.	Review in detail the syllabi of all existing courses and working list of proposed courses sending. (10 x 37.5 x 3.33333)	1. 1250 2. 625
2.	x 3.33333)	3. 625
3.	A list of proposed courses (masters) and courses of study is defined (10 x 18.75 x 3.33333)	4. 1250 5. 1250
4. 5.	First outlines of syllabi for all courses made (10 x 37.5 x 3.33333) Detailed syllabi will generated (10 x 37.5 x 3.33333)	6. 25000
6. 7.	10 textbooks written (10 x 750 x 3.33333) Laboratory exercises devised, necessary software and manuals written (10 x 75 x 3.33333)	7. 2500 8. 5000
	Laboratory exercises devised, necessary software and manuals written (10 x 150 x 3.3333)	9. 63 10. 3750
	Notebook PC and projector will be purchased (1 x 18.75 x 3.3333) Textbooks and lab manuals will be prepared for printing (10 x 75 x 3.33333) + 2 x 187.5 x 3.33333)	11. 125 12. 375
	Report for second consortium members' meeting (1 x 37.5 x 3.33333) Define necessary measurement and computer equipment (6 x 18.75 x	13. 375 14. 1000
13.	3.33333) Lab equipment and special lab working conditions for advanced SoCD courses will be de-fined (3 x 37.5 x 3.33333)	15. 1500 16. 500
15.	Installation of new lab equipment (2 x 150 x 3.33333) Integration of new and existing lab equipment (3 x 150 x 3.33333)	17. 750 18. 1000
	Training of the lab technicians to use new measurement equipment $(2 \times 75 \times 3.3333)$	18. 1000
17.	Training of the research/teaching assistants on new software (6 x 37.5 x	20. 625

	3.33333)	21. 625
18.	For each course, laboratory equipment and necessary software adoption (2 x 37.5 x 3.33333 + 6 x 37.5 x 3.3333)	22. 188
10	Reports prepared for the following consortium members' meeting after each	23. 187
17.	phase (6 x 18.75 x 3.33333)	24. 375
20.	Define lists of necessary books (10 x 18.75 x 3.33333)	25. 500
21.	Define lists of necessary periodicals (10 x 18.75 x 3.33333)	
	Purchase one PC (3 x 18.75 x 3.33333)	26. 63
	Purchase books (3 x 18.75 x 3.33333)	27. 125
	Subscribe to periodicals (3 x 37.5 x 3.33333)	28. 250
25.	Detailed plans made on dissemination and reports prepared for the meetings (4 x 37.5 x 3.3333)	29. 63
26.	The final report will be prepared and included in final project report (1 x	30. 1500
	18.75 x 3.33333)	31. 1500
27.	Acceptance of the list of courses (1 x 37.5 x 3.33333)	
28.	Detailed plans made on sustainability and reports prepared for meetings (1 x 75x 3.33333)	32. 500
29.	Final report preparation (1 x 18.75 x 3.33333)	
	Semi-annual quality control reports will be prepared (12 x 37.5 x 3.33333)	
	Project participant institution progress presentation (6 x 75 x 3.3333)	
32.	Compilation of all progress reports (1 x 150 x 3.33333)	
EU Adi	ministrative Staff	
1.	1. Part time secretary/accountant (1 x 900 x 8)	1. 7200
Partner	r Country Administrative Staff	
1.	Part time secretary/accountant (1 x 1950 x 2)	1. 3900
	Laboratory exercises will be devised, necessary software and manuals	2. 1500
	written (2 x 375 x 2)	3. 225
3.	Available equipment, laboratory area and use will be analysed (4 x 18.75 x 2	
	+ 1 x 37.5 x 2)	4. 225
4.	New lab equipment will be specified. (3 x 37.5 x 2)	5. 225
	Order an purchase of lab equipment (3 x 37.5 x 2)	6. 150
	Material for current needs in laboratory will be specified (1 x 75 x 2)	
7.	Laboratory adaptation for new equipment installation (4 x 75 x 2)	7. 600
8.	Installation of new lab equipment (2 x 150 x 2)	8. 600
9.	Integration of new and existing lab equipment (3 x 150 x 2)	9. 900
10.	Training of the lab technicians to use new measurement equipment $(2 \times 75 \times 2)$	10. 300
11	Necessary software adoption (2 x 37.5 x 2)	11. 150
	Web page design $(3 \times 150 \times 2)$	
12.	TOTAL STAFF COSTS:	12. 900 <b>89689</b>
	IUIAL SIAFF CUSIS;	09089

\* (Please provide specific calculations, e.g.: Lecturers of Partner Country Universities A and B x X number of hours x Y  $\epsilon$ uro per hour equals Z, etc.

#### Table 2: Costs of Stay, Travel Costs, Institutional costs

For maximum costs of stay, please refer to the Guide for Applicants, Part IV pages 15 to 19. The consortium should additionally calculate estimated travel costs and should request the total for both costs of stay and travel.

## Please indicate in this table which mobilities are planned throughout the whole project duration

Staff/trainees
----------------

Direction		Number of flows*	Total costs of stay + Travel costs required from Tempus (€)
From	То		
Partner Country	EU/Candidate Coutry	18	39000
EU/Candidate Coutry**	Partner Country	8	9000
EU	EU	4	4500
Partner Country	Partner Country	18	10900
Within a Part	ner Country	0	
	Total		63400

### Students (only in the framework of Curriculum Development and University Management pro-

jects)

Direction		Number of flows*	Total costs of stay + Travel costs + Institutional costs*** re- quired from Tempus (€)
From	То		
Partner Country	EU	10	17000
EU	Partner Country	0	0
Partner Country	Partner Country	0	0
Within a Partn	er Country	0	0
	Total:		17000

Institutional costs

Flows to EU institutions:	A maximum of € 500 per student for a study period of 3 to 5 months	
	A maximum of € 1000 per student for a study period of 6 to 12 months	

Flows to Partner Country institutions:
A maximum of € 200 per student for a study period of 3 to 5 months
A maximum of $\notin$ 400 per student for a study period of 6 to 12 months

- \* Please note that one flow=one journey. In the case of group travel, each person should be considered as an individual flow (5 staff travelling to the same project meeting = 5 flows). Should an individual carry out several visits, each visit should be considered as 1 flow (Prof X participating in 3 coordination meetings abroad = 3 flows).
- \*\* In this direction Tempus funds may only be used for mobilities of EU consortium members and/or EU individual experts or of individual experts from Candidate Countries travelling to Partner Countries.

\*\*\* Institutional costs are eligible for "student study periods" abroad only.

#### Table 3:Equipment costs

#### the maximum allowed for equipment costs is 30% of the Tempus grant

Here you should detail and quantify items of equipment needed for the activities, listed clearly by the partner country university/ies at which each item will be installed.

You should ensure that these details correspond to those given in the Outcome Tables. Please remember that <u>only partner country universities</u> may benefit from equipment funding.

Beneficiary university/ies	Amount required from Tempus in €
<ol> <li>Unversity of Skopje</li> <li>University of Nis</li> <li>University of Skopje</li> <li>University of Nis</li> <li>University of Nis</li> <li>University of Nis</li> <li>University of Nis</li> <li>University of Skopje</li> <li>University of Nis</li> <li>University of Skopje</li> <li>University of Skopje</li> <li>University of Skopje</li> <li>University of Skopje</li> </ol>	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
TOTAL FOLIDMENT COSTS	89000
	<ol> <li>Unversity of Skopje</li> <li>University of Nis</li> <li>University of Skopje</li> </ol>

### Table 4:Printing and Publishing costs

Please estimate the amount you would require to cover printing and publishing costs and give details on the type of material.

TYPE OF PUBLICATION AND N° OF COPIES (indicative)	Amount required from Tempus in €
1. Publish developed teaching materials from outcome 1	1. 27000
2. Publishing of Project Final Progress Report	2. 2000
TOTAL PRINTING AND PUBLISHING COSTS	29000

#### Table 5:Other costs

Here you should anticipate any other eligible expenses, which might arise during your project, giving reasons for each item. Expenses listed here must be fully detailed and justified.

EXPENSES (please specify)	REASON (please specify)	Amount required from Tempus in €
1. Visas for PC professors, currency exchange losses, bank charges	1. (See the description)	1. 3000
	TOTAL OTHER COSTS	3000

#### Table 6:Overheads

## the maximum allowed for overheads is 7 % of the operational costs covered by the Tempus grant

Please indicate the amount needed to cover overheads.

OVERHEADS (please specify)	Amount required from Tempus in €
1. Stationery, office supplies, postage and telecommunication costs	1. 8000
TOTAL OVERHEADS	8000

#### Table 7: Summary of project co-financing requirements

Applicants should specify through which resources (their own, from other EU Institutions or EU Member States, other organisations) they intend to co-finance the project, on which basis the co-financing has been calculated and what the amount to be co-financed is likely to cover. As the co-financing is an additional heading, expenses that have been declared in any of the previous financial tables covering the Tempus grant (tables 1-6) cannot be declared under co-financing again.

Applicants should note that overheads/indirect costs, the costs of premises (purchase, rent, heating, maintenance, repairs etc.), the purchase of office and/or classroom furniture and exchange losses do not represent eligible costs and thus may not be declared under the heading co-financing.

Source of CO-FINANCING*	Justification**	Item***	Amount (in €)
1. Own resources	1. Research/teaching assistants	1. Staff cost	1. 5000
2. Own resources	coaching a student from the following class one month. Ten students. (Activity 3.2)	2. Staff cost	2. 25000
	<ul> <li>2. New research/teaching assistants teach one semester and then coach a student (Activity 3.2)</li> </ul>		
	TOTAL CO-FINANCED		30000

\*(E.g.: EU grant, governmental subvention, organisation/institution's own resources)

\*\* (E.g.: Preparation of training materials = 2 days x 7,5 hours x 3 persons  $x \in 25$ 

\*\*\*(E.g: Equipment, staff costs, publications))

#### Table 8: Summary of project funding requirements

The estimated amounts given for each heading should correspond to the totals in the tables which detail the budget breakdown for each category of expenditure and must be expressed in Euro ( $\in$ ).

In order to have this summary table properly calculated, please alternately tick/un-tick the two tick-boxes below.

PROJECT COSTS	TOTAL
A.1 Staff Costs	€ 89689
A.2 Travel costs, costs of stay and inst. costs	€ 80400
A.3 Equipment	€ 89000
A.4 Printing & publishing	€ 29000
A.5 Other costs	€ 3000
SUBTOTAL (A.1 – A.5)	€ 291089
A.6 Overheads (up to a flat rate of 7% of the subtotal $A.1 - A.5$ )	€ 8000
A: Total Tempus grant (A.1 – A.6):	€ 299089
<b>B:</b> Amount to be co-financed by the consortium (constituting of a minimum of 5% of the eligible project costs)	€ 30000
GRAND TOTAL (A+B):	€ 329089

Once you have provided the amounts in the detailed financial tables on previous pages, alternately click these two tick-boxes in order to update the totals in the table above and the verification messages below

☑ Staff Costs ceiling of 30% of total Tempus grant is respected

- Z Equipment Costs ceiling of 30% of total Tempus grant is respected
- ☑ Overheads ceiling of 7% of total operational costs covered by Tempus grant is respected

 $\blacksquare$  Total Costs requested from the Tempus programme are within the limits

 $\square$  Co-financing amount respects the 5% minimum of total project cost (A+B)

 $\Box$  I have verified the amounts reported in the summary table above (Table 8 - Summary of project funding requirements) and checked that these comply with the Tempus ceilings and thresholds specified in the Guide for Applicants and restated at the beginning of Section V – Funding Requirements.

In rare cases the settings of the automatic calculation of the above summarising table might not be properly working. Applicants are therefore advised to counter-check their figures, using an excel calculator which can be found on the Tempus website (http://ec.europa.eu/education/programmes/tempus/deadlines\_en.html).

### Table 9: Breakdown of the Tempus grant

In the table below applicants are asked to provide an overview of the indicative breakdown of the Tempus grant amongst the consortium members.

Name of the institution	Amount in €
University of Nis	184889
University of Skopje	62000
University of Southampton	18000
University of Madrid	34200
Total Tempus Grant (A)	€ 299089

## SECTION VI: ADMINISTRATIVE DOCUMENTS

On the following pages you will find two different forms to be filled out concerning the legal status of the applicant – the so-called "Legal Entities" forms:

(1) a form for "Public Entities"(2) a form for "Private Companies"

#### Please note that:

"Public Entities" are organisations and institutions whose founding act is based on public law (such as resolution, law, decree or decision etc.),

whereas;

"Private Companies" are not only companies but also organisations and institutions whose founding act is based on private law (such as registration, agreement, contract, declaration of association etc.).

If you are a public organisation or institution please fill in the form "Public Entity".

If you are a private organisation or institution please fill in the form "Private Company" even if you are not a company.

# LEGAL ENTITIES

# PUBLIC ENTITIES

(Please select from the buttons below or fill in the related fie	lds.)		
TYPE OF COMPANY EDUCATION			
NGO (Non Governmental Organisation) 🗌 YES 🔀	NO		
NAME(S) Faculty of Electronic Engineering University	y of Niš		
ABBREVIATION EF Niš			
OFFICIAL ADDRESS 14 Aleksandra Medvedeva			
POSTAL CODE 18000	P.O. BOX 73		
CITY Niš			
COUNTRY Serbia			
VAT NUMBER 100232259			
PLACE OF REGISTRATION Niš			
DATE OF REGISTRATION ?? / ?? / ??			
REGISTRATION NUMBER ????????????????????????????????????			
PHONE +38118529105	FAX +38118588399		
E-MAIL vanco@elfak.ni.ac.yu			
CONTACT PERSON Vančo Litovski			
THIS "LEGAL ENTITY" FORM SHOULD BE FILLED IN AND RETURNED TOGETHER WITH:			
THIS "LEGAL ENTITY" FORM SHOULD BE FI	LLED IN AND RETURNED TOGETHER WITH:		
• A copy of the resolution, law, decree or decision es	tablishing the entity in question;		
	tablishing the entity in question;		
<ul> <li>A copy of the resolution, law, decree or decision es</li> <li>Or, failing that, any other official document attesting</li> </ul>	tablishing the entity in question; g the establishment of the entity.		
• A copy of the resolution, law, decree or decision es	tablishing the entity in question;		
<ul> <li>A copy of the resolution, law, decree or decision es</li> <li>Or, failing that, any other official document attesting</li> </ul>	tablishing the entity in question; g the establishment of the entity.		
<ul> <li>A copy of the resolution, law, decree or decision es</li> <li>Or, failing that, any other official document attestin</li> <li>DATE</li> <li>NAME AND FUNCTION OF THE AUTHORISED</li> </ul>	tablishing the entity in question; g the establishment of the entity.		
<ul> <li>A copy of the resolution, law, decree or decision es</li> <li>Or, failing that, any other official document attestin</li> <li>DATE</li> <li>NAME AND FUNCTION OF THE AUTHORISED REPRESENTATIVE</li> </ul>	tablishing the entity in question; g the establishment of the entity.		
<ul> <li>A copy of the resolution, law, decree or decision es</li> <li>Or, failing that, any other official document attestin</li> <li>DATE</li> <li>NAME AND FUNCTION OF THE AUTHORISED</li> </ul>	tablishing the entity in question; g the establishment of the entity.		
<ul> <li>A copy of the resolution, law, decree or decision es</li> <li>Or, failing that, any other official document attestin</li> <li>DATE</li> <li>NAME AND FUNCTION OF THE AUTHORISED REPRESENTATIVE</li> </ul>	tablishing the entity in question; g the establishment of the entity.		
<ul> <li>A copy of the resolution, law, decree or decision es</li> <li>Or, failing that, any other official document attestin</li> <li>DATE</li> <li>NAME AND FUNCTION OF THE AUTHORISED REPRESENTATIVE</li> <li>Radoslav Bubanj, Rector of University of Niš</li> </ul>	tablishing the entity in question; g the establishment of the entity.		
<ul> <li>A copy of the resolution, law, decree or decision es</li> <li>Or, failing that, any other official document attestin</li> <li>DATE</li> <li>DATE</li> <li>NAME AND FUNCTION OF THE AUTHORISED REPRESENTATIVE</li> <li>Radoslav Bubanj, Rector of University of Niš</li> <li>Dragan Antić, Dean of the Faculty of Electronic</li> </ul>	tablishing the entity in question; g the establishment of the entity.		
<ul> <li>A copy of the resolution, law, decree or decision es</li> <li>Or, failing that, any other official document attestin</li> <li>DATE</li> <li>DATE</li> <li>NAME AND FUNCTION OF THE AUTHORISED REPRESENTATIVE</li> <li>Radoslav Bubanj, Rector of University of Niš</li> <li>Dragan Antić, Dean of the Faculty of Electronic</li> </ul>	tablishing the entity in question; g the establishment of the entity.		
<ul> <li>A copy of the resolution, law, decree or decision es</li> <li>Or, failing that, any other official document attestin</li> <li>DATE</li> <li>DATE</li> <li>NAME AND FUNCTION OF THE AUTHORISED REPRESENTATIVE</li> <li>Radoslav Bubanj, Rector of University of Niš</li> <li>Dragan Antić, Dean of the Faculty of Electronic</li> </ul>	tablishing the entity in question; g the establishment of the entity.		
<ul> <li>A copy of the resolution, law, decree or decision es</li> <li>Or, failing that, any other official document attestin</li> <li>DATE</li> <li>DATE</li> <li>NAME AND FUNCTION OF THE AUTHORISED REPRESENTATIVE</li> <li>Radoslav Bubanj, Rector of University of Niš</li> <li>Dragan Antić, Dean of the Faculty of Electronic Engineering</li> </ul>	tablishing the entity in question; g the establishment of the entity.		

# LEGAL ENTITIES

# PRIVATE COMPANIES

(Please select from the buttons below or fill in the related fields.)		
TYPE OF COMPANY		
NGO (Non Governmental Organisation)	NO	
NAME(S)		
ABBREVIATION		
ADDRESS OF THE HEAD OFFICE		
POSTAL CODE	P.O. BOX	
CITY		
COUNTRY		
VAT NUMBER		
PLACE OF REGISTRATION		
DATE OF REGISTRATION Day / Month / Year		
REGISTRATION NUMBER		
PHONE	FAX	
E-MAIL		
CONTACT PERSON		
THIS "LEGAL ENTITY" FORM SHOULD BE FI	LLED IN AND RETURNED TOGETHER WITH:	
	te, register of companies, etc.) showing the contractor's	
name and address and the registration number give		
<ul> <li>a copy of the vat registration document if applicable document referred to above.</li> </ul>	le and if the vat number does not appear on the official	
DATE		
SIGNATURE		

## FINANCIAL IDENTIFICATION

(To be filled in by the Grant Applicant)		
ACCOUNT HOLDER		
NAME Universidad Politécnica de Madrid	I HOLDER	
ADDRESS Avda. Ramiro de Maeztu, 7		
TOWN / CITY Madrid	POSTCODE 28040	
CONTACT PERSON Rosa M <sup>a</sup> Benavente León	I	
TELEPHONE +34 911 336 36 60		
E-MAIL director.prog.eu@upm.es		
VAT NUMBER ES-Q2818015F		
BA	NK	
BANK NAME Barclays Bank		
BRANCH ADDRESS Plaza de Colón, nº 2		
TOWN / CITY Madrid	POSTCODE 28046	
BANK/BRANCH CODE 0065		
ACCOUNT NUMBER 0100-12-0031000262		
SWIFT BARCESMM		
IBAN ES74 0065-0100-12-00131000262		
REMARKS:		
BANK STAMP + SIGNATURE of BANK REPRE-	DATE + SIGNATURE of ACCOUNT HOLDER:	
SENTATIVE:	(Obligatory)	

## SECTION VII: CHECKLIST

Before submitting your application by e-mail, please make sure that it is complete and tick the boxes accordingly:

1.	The <u>Declaration</u> (Section I) is completed	$\square$
2.	The Legal Entities Form (Section VI) is filled in	$\square$
3.	The Financial Identification Form (Section VI) is filled in	$\square$
4.	The Basic data (Section II) on the project is provided	$\square$
5.	All the consortium members (Section II) are listed and contact persons are indicated	$\square$
6.	The <u>description</u> of the project covering all questions (Section III) is provided	$\square$
7.	The project summary sheet (Section IV) is complete	
8.	The tables regarding funding requirements (Section V) are complete	$\square$

Before submitting the original supporting and administrative documents after receipt of your project registration number, please make sure that they are complete and tick the boxes accordingly:

1.	The cover letter indicating the registration number is enclosed.	
2.	The <u>Declaration</u> (Section I) is signed and stamped or sealed	
3.	The Legal Entities Form (Section VI) is signed and stamped	
4.	The Financial Identification Form (Section VI) is signed and stamped	
5.	The <u>endorsement letters</u> are signed (Section I)	
6.	The <u>curriculum vitae</u> of the participating expert(s) is/are enclosed.	