WORK AND BUDGET PLAN

All activities proposed in the Work & Budget Plan must respect the COST rules as described in the COST documents, in particular the COST Implementation Rules and the COST Vademecum, and be directed at achieving objectives stated in the Action's MoU and/ or implementing COST policies.

Grant Period (GP) information:

Grant Period n.	Grant Period Start Date	Grant Period End Date	Allocated budget	Agreement/ Amendment (*n*)
3	*02/06/2014*	*01/06/2015*	*EUR 200.000,00*	

I. ACTION PROFILE

Domain[1]	Action no	Action Chair
MPNS	*MP1106*	*Thodoris Karapantsios*
Action Title	Smart and green interfaces - from single bubbles and drops to industrial, environmental and biomedical applications (SGI)	

Action General Information[2]:

Draft MoU:	*oc-2011-1-9659*		Action Entry into Force[3]:	*06/01/12*
CSO approval date:	*01/12/11*		Start of Action[4]:	*11/05/12*
MoU:	*4181/11*		End of Action[5]:	*10/05/16*

Participating COST Member Countries and Cooperating State[6]:

Parties							
Country	**Date**	**Country**	**Date**	**Country**	**Date**	**Country**	**Date**
Austria	30/01/2012	Belgium	09/02/2012	Bulgaria	20/01/2012	Croatia	11/01/2012
Czech Republic	10/02/2012	Denmark	29/03/2012	Estonia	11/04/2012	Finland	03/05/2012
France	23/03/2012	Germany	18/01/2012	Greece	23/01/2012	Hungary	05/03/2012
Ireland	16/01/2012	Israel	27/12/2011	Italy	13/01/2012	Latvia	07/11/2012
Lithuania	23/05/2013	Luxembourg	27/04/2012	Netherlands	17/01/2012	Norway	02/02/2012
Poland	18/01/2012	Portugal	06/01/2012	Romania	15/03/2012	Serbia	24/02/2012
Slovakia	23/03/2012	Slovenia	05/01/2012	Spain	04/01/2012	Sweden	09/08/2013
Switzerland	14/12/2012	Turkey	15/03/2012	United Kingdom	09/12/2011	Bosnia & Herzegovina	27/06/2014

Total: 32

[1] Allocated Domain for monitoring and assessment purposes
[2] Table to be copied from the Action Fact Sheet available for download on the Action page on the COST website
[3] Entry into force is the date when 5 COST countries had accepted the MoU of the Action
[4] The Action's start date is the date of its first Management Committee meeting.
[5] The Action's end date is exactly four years from the start date of the Action.
[6] Table to be copied from the Action Fact Sheet available for download on the Action page on the COST website

	Number
Participating COST Member Countries and Cooperating State	31
Participating inclusiveness COST Member Countries[7]	11+5
MC Members	56+20 sub

International Cooperation:

	Number[8]
Near Neighbour Countries (NNC) participating in the Action	0
Institutions from NNC participating in the Action	0
International Partner Countries (IPC) participating in the Action	4
Institutions from IPC participating in the Action	4
Specific Organisations[9] participating in the Action	2

Action Objectives as defined in the MoU and level of Achievement:

Objective as described in MoU	Current Level of Achievement in %[10]				
	0	25	50	75	100
1) The main objective of the Action is to organize a European interdisciplinary cooperation platform directed towards scientific added value and improvement of industrial, environmental and medical applications concerning interfaces, bubbles and drops.	☐	☐	☐	X	☐
2) Improvement of the fundamental understanding of the general interface structure and evolution dynamics. This will be achieved by a combination of theoretical development, the implementation of novel numerical techniques for solution of the governing equations and the exploitation of novel experimental techniques concerning both single and multiple interfaces.	☐	☐	☐	X	☐
3) Development of new materials relevant to creation of Smart and Green interfaces. These materials cover the whole span of size range and it can be surfactants, macromolecules, solid surfaces, solid foams, aerosol particles.	☐	☐	X	☐	☐
4) Development of novel and improvement of existing diagnostic techniques employing knowledge emerged from the first two objectives. The term diagnostics refers to the identification of the properties of the interfaces and to general real/life applications (e.g. medical diagnosis) in which interfaces/bubbles/drops intervenes.	☐	☐	X	☐	☐
5) Development or improvement of marketed industrial technologies and end user applications relevant to interfaces, bubbles and drops. The objective covers from consumer products to classical industrial processes and to computational tools for their design and optimization.	☐	☐	X	☐	☐

[7] Current COST Member Countries targeted by the COST inclusiveness Policy: EU 13 (Bulgaria, Cyprus, Czech Republic, Estonia, Croatia, Hungary, Lithuania, Latvia, Malta, Poland, Romania, Slovenia, Slovakia), Bosnia and Herzegovina, Serbia, Turkey, the former Yugoslav Republic of Macedonia. In addition, to comply with the EC eligibility criteria for widening, Portugal and Luxemburg might be considered.

[8] Update at the beginning of each Work & Budget Plan negotiation

[9] EU Commission, EU Agencies, European RTD organisations and International Organisations (see COST doc. 4115/13)

[10] Give an approximate estimation in percentage on the current level of achievement of each of the Action Objectives by clicking on the empty boxes. Update at the beginning of each Work & Budget Plan negotiation

Working Groups and Working Groups' Membership:

WG N.	WG Title	Total number of members[11]	Number from Inclusiveness Countries	From Industry	From international cooperation institutions	Number of ESRs	Gender balance (men/ women)
1	Fundamentals	106	5 + 3	8	2	28	80/25
2	Materials	115	6 + 2	11	1	39	94/21
3	Diagnostics	48	3	3	3	12	32/16
4	Technology	63	5 + 3	13	2	20	50/12
5	ESRG	58	3 + 1	3	0		38/20

II. Work and Budget Plan for the Grant Period

Goals for the Grant Period

Please describe in the table below the goals for the given grant period and their relationship to the Objectives of the Action as defined in the MoU.

Grant Period Goal	MoU objective that it relates to
1) Interaction and networking inside and outside the Action	1 to 5
2) Transfer of knowledge, exchange of persons, sharing data	1 to 5
3) Identification of knowledge gaps and ways to overcome them	2 to 5
4) Dissemination of results	1 to 5
5) Organize thematic clusters for future joining training and research projects	2 to 5
6) Specific activities for ESRs in science and management	1 to 5
7) Increase involvement of women (STSMs, Training Schools etc)	1 to 5

Tasks for the Grant period

Please describe, per Working Group, the tasks planned for the given grant period. Describe their relationship with the goals of the Grant Period.

	Tasks planned per WG for the given Grant Period	Grant Period goal(s) that it/ they relate(s) to
WG1-4	Annual Workshop: Smart & Green Interfaces 2015	1 to 7
WG1-4	Combined WGs meeting: Nanomaterials and Nanotechnologies – Nanostructured materials for water treatment/purification	1 to 5
WG1-4	Combined WGs meeting: Medical Diagnostics 7 Advance Therapies – Sustainable Food Science and Technology	1 to 5
WG1-4	Combined WGs meeting: Heat and mass transfer ona solid substrate – Wetting of complex surfaces	1 to 5

[11] Estimated number (update at the beginning of each Work & Budget Plan negotiation); those that are a member of more than one WG must be counted in each WG.

WG1-4	Training School: Advanced multiphysics simulation technology	1,4,6,7
WG1-4	Core Group meeting: teleconference on organization of Annual Workshop	1,6,7
WG1-4	STSM	1,2,6,7

Measures to implement COST Policies
In the table below describe the specific activities you are planning in order to promote the participation and contribution of those targeted in the COST Policies.

Policy	*Action Leadership (Chair, Vice Chair, WG Leaders, STSM manager, etc)*	*Membership of Action*	*Participation in Action activities*	*Event location/ organisation*
Inclusiveness	STSM Coordinator is from Turkey, Dissemination Manager is from Bulgaria	16 member countries from inclusiveness countries have signed the MoU.	63 active members in different events	WGs meeting already in Bulgaria, Planned WGs meeting in Turkey, Training School in Luxembourg
International Cooperation	Not applicable	4 international Institutions. Invitation of renown external experts, collaboration with near Near-Neighbour Countries	4 participants in different events. Joint sessions with international conferences	In 2013, 2014 and now for 2015: annual workshop jointly organized with International Conferences (HTFFM-V, SGI)
Industry involvement	WG3 leader from *Sinterface*, WG4 leader from *DropsTechnology*, Cluster2 leader from *Unilever*	13 industries. One member per industry Invitations on demand by members. Enough members from both Large industries and SME	10.6% participation of industrial members in Workshops, Trainers at Training Schools, hosts of STSMs	Training School in Luxembourg
Gender	One WG leader, Gender Balance Manager	15 women in the MC. 63 women in total. Promotion in website and meetings. Increasing	22.4% female participation in STSMs, (see last year report) Training Schools. Logo	Dedicated sessions in Annual Workshop and WGs meetings

		female members	competition organized by Gender balance team	
Early Stage Researcher	ESRG leader	One ESR in the MC, 60 ESRs in total. Promotion in website and meetings. Increasing female members	17.5% ESR participation in Action Activities: STSMs, Training Schools, chair of science sessions	Training School at Luxembourg, ESRG sessions in Annual workshop and WGs meetings

Use of COST Networking Tools for the Grant Period
Please describe the different COST Networking Tools (Meetings, Training Schools, STSMs, Dissemination) to be used during the Grant Period, by completing the following tables. Also, provide details on any Other Expenses related to Scientific Activities (OERSA).

When allocating funds to the different networking tools, the COST policies must be taken into account in particular, you must ensure that:

- **the available funds are allocated fairly across the participating COST Member Countries and Cooperating State;**
- **priority is given to event locations in Inclusiveness Countries,**
- **that the industrial dimension is supported where relevant**
- **that sufficient funds are allocated in support of the participation of Early Stage Researchers (ESR) and ESR-focussed networking tools such as Training Schools and STSMs,**
- **that gender balance is taken into account, including in the allocation of funds/ grants/ reimbursement places**

(1) MEETINGS
Please copy and complete the following table as many times as necessary (one table per meeting)

Meeting Type	MC meeting, WG meeting, Workshop, Conference, Other Meeting (select relevant)
Title of the Meeting	MC meeting + Annual Workshop
Goal(s) of the GP it will serve	1 to 7
Description of the activity and how it will serve the identified goal(s)	It will be organized jointly with the International Conference on Smart and Green Interfaces 2015. The MC meeting will deal with organization and networking matters (goal 1). The other goals will be dealt with by the science workshop sessions, and the Round Tables on specific Thematic Topics organized by the Action Clusters
Identification of WGs involved	1 to 4 (all)
Contribution of the meeting from and to the WGs	The Workshop is devoted to exchange of information and knowledge within and among WGs
Information on targeted audiences/participants with special emphasis on COST Policies	Presentations dedicated to COST policies meant for participants of the SGI2015 conference that are not MP1106 members
Any other relevant information (eg. links to websites, any particular	The Local Organizer will be the Chair of the Action, prof. Thodoris Karapantsios. Invited

individual taking the lead in the activity, invited speakers, etc…)	speakers will be also outside MP1106 jointly selected with SGI2015 conference. It is too early for more details
Specific Outputs and Outcomes	Networking and coordination, identifying scientific and technological progress, support of national and European research efforts, promote ESR and Gender Balance issues. Event Report
Location	*Piraeus, Greece*
Date	*May 11-15, 2015*
Number of expected total participants	150
Number of participants to be reimbursed from COST funds	95
Average reimbursement (per participant) (EUR)	*750,00*
Total Reimbursement costs (EUR)	71250,00
Local Organiser Support (EUR)	3750,000
Total cost of the Meeting (EUR)	75.000,00

Meeting Type	Combined WGs meeting
Title of the Meeting	Nanomaterials and Nanotechnologies - Nanostructured Materials for Water Treatment/Purification
Goal(s) of the GP it will serve	1 to 6
Description of the activity and how it will serve the identified goal(s)	It will bring together experts on nanorelated science and technology in terms of synthesis, characterization and modification of materials, particles and solid surfaces. This theme is very popular among Action members and covers the whole spectrum of WGs activities. This is a very hot topic with important recent advancements in both fundamentals and materials. This topic has strong relevance with aspects covered by other COST Actions on materials properties and characterization and so it is an important ambassador for further networking and joint activities. Science sessions, Round Tables and invited lectures will all serve achieving the identified goals
Identification of WGs involved	1 to 4 (all)
Contribution of the meeting from and to the WGs	The Workshop is devoted to exchange of information and knowledge within and among WGs
Information on targeted audiences/participants with special emphasis on COST Policies	National and EU policy makers
Any other relevant information (eg. links to websites, any particular individual taking the lead in the activity, invited speakers, etc…)	The Local Organizer will be the STSM coordinator of the Action, prof. Mustafa Ersoz from Konya University The event will be co-organize by prof. V. Koutsos from Edinburgh University. External experts will be Invited to

	present the current state-of-the art in nanoscience and nanothechnology beyond the knowledge and know-how within the Action.
Specific Outputs and Outcomes	Networking and coordination within WGs, identifying scientific and technological progress, support of national and European research efforts, promote ESR and Gender Balance issues. Event Report.
Location	*Antalya, Turkey*
Date	*Oct 11-12, 2014*
Number of expected total participants	50
Number of participants to be reimbursed from COST funds	30
Average reimbursement (per participant) (EUR)	*750,00*
Total Reimbursement costs (EUR)	22.500,00
Local Organiser Support (EUR)	1.200,00
Total cost of the Meeting (EUR)	23.700,00

Meeting Type	Combined WGs meeting
Title of the Meeting	Medical Diagnostics and Advanced Therapies Sustainable Food Science and Technology
Goal(s) of the GP it will serve	1 to 6
Description of the activity and how it will serve the identified goal(s)	It will bring together experts on medical microfluidics, nanoscience and biosensors for Advanced Therapies. Also, experts on hot topics on food science and technology like probiotics, genomics, proteins etc This theme is very popular among Action members and covers the whole spectrum of WGs activities. This is a very hot topic with important recent advancements in both fundamentals and materials. This topic has strong relevance with aspects covered by other COST Actions on materials properties and characterization and so it is an important ambassador for further networking and joint activities. Science sessions, Round Tables and invited lectures will all serve achieving the identified goals
Identification of WGs involved	1 to 4 (all)
Contribution of the meeting from and to the WGs	The Workshop is devoted to exchange of information and knowledge within and among WGs
Information on targeted audiences/participants with special emphasis on COST Policies	National and EU Policy makers
Any other relevant information (eg. links to websites, any particular individual taking the lead in the activity, invited speakers, etc…)	The Local Organizers will be Cluster coordinators, Dr. S.Stoyanov from Unilever and prof. C. Nastruzzi from University of Ferrara. External experts will be Invited to present the

	current state-of-the art on pertinent issues beyond the knowledge and know-how within the Action.
Specific Outputs and Outcomes	Networking and coordination within WGs, identifying scientific and technological progress, support of national and European research efforts, promote ESR and Gender Balance issues. Event Report
Location	*Thessaloniki, Greece*
Date	*Nov 2-3, 2014*
Number of expected total participants	50
Number of participants to be reimbursed from COST funds	30
Average reimbursement (per participant) (EUR)	*750,00*
Total Reimbursement costs (EUR)	22.500,00
Local Organiser Support (EUR)	1.750,00
Total cost of the Meeting (EUR)	24.250,00

Meeting Type	Combined WGs meeting
Title of the Meeting	Heat and Mass Transfer on a Solid Substrate Wetting of complex surfaces
Goal(s) of the GP it will serve	1 to 6
Description of the activity and how it will serve the identified goal(s)	It will bring together experts on heat and mass transfer with and without phase change over solid surfaces with emphasis on innovative complex surfaces like, nanomodified surfaces, nanostrcutred surfaces, nanoporous surfaces. Also, experts on innovative diagnostics in micro and nanoscale by optical, x-ray and force measurements. This is very important for the advancement of the activities towards new generation of highly efficient heat and mass transport devices. This is a topic of great interest to industrial applications where several members perform high level R&D work. The meeting is meant to bridge notions between experimental and theoretical studies and allow the formation of common research strategies in the future. Science sessions, Round Tables and invited lectures will all serve achieving the identified goals
Identification of WGs involved	1 to 4 (all)
Contribution of the meeting from and to the WGs	The Workshop is devoted to exchange of information and knowledge within and among WGs
Information on targeted audiences/participants with special emphasis on COST Policies	National and EU Policy makers
Any other relevant information (eg.	The Local Organizers will be Cluster

links to websites, any particular individual taking the lead in the activity, invited speakers, etc…)	coordinators, Prof. C. vd Geld from University of Eindhoven Dr. T. Roisman-Gambaryan from University of Darmstadt. External experts will be Invited to present the current state-of-the art on pertinent issues beyond the knowledge and know-how within the Action.
Specific Outputs and Outcomes	Networking and coordination within WGs, identifying scientific and technological progress, support of national and European research efforts, promote ESR and Gender Balance issues. Event Report
Location	*Eindhoven , The Netherlands*
Date	*Oct 30-31, 2014*
Number of expected total participants	50
Number of participants to be reimbursed from COST funds	30
Average reimbursement (per participant) (EUR)	*750,00*
Total Reimbursement costs (EUR)	22.500,00
Local Organiser Support (EUR)	1.750,00
Total cost of the Meeting (EUR)	24.250,00

Meeting Type	Core Group meeting
Title of the Meeting	3rd Core Group meeting
Goal(s) of the GP it will serve	1
Description of the activity and how it will serve the identified goal(s)	Organization of the Annual Conference in Spring 2015
Identification of WGs involved	1 to 4 (all)
Contribution of the meeting from and to the WGs	Planning and Organization of all WGs sessions
Information on targeted audiences/participants with special emphasis on COST Policies	-
Any other relevant information (eg. links to websites, any particular individual taking the lead in the activity, invited speakers, etc…)	The Local Organizer will be the Action Chair, prof. Thodoris Karapantsios. Further to Core Group members, Cluster coordinators will be also invited to participate.
Specific Outputs and Outcomes	Networking and coordination within WGs,. Event Report
Location	*teleconference*
Date	*early Dec 2014*
Number of expected total participants	15
Number of participants to be reimbursed from COST funds	0
Average reimbursement (per participant) (EUR)	0
Total Reimbursement costs (EUR)	0
Local Organiser Support (EUR)	0
Total cost of the Meeting (EUR)	0

(2) TRAINING SCHOOLS (TS)

Title of the Training School	Advanced Multi-physics Simulation Technology
Goal(s) of the GP it will serve	2,3,6,7
Description of the TS and how it will serve the identified goal(s)	The objective is to develop Advanced Multi-physics Simulation Technology (AMST) as a flexible, extensible and versatile interface for coupling discrete numerical approaches to field problems applicable under industrial standards. The identified goals will be achieved by an interdisciplinary approach fostering the transfer of knowledge. Strategic partners from the academic and industrial sector will contribute by giving expert advice and by providing industrial relevant test cases. Advanced Multi-physics Simulation Technology closes a large technological gap for research and industry, and contributes significantly to multi-physics research in Europe with a high impact on innovative engineering, sustainable intersectorial collaboration and European competitiveness. This Training School is organized as part of a respective Advanced School organized by the AMST EU/FP7 and so only a few seats will be available for the ESRs of the Action.
Identification of WGs involved	1 to 4 (all)
Specific Outputs and Outcomes	Simulation software for either discrete or continuous applications matured during the last decades, to bridge the gap for integrated software to describe the interaction between a particulate and a continuous phase. Event Report.
Location	Luxembourg city, Luxembourg
Date	Sept 24-25, 2014
Number of Trainees	6
Average Trainee grant (EUR)	600
Cost of Trainees Grants (EUR)	3600
Number of Trainers	2 (supported by COST)
Average reimbursement of trainers (EUR)	1600
Total Reimbursement costs (EUR)	5200
Local Organiser Support (EUR)	300
Total cost of the Training School (EUR)	5500

(3) SHORT TERM SCIENTIFIC MISSIONS (STSMs)

Number	15

Total cost (EUR)	19.500,00

(4) DISSEMINATION

Title	Publisher/provider	Cost (EUR)	Date of Release
Website maintenance	University of Sofia, Bulgaria	1.000,00	-

(5) Other Expenses Related to Scientific Activities (OERSA)

Item	Cost (EUR)
Banking costs	714,00

Other OUTPUTS PLANNED FOR the Grant Period
Describe any other general output/outcome/result – not listed above - including reports, technical documents, publications and other forms of outputs and outcomes.

III. SUMMARY BUDGET

A. COST Networking Tools	EUR
(1) MEETINGS	*147.200,00*
(2) TRAINING SCHOOLS	*5.500,00*
(3) SHORT-TERM SCIENTIFIC MISSIONS	*19.500,00*
(4) DISSEMINATION	*1.000,00*
(5) OERSA	*714*
B. TOTAL SCIENCE EXPENDITURE (sum of (1) to (5)) AUTOMATIC SUM: Click in cell to the right and click button "F9" to update the autosum	***173914***
C. FSAC (max. of 15% of B.)	*26086*
D. TOTAL EXPENDITURE (B+C) AUTOMATIC SUM: Click in cell to the right and click button "F9" to update the autosum	***200.000***