



Contract FP6  
MSCF-CT-2006-046042  
***European School of Antennas (ESoA)***

**ANNEX 3**  
**Second period (2008)**

**(Management)**

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Organisation name of lead contractor for this document: **UNISI (1)**

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## 1. Total event participants, largest groups and third countries percentages

The participants to each course (both students and teachers) are calculated by weighting each participant for a “participation coefficient” that quantify his percentage presence in the course. All student have participated 100% to the course, so that they are always weighted by unity. The speakers are weighted by a coefficient 0.2, 0.4, 0.6, 0.8, or 1 in case they participated 1,2,3,4, or 5 days. In this assumption, we have calculated the ratio: “Maximum number of participants from the same country”/“total number of participants”.

Number and provenience of Students											
Course	Switz / Lausanne	Nether. / Noordw	Germany / Karlsr	Italy/ Rome	Croatia / Dubrov	Italy/ Siena	Czech R/Prague	Spain/ Madrid	UK/ Birmin gham	France / Nice	Total
Spain	3	6	2	1	1	2		7		1	23
Italy	1	5	1	2	5	1					15
UK	1		2	2	1	1	2	3	1	1	14
Sweden					1		2	6			9
Netherlands		3			2						5
France	2		5	1	1			1		4	14
Czech Repu.			1				2			1	4
Germany	2		6			1					9
Switzerland		1	1				1	1			4
Croatia	1				2			1		1	5
Greece								1			1
Austria			2								2
Belgium		1		2	2	1					6
Japan	1				1			1			3
Portugal		1									1
Poland	1		2			1					4
Luxembourg		1									1
Ukraine		1									1
Turkey		2						1		1	4
China	1				1				1		3
Canada	2										2
Singapore		2									2
Ireland						1	1				2
Potugal								1		2	3
USA								1			1
Finland				1			2				3
Argentina									1		1
Russia									2		2
Rwanda				1							1
Denmark		1					1			1	3
<b>TOTAL (AVE 15)</b>	<b>15</b>	<b>24</b>	<b>22</b>	<b>10</b>	<b>17</b>	<b>8</b>	<b>11</b>	<b>24</b>	<b>5</b>	<b>12</b>	<b>148</b>

Table 1: number and provenience students

THIS RATIO SHOULD NOT BE LARGER THAN 30% IN ORDER TO CLAIM A FINANCIAL SUPPORT TO THE COURSE.

On the basis of the details reported in ANNEX 1 (section “Summary report of the courses”), Table 1, 2 and 3 summarizes the total number of students per country in each course, the *equivalent* number of speakers per country in each course, and the total participants for each course, respectively.

We emphasize that, while the students are weighted by 100% (Table 1), the speakers are weighted according to the time percentage of their participation to the course (Table 2). Table 3 also reports the percentage ratios “Maximum number of participants from the same country” over “total number of participants” and “Third countries participants” over “total participants” All the courses have respected the imposed limit of 30% both for participants from the same country and for participants of third countries. The only exception is the course of UBHAM that overcame the limit of third country participant.

Number and provenience of Students											
Course Provenience	Switz / Lausanne	Nether. / Noordw	Germany / Karlsr.	Italy/ Rome	Croatia / Dubrov	Italy/ Siena	Czech R/Prague	Spain/ Madrid	UK/Birmingham	France / Nice	TOT
Spain			0,4				1,6	0,8			2,8
Italy		0,2		1,2	1	1,2		0,2		0,4	4,2
Sweden	0,2							0,2			0,4
Switzerland	1				0,8						1,8
Poland											0
Germany			1,2			2,2	0,2			1,2	4,8
Netherlands		3,8	0,2								4
Serbia	0,4										0,4
Croatia	1				1				0,4		2,4
Czech Repu.							1,2				1,2
France		1							0,4	0,9	2,3
Finland								0,2			0,2
UK									1		1
Singapore	0,2										0,2
Denmark		0,2						0,2			0,4
<b>TOTAL</b>	<b>2,8</b>	<b>5,2</b>	<b>1,8</b>	<b>1,2</b>	<b>2,8</b>	<b>3,4</b>	<b>3</b>	<b>1,6</b>	<b>1,8</b>	<b>2,5</b>	<b>26,1</b>

**Table 2:** Equivalent number of speakers weighted by “participation factor”. For details, see ANNEX 1.

TOTAL PARTICIPANTS											
	Switz / Lausanne	Nether. / Noordw	Germany / Karlsru.	Italy/ Rome	Croatia / Dubrov	Italy/ Siena	Czech R/Prague	Spain/ Madrid	UK/Bir mingham	France / Nice	Total
Spain	3	6	2,4	1	1	2	1,6	7,8		1	25,8
Italy	1	5,2	1	3,2	6	2		0,2		0,4	19
UK	1		2	2	1	1	2	3	2	1	15
Sweden	0,2				1		2	6,2			9,4
Netherlands		6,8	0,2		2						9
France	2	1	5	1	1			1	0,4	3,6	15
Czech Repu.			1				3,2			1	5,2
Germany	2		7,2			3,2	0,2			1,2	13,8
Switzerland	1	1	1		0,8		1	1			5,8
Croatia	2				3			1	0,4	1	7,4
Greece								1			1
Austria			2								2
Belgium		1		2	2	1					6
Japan	1				1			1			3
Portugal		1									1
Poland	1		2			1					4
Luxembourg		1									1
Ukraine		1									1
Turkey		2						1		1	4
China	1				1				1		3
Canada	2										2
Singapore	0,2	2									2,2
Ireland						1	1				2
Portugal								1		2	3
USA								1			1
Finland				1			2	0,2			3,2
Argentina									1		1
Russia									2		2
Rwanda				1							1
Serbia	0,4										0,4
Denmark		1,2					1	0,2		1	3,4
<b>TOTAL</b>	<b>17,8</b>	<b>29,2</b>	<b>23,8</b>	<b>11,2</b>	<b>19,8</b>	<b>11,2</b>	<b>14</b>	<b>25,6</b>	<b>6,8</b>	<b>13,2</b>	<b>172,6</b>
<b>Max from same country</b>	<b>17%</b>	<b>23%</b>	<b>30%</b>	<b>29%</b>	<b>30%</b>	<b>29%</b>	<b>23%</b>	<b>30%</b>	<b>29%</b>	<b>27%</b>	
<b>Third Countries</b>	<b>24%</b>	<b>10%</b>	<b>0%</b>	<b>9%</b>	<b>10%</b>	<b>0%</b>	<b>0%</b>	<b>8%</b>	<b>59%</b>	<b>0%</b>	

**Table 3:** Total number of event participants (students+speakers) and percentage of maximum number of participants from the same country and from third countries. Third countries are evidenced in orange.

Table 4 reports also a summary of attending participants and comparison with what foreseen in the project.

Partner organizing the Course	Country where the course is held	Financed participants	Attending participants (see Annex III)	Expected financed participants (from Annex 1 to the contract)	Expected Total participants (from Annex 1 to the contract)
EPFL	CH	6	17,8	5	21
ESTEC	NL	6	29,2	5	22
UKARL	D	5	23,8	5	25
SAPIENZA	IT	5	11,2	5	20
UNIZAG	HR	6	19,8	5	18
UNISI	IT	5	11,4	5	25
CTU	CZ	3	14	5	15
UPM	ES	5	25,6	5	25
UBHAM	UK	3	6,8	5	20
UNSA	FR	5	13,2	5	23
<b>Average</b>		<b>4,9</b>	<b>17,28</b>	<b>5</b>	<b>21,4</b>

**Table 4** Financed students and total participants

## 2. Funded participants

The list of financed participants (all early stage) are given in the third column of Table 4. The application for selection was open to eligible researchers having a recognized background (master degree) in disciplines of the Information Society Technology, preferably in Electromagnetism, Telecommunication, and Electronics. For each course, the announcement for the grants has been done through our web site around 60 days before the beginning of the course, with deadline 30 days later. A commission composed by 3 people, coordinated by the course leader, has taken care of selecting the students. The applications consisted on sending to the course coordinator the CV, the list of publications, and a recommendation letter by an advisor or an industrial tutor. The selection was done on the basis of the following criteria (in order of importance):

1. CV of the candidate (also in relation with the year of PhD)
2. Effectiveness of the supporting letter

People from east-Europe countries as well as girl students were preferred in the selection, even being the other merits. Preference was given to people from external country with respect to the one that organizes the course.

Publicity for the opening of the selection is carried out by the vacancy tools of CORDIS and on the basis of the available mailing list database provided by the main organizers of microwave and antenna conferences in Europe, in particular the European Conference on Antennas and Propagation" (EuCAP). Mailing publicity has shown its efficiency in other successful events with a large spreading of the information inside the EM community. On the other hand, this action has been strengthened by direct publicity given in special announcements during the numerous workshops or conferences. Our WEB site assumed the fundamental role for attracting the students and providing the relevant information and all the necessary support.

### 3. Prefinancial distribution and requested EU contribution

Table 5 summarizes the advanced payment distribution and the eligible costs claimed in forms C by the various partners during. For completeness, advanced payment of the first period 2007 is also reported (Table 5a). The first advanced payment from EU was € 96554, distributed among the partners as shown in the first column of Table 5. The total requested EC contribution for the second period t is € **92945,94**.

We note that € 6000 were transferred to UMLV and € 7500 to EPFL at the end of 2007. ant the relevant amount was taken by the first advanced payment.

We note that UMLV have organized the course at the European Space Agency (Noordwijk, the Netherlands).

In this second year, the 10 institutions that have organized the courses (EPFL, UMLV, UKARL, SAPIENZA UNIZAG, UNISI;CTU, UPM, UBHAM, UNSA) have presented the form C. DTU, UPC, and IETR (course done in 2007) have presented adjustments to the previous period in form C. All the other institutions have not presented the form C. UNISI have also presented adjustments with respect to the previous period, consisting of a change of category of cost:: € 4582,44 previously declared on the voice management has been moved to the voice Transfer of Knowledge. This cost was relevant to the payment of external personnel working on the global organization of the school.

First period (2007)							
INSTITUTION	First prefinancial distribution	Living (A)	Travel (B)	Transfer of Knowledge Cost (F)	Management	Receipts	Requested (=Declared minus receipts)
TNO	9000	1504	1249	7011		3200	6564
KTH	10000	2050	4765	5984		3000	9799
DTU	10000	2250	2250	10345		2750	12095
IETR	11000	428	1816	4989		2800	4434
POLITO	9000	2490	535	6005		4600	4430
UPC	9000	1487	1487	11104		6000	8078
UNISI	19154			18081	8272		26354
UMLV	6000						
UPV	6000						
EPFL (2008)	7400						
<b>Total</b>	<b>96554</b>	<b>10209</b>	<b>12102</b>	<b>63519</b>	<b>8272</b>	<b>22350</b>	<b>71753</b>

(a)

<b>Second period (2008)</b>									
INSTITUTION	First pre-financial subdivision	Living (A)	Travel (B)	Transfer of Knowledge Cost	participation of eligible researcher	Management	Total Declared expenses	Receipts	Requested=Declared minus receipts
EPFL	7500	2058	1542	8561			12161	3600	8561
UMLV	6000	1958	1858	2380	2400		8597	0	8597
UKARL	8500	1678	1069	14572			17319	10800	6528
SAPIENZA	7000	1159	832	8507		2381	12879	2600	10279
UNIZAG	7500	1210	2937	9007			8753	4400	8754
UNISI	32366	2311	1280	9947		1230	14768	1200	13568
CTU	7000	953	800	9171			10924	3800	7124
UPM	8000	1552	1600	17117			20269	12400	7869
UBHAM	7000	2160	960	5650			8770	800	7970
UNSA	7000	2814	2024	5187			10024	2800	7224
<b>Total</b>	<b>84366</b>	<b>17853</b>	<b>14901</b>	<b>90099</b>	<b>2400</b>	<b>3611</b>	<b>124864</b>	<b>42400</b>	<b>86464</b>
<b>ADJUSTMENT TO THE PREVIOUS PERIOD</b>									
IETR				4000			4000		
DTU		866	-1253	3191		59		694	
UPC		828	-755	239					
UNISI				4582		-4582			
<b>Total</b>							<b>136040</b>	<b>43094</b>	<b>92945,94</b>

(b)

**Table 5:** Summary of eligible costs as from the Form C compiled by the partners (amounts in €) (a) first period and adjustment to the previous period (b) second Period

## 4. Total costs of the project

### 4.1. Management costs

The costs of travels to participate to the Board meetings have been claimed in the previous (first period) report as “transfer of knowledge” (ToK) costs. After request of the technical officer this costs are more convenient to be moved in the category management. No adjustment have been done for the form C; however, it has been communicated by e-mail to the technical officer that the following costs of the form C of 2007 should have been moved from category ToK to management: UNISI €2212, 94; KTH=€1358; IETR=€470,58. Since the large management expenses done in 2007, the money for travel for the board has not been requested this year, except for SAPIENZA and UNISI. The UNISI had also other management expenses relevant to the following activity

- Distributing of pre-financial funding
- Calculating of the budget
- Preparing of the annual management report
- Filling SESAM
- Checking the operation of filling SESAM from the partners
- Collecting information about the overall costs
- Interacting with the partner administrations for clarifying budget issues

Only a fraction of these costs have been charged on form C by the coordinator (UNISI).

## 4.2. Living and Travel costs (categories A and B)

The living and travel costs for funded participants have not been subjected to major deviations with respect to what foreseen in the contract. All the institutions have decided to give the reimbursement to the students after receiving the documentation relevant to travel and living. The 100% of the costs associated to categories A and B have been asked to EU and have been reported in the third and fourth column of Table 5.

## 4.3. “Transfer of knowledge” (organizational) costs (category F).

In this section we describe the costs of the project under the category “Transfer of knowledge costs”. We divided these costs in the following subcategories:

- i. *Logistic costs of the courses*
- ii. *Costs for travel and living of key note speakers*
- iii. *Costs for web casting (UNISI)*
- iv. *Costs for the global organization of the school (UNISI)*
- v. *Costs associated to the management board (Cancelled)*
- vi. *Costs for preparing lecturers*
- vii. *Costs associated to time spent by personnel of the host institution for the organization of the course*
- viii. *Costs for disseminations and publicity*
- ix. *Cost for the preparation of the electronic notes*

2007														
	Partner	(i)-(iii)	iv	v	vi-a	vi-b	vii-a	vii-b	vii-c	vii-d	vii-e	viii	ix	sum
1	UNISI General	10182	54250			1500						11112	6000	83044
3	KTH	5984			8100		1900	1000	3000	714	4000	2490		27188
4	DTU	13536			10800		2100	600	1500	429	3444			32409
7	IETR	8989			5700	900	1900	550	1500	393	2750			22682
9	POLITO	6005			6900	1200	0	850	500	607	2750			18812
10	UPC	11343			3250	250	2000	1350	3000	964	5000	3000	6000	36158
15	TNO	7011			2600	0	0	910	2500	0	4200			17221
	<b>Tot</b>	<b>63051</b>	<b>54250</b>		<b>37350</b>	<b>4150</b>	<b>7900</b>	<b>5260</b>	<b>12000</b>	<b>3107</b>	<b>22144</b>	<b>16602</b>	<b>12000</b>	<b>237815</b>
2008														
	Partner	(i)-(iii)	iv	v	vi-a	vi-b	vii-a	vii-b	vii-c	vii-d	vii-e	viii	ix	sum
1	UNISI General	8843,19	28550			4500						2300		44193
1	UNISI Course	1824,74			2400		450	560	884	400	2000			8519
6	UMLV	2380,05				6600		750	238	1200	2000	800		13968
8	SAPIENZA	8507,14			4700			700	851	500	2500	850		18608
11	UPM	17117,14			3750	2100	600	1680	1712	1200	6000	850		35009
14	EPFL	8561			1800	5100		1050	856	750	2750		6000	26867
16	UNSA	5186,68					1000	800	320	600	3000		6000	16907
20	UKARL	14572,4			3500	4420	2880	640	1975	1280	3500	4500	960	38227
21	CTU	9170,89			2700		675	770	917	550	3750	750		19283
22	UNIZAG	9006,82			1135	4400	0	600	976	267	1538	0	6000	23923
23	UNIBHAM	5650			4200		550	350	565	250	1250		6000	18815
	<b>Tot</b>	<b>90860</b>	<b>28550</b>		<b>24185</b>	<b>27120</b>	<b>6155</b>	<b>7900</b>	<b>9294</b>	<b>6997</b>	<b>28288</b>	<b>10050</b>	<b>24960</b>	<b>264359</b>

Table 6 Total “Transfer of Knowledge” costs by subcategories

The costs charged to the project by partners and claimed in the form C mainly belong to the categories i,ii,iii, and in minimum part to v for those partners that adopted an additional cost model in FP6. The coordinator (UNISI) had costs in sub-categories iii,iv,v,vi,viii,ix (predominantly of type iv). We will shown next that for the fraction claimed in the form C represents a fraction less than the ratio of total participants over funded participants of the overall transfer of knowledge costs for all courses, except for CTU. In the following, the various subcategories are discussed; the costs supported by the partners have been summarized in Table 6.

In 2008, minor adjustments have been carried out on the total costs by the partners. THE MAIN ISSUE IS CONCERNED WITH COSTS OF TYPE V (COSTS ASSOCIATED TO THE MANAGEMENT BOARD) THAT HAVE BEEN COMPLETELY CANCELLED FOR 2007 AND NOT DECLARED IN 2008. Other small adjustments on the total costs wrt what presented in 2007 have been communicated by POLITO, DTU, UPC, IETR, TNO.

### ***i. Logistic costs of the courses***

These costs are listed below

- expenses for Laboratories (materials, substrates, components used in the courses)
- Photocopies and CD's
- Rental of premises
- Contract to people involved in the course assistance and secretariat not belonging to the internal personnel
- social dinner, coffee breaks, other logistic expenses
- hostess services
- services for preparation of material and general logistic support

These costs were contractually estimated as ranging from 6 to 8 K€ per course and actually matched these values with few fluctuations. Some deviations have been seen from those courses with major experimental activity. For instance, DTU had conspicuous expenses for the rental of the huge spherical near-field measurement facility, and UPC had major costs for assistance due to the large number of attending students and to high content of experimental works.

### ***ii. Travel and living costs of key note speakers***

Within the total F costs, we reimbursed travel and living costs of key-note speakers. Key-note speakers belonging or not to one institution partner of the project have been treated same way as concerning the reimbursement. The living and travel costs are claimed in the Form C of *the host institution*, under the column F ("Transfer of knowledge costs").

### ***iii. Costs for web casting (UNISI):***

The ESoA WEB site <sup>(1)</sup> started within a previous investment inside the framework of a network of excellence that involved all our partners. The WEB site has been re-adapted to the Marie Curie Action courses, updated and maintained. The WEB site has been used for the following purposes:

- Centralizing and facilitating as much as possible the on line registration of the students.
- Organizing and making publicity and dissemination actions.
- Publicize the call for funded participants in each course.
- Collecting the electronic material to support the school, namely:

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<sup>i</sup> <http://www.antennasvce.org/Community/Education/Courses>

- i. Electronic forms of the speaker presentations
- ii. Homework's
- iii. Minutes of coordination meetings.
- iv. Evaluation forms.
- v. Notes and reference to textbooks.
- vi. Output of the exams
- Updating the list of the funded students.
- Showing the availability of research positions in the EM research area within Europe.

Part of the site is open to everybody, and part is accessible through password to a limited number of persons with decreasing degrees of priority as listed next: 1. the members of the board, 2. the school coordinators, 3. the teachers of the school and 4. the students registered to the school. In 2008, THE COLLECTIVE COSTS (6500€) FOR THE MAINTENANCE AND UPGRADING THE WEB SITE HAVE BEEN AFFORDED BY UNISI AND DECLARED IN FORM C.

#### ***iv. Costs associated to global organization (UNISI)***

These costs are associated to the time spent for the following activities:

- a. Activity of secretariat for the global organization
  - b. Activity of the coordinator for the global organization
- a. The activity of secretariat for the global organization has been around 3,6% of the global organization cost of the school; the various activity are summarized hereinafter.
- Organizing the documentation summarizing the overall activity of ESoA
  - Exchanging the e-mail with individual course secretariat
  - Organising of the stands in the conferences
  - Updating the brochure and the calendar of the courses
  - Preparing Posters for conferences
  - Preparing slides for presentation of the coordinator in conferences
  - Interacting with the WEB operators for the updating of the ESoA WEB site
  - Updating the indicator for the good progress and success of the school
  - Making the operation of filling SESAM
  - Checking the operation of filling SESAM from the partners
- b. The activity of the ESoA coordinator is summarized below. The relevant costs are obtained by multiplying the time costs of the individual personnel of the various institutions.
- Initiating the actions necessary to fulfil the objective of the school;
  - Drafting the regulation concerning the organization of the ESoA, and the credits (based on the ECTS scheme) granted by the ESoA courses;
  - Directing of the Board
  - Checking the registration fees according to the project rules;
  - Participating with the course coordinators to the selection of funded participants
  - Proposing the political and strategic orientation of ESoA;
  - Deciding on the programme of the courses together with the member of the Board;
  - Looking after the implementation of the decision of the Board;
  - Collecting any documentation relevant to the school, like reports about each course, and budget planning of each course;

- Preparing at the end of each year a final document summarizing the overall activity of ESoA;
- Performing and coordinating the dissemination activity of ESoA inside and outside Europe;
- Making available on VCE the date of the meetings and the meeting agendas, and the relevant the minutes of the board meeting within 10 days from the meeting date;
- Preparing of lectures to be presented in conferences
- Preparing of the minute of meetings of the board

#### ***v. Costs associated to the meetings***

These costs was not included in the Total ToK costs (see 4.1), since they have been considered belonging to the voice management.

#### ***vi. Costs associated to the time for preparing lectures***

The relevant costs have not been declared by the partner in the form C. To associate the time to the cost we consider 5 hours of preparation for any hour of lecture at the hourly rate of the speaker (so 6 hours in total per any hour of lecture). The major part of the speakers giving lecturer are full professor at Universities; the average hourly rate is around 50€ per hour.

Note that this category comprises also speakers belonging to partner institutions that have not organized the courses in 2008 who participated to a course organized by other partners.

#### ***vii. Costs associated to time spent by personnel of the host institution for activities of organization of the course***

The costs relevant to these activities have not been declared in the form C

These activities include:

- a. Activity of support for preparation of the laboratory experiment, of the CAD design project, and of exercises, performed by people belonging to the host institution before the course.
- b. Activity of selection of the students to be funded;
- c. Activity of secretariat (cashing of the registration fee, preparation of the material to deliver, preparation of the CD associated with the material of the course, slide preparation, typewriting of material and notes, preparation of certificates, payment of the funded students, payment of key-note speakers and other administrative matter etc.)
- d. Activity associated to preparation and corrections of tests and homework for the delivery of the PhD credits
- e. Activity of the coordinator the course coordinator

**a)** The activity of preparation of the laboratory experiments and CAD exercise (performed by personnel of the host institution before each course) is dependent by the number of participants and by the amount of laboratory exercise that have been done. This activity was sometimes also associated to experiment organized in the host institutions by teachers coming from abroad.

**b)** The activity of selection of the students to be funded can be estimated around 1,5-2 hours for each application arrived; the applicants were in the average around 70% of the total registrations. The selection have been done by the coordinator of each course with

one people more for each institution, and with the support of the coordinator of the project (UNISI), the latter to ensure avoidance duplications of grants (some students made application more times) and to have homogeneity of criteria.

c) The time spent for activity of internal staff secretariat around the organization of a course had an average cost around 4% of the total ToK cost for course.

d) This activity is proportional to the number of students in the course, with approximately one hour of work per course per student.

e) The time spent by the coordinator for the organization of the course (excluded the time spent for the selection of the funded participant) comprises 5 working days (35 hours) of duration of the course plus time for: organization of the program, e-mailing with the coordinator, activity connected with filling the web site, writing the program, etc. The total time spent for the coordination ranges from the 80 to the 120 hours, and does not account for the time spent for preparing lectures (when it is the case) and for participating to the meetings, that is calculated in a separate category

### **viii. Costs for dissemination and publicity**

These costs comprise the activities production and dissemination of CD, travels for dissemination, production and dissemination of spot trailers and CD by the local organizers, and all of WEB activity connected with the previous items.

#### **a) presentation of ESoA**

This includes the costs for making presentation of ESoA abroad. In 2008, a presentation of ESoA has been performed in London 21 February by the coordinator .

#### **b) international publicity of ESoA**

Spot trailers of the school have been recorder in the studios of Valencia. This spot trailers included a 8 minute presentation of the overall school, plus video trailers of all the courses that will be given in the school in 2008 <sup>(ii)</sup>. The work has been done with the effort of UPV and with the cooperation of all the course coordinators the recording was done in 2007 also for those course given in 2008; the relevant time spent in 2007 for the recording has been included in the total ToK of 2008. CD containing the spot trailers have been distributed in various conferences around the world, together with copies of the brochure of 2008 with main concentration in

1) Antennas and Propagation Society Symposium, (AP-S 2008), S Diego, CA, June 2008

2) Loughborough Antennas and Propagat. Conf. (LAPC), Loughborough, March 17-20 2008.

#### **c) CD collection of the slides-presentations of the school**

All the presentations done in ESoA have been collected in a CD edited by UKARL with the support of UPV and UNISI. The job was done in 2007, and no costs have been loaded in 2008. Each course coordinator produced the electronic material and given it to UKARL. All the activities concerned with the CD have been carried out with independent funding from each institution and not charged as eligible cost within MCA. Under responsibility of the course coordinators, each presenter of the school signed a disclaimer which states the availability to put the slides they used in the school in this CD collection, specifying that the final output is for internal use only of the institutions

members of the ESoA consortium. Delivery of the CD collection to a larger community has been discussed various times in the board meetings.

#### ***ix. Cost for the preparation of the electronic notes***

The activity of writing notes has not been foreseen in the contract. However, these have been considered from the board as extremely useful in the general economy. The course coordinated by the University of Zagreb “Advanced mathematics for antenna analysis” that will be held in Dubrovnik in May 2008 has been considered difficult to be understood in only 5 days without adequate written support on which to study after the course. The main actors of the course, namely UNISI, UNIFI, and UNIZAG, have considered appropriate to write electronic notes for the students. These notes have been financed by internal funds and not claimed in form C. The estimate of the overall effort for this project is planned to 24 k€ and decomposed 6k€ per each institution. The notes have been delivered in draft form to the students of the Dubrovnik course.

#### **4.4. Maximum “F” contribution in form C**

The maximum contribution requested to EU over the total organization costs must not overcome the ratio funded over total participants.

On the basis of Table 6, Table 7 summarize which is the maximum possible amount that each partner could have been declared in form C.

Table 7 presents for any course the number of funded participants, the number of total participants, the fraction funded over total, the total F costs as from Table 6, the income and, in the last column, the maximum possible request of F costs in form C on the basis of the ratio between funded and total participants.

We note that the expenses of UNISI (coordinator) for transfer of Knowledge are divided in “expenses for the global organizations of the school” and “expenses of the organization of the course”. For the global organization of the school THE FRACTION FUNDED OVER TOTAL PARTICIPANTS HAS BEEN TAKEN as THE TOTAL PARTICIPANTS to all the courses the period AND THE TOTAL FUNDED STUDENTS.

#### **5. Registration fees and income**

The income of the project are entirely relevant to the registration fees. These fees was fixed to 400 € for participants of no-profit institutions and 1000 € from participants from profit institutions. Funded participant have never paid the registration fee, since the contribution of category E was asked to EU in the contract.

The receipts of the projects are entirely due to the registration fee of the participants. The income of the registration fees, have been spent to cover organizational costs. The costs of category E of the contract (registration fees for the funded participants foreseen within the maximum contribution from EU) have been attributed to organizational cost, too.

The course “Antenna for Space Applications” organized by UMLV in cooperation with the European Space Agency (ESA-ESTEC) have used the same rules. Upon agreement between ESA-ESTEC And UMLV, UMLV have payed to ESTEC the registration fees and the reimbursement of 6 students. The registration fees of all the other participants was cashed by ESTEC and used to cover part of the organization costs.

period 1	partner	Acronim	EU FUND ED	TOTAL N° OF PART	fraction	total F	max charged	Participation fees EU Funded Part	INCOME	max in F
<b>Event-name/place/date</b>										
	1	UNISI	29	130	22,31%	€ 83.044,00	€ 18.525,20	€ 0,00	€ 0,00	€ 18.525,20
MIMO Commu-nication Systems and Antennas/Stockholm/27-31 August. 2007	3	KTH	5	29	17,24%	€ 27.188,00	€ 4.687,59	€ 0,00	€ 3.000,00	€ 7.687,59
Advanced Spherical Near-Field Antenna Measurement Techniques/Copenhagen/4-8 June	4	DTU	5	14	35,71%	€ 32.409,00	€ 11.574,64	€ 0,00	€ 3.444,43	€ 15.019,07
Microwave and millimeter wave antenna design/Rennes (FR)/18-22 June	7	IETR	4	13	30,77%	€ 22.682,00	€ 6.979,08	€ 0,00	€ 2.800,00	€ 9.779,08
Advanced Computational EM for antenna analysis/Torino (IT)/10-14 Sept. 2007	9	POLITO	5	21	23,81%	€ 18.812,00	€ 4.479,05	€ 0,00	€ 4.600,00	€ 9.079,05
Compact antennas/Barcelona (ES)/4-8 June 2007	10	UPC	5	31	16,13%	€ 36.158,00	€ 5.831,94	€ 0,00	€ 6.000,00	€ 11.831,94
Phased Arrays and Reflectarrays/Den Haag/7-11 May 2007	15	TNO	5	22	22,73%	€ 17.221,00	€ 3.913,86	€ 0,00	€ 3.200,00	€ 7.113,86
TOTAL FOR PERIOD 1										€ 79.035,78

period 2	partner	Acronim	EU FUND ED	TOTAL N° OF PART	fraction	total F	max charged	Participation fees EU Funded Part	INCOME	max in F
<b>Event-name/place/date</b>										
Propagation in mobile communication/Sienna (IT)/9-13 June 2008	1	UNISI (Course)	5	11	45,45%	€ 8.559,00	€ 3.890,45	€ 0,00	€ 1.200,00	€ 5.090,45
		UNISI (General)	49	173	28,32%	€ 44.193,00	€ 12.517,09	€ 0,00	€ 0,00	€ 12.517,09
Antennas for space application/Noordwijk(NL)/10-14 March 2008	6	UMLV	6	29	20,69%	€ 13.968,00	€ 2.889,93	€ 0,00	€ 0,00	€ 2.889,93
Travelling wave antennas/Rome (IT)/21-24 April 2008	8	SAPIENZA	5	11	45,45%	€ 18.608,00	€ 8.458,18	€ 0,00	€ 2.600,00	€ 11.058,18
Antenna mesaurements/Madrid (ES)/ 23-27 June 2008	11	UPM	5	26	19,23%	€ 35.009,00	€ 6.732,50	€ 0,00	€ 12.400,00	€ 19.132,50
Analysis of planar and conformal antennas/Lausanne (CH)/ 4-8 February 2008	14	EPFL	6	18	33,33%	€ 26.867,00	€ 8.955,67	€ 0,00	€ 3.600,00	€ 12.555,67
Time domain techniques for antenna analysis/Nice (FR)/13-17 October 2008	16	UNSA	5	13	38,46%	€ 16.907,00	€ 6.502,69	€ 0,00	€ 2.800,00	€ 9.302,69
Ultrawideband antennas/Karlsruhe (D)/7-11 April 2008	19	UKARL	5	24	20,83%	€ 38.227,00	€ 7.963,96	€ 0,00	€ 10.800,00	€ 18.763,96
Antennas for mobile communication/Prague (CZ)/ 16-20 June 2008	20	CTU	3	14	21,43%	€ 19.283,00	€ 4.132,07	€ 0,00	€ 3.800,00	€ 7.932,07
Advanced mathematics for antenna analysis/Dubrovnik (HR)/ 5-9 May 2008	21	UNIZAG	6	20	30,00%	€ 23.923,00	€ 7.176,90	€ 0,00	€ 4.400,00	€ 11.576,90
Active antennas/Birmingham (UK)/ 8-12 Sept. 2008	22	UNIBHAM	3	7	42,86%	€ 18.815,00	€ 8.063,57	€ 0,00	€ 800,00	€ 8.863,57
TOTAL FOR PERIOD 2										€ 119.683,02

Table 7. Maximum possible costs in F category

## 7. Deviation with respect to what foreseen in the contract

In order to illustrate possible deviation with respect to what foreseen in the contract, Table 9 compares the actual costs with the costs foreseen in the contract for the partners that have organized the course in 2007, WITH INCLUSION OF ADJUSTMENT In this

comparison, we have cumulated in a unique column the voices A+B, relevant to costs for living and travel of funded students.

First report period (2007) with adjustments							
#	Partner	Requested A+B	Contractual A+B	Request F+E-RCP	Contractual F+E	Requested A+B+F+E-RCP	Contractual A+B+F+E
15	TNO	2753	3520	3811	6196	6564	9716
3	KTH	6815	4616	2984	6000	9799	10616
4	DTU	4113	4555	10786	6000	14899	10555
7	IETR	2244	3744	6189	7750	8433	11494
9	POLITO	3025	4178	1405	5200	4430	9378
10	UPC	3048	4289	5104	5217	8152	9506
				18081		18081	
	<b>Total</b>	<b>21998</b>	<b>24902</b>	<b>48360</b>	<b>36363</b>	<b>70358</b>	<b>61265</b>

Second report period (2008)							
#	Partner	Requested A+B	Contractual A+B	Request F+E-RCP	Contractual F+E	Requested A+B+F+E-RCP	Contractual A+B+F+E
14	EPFL	3600	4318	4961	5476	8561	9794
6	UMLV	3816	3521	4780	6932	8597	10452
20	UKARL	2756	3778	3772	6900	6528	10678
8	SAPIENZA	1991	4179	5907	5625	7898	9804
22	UNIZAG	4147	3403	207	5694	4354	9098
1	UNISI	3591	4179	8747	7800	12337	11979
21	CTU	1753	3583	5371	6833	7124	10416
11	UPM	3152	4290	4717	5500	7869	9790
23	UBHAM	3120	3903	4850	5250	7970	9153
16	UNSA	4837	3745	2387	4891	7224	8636
	<b>Tot</b>	<b>32764</b>	<b>38898</b>	<b>45699</b>	<b>60902</b>	<b>78462</b>	<b>99800</b>

**Table 8** Comparison of the actual costs with those foreseen in the contract (amounts in €) .

Table 8 also compared the fraction of “Transfer of knowledge (ToK)” costs asked to EU with the summation of the costs F+E foreseen in the contract (where F is a fraction of transfer of knowledge costs financed by EU and E is the sum of registration fees of eligible students funded by EU). From this comparison, we do not detect substantial deviations from what foreseen in the contract, except for a too large amount of management in the first year.