HELLENIC REPUBLIC
MINISTRY OF DEVELOPMENT

GENERAL SECRETARIAT
FOR
RESEARCH & TECHNOLOGY

EUROPEAN COMMISSION

Γ' ΚΟΙΝΟΤΙΚΟ ΠΛΑΙΣΙΟ ΣΤΗΡΙΞΗΣ
ΕΠΙΧΕΙΡΗΣΙΑΚΟ ΠΡΟΓΡΑΜΜΑ

PRIORITY AXIS 4: TECHNOLOGICAL INNOVATION AND RESEARCH

MEASURE 4.6: CREATION OF REGIONAL INNOVATION POLES – EAST THESSALONIKI INNOVATION ZONE

ACTION 4.6.1: CREATION OF REGIONAL INNOVATION POLES (RIP)

PROPOSAL SUBMISSION FORM

TITLE :	**REGIONAL INNOVATION POLE OF CENTRAL MACEDONIA**

To be completed by the GSRT:

Date of Submission:	**Proposal Serial No:**
___/____/_____	_____

CONTENTS OF PROPOSAL SUBMISSION FORM

I. Summary project data

PROJECT TITLE:

REGIONAL INNOVATION POLE OF CENTRAL MACEDONIA

BRIEF DESCRIPTION OF SCOPE

The scientific/technological areas/priorities[1] of the Pole should be mentioned (max. 2 pages)

The Regional Innovation Pole of Central Macedonia (RIPCM) focuses on the sectors of industry and services that are based on Information and Communication Technologies (ICT). According to NACE classification, these sectors are:

32 Manufacturing of radio, television, and communication equipment
64 Telecommunications services
72 Computer and other similar services

Regarding these sectors the RIPCM is attempting to reinforce the Regional Innovation System with new institutions and partnerships, in order to improve the capability of the ICT enterprises to develop and launch new products into the market. **RIPCM is mainly focusing on product innovation**.

To this end, RIPCM develops its tasks along four 4 directions:

- Technological platforms in the sectors of (1) Broadband Internet services, (2) Telecommunications, (3) Knowledge software, which were designated as the priority areas in the Regional Foresight of Central Macedonia, just concluded (December 2005)
- Research and technological development consortia between ICT enterprises, research laboratories and institutions, and user enterprises, in the same sectors with the technological platforms
- New spin-offs companies based on the exploitation of research results

As well as horizontal activitities concerning

- The strategy and viability of the Pole
- The dissemination of the business and sector intelligence
- The international technological cooperation and promotion of RIPCM
- The transfer of technology and the creation of innovative entrepreneurship activity.

For the above actions, RIPCM brings together a considerable number of organizations in research, entrepreneurship and transfer of technology, which cooperate to define emerging trends in technologies and products, and then to develop new products and innovative spin-off companies. Parallel to this, RIPCM enjoys the active support from all the research and entrepreneurship agencies of Central Macedonia.

The drafting of the proposal hereby was possible under the coordination of the Central Macedonia Region, through an open dialogue and consultation that took place throughout the year 2005. The immediate participation of the C. Macedonia Region reflects the fostering attitude toward this project as well as to its continuation during the next programming period 2007-2013.

[1] These areas must not be more than three (3).

COORDINATING ORGANISATION:

NAME	ARISTOTLE UNIVERSITY OF THESSALONIKI
POSTAL ADDRESS	UNIVERSITY CAMPUS, 54124 THESSALONIKI
TEL.	2310 - 996701
FAX	
E-mail	rector@auth.gr
Tax Reg. No. (AFM)	090069627
Tax Authority Office (DOY)	I Thessaloniki

PROJECT MANAGER:

FULL NAME	IOANNIS ANTONOPOULOS
ORGANISATION	ARISTOTLE UNIVERSITY OF THESSALONIKI
POSITION IN ORGANISATION	RECTOR
POSTAL ADDRESS	UNIVERSITY CAMPUS, 54124 THESSALONIKI
TEL.	2310 - 996701
FAX	
E-mail	rector@auth.gr

TOTAL BUDGET:	4.985.557,63
FINANCING APPLIED FOR:	3.606.846,40
PRIVATE SECTOR PARTICIPATION:	1.378.711,23

DURATION IN MONTHS : __ 24___ months

The duration of the project must not exceed 24 months.

TABLE 1: PROPOSED TASKS:

Implementation Instrument A: Research & technological development consortia in priority areas for the Region	
No.	**TASK TITLE**
A1	Open platform for digital cities
A2	Broadband weather imaging service
A3	Inter-functionality and adaptability of business to business transactions (B2B)
A4	Development of an integrated internet portal for secure service to the students
A5	Development of position identification system and supply of telematic services
A6	Telematic system to manage dispatch calls for fleets of vehicles
A7	'Smart Home' tele-command system
A8	Digital accuracy-driven farming
A9	Development of advanced semantics techniques in a coronary ultrasound test
A10	Utilizing software tools to optimize production of polymers
A11	Electronic platform for quality and tractability in the dairy industry
A12	e-Levator: Customized products management through the Internet
A13	Eye-Olives
A14	3D (3-dimensional) Visual feedback system for sport skills learning
A15	Optimizing the anti-seismic protection for bridges
A16	Green house integrated management
A17	Business information management from miscellaneous sources
A18	ATREAS: Realistic scenery representation in a virtual reality environment
A19	e-Consulting
Implementation Instrument D: Activities in preparation of assistance to research units in connection with the standardization and commercial exploitation of research results	
No.	**TASK TITLE**
D1	Commercial operation of a locally targeted advertising system on the Internet
D2	Video-base customized software
D3	Polymers optimization software
D4	Electrocardiograph through the PC
D5	Information machine based on position awareness from visual identification
Implementation Instrument E: Regional Technological Platforms	
No.	**TASK TITLE**
E1	Technological platform for broadband and Internet services
E2	Telecommunications technological platform
E3	Technological platform for knowledge software and software technologies
Horizontal Activities	
Activity 1: Strategy and viability of the RIPCM	
Activity 2: Dissemination of business and sector intelligence	
Activity 3: Promotion and international technological cooperation	
Activity 4: Transfer of technology and innovative entrepreneurship activity	
Management of the RIPCM	
Management	
Evaluation	

TABLE 2: PARTICIPATING ORGANISATIONS (incl. participating organizations from outside the particular Region, if any, provided that these have partner status)

No.	NAME	**Involvement in the project (*)**	**TYPE OF ENTERPRISE (**)[2]**	UNIV. DEPT. TECHNOL. EDUCATION INST. (TEI) / INSTITUTE (***)	LABORATORY (***)	LEGAL FORM (****)	TAX REG. NO. (AFM)	TAX AUTHORITY OFFICE (DOY)	POSTAL ADDRESS (Street address, City, Postal Code)	FULL NAME OF LEGAL REPRESENTATIVE	TEL.	e-mail
1	Emetris A.E.	**A1**	**2**			2	095668231	FAE Thessaloniki	9th klm Thessaloniki-Thermi	Anestis Voulkopoulos	23109 99900	av@emetris.gr
2	Aristotle University of Thessaloniki	**A1**			Urban and Regional Innovation Research Unit (URENIO)	1	090049627	I' Thessaloniki		Aristidis Kazis	23104 89304	komninos@urenio.org
3	Municipality of Thermi	**A1**				3			Thermi	Theodoros Papadopoulos		
4	Aristotle University of Thessaloniki	**A2**		Physics Department	Section of applied Physics and Environmental Physics	1	090049627	I' Thessaloniki	Administration Building, University Campus, 54124 Thessaloniki	Aristidis Kazis	23109 96745	research@rc.auth.gr
5	3d – General air applications S.A.	**A2**	**2**			2	094062942	FAE Thessaloniki	Skiathou 2, 54648 Thessaloniki	Skepastianos Dimitios	23104 16545	
6	SIGMANET-	**A2**				2	099378949	Θ' Thessaloniki	Baltadorou 11, 54631Thessaloniki	Spiroglou	23102 20505	
7	Aristotle University of Thessaloniki	**A3**		Department of Informatics	Programming languages & Software Engineering Lab	1	090049627	I' Thessaloniki	Administration Building, University Campus, 54124 Thessaloniki	Aristidis Kazis	23109 96745	research@rc.auth.gr

[2] The type of enterprise declared here must be supported by the enterprise data – see below.

8	Singular Software A.E.	**A3**	**2**			2	094220358	FAE Athens	Siniosoglou & Panagouli (Building H), 14234 N.IONIA – Athens	Ioanis Rontiris	210 6267200	yron-diris@singu-lar.gr
9	SYNOLON S.A	**A3**	**2**			2	999718604	FAE Thessa-loniki	Monastiriou 62, 54627 Thessaloniki	Antionios Arletos	2310-502919	aaa@syno-lon.gr
10	Aristotle University of Thessaloniki	**A4**				1	090049627	I'Thessaloniki	Administration Building, University Campus, 54124 Thessa-loniki	Aristidis Kazis	2310996745	re-search@rc.auth.gr
11	Cardisoft AE	**A4**	**2**			2	095647432	FAE Thessa-loniki	Monastiriou 60, 54627	Milonas Theofil-os, head manager	2310567840	t.milonas@cardisoft.gr
12	COMPUCON Soft-ware Applications S.A	**A5**	**2**			2	094373338	FAE Thessa-loniki	9o Klm Xari-laou-Thermi, Thessaloniki 57001	George Voul-garoudis	2310490300	voul-garou-dis@com-pu-con.gr
13	Centre for Research and Technology	**A5**		Informatics and Telematics Insti-tute		1	099785242	Z' Thes-saloniki	6o Klm Xari-laou-Thermi, Thessaloniki 57001	Konstantinos Kiparisidis	2310498100	certh@certh.gr
14	VRSENSE	**A5**	**2**			2	999124680	FAE Thessalo-niki	6o Klm Xari-laou-Thermi, Thessaloniki 57001 PO BOX 328	Tzovaras Di-mitrios	2310498286	vrsense@theste-p.gr
15	ALUMIL	**A5**	**1**			2	094220266	DOY. Kilkis	Industrial ar-ea Stavroxo-riou Kilkis 611 00,	Milona Evagelia	2341079380	g.tsopa-nel-is@alu-mil.com

16	University of Macedonia	**A6**		Research Committee		1	090203611	D' DOY Thessaloniki	Egnatia 156, 54006 Thessaloniki	Konstantinos Margaritis	2310-891299	kmarg@uom.gr
17	COMPUCON Software Applications A.B.E.E.	**A6**	**2**			2	094373338	FAE Thessaloniki	9o Klm Xarilaou-Thermi, Thessaloniki 57001	George Voulgaroudis	2310490300	voulgaroudis@compucon.gr
18	Cardisoft A.E.	**A6**	**2**			2	095647432	FAE Thessaloniki	Monastiriou 60, 54627	Milonas Theofilos, head manager	2310567840	t.milonas@cardisoft.gr
19	Radio Taxi Combination White Tower	**A6**				3	999545079	E' Thessaloniki	Omirou 3, Sikiew, Thessaloniki 56626	Tselios George	2310246104	-
20	OLYMPIA ELECTRONICS A.E.	**A7**	**2**			2	094136591	Eginiou	60061, Kolindros Pierias	Lakasas Nikolaos (Provost)	23530-51611	info@olympia-electronics.gr
21	A.Technological Education Institute of Thessaloniki	**A7**		Department of Electronics	Ηλεκτρονικών Συστημάτων Electronics	1	090047740	Ionias	Po box 141, 57400 Thessaloniki	Karakoltsidis Paul (Chairman of the Research Committee)	2310-791-367	karakol@food.teithe.gr
22	Cardisoft AE	**A7**	**2**			2	095647432	FAE Thessaloniki	MOnastiriou 60, 54627	Milonas Theofilos, head manager	2310567840	t.milonas@cardisoft.gr
23	American Farm School	**A8**				3		Z' Thessaloniki	Mar.Antipa 12 Pilea Thessaloniki	William Magrou	2310-492700	wmcgrew@afs.edu.gr
24	InfoDim SA	**A8**				2						

25	- Informatics and Telematics Institute - Centre for Research and Technology Hellas (CERTH)	**A9**		Centre for Research and Technology Hellas (CERTH)	Informatics and Telematics Institute	1	099785242	Z' Thessaloniki	1st klm Thermi-Panorama, Thessaloniki, 57001, Po box 361	Konstantinos Kiparisidis	+3023 10498 100	certh@certh.gr
26	Aristotle Univarsity of Thessaloniki	**A9**		Aristotle Univarsity of Thessaloniki	Laboratory of hearth mechanism	1	090049627	I' Thessaloniki	University Campus of Thessaloniki, 54124	Aristidis Kazis	+3023 10995 140	research@rc.auth.gr
27	VRSense	**A9**	**2**			2	999124680	FAE Thessaloniki	6th klm Xarilaou-Thermi, Thessaloniki, 57001, Τ.Θ. 328	Dimitrios Tzovaras	+30-2310-498286	vrsense@thestep.gr
28	SIMTEC software and services Ltd	**A9**	**2**			2	999895320	D' Thessaloniki	P.P.Germanou 2, Thessaloniki, 546 22	Urania Faltsi	+3023 10251 731	rana@simtec.gr
29	Centre for Research and Technology Hellas (CERTH)	**A10**		Chemical process Engineering Research institute	EMAP	1	099785242	Z' Thessaloniki	6th klm Xarilaou-Thermi, Thessaloniki, 57001,	Konstantinos Kiparisidis	23108 04150	cypress@cperi.certh.gr
30	Loufakis Chimika SA	**A10**				2	0944486161	FAE Thessaloniki	Industrial Area Thessaloniki 57022	Kiriakos Loufakis	23105 69100	o@loufakis.gr
31	GNOMON INFORMATICS SA	**A10**				2	082964412	FAE Thessaloniki	A.Tritsi 21, 57001 Thessaloniki	Stathis Tavridis	23108 04150	info@gnomon.gr
32	MIK3 SA	**A11**	**2**			2	094519891	FAE Thessaloniki	A.Tritsi 21, 57001 Thessaloniki	Konstantinos Kefalas	2310 804 850	info@mik3.gr
33	Aristotle University of Thessaloniki	**A11**		School of Agriculture Department of Food Technology	Microbiology and health y of food	1			Administration Building A.U.TH. Thessaloniki 541 24		2310 471 467	kkoutsou@agro.auth.gr

34	MEVGAL AE	**A11**				2	094055557	FAE Thessaloniki	Koufalia, 57100 Θεσσαλονικη	Papadakis Petros	03915 9100	
35	GNOMON INFORMATICS	**A12**				2	082964412	FAE Thessaloniki	A.Tritsi 21, 57001 Thessaloniki	Stathis Tavridis	23108 04150	info@gnomon.gr
36	KLEEMANN HELLAS INSTRUCTION SA	**A12**				2	094124623	Kilkis	Industrial area of., kilkis, T.Θ. 25 Kilkis 611 00 - Kilkis	NIkolaos Koukountzos	23410 /3810 0	headoffice@kleemann.gr
37	Centre for Research and Technology Hellas (CERTH)	**A12**		Informatics and Telematics Institute		1	099785242	Z' Thessaloniki	6th klm Xarilou-Thermi 57001 Thessaloniki	Konstantinos Kiparisidis	23104 98100	certh@certh.gr
38	KLEEMANN HELLAS Instructions SA	**A12**				2	094124623	Kilkis	Industrial area Kilkis PO box. 25 Kilkis 611 00 - Kilkis	NIkolaos Koukountzos	23410 /3810 0	headoffice@kleemann.gr
39	Centre for Research and Technology Hellas (CERTH)	**A12**		Informatics and Telematics Institute		1	099785242	Z' Thessaloniki	6th klm Xarilou-Thermi 57001 Thessaloniki	Konstantinos Kiparisidis	23104 98100	certh@certh.gr
40	Aristotle University of Thessaloniki – Eng.& Telematics	**A13**				1	090049627	I' Thessaloniki	University Campus Thessaloniki 54124	Aristidis Kazis	+3023 10995 140	research@rc.auth.gr
41	Synolon SA	**A13**	**2**			2	999718604	FAE Thessaloniki	Monastiriou 62, 54627 Thessaloniki	Antonios Arletos	2310-50291 9	aaa@synolon.gr
42	Konstantopoulos SA	**A13**	**2**			2	094118813	A' DOY Katerini	3rd klm Katerini-Larisa	Prokopios Konstantopoulos	23510-47000	info@onstolymp.gr
43	KAVAFAKIS P. PC	**A13**	**2**			2	099929715	DOY Neapoli	Alex.Papadiamanti 5, N. Efkarpia,	Dimitrios Kavafakis	2310-68596 9	kavaf@mailbox.gr

44	Centre for Research and Technology Hellas (CERTH)	**A14**		Informatics and Telematics Institute		1	099785242	Z' Thessaloniki	6th klm Xarilou-Thermi 57001 Thessaloniki	Konstantinos Kiparisidis	23104 98100	certh@certh.gr
45	Aristotle University of Thessaloniki	**A14**		Department of Physical education and sports science	Lab of education and movement control	1	090049627	I' Thessaloniki	University Campus Thessaloniki, 54124	Aristidis Kazis	+3023 10995 140	research@rc.auth.gr
46	VRSense A.E.	**A14**	**2**			2	999124680	FAE Thessaloniki	6ο klm Xarilaou-Thermi, Thessaloniki, 57001, Τ.Θ. 328	Dimitrios Tzovaras	+30-2310-49828 6	vrsense@thestep.gr
47	Iatrotexnologiki S.A.	**A14**				2			Lakoma - Xalkidiki			
48	FORUM Sports Centre Kalamaria A.E.	**A14**				2	099771286	FAE Thessaloniki	Ethn.Antistaseos 16, Kalamaria 55133	Dimitriadis Nikolaos	23104 34711	
49	Aristotle University of Thessaloniki	**A15**		Τμήμα Πολιτικών Μηχανικών	Εργαστήριο Πειραματικής Αντοχής των Υλικών και Κατασκευών,	1	090049627	I' Thessaloniki	University Campus Thessaloniki, 54124	Aristidis Kazis	+3023 10995 140	research@rc.auth.gr
50	Kentavros O.E.	**A15**				2	04201137	FAE	Terma Stavroupolis, 58000	A.Kouloussios	68194 9	
51	DIGITAL ART ΕΠΕ	**A15**				2	099787757	Z Thessaloniki	Larisis 9	Petros Skalkos		
52	American Farm School	**A16**				3		Z'Thessaloniki	Mar.Antipa 12 Pilea Thessaloniki	William Magrou	2310-49270 0	wmc-grew@afs.edu.gr
53	Aristotle University of Thessaloniki	**A16**		School of Agriculture	Εργαστήριο Agricultural Lab of constructions	1	090049627	I' Thessaloniki	University Campus, 54124	Aristidis Kazis	+3023 10995 140	research@rc.auth.gr

54	Momentus E.Π.E.	**A16**	**2**			2	095327172	B' Thessaloniki	Danedon 4	Manousos Manousakis	23105 22038	manousos@momentous.gr
55	University of Macedonia	**A17**		Research committee		1	090203611	D' DOY Thessaloniki	Egnatia 156, 54006 Thessaloniki	Konstantinos Margatis	2310-891299	kmarg@uom.gr
56	A.Technological Education Institute of Thessaloniki	**A17**		Department of Electronics	Electronics	1	090047740	Ionias	ΤΘ 141, 57400 Thessaloniki	Karakoltsidis Pavlos (Headmaster of Research Committee)	2310-791-367	karakol@food.teithe.gr
57	Papadopoulos Nikolaos – PANOPTIS	**A17**	**2**			2	026566532	ST Thessaloniki	Alex.Mixailidi 1B, 54640 Thessaloniki	Papadopoulos Nikolaos	2310-842886	panoptis@the.forthnet.gr
58	TESSERA MULTIMEDIA SA	**A17**	**2**			2	099774290	FAE Thessaloniki	V. Georgiou 24 56440 Thessaloniki	Sofia Gainde	2310-889155	gaide@tessera.gr
59	MLS Informatics SA	**A18**	**2**	-	-	2	094449116	FAE Thessaloniki	17th November 79, Thessaloniki, 54352	Ioannis Kamatakis	2310-929090	mail@mls.gr
60	Centre for Research and Technology Hellas (CERTH)	**A18**	**-**	Informatics and Telematics Institute	-	3	099785242	Z' Thessaloniki	1ο klm. National road Thermi – Panorama	Konstantinos Kiparisidis	2310-498100	cypress@cperi.certh.gr
61	Centre of dissemination of science and technical museum	**A18**	**-**	-	-	3	099979349	Z' Thessaloniki	6ο kl m Xarilaou - Thermi Ταχ. Κωδ 57001	Dimitrios Psilos	2310-483000	info@tmth.edu.gr
62	Epsilon Net - Informatics	**A19**				2	099357493	FAE Thessaloniki	17th November 79, Thessaloniki, 54352	Ioannis Mixos	23109 81700	infoath@epsilonnet.gr

63	Aristotle University of Thessaloniki	**A19**		Department of Informatics	Lab of data development	1	090049627	I' Thessaloniki	University Campus, 54124	Aristidis Kazis	+3023 10995 140	research@rc.auth.gr
64	Elliniki Symboulon SA	**A19**				2						
65	Eustratios Arabatzis. (Tero Ε.Π.Ε.)	**D1**				2	999256823	Z Thessaloniki	A.Tritsi 21, TK 57001 Thessaloniki	Eustratios Arabatzis	23108 04900	info@tero.gr
66	Sfigos Nikolaos	**D2**				3						
67	Centre for Research and Technology Hellas (CERTH)	**D3**		CPERI		1						
68	Athanasios Tsigos	**D4**				3	035392039	I' Thessaloniki	Ioakim G 10 , Thessaloniki, T.K. 54636	Tsigos Athanastios	23990 – 20278	tsiguepe@otenet.gr
69	Kostas Daniilidis	**D5**					04218295	Θ' Thessaloniki	Mitropoleos 19, 54624 Θεσσαλονικη	Kostas Daniilidis	69743 28046	kostas@cis.upenn.edu
70	Aristotle University of Thessaloniki			Department of science		1	090049627	I' Thessaloniki	University Campus, 54124	Aristidis Kazis	+3023 10995 140	research@rc.auth.gr
71	University of Macedonia			Research committee		1	090203611	D Thessaloniki	Egnatia 156, 54006 Thessaloniki	Konstantinos Margatis	2310-89129 9	kmarg@uom.gr
72	CERTH			CPERI		1						

Extra lines may be added, depending on the number of participants

* Implementation Instrument / Task No. (in accordance with table 1 in Section I)

** 1 – Large company, 2 – SME (in accordance with the EC definition). This column is completed only by enterprises.

*** These columns must be completed in the case of public R&T organizations

**** 1 – Public R&T organization, 2 – Business organization, 3 – Other organization

II. Overview of RIP activities

II.1 Focus of the pole in terms of technological / research areas and markets (max. 2 pages)

This proposal for the Regional Innovation Pole of Central Macedonia (RIPCM) was designed according to the Application Guide of the measure 4.6 of the GSRT for the creation of the regional innovation poles. It responds to the intended policies of the Ministry of Development and GSRT to reinforce the development of strong clusters of research, technological development and knowledge-based entrepreneurship in the regions of Greece showing a critical mass in this field.

The Regional Innovation Pole of Central Macedonia (RIPCM) chooses to focus on a single scientific / technological area, that of the Information and Communication Technologies (ICT). Focusing on a single scientific / technological area is complemented and expanded with the emphasis of the RIPCM placed on the innovative application of the ICTs in as many as possible market sectors of manufacturing and and services.

In this context, RIPCM emphasizes mainly in the promotion of entrepreneurship in sectors utilizing ICTs, that is, it focuses its attention in the innovative application of the ICT in all of the sectors of business activity with a view to: (1) the promotion of innovative procedures toward the productive, administrative and broader business process of the enterprises in the region aimed at the reinforcement of competitiveness and the attainment of a comparative advantage, and (2) the promotion of innovations with a view to the design, manufacture and marketing of high added value products or services.

This goal is compatible with the rationale of innovation clusters, that is, local systems of innovation within single sector production systems, as well as with the Digital Strategy of Greece for 2006-2013 (http://www.infosociety.gr/digital_strategy), which sets the national goals and the time schedule for their accomplishment. The key directions in the optimization of productivity include the following measures: (a) Promoting the integration of ICTs in enterprises, (b) Support of the ICT sector, and (c) Promotion of entrepreneurship in the sectors utilizing ICTs.

The objective, thus, of the RIPCM is the development of technological innovation through the application of ICTs in a wide spectrum of productive, commercial, enterprise and administrative activities. It is reasonable, though, to argue that the achievement of such a goal encompasses the tasks for the promotion of ICTs in enterprises and support of the ICT sector, since the accomplishment of the general objective requires healthy ICT enterprises and a wide use of ICT in enterprises as well as in the greater public sector.

This option, i.e. for the RIPCM to focus on a group of industry and services sectors that base their activities in ICTs, concentrates the tasks of the Pole in the following NACE sectors:

32 Manufacture of radio, television, and communication equipment
64 Telecommunications services
72 Computer-based and other similar services

Selecting the sector of ICT as the center of RIPCM, the key partners of the Pole are defined to be:

(a) The higher education institutions (Universities, TEI), research centers located in the RCM. These organizations have quite a significant number of top level scientists and researchers, who, either engage exclusively in ICT or they utilize ICT intensely to conduct the research and development of innovative products to almost all of the scientific and technological areas.

(b) The ICT enterprises of the region that show a significant concentration, notable activity and effort for coordinated action in the effort for the development of innovative products and services (SEPBE, Technopolis). Also, agencies in the region that specialize on the issues of technology (know how) transfer and technological innovation (Technology Park, Incubators, CERTH).

(c) The enterprises of RCM (industry, SME, commercial businesses, enterprises of the wider public sector) with particular sector or/ and individual interests in the development of technological innovation through ICT applications.

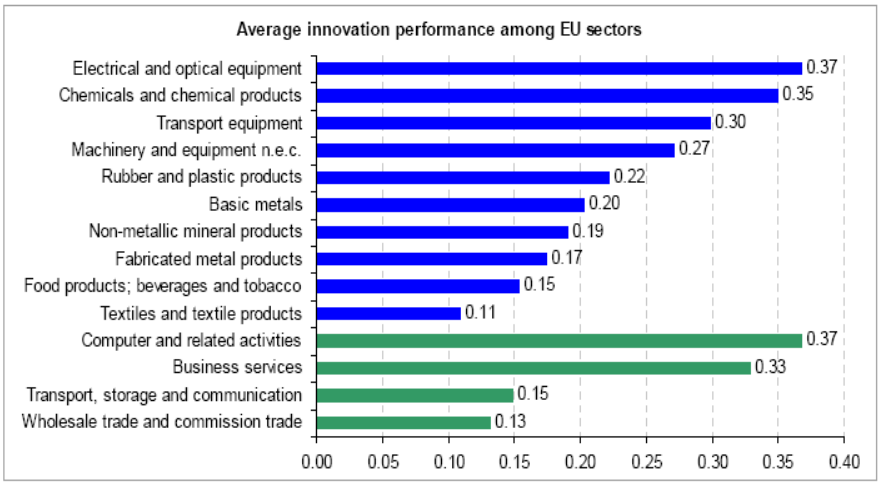
For all of the above organizations, RIPCM offers a field for synergies and cooperation in the development of innovation and international promotion of products and services.

The choice of the ICT as central focus of the RIPCM was based on the following rationale:

1. The ICT sector (NACE 30-31-32-64-72-73-74-92) constitutes a significant part of the productive potential of C. Macedonia, corresponding approximately to 7% of the regional GDP and employment.

2. As shown by the Innovation Scoreboard 2004 and 2005 data, this sector of ICT exhibits the best performance in the field of innovation at European level, both in hardware (electrical and optical equipment) and software (computer and related activities), and hence the attempts to innovation shall be spawned on fertile ground.

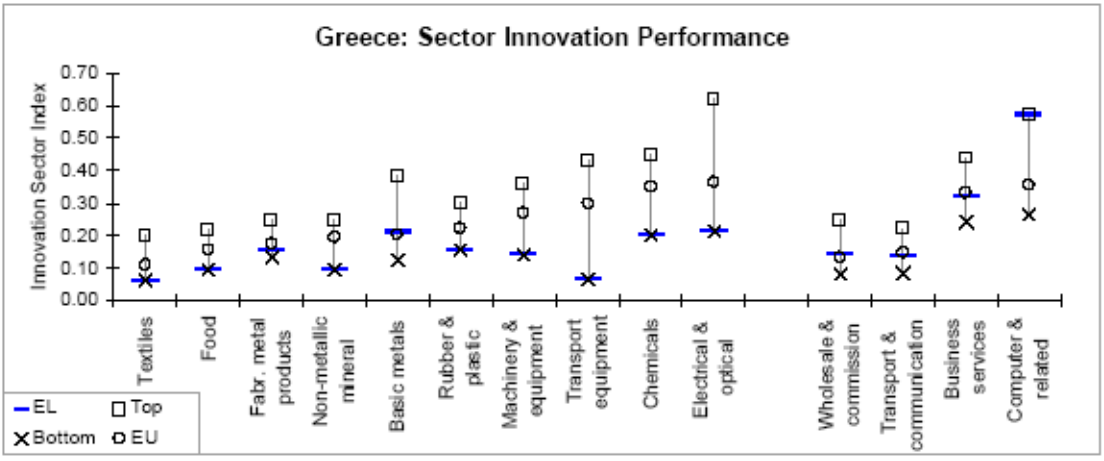
Innovation performance of EU sectors



Source: Innovation Scoreboard 2004

3. The sector of ICT in Greece, and in particular, the part involving the software has the best performance in the field of innovation in relation to other EU member – states, and consequently it can respond to the efforts for innovation that will be developed in the framework of the RIPCM

Greece: Innovation by Sector



ISI scores per sector shown by •, highest ISI score in country sample depicted by •, lowest ISI score in country sample depicted by x, EU average depicted by •.

Source: Innovation Scoreboard 2004

II.2. Description of all organizations participating in the RIP. More in particular:

Because the exceptionally big extent of the text describing all participating institutions (> 500 p.), this part of the proposal was transported in the Annex Documents together with the Balance-sheets, supporting documents, and the CVs of the work-teams of each task.

III. Description of current situation

- **Detailed description of the current situation in terms of the technological/research areas/markets proposed in the section "Overview of RIP activities"** (please provide as many details as are necessary)

RIPCM concentrates its tasks in the sectors of industry and services that are based on Information and Communication Technologies (ICT).

During the recent years, Greece marked a significant and constant growth in its economic performance. The most radical changes in the economy are in the sector of ICT (*National country report, program ISIS - SEPBE, 2003).* Nevertheless, Greece allocates the least expenditures in ICT in Europe, however, with trends for convergence (study of IIER- SEPVE*, 2004*), while it also ranks low with respect to the European average regarding the penetration and use of ICT in the country. In more recent years, significant efforts have been made involving the use and penetration of ICT in the Greek businesses and households with national and European funds pushing for the penetration of information technology in the economic, business as well as social mainstream in the country.

More specifically, the ICT sector in the region of Central Macedonia may be characterized as a continuously growing sector, with visible innovation features that assists and supports the business development of the region, while it has within its ranks companies that are active in all of the sectors of Information & Communication Technologies developing products and providing integrated services for customers of the private as well as of the public sector. It must be noted that when compared at the level of development with respect to the other regions, it shows the greatest and faster growth incorporating the characteristics of advanced clusters from abroad.

In particular, it consists of companies that specialize in hardware and software production (software development, computer and peripherals distribution), integrated systems and informatics services, internet business solutions & e-commerce applications, such as web and online databases, telecommunication applications and solutions as well as marketing of telecommunication products & services, multimedia applications, while at the same time they develop and promote integrated and consulting services in informatics. In more detail, the ICT companies in the region are about 500 in total, the majority of which are SME and employ between 11-50 people with a turnover ranging from 1 to 10 million Euros (study of IIER- SEPVE*, 2004*).

On the basis of their activity, ICT companies in C. Macedonia are divided as follows:

- Equipment : 48,7%
- Software : 18,4% -
- Services : 32,9% (study Aristia - SEPBE*, 2004*)

Lately, there is a great interest observed for the relocation of the offices of major Greek & foreign corporations in Thessaloniki, with a view to the development of not only the local market but mainly of emerging markets in informatics (computers) in Southeastern Europe. It must be noted that in the ICT sector in the region of Central Macedonia the penetration of ICT is based on the SME with a flexible management structure, capable of implementing solutions of high tech level and innovation (Study Aristia - SEPBE*, 2004*).

The university – academic sector is playing its own role in the sector of ICT, since the high level of the university and technological institutions can provide a pool of talent and skills from which companies can tap highly qualified human resources. Despite the fact that there is a very good performance level in the sector of Research & Development (R&D), there is a relatively limited number of spin off businesses resulting from the partnership of the academic research field with enterprises.

Key factors in the future growth of the ICT sector is the broadening of the European Union that provides the potential for a larger market, better funding through the community funds supporting research & development, as well as the transfer of know how and promotion of joint research programs, good level of post high-school and higher education, and continuous growth of the Information Society. On the other hand, the obstacles in the development of the ICT sector are the limited national market, the relatively low percentage of utilization of European programs by the SME to support their R&D, as well as the constantly growing competition from multinational corporations that the sector is experiencing.

Some conclusions involving the strengths, weaknesses, as well as the opportunities and threats of the sector of ICT

to support the regional economy and for the development of informatics into a competitive strategic advantage for the development of our region are:

Strengths

- In the region of Central Macedonia the penetration of the ICT sector is based on the SME with a flexible management structure, capable of implementing solutions of high tech level and innovation.
- The technical and scientific personnel available are highly qualified and the performance of the technological solutions is very high.
- There is development of the export activities of the enterprises.
- Significant annual increase in the expenditures for informatics that sets the ground for investments in the sector by major industrial players in the region.
- Synergies developed between the local and multinational companies, which set the basis for project consortia with a complex scope in major IT projects mainly in the public sector.
- The production of ideas is satisfactory for the development of new products and services.
- The drive for expansion in Balkan countries forms the basis for a strong placement of the businesses in the region.
- Local businesses are well aware of the conditions in the region with major group of companies trying to develop activity in the region of CM.

Weaknesses

- There are no organized Research & Development departments in most companies.
- No satisfactory cooperation between the research laboratories in the region and industry informatics.
- Access to financing means for the development of new technologies is theoretically impossible due to the structure of the banking system and low priority they place on high risk investments.
- The industrial users of informatics are not informed about the evolution taking place in the area of informatics.
- IT investments in the enterprises are mainly based on the structural investment of automated data, and do not introduce informatics into the production process.
- Great concentration of IT companies in Thessaloniki, less opportunities for the Region of CM.

Opportunities

- Informatics incorporates the great hope for the development of the regional economies that were not particularly beneficial during the period of industrial development due to weaknesses and delays of the wealth producing but also financial resources and conditions. Now, they have the possibility to play a major role in the reformulation of the new global setting already being formulated, while the economies of the western and Asian countries that based their strategy on the ICT already, have created a favorable environment for the competitiveness of their economies.
- The "High Tech Enterprises Technology Park – Technopolis Thessaloniki S.A.", which helps significantly with the growth of the region.
- The establishment of "Egnatia Odos of Informatics" and the funds of the 3rd CFS, as well as the funding tools of EU (FP6 & FP7) for the development of research and innovation.
- The informatics enterprises of the Region can become the trunk for a new, emerging Industry.
- Broadening of the market due to accession in the E.U. of countries from SEE and the Balkans.

Threats

- Widening of the gap between large and small informatics companies, low rate of funds absorption from the 3rd CSF for informatics projects of the State.
- Technological lag of Greece in relation to Europe and the USA, which increases the risk of penetration of the Greek market by foreign companies.
- Lack of a coordinated action plan to ensure the viability of informatics companies in the region.

In summary, we could argue according to the analysts of Strategic International SA, the following, "there is prospect for the future growth of High Tech, always in the context of improving the environment, but also with the upgrade of the added value of companies, in order to improve their competitive performance against the international competition." (*GREECE - DIGITAL WORLD OUTLOOK 2003-2006, Kataras*).

- **Description of the collaborations developed at the regional, national and European level prior to the creation of the Pole**
  (please provide as many details as are necessary)

The establishment of the RIPCM was made possible through the contribution of the efforts by several agencies of Central Macedonia (Region of CM, CERTH, AUTH, FING, SEPBE) to promote the technological development of the region and to create infrastructures and support institutions for technology, applied research, and development of high tech enterprises. These efforts comprise the elaboration of Regional Innovation Policies, the establishment of the Technological Theme Park of Thessaloniki and then of CERTH, the establishment of the Center for Dissemination of the Research Results and of the Digital Research Center of the AUTH, the establishment of Technopolis in Thessaloniki, and projects such as 'Excellence (Aristia) in CM' to promote technologies and innovations to the enterprises in the region that was performed by the Region of Central Macedonia.

Central Macedonia has developed a long term activity in the issues of innovation policy. Thessaloniki was one of the significant endeavors for the creation of an environment for innovation at the beginning of the 90's, when the organization EITXHD managed to create the most successful technological theme part in the country. A lICTle later, in 1994, through an initiative by the European Commission and the Aristotle University of Thessaloniki, began a parallel endeavor for technological policy, the Regional Technology Plan for C. Macedonia (Phase 1 1995-97, Phase 2 1999-2000). In addition, the technological development was a distinguished unit within the Operational Business Program, with the implementation of a series of projects for the development and promotion of technology (industrial informatics, technological diagnosis, telematics, new institutes, know-how transfer centers, etc.).

Regional technological policy
RTP (1995-97), RIS+(1999-2000)

Within the framework of EU innovation-led regional policies, began the Regional Technology Plan for Central Macedonia in 1994 (RTP - Regional Technology Plan). RTP was a pilot program in the context of a new policy of the European Commission to support the less developed regions of Europe through research and technological development programs. The target of the 8 initial RTPs was the empowerment of the technological capability of the regions of the Community, improvement of the skills of the local and regional agencies to exercise policy related with the actual needs of the productive sectors and the capabilities of the local scientific and research communities, such as ensuring an agreement between public administration, private sector, universities and research centers with respect to the nature of technological development in a region.

The preparation of RTP in C. Macedonia evolved in four stages. During the first one, the regional innovation production system was analyzed through a series of studies that focused on the description of the productive system and its competitiveness, recording of the level of characteristic technologies, analysis in the regional demand for technology, analysis of the regional supply of technology, and analysis of the regional technology transfer. At the second stage, an attempt was made to process an innovation strategy adapted to the conditions and particularities of Central Macedonia. Strategic directions and priorities for technological development of the Regions were sought. There was assessment of the innovation strategies adapted in other regions of the E.U., as well as of the trends that define the industry in Northern Greece.

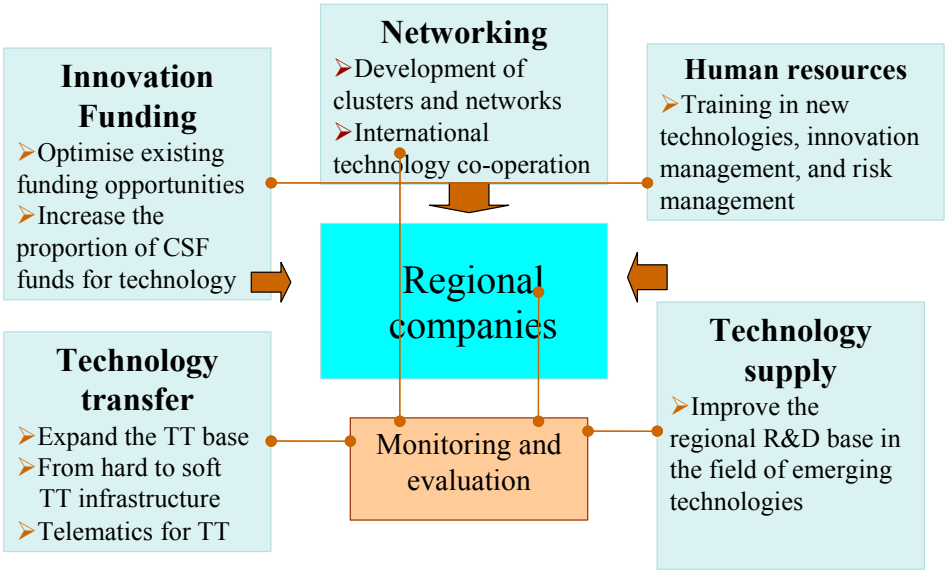
At the third stage, the Action Plan was elaborated, which comprises the final statement of the program strategy, selection of individual distinct priorities, and 22 projects corresponding to the above priorities. Finally, at the fourth stage, there was investigation of the application framework of the RTP, the possibilities to interface it with the Community Support Framework and the Community Initiatives that were considered as the major sources of funds for the implementation of the projects in the program.

The implementation of the Program commenced in the period 1997-99. Certain projects were promoted through the Research and Technology Operation Program, PEP of Central Macedonia and resources of the EU. These include:

- The project of Industrial Informatics (budget, 1,6 billion GRD) and the Techno-Diagnosis Program (budget, 200 billion GRD) funded from the PEP.

- The project of Dissemination of Innovation Development Technologies (budget, 1,2 billion GRD) funded by the European Commission.
- The project for the establishment of the Division for Technology Transfer in the Technological Theme Park of Thessaloniki, which was funded by the Research & Development Operational Program and by the PEP.
- The Center for Dissemination of Research Results AUTH (budget, 3,5 billion), which is in the phase of preparation and process for the issue of the building permit.

Regional Technological Program for C. Macedonia: Strategy Axes



Parallel to this, the European Commission approved the continuation of the Regional Technology Plan in the form of funding a series of pilot tasks, through the RIS+ project of C. Macedonia (1999-2000). This program focused on the further processing and pilot application of projects making up the policy for technological development and reinforcement of innovation in Central Macedonia.

Thermi innovation pole

In the eastern part of Thessaloniki, the concentration of research and technology institutions, the creation of the Technological Park, the National Center for Research and Technological Development, the plans of the American Farm School, the Agro-Farm of the Aristotle University of Thessaloniki, and other private initiatives have produced a critical mass of research and technology activities and a distinct technological pole.

The establishment of the Thessaloniki Technological Park (TTP) in 1992 was an important start in physical planning, as it provided significant support to the research infrastructure of area of Thermi and changed its image. The TTP includes the National Center for Research and Technological Development, the Center of Technology Transfer, the business Incubator and the conference center. It serves as a reference cluster for the greater technological system of the city. It transfers technological know how to the enterprises and supports the emergence of new, technology-intensive enterprises.

The TTP also hosts the Hellenic American Initiative for the Technological Cooperation in the Balkans - (*ITCB - Initiative for the Technological Cooperation in the Balkans)*, which creates the potential to highlight Thessaloniki as the center for technological development and establishment of high tech enterprises. The initiative supports the Greek – American business partnerships with the ultimate goal being the transfer of technology and private business know how, as well as the upgrade of the technological capabilities in the Balkans. The memorandum of cooperation has been signed and the Action Plan has been prepared, which comprises the elaboration of techno-diagnosis and the

drafting of the Guide to Technological Services.

The establishment of the National Center for Research and Technological Development (CERTH) was a step further in the support of the technological nature of the region. CERTH includes four institutes, Institute for Chemical Processes, the Institute of Informatics and Telematics, the Institute for Agrotechnology and Food Technology, and the Institute of Transports. A potential expansion, in future, could include 3-4 more Institutes.

As a complement to this, but without any particular functional interfaces, is the operation of the European Center for Continuous Training and Education (CEDEFOP), and the Center for the Promotion of Sciences and Technical Museum.

The land policy of the American Farm School played a decisive role in the concentration of the above organizations and activities, as well as the grant of areas from the School for the facilities of the Thessaloniki Technological Park, CERTH, CEDEFOP, and of Technopolis S.A. Overall, the pursuit of the AFS is the creation of a technological pole, with particular emphasis in the technologies of the farming sector, possibly of a specialized Technopolis in the primary sector, agriculture, and food industry.

Technology Planning in C. Macedonia

The ten-year period that intervened from the Regional Technology Plan and the establishment of the Technology Pole in Thermi until today, produced a significant experience in planning for innovation and technological development in Central Macedonia in wider sense. Today there is a valuable experience in the planning of issues involving:

- the dissemination and application of informatics/ automation technologies in businesses
- the establishment and operation of research institutes
- the installation and operation of digital networks and services
- the establishment and operation of institutions and infrastructures for the transfer of technology
- the creation and support of clusters
- the dissemination of technologies
- the development indicators and systems for measuring innovation at regional level.

If we look at this issue from the perspective of the guiding ideas characterizing the planning of technological development of C. Macedonia, we shall be able to identify two parallel trends. At the first level, the efforts refer to the creation of innovation clusters. This involves

- research clusters: new institutes of informatics, biotechnology, etc. National Center for Research and Technological Development
- technology transfer clusters: expanding the Technological Park, Agropolis, Center for Research Dissemination of AUTH, Technological Museum, etc.
- company clusters of technology-intensive industries: Technopolis SA
- clusters in the existing industry, with the projects 'Industrial Informatics', 'Techno-Diagnosis', 'Telematics', 'Dissemination of innovation development technologies', etc.

At a second level, the efforts involve the linking of the above initiatives, the cohesion of the regional innovation system and the creation of regional knowledge and innovation system. This system shall be based on institutions and organizations, on human communication and cooperation networks, and above all, in the creation of complementarities and synergy between the agencies for development, transfer, and use of technology.

Preparation of the Regional Technological Pole of C. Macedonia (RIPCM)

In the above framework of initiatives for the promotion of technological innovation in Central Macedonia and in Thessaloniki, the Region of Central Macedonia took the initiative, in May 2005, to start preparing the creation of the Regional Innovation Pole, by ensuring the support from a large number of agencies in the Region, among which are:

- The Aristotle University of Thessaloniki (AUTH)
- The University of Macedonia

- The National Center for Research and Technological Development
- The National Center for Agricultural Research
- University and HTI research laboratories
- The Higher Technological Institute of Thessaloniki
- The Supreme Technological Institute of Serres
- The Technological Park of Thessaloniki
- The Incubators EDAP SA, I4G SA, Thermi SA
- The Center for Technological Development of Thessaloniki
- The Federation of Industries of Northern Greece
- The Association of Informatics Companies of Northern Greece
- The Commerce and Industry Chamber of Thessaloniki
- The Greek – German Chamber
- The Geotechnical Chamber
- The Association of Export Companies of Northern Greece
- Informatics and Communication Companies
- The American Farming School of Thessaloniki
- Technopolis of Thessaloniki SA
- The SE Europe Institute of Telecommunications
- The Center for Dissemination of Sciences and Technology Museum

Under the auspices of the above organizations a conference was held on 12 December 2005, at the facilities of the Technological Park of Thessaloniki, with the topic being the participation of enterprises, university labs and other organization in the RIPCM in the consortia and spin-offs of RIPCM. The conference was attended by more than 150 representatives from companies and research centers and there was a detailed discussion on the establishment of the RIPCM and the possibilities for participation in this initiative.

In response to the RFP (Request For Proposals) for the establishment of R&D Consortia and Spin-offs that was announced in the above conference, 60 proposals were filed. These proposals were evaluated by a 4 three-member committees of evaluators, appointed by AUTH, University of Macedonia, CERTH, FING, SEPBE, with the following criteria:

1. The innovation of the product, technology, service
- Is it based on the results of an instituted research?
- Is it a new product/ service in the market (not the company)?
- Can it be protected by copyright/ intellectual property rights?

2. The technical feasibility of the proposed product, technology, service
- Is the product/ service technically feasible?
- Is there a prototype?
- Is there any contract for mass production?

3. The market of the product/ service
- Is there a market research (market size, competitors, shares)?
- Is it targeted for the national/ international market?
- Are the target groups of the market clear and sufficiently defined?

4. The experience and capability of the candidate submitting the proposal
- Is there know how for the development of the product/ service of the research organization?
- Is there any business experience with the organization for entrepreneurship?
- Is there commitment on the part of the application organization?

5. The benefits at regional level
- Jobs created
- Creation of business/ economic activity in the RCM
- Promotion of transnational cooperation and highlighting of the RCM

Based on the marking received by each of the proposals and in the order of priority, as defined by the evaluators, 19 R&TD Consortia and 5 Spin-off were qualified that were included in this proposal.

Parallel to this, the entirety of the filed proposals in their initial form is submitted as accompanying documentation of the proposal hereby, in order to enable the complete assessment and evaluation of all the proposals that were requested to be included in the Regional Innovation Pole of C. Macedonia. It is up to the GSRT to make the final choice of the Consortia and Spin-off that will be included in the RIPCM, as long as it is approved for funding.

- **Size and growth rate of target market(s)**
  (please provide as many details as necessary)

Information and communication technologies (ICT) are a core element of the knowledge-based society. ICT expenditure, investment and production shares are rising in the US and in the EU - albeit at different rates across Member States.

In the 1990s, several causes combined to accelerate ICT diffusion and growth. Technological change, coupled with large price reductions, led to a surge in the use of digital technologies. With firms ready to exploit the opportunities offered by ICT, the liberalisation of telecommunications and the growth of the Internet economy – allowing for economies of scale and network effects – brought new vigour and eagerness to invest in new technologies. In the US, business investment in computers and peripheral equipment, measured in real terms, jumped more than fourfold between 1995 and 199924 and a rapid increase is also detectable in the EU, though not at the same pace as in the US.

International Comparison in ICT Expenditures and Production

Table III.1 International comparison of ICT expenditur e and production

	Share of ICT in business sector employment, 1998	Share of ICT in business sector value added, 1998	ICT expenditure as % of GDP, 1998	ICT expenditure as % of GDP, 1992-1999
Belgium	4.3	5.8	5.7	5.6
Denmark	5.1	-	6.7	6.6
Germany	3.1	6.1	5.1	5.3
Greece	-	-	5.1	3.8
Spain	-	-	4.0	3.9
France	4.0	5.3	5.9	5.9
Ireland	4.6	-	6.4	5.9
Italy	3.5	5.8	4.5	4.2
Netherlands	3.8	5.1	6.9	6.7
Austria	4.9	6.8	4.7	4.8
Portugal	2.7	5.6	5.1	4.5
Finland	5.6	8.3	5.7	5.6
Sweden	6.3	9.3	9.5	8.2
United Kingdom	4.8	8.4	9.0	8.1
EU (*)	**4.0**	**6.4**	**6.0**	**5.6**
Japan	3.4	5.8	6.2	6.0
US	3.9	8.7	8.7	8.1
Switzerland	6.0	-	7.3	7.3
Australia	2.6	4.1	8.5	8.1
Canada	4.6	6.5	8.1	7.6

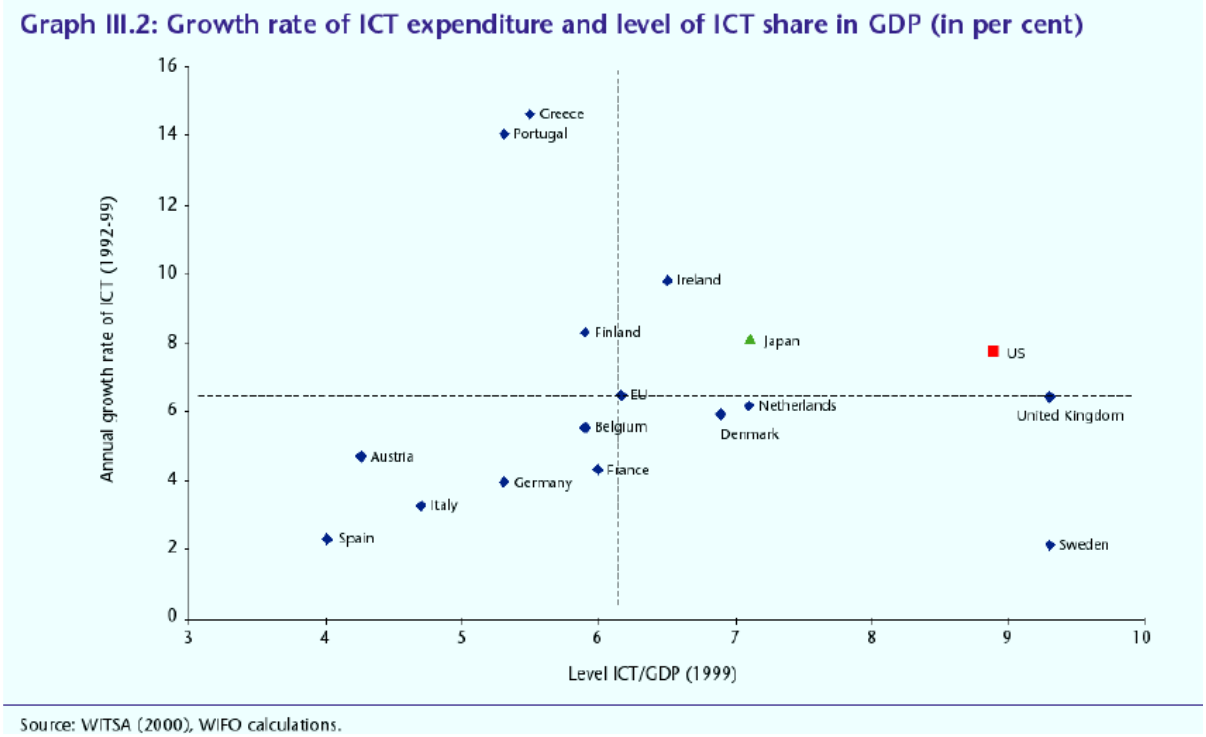
(*) Weighted average GDP (1990), WIFO calculations.

Source: OECD, 2001A, WITSA, 2000, WIFO calculations.

Source: EU Competitiveness Report 2001

The expenditures, production and investments in ICT are growing at a different rate in the EU countries. The ICT expenditures measure the dissemination of ICT goods and services, and the absorption of ICT by companies, private homes and the public sector. The expenditures in the EU are lower than in the USA, although there are certain remarkable exceptions. For example, as a percentage of the GDP, Sweden and the U.K. spend in ICT as much as the USA spends. The indices in ICT expenditures reveal visible differences in the countries of OECD. Sweden and the U.K. in Europe, Australia and the USA are at the top, with ICT expenses of about 8% of the GDP (1999). Next, in descending order are the Netherlands (Holland) and Denmark with their expenditures near 7%. France, Germany, Italy and Spain are in the low average of the EU (5,6% in 1999).

Growth Rate and ICT Share in the GDP



Source: EU Competitiveness Report 2001

The difference between the share of ICT expenditure in GDP in the EU and the US has widened since 1992 (exactly 2.3 percentage points higher in the US in 1992 and 2.7 percentage points in 1999). Measured relative to US expenditure, EU expenditure in ICT declined from 90 % in 1992 to 75 % in 1999. Overall, the acceleration of ICT spending the share of ICT in GDP in 1999 is clearly above average.

In contrast, countries like Spain, Germany, Austria and France on average registered growth in ICT expenditure well below the EU average in the 1990s, and a stagnating share of GDP devoted to ICT leading to below average ICT shares in 1999. Sweden registered the lowest growth of ICT expenditure, but the share of ICT spending in GDP grew at rates close to the EU average, and in 1999 its ICT share was the highest of all the Member States.

The lowest level of ICT expenditures in the EU in relation to the USA partly represents a smaller ICT sector, but also less expenditures from the homes, enterprises and the public sector.

However, the most dynamic European countries with respect to growth of ICT expenditures are Greece, Portugal, Ireland and Finland. They increased their share of ICT expenditures in the GNP during the 90s and now are near the average of the EU. In the case of Greece and Portugal, the high growth percentages represent the serious investment in the telecommunication infrastructures, an investment that the majority of the European countries have already made during the first half of the 90s. In the U.K., Netherlands, Denmark and Belgium, the ICT expendi-

tures grew to a percentage slightly lower than the EU average.

Instead, countries like Spain, Germany, Austria and France noted on the average expenditure in ICT quite below the EU average during the 90s, and a fixed share of the GNP in ICT. Sweden noted the lowest growth in ICT expenditures, but the share of ICT expenditures in the GNP increased by percentages near the EU average, and in 1999 the ICT share of the GNP was the highest of all the member states.

Annual Growth Rate of ICT Expenditures

Table III.2: Annual growth rates of ICT expenditure (1992-99, per cent)

	Annual growth rate			Acceleration
Country	1992-95	1995-99	1992-99	second half - first half
Belgium/Luxembourg	6.8	4.6	5.5	-2.2
Denmark	7.6	4.7	5.9	- 2.9
Germany	5.8	2.6	3.9	- 3.2
Greece	23.7	8.3	14.6	- 15.5
Spain	- 1.7	5.2	2.2	6.9
France	5.7	3.2	4.3	- 2.4
Ireland	9.4	10.1	9.8	0.8
Italy	0.3	5.5	3.3	5.2
Netherlands	7.0	5.5	6.1	- 1.5
Austria	5.1	3.5	4.2	- 1.6
Portugal	24.9	6.5	14.0	- 18.4
Finland	12.6	5.2	8.3	- 7.3
Sweden	- 1.7	5.1	2.1	6.8
United Kingdom	4.2	8.1	6.4	3.9
EU	**4.7**	**4.8**	**4.7**	**0.1**
US	7.3	8.1	7.8	0.9

Source: WITSA (2000).

Source: EU Competitiveness Report 2001

Investment in information technology affects output and productivi ty gr owth through three separa bl e channels (see Stiroh, 2001 and European Commission, 2000):

1. Technological progress in the production of ICT goods: Technological progress allows production of improved capital goods at lower prices, thus raising total factor productivity growth in the ICT-producing sector. The magnitude of this effect on the total economy depends on both the speed of this technological progress and the share of the ICT sector in the economy.

2. Capital deepening in the total economy: The most important effect of ICT use could be an increase in labour productivity through additional capital formation (ICT capital), which raises the productivity of labour.

3. Spillover effects: ICT investment induces embodied technological change, thus increasing total factor productivity growth outside the IT sector, generating production spillovers or externalities.

IV. Strategy for the development of the RIP

- **This section covers the short-, medium- and long-term goals (quantified, where possible). Relevance of the RIP strategy to the overall economic development policy for the Region, and potential synergies between them. Relation of the RIP strategy to the EU policies on regional development, research and innovation.** (please provide as many details as are necessary)

The Regional Innovation Pole for Central Macedonia ventures to continue the efforts to support the innovation environment of the Region, but also to deal with the weaknesses of the Regional Innovation Strategies (RTP, RIS+) that were elaborated in the period 1995-2000. The RIPCM as well as the regional innovation strategies that preceded it are concentrating on the **Regional Innovation System**. In that sense they are approaches that adopt the systemic theory of innovation, as a process of collaboration and combination of capabilities between institutions of research, information dissemination, technology transfer, and innovation development.

The fundamental difference between a Regional Innovation Pole and a Regional Innovation Strategy refers to the type of the system of innovation that is created. In the case of the Pole, it involves a system focused on a small number of sectors of industry or services, technologically focused on major importance technologies, with a clear cooperation of the organizations for research, technology transfer and entrepreneurship, which participate in the Consortium/ Partnership of the Pole.

In the case of C. Macedonia the system of innovation that the RIPCM is trying to create involves all the sectors which are directly associated with the ICT, including:

30 Manufacturing of office machines and computers
31 Manufacturing of electrical equipment
32 Manufacturing of radio, television and communication equipment
64 Telecommunication services
72 Computer related and other similar services
73 Research and development services
74 Other services
92 Services of entertainment, culture, media, radio, television

Out of these, three sectors, 32, 64 and 72 are the sector of focus of this project hereby.

The long term strategy of development of the Regional Innovation Pole of Central Macedonia is focusing on the creation of a solid **system of innovation in the ICT sector**.

This strategy is intended to deal with the most important weaknesses recorded on the European Innovation Scoreboards for Greece and for the Greek regions. It is well known that the innovation performance of the enterprises (new products, patents, inter-business research, innovation expenditures, etc) is low, the attraction of multinational companies in C. Macedonia and knowledge-intensive activities, which, would evidently contribute to the egional innovation economy, is limited; the private sector does not always keep up with the improvement of performance of the public sector.

The general concept of the RIPCM strategy is illustrated in the Diagram below.

- The ICT enterprises are at the center of interest of the Pole. This interest expends to all informatics and communication enterprises that are established in the Region of C. Macedonia: local businesses, businesses that were created by spin-off, branch-plants of multinational corporations, as well as their vendors in other sectors of industry and services.
- The scope is to develop and disseminate innovative products and services through technology platforms and cooperation consortia.

To accomplish this, the enterprises must cooperate with R&D and technology transfer organizations. This is a targeted collaboration for the joint development of products, use of the research results, measurement and certification of quality, follow up of markets and technologies, etc.

ICT Sector Innovation System

TECHNOLOGIES	Cooperation Networks	PRODUCTION		New Products	MARKETS
Research: Information technology Labs	Joint new product development Exploitation of R&D results			Telecoms Wireless networks Broadband networks and services Web services	**ICT companies** Of CM and Greece
Research: Labs implementing information technologies	Laboratory measurement	**SUBCONTRACTORS**	**Existing ICT** companies in C. Macedonia		**Companies in other sectors** than ICT of CM and Greece
Technology Transfer TTP, KETA, Liaison Offices	Cooperative watch of markets and technologies Technology platforms Technology interim services		**Spin-off ICT** companies in C. Macedonia	Software technologies Knowledge software Bio-informatics Medical informatics Broadband, multimedia	**Companies in** other EU countries
Incubators EDAP, I4G, Thermi			**Multinational** companies in C. Macedonia		**Public administration** Local Central
Funding institutions	Risk capital Seed capital				**Population** of CM and Greece

The long term strategy of RIPCM stems from the systematic approach of innovation. The 'system of innovation' is a set of institutions of research, technology, funding and production that collaborate with each other and influence the capability of businesses for innovation. As Richard Nelson points out in his classical book, 'National Systems of Innovation':

*'Although to some the word (**system of innovation**) connotes something that is consciously designed and built, this is far from the orientation here. Rather, the concept is of a set of institutions whose interactions determine the innovative performance of national firms. There is no presumption that the system was, in some sense, consciously designed, or even that the set of institutions involved works together smoothly and coherently. Rather, the 'systems' concept is that of a set of institutional actors that, together, play the major role in influencing innovative performance. The broad concept of innovation that we have adopted has forced us to consider much more than simply the actors doing research and development.'*

The system of innovation, in the case of RIPCM, is based on the cooperation of the ICT companies with research laboratories / centers that develop ICT applications, as well as with technology transfer and information dissemination agencies, such as the Thessaloniki Technological Park, the Liaison Offices of universities, the business incubators, and technology management consultants. This system comprises two levels: (1) the establishment of institution supporting the innovation, and (2) the establishment of partnerships for the development of innovative products and services.

The direct objective of the Regional Innovation Pole of Central Macedonia is the improvement of innovation of the ICT compnies of the Region. This strategy focuses on the basic routes for innovation development (Research – Transfer of technology – Product development – Procees innovation – Spin-off creation) and promotes the creation of support mechanisms to reinforce these routes, taking into account the existing know-how and capabilities in the Regionl.

The immediate goals of the RIPCM are focisuing on basic processes of innovation of ICT companies, such as:

1. Development of applied research
2. Information on markets and products
3. Transfer of technology
4. Creation of spin-off companies
5. Development of new products
6. Optimizing proceses and logistics
7. Promotion of products in the international market

The RIPCM is planned as a regional system of institutions and partnerships that reinforce innovation, firstly in the ICT sector and then to other sectors of industry and services, dealing with their shortcomings in the fields of research and development, patent acquisition, development of new products, and access to international markets.

The short term goals of the RIPCM comprise actions for the creation of new innovation-support institutions, and actions for technological cooperation:

In the field of new institutions supporting innovation in the ICT sector, the goal is to set:

- 3 technological platforms for the increase and optimization of research in telecommunications, broadband, and software
- 1 network for the dissemination of business and sector intelligence
- 1 network for international technological cooperation
- 1 network for technology transfer and creation of innovative entrepreneurship

In the field of cooperation between businesses and research centers, the goal is to set:

- 19 consortia for the development and introduction of new products and servicesinto the market
- 5 new spin-off enterprises.

The implementation of the RIPCM strategy includes a series of coordinated tasks, like:

- Detailed planning of the viability of the Pole;
- Coordination and ensuring the synergy of tasks and organizations of the RIPCM Consortium;
- Planning of permanent support mechanisms for the promotion innovation in the fields of (a) business intelligence, (b) transfer of technology and creation of spin-off, (c) advertising and promotion of new products in the international market;
- Preparatory tasks for new clusters and sectors which are not included in the initial target of the Pole;
- Continuous evaluation and adaptation of the tasks in relation with their tangible and measurable results.

- **Foreseen national, European and international collaborations**
  (please provide as many details as are necessary)

EUn and international collaborations of RIPCM will be developed in all of its directions: the development and operation of innovationsupport institutions; the development of new products; the creation of new enterprises.

The organizations outside the region with which these collaborations are provisioned are**:**

Concerning technological platforms
- European Commission Inter-Service Group on Technology Platforms

Concerning the dissemination of business and sector intelligence
- Business Intelligence Forum, an iternational network for the promotion of business intelligence
- DECILOR, one of the major European applications of sector intelligence
- ORACLE, MICROSTRATEGY, SAP, major business intelligence providers
- Collective Intelligence Practitioners Initiative, an initiative for the promotion of collective intelligence
- Institute for the Future (IFTF), a non profit research organization for emerging technologies and business trends in the global market.

Concerning transfer of technology
- IRCs, the national and European network supporting business innovation
- Alpha Consortium, a pan-European group of organizations fostering technology entrepreneurship
- IASP International Association of Science Parks
- Incubator Forum (Technology Incubator Management) initiative by Gate2Grouth

Parallel to this, there will be efforts for cooperation with the Association of Greek Science Parks under establishment for the networking of the Regional Innovation Pole with other Regional Poles that will be created.

The presence of Technological Parks in a number of regions of the country provides the geographical as well as the content coverage, which may constitute a "national identity" regarding issues of utilization and exploitation of research results.

Concerning promotion and international technological cooperation
- EU-Japan cooperation
- STPI, Software Technology Parks, Bangalore, India
- Ministry of Communication and Information Technology, Karnataka State Government
- Manufacturers Association for Information Technology of India
- InnoCentive, an international network of businesses and research centers cooperation
- yet2.com, a global forum for buying and selling technology on the Internet

Concerning R&D consortia
- Collaborations with several European and US universities and research centers, among which are the University of Georgia, University of Wales, Institute Jules Destre, Catholic University of Louvain, Research and Technology Institute of Maastricht, Technical University of Milan, etc.

Concering the creation of spin-offs
- EU-US working group on venture capital
- PAXIS: Pilot action on innovative Start-ups
- Forum of Innovative Enterprises

- **Analysis of RIP strengths and weaknesses (key success factors)**
  (please provide as many details as are necessary)

The RIPCM is an extensive cooperation network around the ICT sector. Direct participants are 24 research laboratories from Universities, Higher Technolgical Institutes, and Research Centers, 36 enterprises, 3 other organizations, and 2 business associations of Northeth Greece, while the its horizontal activities are intended for all of the organizations of the Region that are active in the sector of ICT.

The targeting of the Pole is double- faceted: on the hand, to create permanent institution to support technological innovation (sector intelligence, technology transfer, international cooperation), and on the other, to reinforce technological collaboration for the development of new products and services.

From these features it is possible to define the strengths and weaknesses that determine the success of the RIPCM.

Strengths

- Previous experience of the organizations of C. Macedonia in the management of intangible innovation tasks
- Focusing of the RIPCM only on a single super-cluster of ICT businesses and technologies with horizontal interfaces with all of the sectors of industry and services
- Focus on the institutions and cooperations for the development of innovation,
- Large participation of ICT enterprises
- Large participation of research laboratories developing ICT applications
- Strong presence and activity of the Association of Informatics Businesses of N. Greece
- Support of the Pole by a large number of organizations in the academic and business community of C. Macedonia
- Open invitation to businesses and research laboratories to submit proposals by consortia for new products; the submission of 60 proposals and selection for participation in the RIPCM following the evaluation.

Weaknesses

- The enterprises of the Region belong, in their majority, in the category of technology modifiers & technology adopters (Innovation Scoreboard 2005, Strengths and Weaknesses), with limited experiences in the development of new products for the global market.
- Relatively limited international presence and activity of the ICT enterprises from C. Macedonia.
- Limited R&D activity within the businesses of C. Macedonia.
- Limited activity of the research and technological system of the Region with the establishment of patents and commercial utilization of research.
- Limited tradition of cooperation between enterprises and research centers.
- Limited tradition of cooperation between enterprises for the creation of networks and clusters.

The critical factors for the success of the RIPCM are two:

The first involves the capability of the Consortia of the Pole to develop innovative products with a market response. This is related with the internal capability of the enterprises and research laboratories, but also with the capability of the innovation institutions of the Region (incubators, technology transfer centers, information centers) to transfer knowledge and information for emerging technologies and market trends.

The second involves the viability of the institutions for the support of innovation operating in the region and of the new institutions that will be created through the horizontal tasks, following the end of the support period. Ensuring viability is part of the initial planning of the horizontal tasks that take the form of provision of services rendered.

V. Proposed Tasks

The tasks of the Innovation Pole of C. Macedonia specialize and implement the above strategy, the general and special targets that were described in the previous section. Firstly, the tasks are concentrated on the ICT sector, but with the same concept and strategy it is possible to address every sector of industry and services in the Region.

In the sector of ICT, as well as any other futuren sector/ cluster of RIPCM, will be the implementation of the tasks that included in three major categories: (1) Regional Technological Platforms, (2) Research and technological development Consortia, (3) Support for the commercial utilization of the research results. All of the tasks that are implemented through networks of enterprises and research and technology organizations.

1. Regional Technological Platforms

The concept of the *'technological platform'* refers to cooperative approach in the development and application of selected technologies. A key component of technological platform is the agreement of the stakeholders (interested parties) on a common vision for the development of technologies that concern them. Organizations from the industry, research, and financial institutions, regulatory authorities, and the users are cooperating to identify major technologies, as well as methods and best application practices of these technologies.

Three technological platforms were chosen, in accordance to the areas of priority of the study '*Technology Foresight of C. Macedonia*' that was performed in the context of the Program Excellence (ARISTIA) in C. Macedonia (Innovative Actions ERDF 2001-2006). These areas are:

Broadband networks and Internet services
Coordinating organization: University of Macedonia, Parallel & Distributed Processing Laboratory and SEPBE
- Internet and e-commerce services
- Applications of distance learning, tele-medicine and mobile office
- Electronic governance systems
- Business to Business transactions (B2B)

Digital systems and telecommunication systems
Coordinating organization: Aristotle University of Thessaloniki, Radiocommunications Laboratory, and SEPVE
- Integrated telecommunication solutions
- Wireless local networks (LAN)
- Hard-wired and wireless satellite networks
- Systems and communications security
- Smart buildings and homes

Software technologies and knowledge software
Coordinating organization: National Center for Research and Technological Development & SEPVE
- Software for industry and commercial businesses and data management
- State enterprises
- Hospitals and public organizations
- Banking applications
- Educational/ training software
- Scientific software
- Physical communication with computer systems, and simulation systems
- Management of research and transfer of technology (know how)

The tasks for the technological platforms shall be performed in parallel with the same methodology. In each of the Regional Technological Platforms, significant technologies will be defined taking into account the strategic needs of sectors from the industry and services, production process modernization issues, development of new competitive products and technologies, improvement of competitiveness, increase of employment and turnover.

The selection criteria of the partial technologies in each thematic field comprise:

- Ensuring the cooperative approach and application of selected technologies bearing in mind the current innovative development of the sector in Europe and globally.
- Ensuring the transfer of the new know how/ innovation from the technology developers to the enterprises (end-users) using the software providers-exploitation companies.
- Quantification of the results/ deliverables of the technological platform (e.g., increase in productivity, improvement in the product quality, protection of the environment, saving energy and resources, improvement of health, improvement of competitiveness, creating of new jobs, etc.)
- Development of innovative informatics products targeted for the international market and ensuring the international recognition of the operator companies exploiting the results of the technological platform, mainly from companies active in Central Macedonia.

The technologies chosen shall be broken down into terms of application and course guides will be constructed to adopt them. Parallel to this, there will be tasks of promotion and awareness of the users so that they are informed regarding the meaning of the technology platforms and the importance of their application.

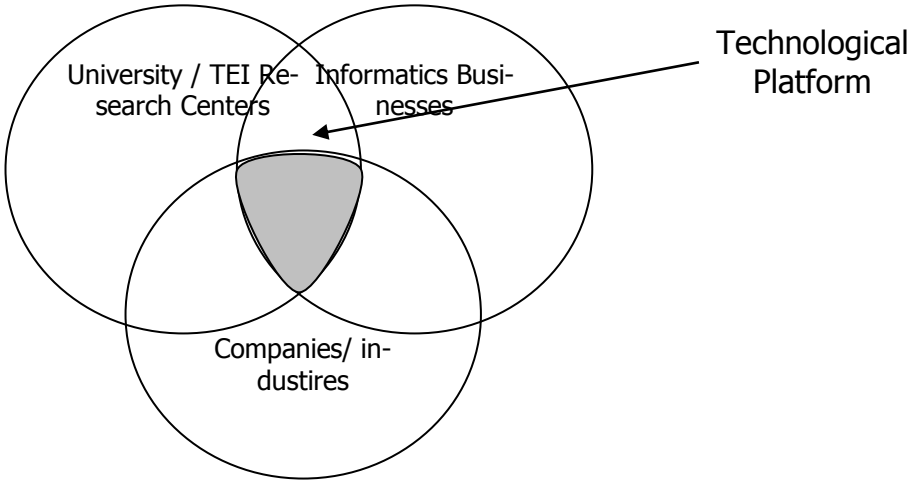
The total budget for the Regional Technology Platforms is 300.000 Euros.

2. Research and technological development consortia

The main objective of these tasks is the cooperation and gaining of knowledge and technologies from Universities and research centers and their use by the enterprises. This task is important to the universities, as it improves the outward ness of the research laboratories and the tapping of additional funds, as much as it is for the enterprises that gain access to technologies that are open to commercial / production exploitation.

The selection of the consortia has been based on **a systematic evaluation of all the proposals submitted in the regional announcement** for the creation of RIPCM, having considered:

- The strategic importance of the proposed technology application and the existence of a reliable list of deliverables.
- Clear evidence of the usefulness and viability of the enterprises proposing the application.
- Clear evidence of the actual and long term commitment/ strategy of the partners in the object of the innovative platform.
- Advantages (e.g., international recognition, defend from the competition) arising from the operation of the technology platform.



The participants in the R&TD Consortia are from:
1. Enterprises/ industry organizations or services of the public or private sector
2. Informatics and Communication Technology companies (ICT)
3. Research Centers, Universities/ TEI and their laboratories

Suggestively, there are some examples below of the applications and end users, which were announced in the public invitation for participation in the consortia of the RIPCM:

- Development of informatics applications for the food and drink industry
- Development of informatics applications for the production of industrial products (e.g., inorganic materials, petrochemicals, plastic, textiles, fertilizers, etc.)
- Development of informatics applications for power production and management
- Development of informatics applications for the protection of the environment
- Development of informatics applications for the health
- Development of ICT software and services for enterprises and organizations using open software/ freeware
- Development of technologies for industrial design – quick certification – flexible / customized production
- Development of technologies for processing and improvement in production lines
- Development and application of innovative methods for transportation management and other similar applications.

The tasks of the R&TD consortia are concentrating on the development of innovative products in cutting edge technology sectors, but also in conventional sectors (e.g., food, chemicals, metal, plastics etc.) based on informatics technologies.

The overall budget of the Research and Technology Development Consortium totals 3.290.000 Euros.

3. Support for the commercial use of research results

The creation of new enterprises is a critical path and empowerment strategy for the development of a new sector of industry. Especially for the ICT sector, it is a primary process to formulate the sector, which was established based on new technologies and small businesses by scientists and technicians. The spin-offs, that is, the creation of enterprises exploiting commercial research results is a classic pathway for innovation and entrepreneurship in the ICT sector**.**

The first steps toward this direction in C. Macedonia have been made, with a large number of ICT and multimedia enterprises and 3 incubators that are working systematically and invest, in order to support the creation of new enterprises.

The tasks in this category are intended to create new knowledge –intensive companies that are based on the utilization of research results. The tasks shall be implemented either by physical persons with know how for the production of new products or/ and supply of knowledge – intensive services, or by small & medium (SME) businesses that have the know how for the production of new products or knowledge – intensive services.

The overall budget for the support of the spin-off totals 300.000 Euros.

The entirety of the tasks of the RIPCM, including the horizontal tasks, is shown in the table below. Detailed data for each project are given in the Annexes.

Implementation Instrument A: Research & technological development consortia in priority areas for the Region	
No.	**TASK TITLE**
A1	Open platform for digital cities
A2	Broadband weather imaging service
A3	Inter-functionality and adaptability of business to business transactions (B2B)
A4	Development of an integrated internet portal for secure service to the students
A5	Development of position identification system and supply of telematic services
A6	Telematic system to manage dispatch calls for fleets of vehicles
A7	'Smart Home' tele-command system
A8	Digital accuracy-driven farming
A9	Development of advanced semantics techniques in a coronary ultrasound test
A10	Utilizing software tools to optimize production of polymers
A11	Electronic platform for quality and tractability in the dairy industry
A12	e-Levator: Customized products management through the Internet
A13	Eye-Olives
A14	3D (3-dimensional) Visual feedback system for sport skills learning
A15	Optimizing the anti-seismic protection for bridges
A16	Green house integrated management
A17	Business information management from miscellaneous sources
A18	ATREAS: Realistic scenery representation in a virtual reality environment
A19	e-Consulting
Implementation Instrument D: Activities in preparation of assistance to research units in connection with the standardization and commercial exploitation of research results	
No.	**TASK TITLE**
D1	Commercial operation of a locally targeted advertising system on the Internet
D2	Video-base customized software
D3	Polymers optimization software
D4	Electrocardiograph through the PC
D5	Information machine based on position awareness from visual identification
Implementation Instrument E: Regional Technological Platforms	
No.	**TASK TITLE**
E1	Technological platform for broadband and Internet services
E2	Telecommunications technological platform
E3	Technological platform for knowledge software and software technologies
Horizontal Activities	
Activity 1: Strategy and viability of the RIPCM	
Activity 2: Dissemination of business and sector intelligence	
Activity 3: Promotion and international technological cooperation	
Activity 4: Transfer of technology and innovative entrepreneurship activity	
Management of the RIPCM	
Management	
Evaluation	

VI. Expected results - Impacts

- **Breakdown of the overall impacts of the creation of the RIP on the Region (quantified indices on employment, competitiveness, patents etc.)**

Indices	Target Value
Number of tools, methodologies, products, services expected to be developed in the project	55
Information, dissemination, promotion, awareness activities targeted at the general public (number)	54
Number of companies to benefit from the implementation of the program	48
Number of research organizations to benefit from the implementation of the program	27
Creation of new enterprises (number)	8
Expected percent increase of turnover contributed by the specific R&T activities	5-10%
New full-time jobs (number)	25
Jobs created during the implementation of the project (in equivalent 12-month long person-years)	73
New recruitment of women (number)	78
Number of persons to be trained on Research, Technology, Innovation and Technology transfer issues	138
Number of persons to be trained on issues belonging to the priority areas of the RIP	133
Patents	8
Market share (%) won by priority area	5-10%
Other indices specific to the particular program (Description)	

Indicators	Target Value
Number of tools, methodologies, products, services expected to be developed in the project	4
Information, dissemination, promotion, awareness activities targeted at the general public (number)	20
Number of companies to benefit from the implementation of the program	100-200
Number of research organizations to benefit from the implementation of the program	30-50
Jobs created during the implementation of the project (equivalent man-years of 12 months duration)	200
New recruitment of women (number)	55
Number of persons to be trained on Research, Technology, Innovation and Technology transfer issues	15
Number of persons to be trained on issues belonging to the priority areas of the RIP	6

VII. Horizontal Activities

HORIZONTAL ACTIVITIES MANAGER:

FULL NAME	NIKOS KOMNINOS
ORGANISATION	ARISTOTLE UNIVERSITY OF THESSALONIKI
POSITION IN ORGANISATION	PROFESSOR
POSTAL ADDRESS	UNIVERSITY CAMPUS, 54124 THESSALONIKI
TEL.	**2310 489 304**
FAX	2310 472 240
E-mail	komninos@urenio.org

TABLE 4: IMPLEMENTATION ORGANISATIONS – WORKING GROUP (if more than one organizations are involved)

No	NAME	MANAGER FOR THE ORGANISATION
1	ASSOCIATION OF INFORMATICS COMPANIES OF NORTHER GREECE (SEPBE)	Spyros Ignatiadis
2	URENIO RESEARCH UNIT	Nicos Komnimos
3	FEDERATION OF INDUSTRIES OF NORTHERN GREECE	Christos Georgiou
4	THESSALONIKI TECHNOLOGICAL PARK, EDAP SA	Kostas Tramantzas

- **A. Goals** (please provide as many details as are necessary)

The horizontal tasks are intended to offer support services of innovation to all of the organizations (enterprises, research laboratories, consultants and technology transfer companies) that participate directly or indirectly in the Regional Innovation Pole of C. Macedonia. Direct participants are the organizations that signed the RIPCM proposal and indirect are those organizations that develop activities in the field of information and communications technologies in C. Macedonia.

These innovation support services to the RIPCM organizations comprise 4 components**:**

D1: Strategy and viability of RIPCM (implementation by SEPBE)
D2: Dissemination of business and sector intelligence (implementation by URENIO)
D3: Promotion and transnational technology cooperation of RIPCM (implementation by FING)
D4: Technology transfer & innovative business activity (implementation organization by TTP).

More specifically, the goals in each of the above 4 activities are:

D1: Strategy and viability of RIPCM
For the development and establishment as well as the future viability of RIPCM it is necessary to clarify the strategy of the Pole. The strategy is centered on the development and promotion of innovation in the ICT sector with the cooperation of the research community of the region. Also, the strategy refers to the modernization of the production tissue of the region and the enterprises, so that they can innovate through the ICTs, using information and communications technologies.

The RIPCM strategy is expected to broaden:

- The basic technologies on which the ICT sector must be focused on the long term.
- The expansion of the RIPCM in other sectors, as well and the cooperation and synergy with the Innovation Zone of Thessaloniki.
- The long term viability of the Regional Innovation Pole.
- The funding sources following the current period of the 3rd CSF, the desired integration in the next funding frameworks of the GSRT or the Region of C. Macedonia.
- The need for the establishment of a permanent structure or network of organizations of C. Macedonia that will be responsible to manage and maintain the Pole for a long period of time.
- Parallel to this, intends to offer strategy processing services to the ICT sector businesses.

The selection criteria for the success of the partial components of the strategy comprise:

1. Development of both the collaborative approach and application of selected technologies taking into account the current innovative advances of the sector in Europe and globally.
2. Ensuring the transfer of new know how/ innovation from the technology developers to the businesses end-users with the help of the software providers - exploitation companies.
3. Quantification of the results/ deliverables from the cooperation between the ICT businesses of the Research Centers as well as of the user clients (commerce, industry) (e.g., increase in productivity, improvement of product quality, protection of the environment, saving energy and resources, improvement of health, improvement of competitiveness, creation of new jobs, etc.)
4. Development of innovative informatics products targeted for the global market and ensuring of international recognition by the exploitation companies of the results of the technology platform, mainly by companies that are active in Central Macedonia.

Partial goals of the strategy are:

- The adoption of innovation as key characteristic of business activity of the sector.
- The orientation and support to companies at the level of sector strategy issues.
- International cooperation with European and Greek regions in the dissemination of the innovation culture.
- The establishment of annual awards for innovative activities.
- The planning of permanent mechanisms to promote innovation in the fields of (a) business intelligence, (b) financing innovation, (c) technology transfer, (d) development of new products and production technologies
- The promotion of collaboration between businesses of the ICT sector with other sectors, but also with research organizations, Greek and foreign.
- The continuous information of the sector businesses on the latest developments in the sector.
- The promotion of tasks and measures to upgrade businesses of the sector, making a positive contribution to the course of the country toward the Information Society.

D2: Dissemination of business and sector intelligence

Business intelligence is the systematic monitoring of markets and technologies with a view to the improvement of the efficiently in business management, discovering new markets, assessment of future needs. The contribution of business intelligence in the field of innovation is that it can substitute (certain) R&D departments, through the systematic monitoring of technology, innovation, and market trends.

Business and sector intelligence is implemented in three levels:

(1) At sector level, with the design of information systems for all the businesses of the sector
(2) At competition level, utilizing benchmarking applications that record and analyse the practices and methods of selected groups of businesses designated as major competitors
(3) At business level, by utilizing the internal database from ERP and CRM applying data mining techniques to reveal hidden information.

Partial goals:

- Dissemination, awareness, and demonstration of business intelligence applications on ICT businesses, includingn market analysis, alternative technologies analysis, cooperation opportunities with vendors. Demonstration of alternative technologies.
- Application of sector intelligence in the ICT sector. Development of the market and technology watch systems, systemizing information sources, analysis methods, information receivers, methods of approach and information, feedback from the receivers, evaluation of the information selection system.

- Business intelligence pilot application in the ICT sector, with a view to the understanding of the results and demonstration to third parties.

D3: Promotion and transnational technology cooperation of RIPCM

The globalization of the economy drastically increased outsourcing in all of sectors of new products development: product concept, engineering, software writing, and accounting. The international technology collaboration is a prerequisite to monitoring the changes in the market and continuous innovation of products and services. Significant technology clusters have been created in the developing world (China, India) that combine scientific skill and competitive cost of services. Specifically in the software production and ICT industry, the competitive presence in the global market is impossible without the development of subcontracts with the developing countries.

Parallel to this, C. Macedonia and the Innovation Pole must improve the possibilities to attract knowledge-based businesses and technology organizations, but also people highly qualified and knowledgeable, utilizing the potential of the Greeks abroad (Diaspora).

This activity is intended to improve the international technology collaboration of businesses and research centers of C. Macedonia working with / developing applications and products in the ICT sector. Comprises two partial components:

- On the one hand, the international networking and technology cooperation of businesses and organizations of C. Macedonia with peer organizations in Europe, USA, and Asia, with a view to the improvement of quality, originality, and production cost of products, but also the approach to new markets.
- On the other, the promotion of the Innovation Pole and C. Macedonia as a host place to ICT businesses and organizations, aimed at attracting similar activities to reside in C. Macedonia. Similar to the promotion is also the transfer of good practices in attracting businesses and international technology cooperation from regions that exercise respective practices successfully (Ireland, Scotland, S. France, etc.).

Partial goals:

- Planning and activation of networks for international technology cooperation of ICT businesses with potential suppliers, associates, and distributors in the EU and Asia. Cooperation with the European network EU-Japan, prospecting partnerships in the production of software with suppliers in Bangalore. Exchanges, meetings, visits.
- Promotion of C. Macedonia and the Regional Innovation Pole as a host place for ICT businesses and organizations. Promotion of the advantages of residence. Recording and promotion of services and after-care organizations.
- Analysis of the attractiveness of C. Macedonia as a host location for international knowledge intensive and technology investments. Exploring the terms for the residence of selected cases of multinational corporations (e.g., Nokia, Sony, etc). Planning of a package of motives and attraction services.
- The promotion of the investment benefits of the RCM.
- The documentation for the creation of investment motives to attract foreign direct investments in innovation.
- The links of the research community of the region with the local production system.
- The mobilization of local businesses to develop new, innovative products and services.
- The mobilization of research centers on the one hand, for the merchandising of the already existing research results and on the other, for the direction of developing research activity in line with the demand by the local production system,.
- The highlighting of shortcomings in infrastructures and political measures to support growth through the exploitation of innovation.
- The promotion of success stories of business globalization from the local production system.
- The promotion of competitive advantages of groups of ICT businesses and organizations in the Greek and global market, and,
- The development of a mechanic to connect the demand for technology by local businesses with the available results of research projects of local research institutions and institutes.

D4: Technology transfer & innovative business activity

The development of innovative business activities has an inherent risk and uncertainty to a great extend regarding the final outcome, as this depends from a plethora of factors, both intrinsic (business organization) and external

(technological developments). In the RCM, a series of structures have been developed such as knowledge intensive business incubators, which aim at the support of innovative entrepreneurship at its various stages of development. Nevertheless, apprehension remains intense in the business as well as the scientific community regarding the initial involvement with an innovative venture. The most important reason is the lack of support during the process of evaluation of the venture. The goal of activity D4 is to motivate the innovation entrepreneurship through:

- The integration of the support tools available
- The development of an evaluation methodology of a) the venture and b) the technology
- Conducting 2 cycles of stimulation activities for innovative entrepreneurship.

Providing specialized support and evaluation services prior to assuming the business risk combined with the existing support and finance structures (incubators) of innovative ventures shall be a significant instrument in the empowerment and acceleration of the commercial exploitation of the research results. Parallel to this, the collaboration of all the incubators in the implementation of the task ensures the homogenization and complementarities of the services provided at the level of structures as well as at the level of the services rendered, creating a strong support cluster for new knowledge intensive businesses in the Region of Central Macedonia.

- **B. Detailed description of proposed activities / Methodology / implementation approach** (please provide as many details as are necessary)

D1: Strategy and viability of RIPCM

This activity comprises the following Work Packages (WP) and Deliverables (D)

WP1.1 Strategic Plan of the RIPCM

The study of the sector's strategy shall help to analyze the ICT sector at national as well as at regional level, but mostly it shall be the tool to gather the information that the sector needs for its development, viability, and promotion at international level. In addition, the study shall assist with the investigation of the orientation of innovation in the area of informatics and new technologies at regional level, for the creation of strategic competitive advantage.

The target for SEPVE is the creation of a standing study mechanism of the ICT sector strategy so that the strategic goal for its support and development can be set immediately. The study shall enable the deliberate understanding of those factors that will help in the development and support of the ICT to be a strategic sector for the economic and social growth of the region with a view to international acclaim and activity.

The issues examined in the study are the determination of the current conditions in the ICT businesses, survey of the level of innovative character in the products or services provided to their customers, level of use of the research results but also level of cooperation and synergies with research institutions and organizations, the research activity as well as the participation – networking of businesses in the European research area, sector data and market size, focused research per sector of activity. Also, the survey of the needs for training, organization, and development of the sector businesses is a priority.

Deliverables
D1.1. Strategy for the RIPCM
D1.2. Development of a web site to host the strategy of the study as well as all of the tasks of the Horizontal Task for Strategy - ICT Innovation Platform

Budget:

- Personnel fees - 3 A/M, 3*3.000 = 9.000
- Third party fees: Website Development - Platform: 3.000 €

- Third party fees: assignment of the study to an expert consulting company: 15.000 €

TOTAL: 27.000 €

WP1.2 Good practices and strategic innovation in ICT businesses

This stage shall involve the compiling of the good practices to support and aid the development and transfer of know how, technology, and the exchange of best practices from success stories in Greece but also from abroad from the network of organizations cooperating with SEPVE. The ICT businesses will have the possibility for direct strategic information but also actual knowledge tools from the respective foreign clusters. Through this task it will be attempted to conduct a thorough search of the competitiveness innovation and technology growth of the ICT sector globally. The resulting material shall be evaluated and processed so that the results of knowledge can be compatible with the needs and particularities of the RIP and of the ICT sector of our region, as well as be material to be utilized by the RIP future development. Following the completion of the above procedure, the collection of best practices shall create a Bank – Library of the Best Practices in Innovation for the ICT sector, while at the same time a knowledge mechanism shall be in place as a tool for the promotion of innovation by SEPBE and its membership.

The topics of the search for best practices are targeted on a series of issues such as:

- Performance measurement and management
- Benchmarking
- Strategic and business planning
- Marketing and business development
- Supply chain management (suppliers – clients)
- Knowledge management and human resources management)
- Project management
- Know-how and technology transfer
- New product development
- Quality management

Deliverables:
D1.3 Compiling of material for best practices, classification by category, thematic unit and country; methodology guide to organize and present best practices;
D1.4 Creation of template for the presentation of best practices (Best Practices Innovation Form); presentation of best practice cases;
D1.5 Platform contents, creation of electronic library on the web site of horizontal activities.

Budget:

- Personnel fees - 3 A/M, 3*3.000 =9.000 €
- Third party fees – creation of Best Practices Innovation Form: 8.000 €
- Expenditures for travel, exchange of know how: 2.000 €

TOTAL: 19.000 €

WP1.3 Comprehensive consulting support of innovation strategy in the ICT businesses

It will be ventured to create a training mechanism of the ICT businesses in strategy issues. The two previous phases – Work Packages (WP1.1 & WP1. 2) the completion of the study for the sector strategy and the compilation as well as organization of the best practices are complemented by the comprehensive consulting and training support of the ICT businesses of the RIPCM. Through the above consulting, a technology transfer is attempted and the creation of an innovation support and development mechanisms for the businesses of the sector.

The third phase of the RIPCM strategy is the provision of specialized consulting services to the members of the ICT Cluster and the Business training of the ICT companiers in innovation and entrepreneurship development issues by presenting case studies from respective examples abroad (workshops, business games, daily events, the creation of thematic round tables, workshops, seminars participated by experts).

Deliverables:
D1.6 Training material for the consulting services
D1.7 Organizing three training workshops
D1.8 Organizing the final event of the SEPVE horizontal task with presentation of the results of the Work Packages, presentation of the results of the RIPCM strategy, best practices as well as of the results of the training process to the ICT businesses.

Budget:
- Personnel fees - 6 A/M, 6*3.000: 18.000 €
- Third party fees / Organization, preparation of educational material: 10.000 €
- Promotion & Dissemination Expenditures: 2.000 €
- Workshop Expenditures 3 * 4.000: 12.000 €
- Final Event Expenditures: 10.000 €
- Expenditures for travel, expert etc.: 2.000 €

TOTAL: 54.000 €

D2: Dissemination of business and sector intelligence

The activity of 'Business and Sector Intelligence' is addressed to several groups of organizations:
- Involves the information and communication tehnologies businesses and in particular the providers of technology applications ERP, CRM, and automation solutions, with a view to inform about the key technologies that can be utilized, demonstrate solutions from major suppliers (Oracle, SAP, Micromedia, Microsoft), and support the first steps toward the promotion of business intelligence application in the local market.
- Involves the enterprises from every sector of industry and services, in order to clarify the positive results of the BSI application systems.
- Involves individual industrial sectors overall, as well as to systematically inform all of the sector organizations about technology developments and market perspectives in the respective sector.

The activity comprises the following Work-Packages (WP) and Deliverables (D):

WP2.1: Dissemination of business intelligence

The business intelligence market (BI) comprises a large number of applications and software, offered by global suppliers (SAP, ORACLE, MS) or smaller software companies (Microstrategy). The goal of this Work Package is to collect the applications available in the market, evaluate them, and transfer the information for their application to companies of all sectors of C. Macedonia. Includes the analysis of available applications, information of users about the advantages of their use, training of companies that wish to offer BI services, and the authoring and printing of a business intelligence blue print (guide).

Deliverables
- D2.1: Compiling, analysis, and evaluation of business intelligence tools and software
- D2.2: Dissemination – 4 workshops to inform 100 businesses from all sectors on BI applications and benefits
- D2.3: Publication of business intelligence (blue print) guide and dissemination of 500 copies

Budget
- Personnel: 4 MM x 3.000 = 12.000
- Third party fees for the analysis and evaluation of BI tools/ software: 20.000
- Third party fees for organizing 4 workshops with participation of 100 businesses: 10.000
- Travel, visits of 3 experts for transfer of know how: 3 * 3.000 = 9.000
- Third party fees for writing a BI blue print: 11.500
- Promotion: Design, printing, and dissemination of BI guide: 20.000
- Overhead 5%: 4315

Total: 86.315

WP2.2: Pilot applications and training of business intelligence providers

Parallel to the dissemination of the BI applications, small pilot applications will be carried out for the installation of BI tools in selected businesses. These applications are intended to bring to the surface the problems and difficulties in the implementation of BI projects, especially in small businesses.

15 businesses providers will be trained in the installation and launching in the market of BI systems. Also, relations with major providers like SAP, ORACLE, MS, will be explored.

Deliverables:
D2.4: Training 15 businesses in the provision of BI systems and services
D2.5: Three BI pilot applications for small businesses

Budget:
Software purchase: 20.000
Third party fees for pilot applications: 50.00
Third party fees for training BI providers: 15.000
Overhead: 4473
Total: 89.473

WP2.3: Creation of sector intelligence regional network

Parallel to the customized BI applications, there are collective systems compiling, processing and disseminating information operating in several sectors. Characteristic examples are the application of sector information for the textile industry, (http://www.textileintelligence.com/marketintelligence/index.php)
and wood industry (http://www.decilor.org/pages/fr/5.htm).

The goal of this Work Package is to create an integrated intelligence network for the ICT sector. It includes two components: (1) an open portal to gather and record information which will be accessible to all of the sector businesses, and (2) individual confidential reports evaluating the position and performance of each business in relation with other businesses of the sector. To develop the system, the URENIO application and software will be utilized that was developed in the context of the European project Meta-foresight (Regions of Knowledge I). The system will be hosted on the Website of the Digital Research Center of AUTH.

Deliverables
- D2.6: System design and analysis of the sector intelligence user requirements
- D2.7: Adaptation of Meta-Foresight software and development of complementary applications for user feedback
- D2.8: Compiling and recording the materials
- D2.9: Demonstration and promotion
- D2.10: Generation of confidential reports for 50 ICT sector businesses
- D2.11: Final event of the results from BSI

Budget
- Personnel: 8AM * 3.000= 24.000
- Equipment: Server (1) = 10.000
- Software: Documentum / google-mini, and other: 15.000
- Third party fees for the system design: 6.000
- Third party fees for adaptation and development of complementary software: 20.000
- Third party fees for compilation and recording of material (20 months *2.000): 40.000
- Third party fees for generating 50 individual reports: 50.000
- Overhead 5%: 8.684

Total: 173.684

D3: Promotion and transnational technology cooperation of RIPCM

The rules of competition in the context of the "global" business environment are aimed at economic growth and stability. However, there is no economic growth and stability without regional development. Today, the parameters forming the rules and the context of competition between regional economies are constantly becoming more important for the achievement of global competitiveness and economic growth. Significant parameters of the "new" business environment being formulated are:

- the high levels of activities in research and technology development sectors,
- the development of innovations generated from universities, research institutes and companies and which are commercialized promptly, and mass produced, as products within the geographical boundaries of the region, and,
- the globalization of production and distribution for products and services.

In addition, the successful regions from a competitive point of view are considered to be those that can develop the above items and complete them, by connecting them with the overall competitive advantages and the needs of the production fiber of the region.

In this framework, a series of tasks is proposed, by means of which the following will be achieved:

- Perspectives for international technology cooperation of businesses and organizations of the Region of Central Macedonia (RCM) with organizations of excellence;
- Global networking of businesses and organizations of the Region of Central Macedonia (RCM), and
- Promotion of the Pole and Region of Central Macedonia (RCM) as a host site for the establishment of businesses and organization.

From the proposed task the top priority is set in the support of the globalization of the local productive system and then the matter of promoting the "technology identity" of the Pole of the Region of Central Macedonia (RCM) in Greece and abroad. The documentation of this strategy follows with the detailed description of three (3) Work Packages each one titled with the above items A, B, and C.

This activity comprises the following Work Packages (WP) and Deliverables (D):

ΠΕ3.1 International technology cooperation of businesses and organizations of the Region of Central Macedonia with excellence organizations

Work Package 3.1 includes the implementation of the following tasks:

- Survey of the type and form of globalization of the RCM businesses.
- Evaluation of the innovative activity of the region, and
- Review of the conditions for the establishment of selected cases of multinational corporations in the Region of Central Macedonia.

Deliverables:

D3.1: Study of the survey and evaluation of innovative and technology identity of the Innovation Pole of RCM

The "concentration issue" of the Innovation Pole of the RCM is "informatics, Internet and communication technologies". There must be, and it is a "prerequisite" of the announcement of the General Secretariat of Research and Technology (GSRT), a survey and evaluation of the innovation and technology "identity" of the Innovation Pole.

The proposed study shall involve:

1. the survey of the demand, by the businesses of the RCM, irrespective of industry or sector, for informatics and communication technologies
2. the study of the supply of informatics and communication technologies from the respective businesses residing in the RCM
3. the connection of supply and demand in ICT in the RCM, and
4. the survey of the "gap", if any, in supplied technologies and services from the ICT businesses of the sector of the RCM.

The study shall place emphasis on the way, procedure and methodology of "connection" of the demands in infor-

matics technologies of the entirety of businesses of the RCM irrespective of industry and sector, with the available technologies held by local businesses of the informatics industry established in the RCM.

The implementation of the study provides a full picture of the local ICT market and, in addition:
- the task of the Pole is "rationalized",
- strategic directions arise in the task of the Pole,
- the "gaps" of the ICT market at the level of region "emerge",
- conditions are created to support the competitiveness of the local businesses not belonging to the ICT industry, through the attainment of a competitive advantage that will arise fro the use of ICT, and
- a "best practice" procedure is proposed that will connect the technology needs with available technologies, initially, at the regional level.

One study shall be delivered of the survey study and evaluation of the innovative and technology activity of the Innovation Pole of the RCM and two (2) workshops connecting supply and demand shall be organized: the first workshop will involve the supply and demand for industrial businesses, while the second shall involve the supply and demand for businesses of the rest of the sectors and industries.

BUDGET:
- third party fees for elaboration of the study : 30.000 €
- third party fees to organize two (2) workshops 20.000 € (cost of each, 10.000 €)

Total: 50.000 €

D3.2: Evaluation study of the globalization of businesses of the RCM
Until today there are a great number of organization initiatives residing in the RCM, which originate from local collective and professional organizations, and they involve the recording of the businesses, irrespective of industry or sector, that have developed globalization tasks.

For the needs of the Pole and fully in line with the requirements in the announcement there will be, through survey and subsequent study, a "mapping" of the companies of the ICT industry, which develop globalization tasks. To this end, a survey shall be conducted to create a record of the businesses of the ICT industry with registered office in the RCM.

Once the businesses developing globalization tasks are recorded, there will be a subsequent survey of a representative sample from these, in order to evaluate the type and form of the globalization they develop. To this end, there will be a questionnaire for the collection of data, which will be circulated between the businesses of the sample.
Key topics that will be studied through the collection of data from the questionnaire are:
- the type of activity of the mother company and subsidiaries,
- the motives and benefits from globalization,
- the countries of establishment of the subsidiaries, and
- the evaluation of the motives, benefits, but also of the obstacles that the businesses experienced in the selected destinations for establishment of their production activities.

Upon the implementation of the study it will be possible to provide answers to critical questions involving the type and form of globalization of the businesses of the ICT industry in the RCM,
- as to how the businesses of the ICT industry established in the RCM are globalized;
- which are the main countries of establishment of their subsidiaries; and
- what are the benefits, as well as the difficulties, per country of establishment and type of activity;

There will be delivery of: a) one (1) issue of the evaluation study of the globalization of businesses of the RCM, b) one (1) questionnaire for the collection of information and data, c) one (1) database with the details of the businesses that will participate in the survey, and, d) a workshop will be organized to disseminated the results of the survey.

BUDGET:
- third party fees for the elaboration of the study, development of the questionnaire and database : 24.000 €

- third party fees to organize one (1) workshop: 10.000 €

Total: 34.000 €

D3.3: Meetings with selected multinational corporations to explore the conditions for their establishment in the Region of Central Macedonia

After the inclusion in the "Operation Program Competitiveness" of the measure involving the creation of the "East Thessaloniki Innovation Zone", the necessary conditions were created for the establishment of selected multinational corporations in the above area as well as in the RCM generally.

The requirement from this type of tasks is not the establishment of the production facilities of multinational corporations in East Thessaloniki, but the transfer and establishment in this area of divisions of these corporations that will be engaged with:

- the design of products and services,
- research and technology development,
- supply chain management (logistics).

The specific task is a pilot application of the procedure to attract multinational corporations in the RCM, a procedure that had not been implemented at regional level to this date.

From the implementation of the task it is expected that the "good practices" to attract multinational corporations in the region shall arise, as well as more generally in the country. To this end, three (3) multinational corporations of the ICT industry shall be selected, which "meet" the specific criteria and may potentially be established in the region. The selection criteria of the multinational corporations shall be related with the increased possibilities that may come with their establishment in the specific region, for the development of synergies:

- with the local production community, and
- with research centers and institutes in the region.

There will be delivery of three (3) reports involving the "prospects for the conditions of establishment of selected cases of multinational corporations" (one for each corporation).

BUDGET

- Personnel fees 6 A/M * 3.000 € = 18.000 €
- travel of staff to make contacts with multinational corporations: six (6) trips * 2.000 €/trip = 12.000 €

Total: 30.000 €

<u>WP3.2: International networking of businesses and organizations of the ICT industry</u>

The Work Package 3.2 is aimed at the utilization of the results from the studies of the Work Package 3.1, so that the effectiveness of the tasks that will be implemented overall in the context of the Pole is maximized. The requirement is to facilitate the businesses and organizations of the RCM to develop business agreements and corporations in sectors of common technology interest.

The partial tasks that will be implemented involve the electronic networking of the businesses of the RCM, with similar or/ and complementary businesses internationally to establish all types of collaboration platforms, which will operate both at geographical and industrial level. The collaborations to be developed are expected to operate on the long term as "leverage" of development for local businesses and formulate a "facilitating" process in their attempt to be globalized.

Deliverables:

D3.5: Business mission to target countries

From the experience of activation of businesses established in the RCM until today, the target countries in their globalization are:

- the "business neighborhood" of the Balkans: Turkey is an emerging market with excellent room for improvement in all of the sectors of collaboration with foreign businesses while it also "psychologically" adjacent with the businesses of the RCM.
- Asia: India is the country with the greatest development of software companies in the world. Similarly, its size allows for the exploration of the possibility to develop business agreements with businesses from this country.
- The United States of America (USA): the development of collaborations shall be initially attempted with Greek businessmen abroad in the USA, through the Council for Greeks Abroad (SAE).
- the countries of Europe: Germany is the first exporter country in the world, while its technological progress is at the top in Europe.

Business missions will be planned and realized in these countries, with businesses and organizations of the Regions of Central Macedonia (RCM). In the context of the missions, beyond the main part that will involve the development of agreements between businesses, it will also be attempted to sign memos of understanding between business organizations, research centers etc., from the RCM with respective organizations from these countries, where the missions shall be implemented. There will be four (4) business missions organized, and at least four (4) memos of cooperation and understanding shall be signed between the business organizations of the RCM and the of countries where the business missions shall be implemented.

Budget:
- Personnel fees 6 A/M * 3.000 € = 18.000 €
- third party fees to organize the business meetings: 18.000
- travel expenditures of the personnel to participate in the missions: four (4) trips * 3 people * 3.000 €/trip = 36.000 €
- expenditures to organize the business missions (payment of conference rooms, catering, transportation, payment of reporters and TV crews to cover the meetings etc.) 130.000 €

Total: 202.000 €

WP3.3: Promotion of the Pole of the Region of Central Macedonia as place for establishment of businesses and organizations

Deliverables:

D3.6: Development of web site and creation of the logo of the Innovation Pole of the Region of Central Macedonia
The development of web site and creation of logo for the Innovation Pole of the Region of Central Macedonia are the "tools" necessary for advertising and promotion:
- of the participant businesses and organizations in the implementation of the project, and
- for the ICT industry.

The web site is expected to serve as a "forum" of the businesses similar to the ones participating in this proposal, as well as of their complementary, for the development of collaborations at local/ regional level, but also at national and international level. There will be creation of one (1) web site to serve for the promotion of the Pole project, the activities developed in the Region of Central Macedonia, and, the Logo of the Innovation Pole of Central Macedonia.

Budget:
- third party fees for the development of the web site: 4.000 €
- third party fees for the creation of the logo: 2.000 €
- third party fees for feed back, maintenance and upgrade of the web site for two years: 5.000 €

Total: 11.000 €

D3.7: Organizing a major event to promote the Pole, its activities and the work produced.
In the form of "closure" of the project, a major event shall be organized in Thessaloniki during which there will also be promotion of the work produced during the two year of implementation of the project.

During the day-long event the activities include:

- presentation of the results of the works included in each of the technology platforms,
- open discussion for the evaluation of the project implementation strategy, and
- exchange of views regarding the viability of the Pole following the completion of its operation.

One (1) day-long will be organized to present the results of the project, evaluation of the strategy applied during the project implementation and proposals regarding its viability.

Budget:
- Personnel fees to organize the event 3 A/M * 3.000 € = 9.000 €
- promotion expenditures (payment for conference room, catering etc.) 10.000 €
- promotion expenditures (prints of the agenda and brochure about the program: 4.000 €

Total: 23.000 €

D4. Technology transfer & innovative business activity

This activity comprises the following Working Packages (WP) and Deliverables (D).

WP4.1: Integration of available tools

Today there is a wide range of tools available aiming at the support of innovative start-up ventures. More specifically, there are electronic tools available mainly in the form of methodological guides for a) market research, b) technology transfer, c) intellectual property management, d) marketing tools and more generally e) business planning tools. Efforts will focus in the collection of available tools and information sources in a portal form that will be addressing to the ambitious new entrepreneurs of the Region of Central Macedonia. The platform shall comprise electronic versions of the tools, methodological guides and best practice case studies.

Deliverable
- D4.1: Portal to access the available tools and information sources involving innovative business activities

Budget
- Personnel: 3 Man months = 3*3,000 = 9.000E
- Equipment (servers / office furniture) = 5.000 €
- Third party fees (creation of platform) = 10.000 €
- Know how exchange visits (3 trips *1500)= 4.500 €

Total 28.500 €

WP4.2: Creation of a model methodology for innovative ventures and technologies

Cooperation of the support structures for innovative entrepreneurship (Incubators) at regional level, aiming at the development of a common evaluation model for a) innovative ventures and b) commercially exploitable research results. Through this common approach there is also common promotion of the existing services and structures to support innovative entrepreneurship in the RCM, with the particularities and conditions set by each one.

Deliverables
- D4.2: Unified text of the consulting and infrastructure services provided by the support structures for innovative entrepreneurship
- D4.3: Evaluation methodology model

Budget
- Personnel: 3 Man months = 3*3,000 = 9.000E
- Third party fees to draft the evaluation methodology model for a) innovative ventures, b) technologies = 15.000 €

Total 24.000 €

WP4.3: Motivation of innovative business activity

Conduct of 2 motivation cycles to exploit research results through a new business activity. Each cycle comprises:
A) information tasks (publicity in the press, info days, events, etc.)
B) initial evaluation of ideas
C) support workshop to draft a business plan
D) Conduct of award contests and possible funding of innovative ventures
E) Conduct of funding negotiations of the best business plans from the existing incubators.

Deliverable

- D4.4: Conducting 2 cycles to motivate innovative business activity

Budget

- Personnel: 6 man months = 6*3,000 = 18.000 €
- Promotion & Dissemination Expenditures = 2 cycles *2 events (750) + support workshop (1000) = 5.000 + invitation of foreign experts 4500 = 9.500 €
- Third party fees (support with drafting / authoring the business plan) 20.000 €

Total 47.500 €

C. Time Schedule and budget

TABLE 5: PHASES OF HORIZONTAL ACTIVITIES

No.	Title of Phase	Participating organization(s)[1]
PHASE 1	**STRATEGIC VIABILITY OF THE RIPCM**	
WP1.1	Strategic plan of the RIPCM	SEPVE
WP1.2	Good practices and strategic innovation in ICT businesses	SEPVE
WP1.3	Coprehensive consultative strategic support of innovation strategy in the ICT business	SEPVE
PHASE 2	**DISSEMINATION OF BUSINESS AND SECTOR INTELLIGENCE**	
WP2.1	Dissemination of business intelligence	URENIO
WP2.2	Pilot applications and training of BI providers	URENIO
WP2.3	Creation of a regional sectoral intelligence network	URENIO
PHASE 3	**PROMOTION AND INTERNATIONAL TECHNOLOGY COOPERATION**	
WP3.1	International technology cooperation of businesses and organizations of the Region of Central Macedonia with organizations of excellence	FING
WP3.2	International networking of businesses and organizations of the ICT industry	FING
WP3.3	Promotion of the Pole of Region of Central Macedonia as place for establishment of businesses and organizations	FING
PHASE 4	**TECHNOLOGY TRANSFER AND INNOVATIVE BUSINESS ACTIVITY**	
WP4.1	Integration of available tools	TTP – MDC
WP4.2	Creation of a model methodology for innovative ventures and technologies	TTP – MDC
WP4.3	Motivation of innovative business activity	TTP – MDC

[1] If more than one organisations are involved.

List of deliverables

TABLE 6: LIST OF DELIVERABLES

No.	Deliverable	Organisation[1]
1	D1.1: Study of the strategy for the innovation of ICT businesses in Central Macedonia	SEPVE
2	D1.2: Development of a web site to host the material of the study as well as all of the tasks of the Horizontal Task for Strategy - ICT Innovation Platform	SEPVE
3	D1.3: Compiling of material for best practices, classification by category, thematic unit and country; methodology guide to organize and present best practices;	SEPVE
4	D1.4: Creation of template for the presentation of best practices (Best Practices Innovation Form); presentation of best practice cases;	SEPVE
5	D1.5: Platform contents, creation of electronic library on the web site of horizontal activities.	SEPVE
6	D1.6: Training material for the consulting services	SEPVE
7	D1.7: Organizing three training workshops	SEPVE
8	D1.8: Organizing the final event of the SEPVE horizontal task with presentation of the results of the Work Packages, presentation of the results of the RIPCM strategy, best practices as well as of the results of the training process to the ICT businesses.	SEPVE
9	D2.1: Compiling, analysis, and evaluation of business intelligence tools and software	URENIO
10	D2.2: Dissemination – 4 workshops to inform 100 businesses from all sectors on BI applications and benefits	URENIO
11	D2.3: Publication of business intelligence (blue print) guide and dissemination of 500 copies	URENIO
12	D2.4: Training 15 businesses in the provision of BI systems and services	URENIO
13	D2.5: Three BI pilot applications for small businesses	URENIO
14	D2.6: System design and analysis of the sector intelligence user requirements	URENIO
15	D2.7: Adaptation of Meta-Foresight software and development of complementary applications for user feed-back	URENIO
16	D2.8: Compiling and recording the materials	URENIO
17	D2.9: Demonstration and promotion	URENIO
18	D2.10: Generation of confidential reports for 50 ICT sector businesses	URENIO
19	D2.11: Final event of the results from BSI	URENIO
20	D3.1: Study of the survey and evaluation of innovative and technology identity of the Innovation Pole of RCM	FING
21	D3.2: Evaluation study of the globalization of businesses of the RCM	FING
22	D3.3: Meetings with selected multinational corporations to explore the conditions for their establishment in the Region of Central Macedonia	FING
23	D3.4: Business missions to target countries	FING
24	D3.5: Creation of web site and development of logo of the Innovation Pole of the Region of Central Macedonia	FING
25	D3.6: Organizing a major event to promote the Pole, its activities and the work produced.	FING
26	D4.1: Portal to access the available tools and information sources involving innovative business activities	TTP – MDC
27	D4.2: Unified text of the consulting services and infrastructure services provided by the support structures for innovative entrepreneurship	TTP – MDC
28	D4.3: Evaluation methodology model	TTP – MDC
29	D4.4: Conducting 2 cycles to motivate innovative business activity	TTP – MDC

[1] If more than one organisations are involved.

Implementation Schedule for Horizontal Activities

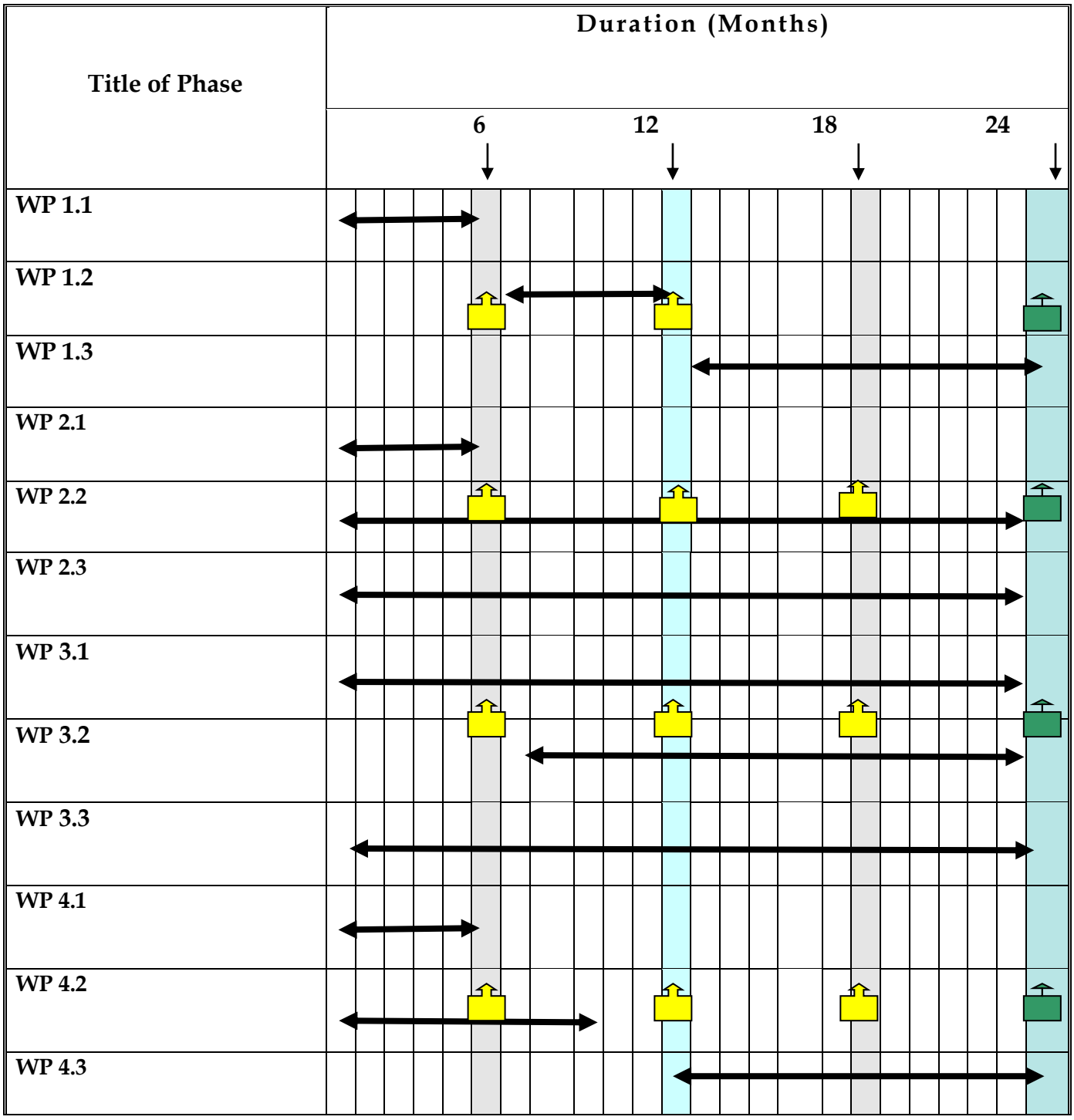


TABLE LEGEND / ANNOTATION

Please use the following symbols:

Duration of phase

Submission of six-monthly progress reports

TABLE 7: BUDGET OF HORIZONTAL ACTIVITIES BY ORGANISATION

For the maximum level of subsidy per category of expense, see § 5 of the Implementation Guide.

		SEPVE		URENIO		FING		TTP		TOTAL	
	CATEGORY OF EXPENSE	**BUDG.**	**PUBL. EXP.**	**BUDG.**	**PUBL. EXP.**	**BUDG.**	**PUBL. EXP.**	**BUDG.**	**PUBL. EXP.**	**BUDG.**	**PUBL. EXP.**
1-1	Equipment expenses (PCs etc.)	0	0	10.000	10.000	0	0	5.000	5.000	15.000	15.000
1-2	Software expenses	0	0	35.000	35.000	0	0	0	0	35.000	35.000
2	Personnel fees	36.000	36.000	36.000	36.000	36.000	36.000	36.000	36.000	144.000	144.000
3	Fees of third parties	36.000	36.000	222.500	222.500	122.000	122.000	45.000	45.000	430.500	430.500
4	Promotion & Dissemination Expenses	24.000	24.000	20.000	20.000	144.000	144.000	9.500	9.500	192.500	192.500
5	Travel Expenses	4.000	4.000	9.000	9.000	48.000	48.000	4.500	4.500	65.500	65.500
6	General (5%)	0	0	17500	17500	0	0	0	0	17.500	17.500
	ΣΥΝΟΛΟ	**100.000**	**100.000**	**350.000**	**350.000**	**350.000**	**350.000**	**100.000**	**100.000**	**900.000**	**900.000**

The Budget justification – documentation of the need for the proposed expenses, by organisation and category of expense was given in the paragraph B (Detailed description of proposed activities) of the Horizontal Activities.

VIII. Management and organization of the work

MANAGEMENT UNIT:

NAME	ORGANIZATION	SPECIALTY	
ANTONOPOULOS I	AUTH	AUTH Professor, Rector	Project Manager
KOMNINOS N.	AUTH – URENIO	AUTH Professor, Urban Development & Innovation Policy	Horizontal activities manager
IGNATIADIS S.	SEPVE	Informatics & Marketing	Horizontal activities manager
STAVROU G.	FING	Economist	Horizontal activities manager
TRAMANTZAS K.	TTP – EDAP	Mechanical Engineer	Horizontal activities manager
MARGARITIS K.	UNIV. OF MACEDONIA	Professor UOM, Vice Chancellor	Task E1 Manager
SAHALOS I.	AUTH – RADIO COMMUNICATIONS LABORATORY	Professor AUTH, Telecommunications	Task E2 Manager
KYPARISSIDIS K.	CERTH	Professor AUTH, President CERTH	Task E3 and D3 Manager
VOULKOPOULOS A.	EMETRIS S.A.	Businessman	Task A1 Manager
SAMARAS TH.	AUTH	Professor	Task A2 Manager
VLACHAVAS I.	AUTH	Informatics Professor	Task A3 Manager
PAGALOS G.	AUTH	Informatics Professor	Task A4 Manager
BOULGAROUDIS G.	COMPUCON SA	Businessman	Task A5 Manager
ROUMELIOTIS P.	UNIV. OF MACEDONIA	UOM	Task A6 Manager
PAPAKOSTAS D.	THESSALONIKI ATEI (Higher Techn. Ed. Inst.)	Professor ATEI	Task A7 Manager
McGREW W.	AMERICAN AGRICULTURAL SCHOOL	President AAS	Task A8 & A16 Manager
KOBATSIARIS G.	CERTH – ITI	CERTH Researcher	Task A9 Manager
KOTOULAS K.	CERTH – CPERI	CERTH Researcher	Task A10 Manager
SIFAKIS I.	MIK3 S.A.	Businessman	Task A11 Manager
KAGGELIDIS K.	GNOMON PLIROFORIKI SA	Businessman	Task A12 Manager
ARLETOS A.	SYNOLON S.A.	Businessman	Task A13 Manager
ZOUBOULIS X.	CERTH – ITI	CERTH Researcher	Task A14 Manager
MANOS G.	AUTH – STRENGTH OF MATERIALS LABORATORY	Professor of strength of materials	Task A15 Manager
EVAGELIDIS G.	UNIV. OF MACEDONIA		Task A17 Manager 20
ANTONIADIS I.	MLS PLIROFORIKI SA	Businessman	Task A18 Manager
KOUKOULIS TH.	EPSILON NET AE	Businessman	Task A19 Manager
ARABATZIS E.		Businessman	Task D1 Manager
SFIGGOS N.		Sports Engineer _ Information Technologist	Task D2 Manager
TSIGGOS A.		Businessman	Task D4 Manager
DANIILIDIS K.		IT Engineer	Task D5 Manager

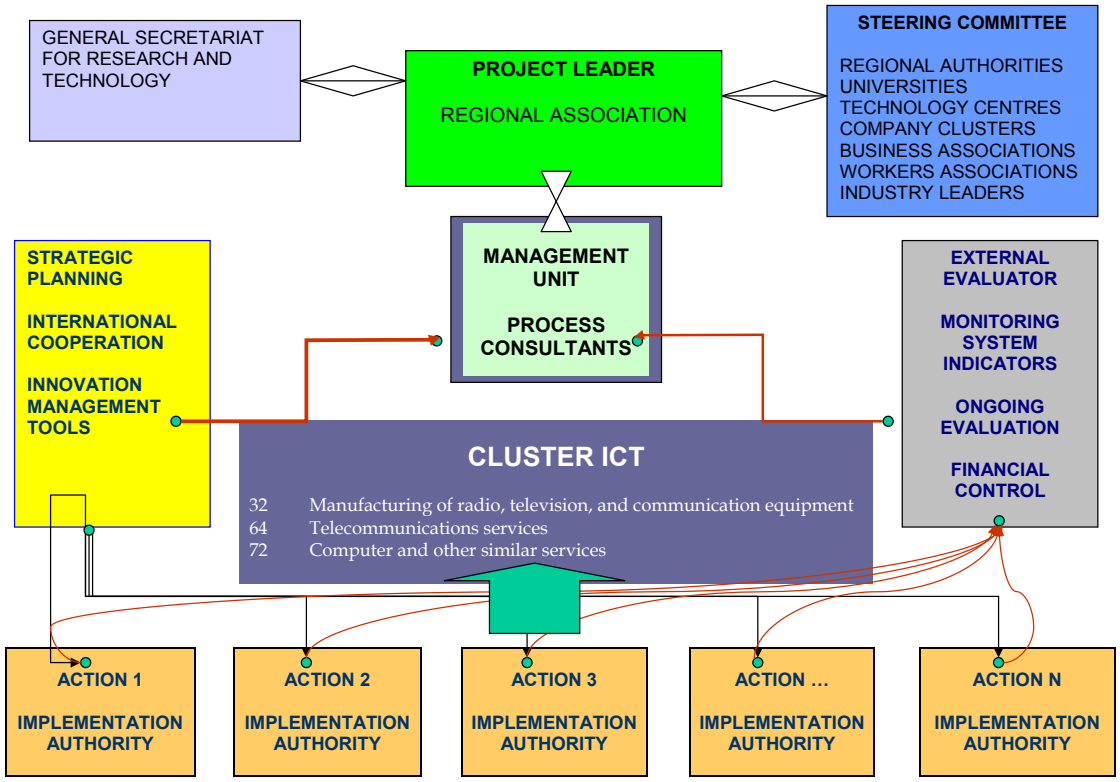
Coordination between the Pole tasks

(provide as many details as necessary)

The Regional Innovation Pole of C. Macedonia is created by organizations for research, innovative businesses, and technology transfer organizations, which cooperate with each other with a view to improve the innovation capability and international competitiveness of the ICT cluster located in Thessaloniki and C. Macedonia.

The general organization and management scheme of the RIPCM is illustrated in the Diagram below. The Project Leader (AUTH) is supported by the Steering Committee, presided over by the General Secretary of the Region of C. Macedonia, and by a Management Units (MU). The evaluator is an independent associate, outside the organizations participating in the RIPCM Consortium. The partial actions are implemented at the responsibility of the organizations participating in the Consortium.

Management of Innovation Pole of C. Macedonia



The main bodies responsible for the management of RIPCM are the following:

Project Leader and Coodinator

Project leader and coordinator having the overall management responsibility of the RIPCM has been chosen to be the Aristotle University of Thessaloniki. The partial actions (Tasks) shall be implemented by the organizations of the Consortium, as specified in the detailed description of the tasks.

Steering Committee

The overall activity of the RIPCM is monitored by the Steering Committee. This is a five-member Committee consisting of:

- The General Secretary of the Region of C. Macedonia as Chairman
- A representative from the GSRT
- A representative of the Operational Programme of Development (EPAN) from which the Regional Innovation Poles are funded

- Two representatives of the participating organizations (one of the two comes from the Project Coordinator)

The Steering Committee is in continuous contact with the Management Unit. The Management Unit oversees the Tasks implemented. The entire procedure is evaluated by the Independent Evaluator.

Management Unit

The Management Unit consists of the Project Manager and the Task Managers. The Project Manager as well as the Task Managers belong to the permanent staff of the organizations members of the RIPCM. The MU is competent for the coordination of all tasks and work groups and it is responsible for the implementation of the project in accordance to the awarding decision. The competencies of the MU include the planning and annual amendments of the development plan of the RIPCM. In addition, the MU is responsible to file every six months the progress report with the GSRT, of the economic and physical deliverables of the project.

The MU as representative of the organizations participating in the project will have the full responsibility for the good performance of the project, irrespective of whether they are implemented by it (its staff) or by external associates and subcontractors.

Evaluation

The evaluation will be assigned to an independent evaluation with significant international experience in the recording and evaluation of innovation related projects. It will be an ongoing and ex-post evaluation. The evaluation shall be assigned to an independent evaluator or group of evaluators following a tender.

The evaluator must not be part of the Consortium of the Innovation Pole. Criteria of the tender for the selection of the evaluator will be the completeness of the evaluation methodology and the experience of the evaluation group that every candidate evaluator or consortium shall propose. The tender shall be low bidding, and the total of the relevant expenditure shall be estimated from the partial tasks, required man months and the cost per man month provided by the Implementation Guide of the GSRT.

A quantitative measurement system shall be developed to measure the results of the tasks of the Pole. The EU Innovation Scoreboard will be the basis for the design of the measurement system. According to what is acceptable today in the EU regarding the measurement and evaluation of innovation, innovation performance of clusters, sectors, regions and member-states may be measured by quantified indices concerning (1) the general level of higher (university) education of a region, (2) the effort to create new knowledge, (3) the application of new knowledge by the businesses, and (4) the dissemination/ maturity of the innovation market.

Based on these indicators, the progress and the results of the Innovation Pole shall be evaluated and its future tasks shall be planned.

The on-going evaluation shall focus on the compliance to the technical specifications of the project, as defined in this proposal and annexes, including the control of eligible expenditure, and the legality of the management procedures. The ex-post evaluation shall be focused on the results of the tasks and on the impact of the project on the ICT industry and on the other industries recipients of the tasks.

Cohesion and coordination of tasks

The tasks of the RIPCM have been grouped into 5 major categories with similar projects:

Innovation in BROADBAND and INTERNET SERVICES

- E1 Technology platform of Broadband and Internet Services
- A1 Digital cities open platform
- A2 Weather imaging broadband service
- A3 Inter-functionality and adaptability of the business to business (B2B) transactions
- A4 Creation of an integrated portal for the secure service to the students
- A12 e-Levator: Management of customized products on the Internet
- A18 ATREAS: realistic representation of scenes in a virtual reality environment

- A19 e- Consulting

Innovation in TELECOMMUNICATIONS
- E2 Telecommunications technology platform
- A5 Development of system for position identification and telematics services
- A6 Telematic system to manage calls to fleets of vehicles
- A7 'Smart Home' remote management system

Innovation in SOFTWARE GTECHNOLOGIES AND KNOWLEDGE SOFTWARE
- E3 Software technology platform
- A8 Digital accuracy agriculture
- A9 Development of advanced semantics techniques on a coronary ultrasound
- A10 Utilizing software tools to optimize polymer production
- A11 Electronic platform for quality and trace ability in the dairy industry
- A13 Eye-Olives
- A14 3D Visual feed back system for sports skills learning
- A15 Improving the anti-seismic protection of bridges
- A16 Integrated greenhouse management
- A17 Business information management from various sources

CREATION OF SPIN-OFFS
- Horizontal activity: Technology transfer and innovative business activity
- D1 Commercial exploitation of a system for locally targeted advertisement on the Internet
- D2 Specialized video – bases software
- D3 Polymers oprimization software
- D4 Electrocardiography using a computer
- D5 Information mechanisms based on position identity and visual recognition

HORIZONTAL TASKS
- ACT1 Strategy and viability of the RIPCM
- ACT2 Dissemination of business and industry intelligence
- ACT3 Promotion and international technology cooperation

The Technology platform of **Broadband** coordinates and monitors the consortia of the respective field. The **Telecommunications** technology platform coordinates and monitors the consortia of the respective field. The **Software** technology platform coordinates and monitors the consortia of the respective field. The Horizontal task of **Technology Transfer** coordinates the tasks of the Spin-offs. The other **Horizontal tasks** offer services of Strategic Business Intelligence, Promotion, and International Technology Cooperation to all of the tasks (Platforms, Consortia, and Spin-offs).

Mobilization of existing structures in the Region
(Universities, TEI, Research Centers, Technology Parks, Incubators, etc.) (provide as many details as necessary)

The RIPCM consortium includes participants from the entirety of organization of C. Macedonia that have developed activity in the field of R&D, technology development and innovation. This participation is direct, in the partial tasks of the Pole, and indirect in the support organizations of the initiative.

There are about 100 organizations of C. Macedonia involved in the RIPCM, directly or indirectly:
- The Region of C. Macedonia
- Universities: Aristotle University of Thessaloniki, University of Macedonia

- Higher Technological Educational Institutions: ATEI of Thessaloniki, ATEI Serres
- Research Centers: National Center for Research and Technology Development, National Institution of Agricultural Research
- Research institutes and laboratories from the AUTH, UOM, ATEI, CERTH
- Business Incubators: TTPT - EDAP S.A., I4G S.A., Thermi S.A., Technopolis S.A.
- Technology Park of Thessaloniki
- Business Associations: Federation of Industries of Northern Greece, Association of Informatics Companies of Northern Greece
- Chambers: Commercial and Industrial Chamber of Thessaloniki, Hellenic – German Chamber, Geotechnical Chamber
- Informatics and Communications Technologies Companies
- Other organizations: American Farm School of Thessaloniki, Telecommunications Institute of SE Europe, Center of Disseminations of Sciences and Technology Museum, Community of Thermi.

The wide participations expresses the interest and the importance that the research and technology development organizations of C. Macedonia place on the project, but also the awareness of the impact of innovation on the growth and prosperity of the region.

With the participation of the above organizations in an organized production and evaluation scheme for innovation projects, a significant step has already been achieved in the primary goal of the Pole, the creation and mobilization of the Regional Innovation System. The participants in the RIPCM are mainly the organizations making up this system.

The place of the tasks of the Pole within the more general strategy for economic growth of the interested or/ and Regional authorities involved and cooperation with them, collaborations with the other RIP, the inter-regional and transnational cooperations
(provide as many details as necessary)

The Region of C. Macedonia played an essential part in the establishment and smooth cooperation of the organizations of the RIPCM. The maturity meetings of the project were held under the coordination of the RCM and RCM guaranteed the reliability of the regional assessment, through which all of the tasks of the RIPCM were selected.

The RIPCM is the continuation of the tasks in the field of innovation that were implemented in the last decade in C. Macedonia. From the Regional Technology Plan (1995-97) to the most recent programme 'Excellence (ARISTIA) in C. Macedonia' (2002-2005) funded by the ERDF, the regional strategy for economic growth is constantly linked with the pursuit of improvement of the environment and capabilities for innovation.

This is associated with the priorities of the Regional administration and the importance placed on the development of innovation as a strategic direction for C. Macedonia, during the current and next programming period.

The inter-regional relations and collaborations are continuous throughout this period through the National and European Network of Innovative Regions (IRE, www.innovating-regions.org).

- Within Greece with the other regions participating in the Greek network (Thessaly, Eastern Macedonia and Thrace, Western Macedonia, Peloponnese, Crete, etc.).
- Abroad, with regions where a steady collaboration has been developed for a long period of time (Wales, Lorraine, NW Westphalia, Basque, Extremadura, Wallonia).

Budget analysis – justification per expenditure category (personnel fees, travel, consumables or fees to third parties – the overhead expenditures are not selectable).

Management

MANAGEMENT BUDGET			
1	Project coordinator fee	24*1.500	36.000
2	Secretarial support fee (3 people)	3* 24*1.100	79.200
3	Third party assignments: 3 interim and 1 final report	4 *5.000	15.000
4	Travel	10*300	3.000
5	Consumables	24*300	7.200
6	Telecommunications	24*360	8.600
	TOTAL		**149.000**

The fees of the Management Unit comprise

- Fees of the project coordinator and for 3 people providing secretarial support.
- The members of the Management Unit having responsibilities of tasks managers participating in the M.U. are not paid for their participation.
- Included is the fee of independent associate to author the 3 interim and the final report.
- Included are expenditures for travel in the country and for cooperation with the GSRT.
- Expenditure for consumables and telecommunications has been estimated on a monthly basis.
- No overhead expenditures were included as being non selectable.

Estimate of Fee for Independent Evaluator

EVALUATION BUDGET			
1	Evaluation model.	1 report	5.000
2	Initial assessment: Selection and estimation of basic evaluation indices	1 report	5.000
3	Ongoing evaluation	32 tasks 2 reports per task on eligible expenditure and progress of deliverables, approx. 500 €/ report	30.000
4	Expost evaluation: Impact assessment. Comparison of initial and following the actions value of benchmark indices	1 report	10.000
	TOTAL		**50.000**

The fee of the independent evaluator has been estimated based on the evaluation deliverables.
Four deliverables provided:

- The description of the evaluation model (following the approval of the Management Unit)
- The initial assessment and calculation of basic line indicators
- The ongoing evaluation, to monitor the physical and economic progress of the project
- The expost evaluation and description of the change in the base line indicators due to tasks of the Pole.

IX. Budget

TABLE 8: BUDGET BREAKDOWN BY TASK

IMPLEMENTATION INSTRUMENT A: RESEARCH & TECHNOLOGICAL DEVELOPMENT CONSORTIA IN PRIORITY AREAS FOR THE REGION					
No.	**TASK**	BUDGET	PUBLIC EXPENDI-TURE	PUBLIC EXPEND. (%)	PRIVATE SECTOR PARTICIP.
A1	Open platform for digital cities	225.000,00	134.000,00	59,56	91.000,00
A2	Broadband weather imaging service	196.800,00	93.990,00	47,76	102.810,00
A3	Inter-functionality and adaptability of business to business transactions (B2B)	100.750,00	60.000,00	59,55	40.750,00
A4	Development of an integrated internet portal for secure service to the students	99.737,63	59.466,17	59,62	40.271,46
A5	Development of position identification system and supply of telematic services	225.000,00	134.356,39	59,71	90.643,61
A6	Telematic system to manage dispatch calls for fleets of vehicles	200.000,00	119.607,84	59,80	80.392,16
A7	'Smart Home' tele-command system	150.000,00	86.945,00	57,96	63.055,00
A8	Digital accuracy-driven farming	225.000,00	134.018,00	59,56	90.982,00
A9	Development of advanced semantics techniques in a coronary ultrasound test	200.000,00	120.000,00	60,00	80.000,00
A10	Utilizing software tools to optimize production of polymers	199.990,00	119.760,00	59,88	80.230,00
A11	Electronic platform for quality and tractability in the dairy industry	150.000,00	87.083,00	58,06	62.917,00
A12	e-Levator: Customized products management through the Internet	100.000,00	56.000,00	56,00	44.000,00
A13	Eye-Olives	224.780,00	134.755,00	59,95	90.025,00
A14	3D (3-dimensional) Visual feedback system for sport skills learning	200.000,00	119.545,00	59,77	80.455,00
A15	Optimizing the anti-seismic protection for bridges	140.000,00	84.000,00	60,00	56.000,00
A16	Green house integrated management	200.000,00	119.000,00	59,50	81.000,00
A17	Business information management from miscellaneous sources	150.000,00	89.960,00	59,97	60.040,00
A18	ATREAS: Realistic scenery representation in a virtual reality environment	150.000,00	90.000,00	60,00	60.000,00
A19	e-Consulting	150.000,00	89.860,00	59,91	60.140,00
TOTAL IMPLEMENTATION INSTRUMENT A		**3.287.057,63**	**1.932.346,40**	**58,79**	**1.354.711,23**
IMPLEMENTATION INSTRUMENT D: ACTIVITIES IN PREPARATION OF ASSISTANCE TO RESEARCH UNITS IN CONNECTION WITH THE STANDARDISATION AND COMMERCIAL EXPLOITATION OF RESEARCH RESULTS					
No.	**TASK**	BUDGET	PUBLIC EXPENDI-TURE	PUBLIC EXPEND. (%)	PRIVATE SECTOR PARTICIP.
D1	Commercial operation of a locally targeted advertising system on the Internet	60.000,00	36.000,00	60,00	24.000,00
D2	Video-base customized software	59.500,00	59.500,00	100,00	0,00
D3	Polymers S.A.	60.000,00	60.000,00	100,00	0,00
D4	Electrocardiograph through the PC	60.000,00	60.000,00	100,00	0,00
D5	Information machine based on position awareness from visual identification	**60.000,00**	**60.000,00**	**100,00**	**0,00**
TOTAL IMPLEMENTATION INSTRUMENT D		**299.500,00**	**275.000,00**	**91,99**	**24.000,00**
IMPLEMENTATION INSTRUMENT E: REGIONAL TECHNOLOGICAL PLATFORMS					
No.	**TASK**	BUDGET	PUBLIC EXPENDI-TURE	PUBLIC EXPEND. (%)	PRIVATE SECTOR PARTICIP.
E1	Technological platform for broadband and Internet services	100.000,00	100.000,00	100,00	0,00
E2	Telecommunications technological platform	100.000,00	100.000,00	100,00	0,00
E3	Technological platform for knowledge software and software technologies	100.000,00	100.000,00	100,00	0,00
TOTAL IMPLEMENTATION INSTRUMENT E		**300.000,00**	**300.000,00**	**100,00**	**0,00**
HORIZONTAL ACTIVITIES					
No.	**TASK**	BUDGET	PUBLIC EXPENDI-TURE	PUBLIC EXPEND. (%)	PRIVATE SECTOR PARTICIP.
Activity 1: Strategy and viability of the RIPCM		100.000,00	100.000,00	100,00	0,00
Activity 2: Dissemination of business and sector intelligence		350.000,00	350.000,00	100,00	0,00
Activity 3: Promotion and international technological cooperation		350.000,00	350.000,00	100,00	0,00
Activity 4: Transfer of technology and innovative entrepreneurship activity		100.000,00	100.000,00	100,00	0,00
TOTAL HORIZONTAL ACTIVITIES		**900.000,00**	**900.000,00**	**100,00**	**0,00**
RIP MANAGEMENT				100	-
BUDGET OF REGIONAL INNOVATION POLE – GRAND TOTAL		**4.985.557,63**	**3.606.846,40**	**72,35**	**1.378.711,23**

TABLE 9: BUDGET BREAKDOWN BY ORGANISATION

Particular attention must be paid when completing this table (an Organization may participate in more than one tasks – however, it will only be mentioned once in the table)

No.	ORGANISATION (within the Region)	TASKS IT PARTICIPATES IN	BUDGET	PUBLIC EXPENDI-TURE	PUBLIC EXPEND. (%)	PRIVATE SECTOR PARTICIP.
1	3Δ	A2	120.800,00	58.900,00	48,76	61.900,00
2	ALUMIL	A5	15.000,00	5.631,27	37,54	9.368,73
3	Cardisoft S.A.	A4, A6, A7	198.767,63	87.755,96	44,15	111.011,67
4	Compucon Computer Appli-cations	A5, A6	198.100,00	93.580,17	47,24	104.519,83
5	Emetris S.A.	A1	120.000,00	59.000,00	49,17	61.000,00
6	Epsilon Net S.A.	A19	104.200,00	51.320,00	49,25	52.880,00
7	Forum Gym S.A.	A14	34.000,00	15.612,00	45,92	18.388,00
8	MLS MULTIMEDIA	A18	111.440,00	51.440,00	46,16	60.000,00
9	Momentus LTD.	A16	60.000,00	34.200,00	57,00	25.800,00
10	Olympia Electronics	A7	60.000,00	29.388,00	48,98	30.612,00
11	Sigmanet	A2	28.000,00	13.610,00	48,61	14.390,00
12	Sim Tec	A9	90.000,00	35.000,00	38,89	55.000,00
13	Singular	A3	49.250,00	21.340,00	43,33	27.910,00
14	Tessera Multimedia	A17	83.900,00	45.050,00	53,69	38.850,00
15	VRSENSE	A5, A9, A14	120.604,00	60.000,00	49,75	60.604,00
16	AUTH	A1, A2, A3, A4, A9, A11, A13, A14, A15, A16, A19, E1, Activity 2	845.150,00	788.630,00	93,31	56.520,00
17	American Farm School	A8, A16	263.000,00	145.105,00	55,17	117.895,00
18	Thessaloniki Higher Ed. Inst.	A7, A17	38.500,00	38.500,00	100,00	0,00
19	GNOMON INFORMATICS S.A.	A10, A12	116.000,00	52.300,00	45,09	63.700,00
20	Kostas Daniilidis	D5	60.000,00	60.000,00	100,00	0,00
21	Thermi Municipality	A1	15.000,00	15.000,00	100,00	0,00
22	CERTH	A5, A9, A10, A12, A14, A18, D3, E3,	373.410,00	373.410,00	100,00	0,00
23	Hellenic Consultants S.A.	A19	13.200,00	5.940,00	45,00	7.260,00
24	Efstratios Arabatzis Ltd.	D1	60.000,00	36.000,00	60,00	24.000,00
25	Medical Technology S.A.	A14	72.396,00	30.933,00	42,73	41.463,00
26	INFODIM	A8	70.000,00	41.713,00	59,59	28.287,00
27	Kavafakis P. & Co.	A13	25.300,00	9.050,00	35,77	16.250,00
28	Kentavros	A15	54.000,00	16.000,00	29,63	38.000,00
29	Thessaloniki Science Center	A18	10.000,00	10.000,00	100,00	0,00
30	KLEMAN S.A.	A12	25.000,00	11.000,00	44,00	14.000,00
31	Konstantopoulos S.A.	A13	14.400,00	5.265,00	36,56	9.135,00
32	Loufakis Chemicals S.A.	A10	78.140,00	31.610,00	40,45	46.530,00
33	MEVGAL	A11	72.175,00	26.323,00	36,47	45.852,00
34	MIK3 S.A.	A11	53.325,00	36.260,00	68,00	17.065,00
35	University of Macedonia	A6, A17, E2	143.300,00	143.300,00	100,00	0,00
36	Nikolaos Papadopoulos	A17	34.100,00	12.910,00	37,86	21.190,00
37	FING	Activity 3	350.000,00	350.000,00	100,00	0,00
38	SEPVE	E1, E2, E3, Activity 1	175.000,00	175.000,00	100,00	0,00
39	TAXI Association	A6	7.000,00	3.150,00	45,00	3.850,00
40	SYNOLON S.A.	A3, A13	179.600,00	102.120,00	56,86	77.480,00
41	Nikos Sfingos	D2	59.500,00	59.500,00	100,00	0,00
42	Thessaloniki Technology Park – Management & Dev. Agency	Activity 4	100.000,00	100.000,00	100,00	0,00
43	Athanasios Tsingos	D4	60.000,00	60.000,00	100,00	0,00
44	Psifiakes Technes (Digital Art) Ltd.	A15	25.000,00	7.000,00	28,00	18.000,00
SUBTOTAL (A)			**4.786.557,63**	**3.407.846,40**	**71,20**	**1.378.711,23**
No.	**ORGANISATION (partner from another Re-gion)**	**TASKS IT PARTICIPATES IN**	**BUDGET**	**PUBLIC EXPENDI-TURE**	**PUBLIC EXPEND. (%)**	**PRIVATE SECTOR PARTICIP.**

		numbering in accordance with table 1				
SUBTOTAL (B)			149.000,00	149.000,00	100,00	0
MANAGEMENT (C)			50.000	50.000	100,00	0
TOTAL BUDGET OF REGIONAL INNOVATION POLE (A+B+C)			**4.985.557,63**	**3.606.846,40**	**72,35**	**1.378.711,23**

Extra lines may be added, depending on the number of Organizations

TABLE 10: BREAKDOWN OF RIP BUDGET BY YEAR

YEAR	2006	2007	2008	TOTAL
TOTAL BUDGET:	35%	45%	20%	**100**
	1.744.945	2.243.501	997.111,6	**4.985.558**

X. RIP implementation schedule

TASKS	Duration (Months)
	6 12 18 24
A1.	
A2.	
A3.	
A4.	
A5.	
A6.	
A7.	
A8.	
A9.	
A10.	
A11.	
A12.	
A13.	
A14.	
A15.	
A16.	
A17.	

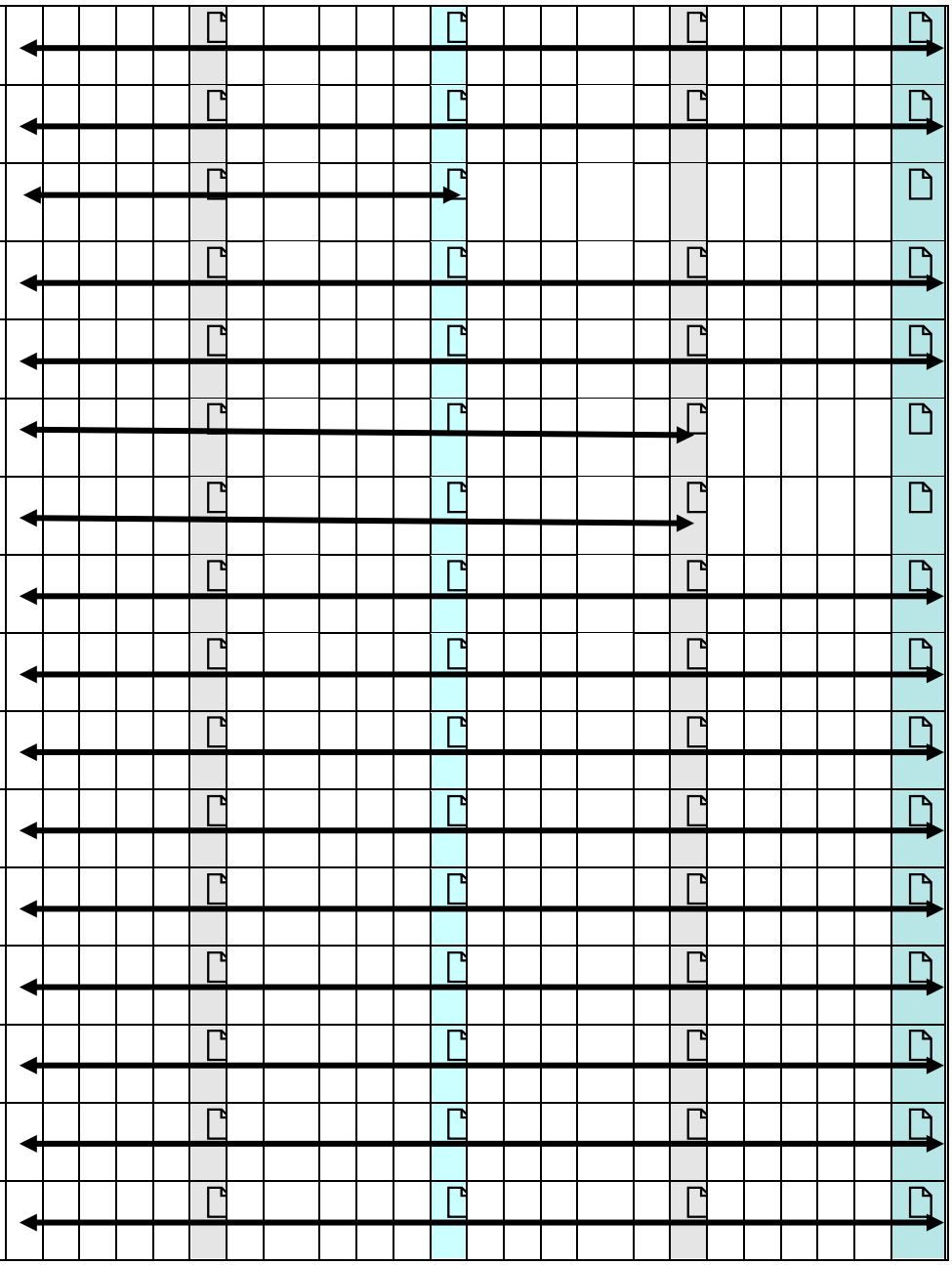
A18.	
A19.	
D1.	
D2.	
D3.	
D4.	
D5.	
E1.	
E2.	
E3.	
Horizontal activity 1	
Horizontal activity 2	
Horizontal activity 3	
Horizontal activity 4	
Management	
Evaluation	

TABLE LEGEND / ANNOTATION

Please use the following symbols:

Duration of phase

Submission of six-monthly progress reports

SOLEMN DECLARATION BY THE LEGAL REPRESENTATIVE OF THE COORDINATING ORGANIZATION

I hereby solemnly declare that:

- I am officially authorized by the organization that I represent to sign this declaration.
- I have examined the Call dossier and I agree with the information given regarding its implementation.
- All information given in the proposal and all documents attached hereto are accurate and true.

Name and surname of Legal Representative:

Professor IOANNIS ANTONOPOULOS

Seal, Signature

Position held: Rector, Aristotle University

Date: 13 February 2006

STATEMENT REGARDING COVERAGE OF PRIVATE SECTOR PARTICIPATION

The legal representatives of the participating organizations confirm that they have been informed about the submission of the proposal and that – should the proposal be approved – they will contribute the Private Sector Participation depending on the type of research that their respective organizations will carry out (as mentioned in the Action Implementation Guide) and that they will undertake to also pay, where the case arises, the resulting own contribution of public organizations.

No. of organization	ORGANISATION NAME	FULL NAME OF LEGAL REPRESENTATIVE	SIGNATURE
1	**3Δ**		
2	**ALUMIL**		
3	**Cardisoft A.E.**		
4	**Compucon Εφαρμογές Υ/Η**		
5	**Emetris A.E.**		
6	**Epsilon Net A.E.**		
7	**Forum Gym A.E.**		
8	**MLS PLIROFORIKI**		
9	**Momentus E.Π.E.**		
10	**Olympia Electronics**		
11	**Sigmanet**		
12	**Sim Tec**		
13	**Singular**		
14	**Tessera Multimedia**		
15	**VRSENSE**		
16	**AUTH**		
17	**American Farm School**		
18	**ATEI-Thessaloniki**		
19	**Gomon Pliroforiki.**		
20	**Daniilidis Kostas**		
21	**Dimos Thermis**		
22	**CERTH**		
23	**Elliniki Symvoulon SA.**		
24	**E. Arabatzis Ltd.**		

25	**Iatrotexnologiki SA**		
26	**Infodim**		
27	**Kavafakis P., PC**		
28	**Kentavros**		
29	**Kentro Diadosis Epistimon**		
30	**Kleman SA**		
31	**Konstantopoulos SA**		
32	**Loufakis Chimika SA**		
33	**Mevgal SA**		
34	**MIK3 SA**		
35	**Panepistimio Makedonias**		
36	**Papadopoulos Nikolaos**		
37	**SVVE (FING)**		
38	**SEPVE**		
39	**Synetarismos TAXI**		
40	**Synolon SA**		
41	**Sfiggos Nikos**		
42	**Texnologiko Parko Thessaloniki – EDAP SA**		
43	**Tsiggos Athanasios**		
44	**Psifiakes Technes Ltd**		

The following are submitted in attachment:

1. Two (2) hard copies of the completed proposal submission form, also in digital format (2 computer-readable CDs containing the completed forms, processed using MS-WINDOWS WORD: 1 in Greek and 1 in English), together with 1 hard copy in English.
2. All the supporting documents mentioned in Section 12 of the Implementation Guide (only in Greek).

The Project Manager

Signature

Professor IOANNIS ANTONOPOULOS

Position held: Rector, Aristotle University

Date: 13 February 2006