



THE SEVENTH FRAMEWORK PROGRAMME

The Seventh Framework Programme focuses on Community activities in the field of research, technological development and demonstration (RTD) for the period 2007 to 2013



GRAPHENE FLAGSHIP

The *Graphene-Based Revolutions in ICT And Beyond* (Graphene Flagship) project is a CP-CSA supported by the European Commission Seventh Framework Programme Under contract 604391

GUIDE FOR APPLICANTS

participating in a competitive call for additional beneficiaries in the GRAPHENE FET Flagship Project

Additional beneficiaries in the FET Flagships Project

604391 GRAPHENE

http://cordis.europa.eu/projects/rcn/109691_en.html

<http://www.graphene-flagship.eu>

VERSION

Version	Changes from last version
29/11/2013	Changes from Original Version (25/11/2013): - Clarification on consortium composition as an eligibility criteria (p.6) - Indicative information on project duration (part 5 – p.8)
3/12/2013	Changes from previous version (29/11/2013): - Clarification on submission process (p.6) - Updated indicative information on project duration and access negotiation (part 5 – p.8)
23/01/2014	Changes from previous version (03/12/2013): - Clarification on subcontracting costs p. 17-18 and 26

CONTENTS

1. INTRODUCTION	4
2. HOW TO PREPARE AND SUBMIT A PROPOSAL	6
2.1 ONE STAGE SUBMISSION	6
2.2 PROPOSAL LANGUAGE	6
2.3 SUBMISSION OF PROPOSALS	6
2.4 ACKNOWLEDGEMENT OF RECEIPT	7
3. PROPOSAL EVALUATION AND SELECTION	7
4. INTEGRATING NEW BENEFICIARIES AND ACHIEVING COMPLEMENTARITY	8
5. ACCESSION AND PROJECT DURATION	8
6. FUNDING ENVELOPE	9
7. SUPPORT TO PROPOSERS	9
7.1 CALL HELPDESK	9
7.2 NATIONAL CONTACT POINTS	9
7.3 THE INTELLECTUAL PROPERTY RIGHTS HELPDESK	9
ANNEX 1A – PROPOSAL FORMAT – RESEARCH PROJECTS (CALL TOPICS 1 TO 12)	10
ANNEX 1B – PROPOSAL FORMAT – ROAD MAPPING PROJECTS (CALL TOPIC 13)	20
ANNEX 2A – EVALUATION FORM - RESEARCH PROJECTS (CALL TOPICS 1 TO 12)	28
ANNEX 2B – EVALUATION FORM – ROAD MAPPING PROJECTS (CALL TOPIC 13)	30
ANNEX 3: LIST OF GRAPHENE FLAGSHIP BENEFICIARIES	32
ANNEX 4: SUMMARY OF THE GRAPHENE FLAGSHIP EXPECTED IMPACT	35
ANNEX 5: CALL TOPICS	37

GUIDE FOR APPLICANTS
for the selection of additional beneficiaries in the GRAPHENE FET Flagship project

1. Introduction

It is expected that FET Flagship CP-CSAs funded by the Seventh Framework programme of the European Community Union for research, technological development and demonstration activities contributing to the creation of the European research area and to innovation should reserve a substantial part of the budget (e.g. 20%) for future partners, foreseeing an enlargement of the consortium in an open and flexible way, ensuring dynamic responses to unforeseen challenges.

These later-joining beneficiaries must be selected by means of a competitive call.

This **Guide for applicants** contains the basic information needed to guide you in preparing a proposal to join the GRAPHENE Flagship project which has launched such a competitive call. It gives instructions on how to structure your proposal. It also describes how the proposal should be submitted, and the criteria on which it will be evaluated.

Conditions of participation and funding are those of the Seventh Framework programme, as defined principally in *Regulation (EC) No 1906/2006 of the European Parliament and of the Council of 18 December 2006 laying down the rules for the participation of undertakings, research centres and universities in actions under the Seventh Framework Programme and for the dissemination of research results (2007-2013)*.

These can be found at http://ec.europa.eu/research/participants/portal/page/fp7_documentation under "Rules for Participation" in the document "FP7 Rules for participation".

The proposers which are selected to join the consortium will be required to accede to the existing grant agreement; a model example of which can also be found at the above website ("Standard model grant agreement"). They will also be required to sign the existing consortium agreement, an internal project document concerning the relations between the beneficiaries (can be found on <http://www.graphenecall.esf.org/documents>).

This Guide for applicants does not supersede the rules and conditions laid out, in particular, in Council and Parliament Decisions relevant to the Seventh Framework Programme

Funding of participation

Participation as a beneficiary in an FP7 project is on a cost-shared basis, the Commission making only a partial contribution to the total cost of the work.

You may only receive funding via the GRAPHENE Flagship project if you are eligible to receive funding under the rules of the Seventh Framework Programme. The following may receive EU funding in an FP7 project:

- Any legal entity established in a Member State or an FP7 Associated country¹ (including the European Commission's Joint Research Centre), or created under Community law (e.g. a European Economic Interest Grouping),
- Any international European interest organisation
- Any legal entity established in an FP7 International Cooperation Partner Country (ICPC). A complete list of these countries is given in annex 1 of the 2013 Cooperation Workprogramme², but in principle it includes the developing countries of Africa, Asia and Latin America, as well as those European countries which are not already Member states or Associated countries.

Organisations from other countries may also participate in FP7 projects, but normally without funding. There are also a number of other conditions which exclude funding, specified in Articles 93 and 94 of the Commission's Financial Regulation³

In addition to the criteria above, groups from existing Graphene Flagship beneficiaries (identified by their Participant Identification Code – PIC) are not eligible to apply through the open call – see Annex 2 for the list of current beneficiaries.

Proposals can be submitted either by a single organisation responding to the competitive call or by consortia of several eligible organisations.

Fuller details of the Commission's funding arrangements can be found at: http://ec.europa.eu/research/participants/portal/page/fp7_documentation under "Guidance Documents for FP7" - "Financial Issues" in the document "Guide to Financial Issues relating to FP7 Indirect Actions".

¹ The FP7 Associated countries are Albania, Bosnia and Herzegovina, Faroe Islands, FYR Macedonia, Iceland, Israel, Liechtenstein, Moldova, Montenegro, Norway, Serbia, Switzerland and Turkey.

² Obtainable at http://ec.europa.eu/research/participants/portal/page/fp7_documentation under "All Work Programmes" – "2013" – "Cooperation" in the latest 'Update to the Annexes 1-5' of the '2013 Cooperation Work Programme'

³ http://ec.europa.eu/budget/documents/financial_regulation_en.htm

Summary of eligibility criteria

A proposal will only be considered eligible if it meets all of the following conditions:

- it is submitted through the on-line submission system before the deadline, 5 February 2014, 16h00 (Brussels time);
- it is written in English
- it is submitted by an eligible participant (or by the coordinator of a consortium of eligible participants); eligible participants are listed above
- it is complete i.e. all elements forming the application (on-line and in the template to be used) have been provided
- the content of the proposal relates to the call topic it addresses (see annex 5 and the 'GRAPHENE Flagship Competitive Call for Consortium Extension' call document)
- (if relevant) Consortium composition respects the requirement expressed in the call topics
- Requested EC contribution is within the funding limits specified in the call document

2. How to prepare and submit a proposal

2.1 One stage submission

Proposals for selection as an additional beneficiary in the GRAPHENE Flagship project are submitted in a single stage, by submitting a complete proposal application which is prepared as described in Annex 1 of this document.

2.2 Proposal language

The proposal must be prepared in the working language of the GRAPHENE Flagship project: English. Proposals submitted in any other language will not be evaluated.

2.3 Submission of proposals

Proposals must be submitted electronically through the online platform accessible through the address given in the call announcement.

Once they have started the application process, proposers will be provided with a personal access to their application enabling them to complete it at their convenience (in several sessions if needed) and submit it before the call deadline. **Submissions are final and cannot be changed. It is the coordinators' responsibility to ensure correctness of information and documents provided before final submission.**

Proposals must be submitted by the closing time and date of the call. Late proposals, or proposals submitted to any other address or by any other means than through the online platform, will not be evaluated.

Once submitted, the coordinator will have the possibility to withdraw a proposal by contacting the call office.

Do not wait until the last minute to submit your proposal. Failure of your proposal to arrive in time for any reason, including communications delays, is not acceptable as an extenuating circumstance. The time of receipt of your proposal as recorded by the online platform system will be definitive

2.4 Acknowledgement of receipt

Once your proposal has been submitted, you (and your team members) will receive an acknowledgement of receipt email that will be sent to the email address you provided in the online platform.

The sending of an Acknowledgement of receipt does not imply that your proposal has been accepted as eligible for evaluation.

3. Proposal evaluation and selection

The GRAPHENE Flagship consortium will organise the evaluation of proposals received in the light of the standard FP7 evaluation criteria for Collaborative Projects, using the form shown in Annex 2 of this document and with the assistance of at least two independent experts. These experts will be individuals from the relevant fields of science, industry and/or with experience in the field of innovation. They will hold the highest level of knowledge, and be internationally recognised authorities in their area.

Each independent expert will record his/her individual opinion of each proposal on the form presented in annex 2. They will then meet together to prepare a “consensus” form for each proposal. Using the results given on the consensus form, the consortium will then select the proposal(s) with the highest overall score.

However, the GRAPHENE Flagship consortium is not obliged to select the highest scoring proposal when:

- A proposal raises objective concerns about commercial competition
- Significant erroneous claims impacting feasibility of the proposed work

Should this happen, approval from the European Commission services in charge of the GRAPHENE Flagship will be required to validate non-selection. In this case the choice may pass to the next-ranked proposal(s). It may happen that no other proposal score passes the minimum threshold in which case no selection will be made.

Also the GRAPHENE Flagship project may conclude that even the highest scoring proposal is failing the minimum thresholds as described in annex 2a, in which case it will make no selection.

In the event of no selection being made, the budget foreseen for the call-topic in question may be redistributed to other topics of the competitive call.

All proposers will receive from the GRAPHENE Flagship project the report of the consensus view of the experts who examined their proposal. The selected proposer(s) will be invited to accede to the project's grant agreement with the Commission.

(For more details about proposals handling and evaluation, see the document *proposals handling and evaluation process* – (<http://www.graphenecall.esf.org/documents>)

4. Integrating new beneficiaries and achieving complementarity

Only concerns research proposals submitted under call topics 1 to 12.

The call topics have been carefully selected to ensure the strategically needed new directions and desired new complementarities of the work done by the new beneficiaries. In order to be integrated to the overall GRAPHENE Flagship and to avoid duplication of effort, it is of critical importance that the proposals selected through this call demonstrate complementarities with the research plan of the GRAPHENE Flagship as delineated in the document *Outline work programme of the GRAPHENE flagship core project* – <http://www.graphenecall.esf.org/documents>. The demonstrated degree of integration will be an important part of the evaluation criterion Implementation.

To this end, proposers/proposing teams will have to demonstrate that their research plan will complement the overall GRAPHENE Flagship research plan (as presented in the document *Outline Work Programme of the GRAPHENE flagship core project*) and present how they intend to collaborate with existing Graphene partners. This will have to be described in part 2.3 of the proposal (see annex 1a).

5. Accession and Project Duration

The actual date of accession of selected partners to the Grant Agreement will depend on the length of the negotiation process with the GRAPHENE Consortium and the European Commission services; this may vary, in particular for the organisations not already registered to FP7. However, contribution will have to be spent by the end of the GRAPHENE Ramp up period: 31 March 2016.

It can be estimated that selected candidates will access the Grant Agreement around September 2014, therefore an indicative 18 months project duration seems appropriate.

Unless reasonable justifiable reasons are put forward, if access negotiation with the GRAPHENE Flagship Consortium is not finalised before 31 March 2015, new partner(s) and their project(s) will not be funded.

6. Funding envelope

The expected average EC contribution is 708.000 € for each of the topics GF01-GF12 and the maximum funding for topic GF13 will be 250.000 €.

For topics GF01-GF12: The upper funding limit per proposal is 708.000 €. Up to two proposals will be selected for each topic.

For Topic 13: The upper funding limit per proposal is 250.000 €. Only one proposal is expected to be funded.

The total EC funding available through this call is 8,746,000 € from the FP7 budget. EC Contribution will have to be spent before the end of the Flagships' FP7 project, i.e. before March 31, 2016.

7. Support to proposers

7.1 Call Helpdesk

For further information on the call, contact:

Name: Mr. Nicolas Walter

Dr. Ana-Maria Ciubotaru

email: Graphene-call@esf.org

tel: +33 388 76 21 41

7.2 National Contact Points

The European Commission supports a network of National Contact Points (NCPs), which can be helpful to organisations from their country both in general advice and particularly on preparing proposals. Organisations should contact the NCP of their own country for further information. <http://ec.europa.eu/research/participants/portal/page/nationalcontactpoint>.

7.3 The Intellectual Property Rights Helpdesk

The IPR-Helpdesk has as its main objective to assist potential and current beneficiaries taking part in Community funded projects on Intellectual Property Rights issues, and in particular on Community diffusion and protection rules and issues relating to IPR in international projects.

<http://www.ipr-helpdesk.eu/>

Annex 1a – Proposal format – Research projects (call topics 1 to 12)

Proposals must be submitted:

- **via the dedicated online platform**
- **in the language stated in the call announcement**
- **before the date and time given as the call deadline in the call announcement**

PART A - TO BE FILLED ONLINE

- Contact details and PIC (FP7 registration number) of the project coordinator (project leader)
 - *In case of consortia:* Contact details and PIC (FP7 registration number) of all co-proposers
 - GRAPHENE Flagship detailed call topic reference
 - Project title
 - Project length (months)
 - Requested EC Contribution (Euros)
 - Project effort (Number of person.months)
 - Project abstract (*maximum 2000 characters summary of your proposed work*)
 - Project key-words
-

PART B - TO BE PROVIDED AS A SINGLE PDF DOCUMENT

A- Front page

Full title of the existing project you wish to join ("Graphene-Based Revolutions in ICT And Beyond")

Acronym of the existing project ("GRAPHENE")

Grant agreement number of existing project (604391)

Type of instrument (CP-CSA)

Date of preparation of the proposal

Proposal Title

Project Coordinator's legal organisation name

Project Coordinator's organisation address

Name of the Project Coordinator

Project Coordinator's telephone number

Project Coordinator's email

B- Contents page

(Show contents list)

C- Proposal

Section 1: Scientific and/or technical quality, relevant to the topics addressed by the call

Recommended maximum length of section 1: 7 pages (not including table 1.2a, 1.2b and 1.3c)

1.1 Concept and objectives

Describe in detail the S&T objectives of your proposed action. Show how they relate to the topic(s) addressed by the competitive call. These objectives should be those achievable within your proposed action, not through subsequent development. They should be stated in a measurable and verifiable form.

1.2 S/T methodology and associated work plan

A detailed work plan should be presented, broken down into work packages⁴ (WPs) which should follow the logical phases of the implementation of your work, and include management and assessment of progress and results.

⁴ A work package is a major sub-division of the proposed work with a verifiable end-point - normally a deliverable or a milestone in the overall action.

Please present your plans as follows:

- i) Describe the overall strategy of the work plan
- ii) Show the timing of the different WPs and their components (Gantt chart or similar).
- iii) Provide a detailed work description broken down into work packages:
 - Work package list (please use table 1.2a);
 - Description of each work package (please use table 1.2b)
 - Deliverables list (please use table 1.2c);
- iv) Provide a graphical presentation of the components showing their interdependencies (Pert diagram or similar)
- v) Describe any significant risks, and associated contingency plans

Note: The number of work packages used must be appropriate to the complexity of the work, a small action with very specific goals could consist of one work package only. The planning should be sufficiently detailed to justify the proposed effort and allow progress monitoring by the GRAPHENE Flagship project coordinator.

Table 1.2a: Template - Work package list

Work package list

WP No ⁵	Work package title	Type of activity ⁶	Lead partic no.	Lead partic. short name	Person-months ⁷	Start month	End month
	TOTAL						

⁵ Workpackage number: WP 1 – WP n.

⁶ Please indicate one activity per work package:

RTD = Research and technological development; DEM = Demonstration; MGT = Management of the consortium; OTHER = Other specific activities if applicable in this call, including any activities to prepare for the dissemination and/or exploitation of project results and coordination activities.

⁷ The total number of person-months allocated to each work package.

Table 1.2b: Template - Work package description

Work package description

Work package number		Start date or starting event:	
Work package title			
Activity type⁸			
Participant number			
Participant short name			
Person-months per participant			

Objectives

Description of work (possibly broken down into tasks)
--

Deliverables (brief description) and month of delivery

Total effort (person months) -

⁸ Please indicate one activity per work package:

RTD = Research and technological development; DEM = Demonstration; MGT = Management of the consortium; OTHER = Other specific activities, if applicable in this call, including any activities to prepare for the dissemination and/or exploitation of project results, and coordination activities.

Table 1.2c: Template - Deliverables List

List of Deliverables

Del. no. ⁹	Deliverable name	WP no.	Nature ¹⁰	Dissemination level ¹¹	Delivery date ¹² (proj. month)

⁹ Deliverable numbers in order of delivery dates. Please use the numbering convention <WP number>.<number of deliverable within that WP>. For example, deliverable 4.2 would be the second deliverable from work package 4.

¹⁰ Please indicate the nature of the deliverable using one of the following codes:

R = Report, **P** = Prototype, **D** = Demonstrator, **O** = Other

¹¹ Please indicate the dissemination level using one of the following codes:

PU = Public

PP = Restricted to other programme participants (including the Commission Services).

RE = Restricted to a group specified by the consortium (including the Commission Services).

CO = Confidential, only for members of the consortium (including the Commission Services).

¹² Measured in months from your action start date (month 1).

Section 2. Implementation

2.1 Individual participants

For each participant in the proposed project, provide a brief description of the legal entity, the main tasks they have been attributed, and the previous experience relevant to those tasks. Provide also a short profile of the staff members who will be undertaking the work.

2.2 Consortium/team as a whole

Recommended maximum length of part 2.2: 2 pages

Describe how the participants (institutions or individuals from the same organisation depending if the proposals involves several organisations or only one) collectively constitute a consortium/team capable of achieving the project objectives, and how they are suited and are committed to the tasks assigned to them. Show the complementarity between participants/individuals. Explain how the composition of the consortium/team is well-balanced in relation to the objectives of the project. If appropriate describe the industrial/commercial involvement to ensure exploitation of the results, and how the opportunity of involving SMEs has been addressed.

2.3 Complementarity with the GRAPHENE science plan

Recommended maximum length of part 2.3: 2 pages

Describe and explain how your project will complement the activities already planned in the GRAPHENE flagship and how collaboration with existing GRAPHENE beneficiaries will be real and effective. A table of potential areas of common interest with the following areas would be welcome:

- Materials,
- Health & environment,
- Fundamental science,
- High-frequency electronics,
- Optoelectronics,
- Spintronics,
- Sensors,
- Flexible electronics,
- Energy applications,
- Nanocomposites,
- Production

Demonstrate that the research plan will complement the overall GRAPHENE Flagship research plan (as presented in the document *Outline Work Programme of the GRAPHENE flagship core project* – <http://www.graphenecall.esf.org/documents>) and present how they intend to collaborate with existing Graphene partners.

More information about the current GRAPHENE Flagship Work Programme (list of Work Packages and tasks) is available document *Outline work programme of the GRAPHENE flagship core project*.

2.4 Resources to be committed

Recommended maximum length of part 2.4: 2 pages without budget tables

Applicants should be aware that FP7 Rules for participation apply, in particular for the Maximum Reimbursement rates of eligible costs, these are:

- *Non profit public bodies; higher education establishments; research organisations - 75%*
- *SME - 75%*
- *Large companies and other organisations - 50%*

(depending on the type of beneficiary and the type of activity to be carried out, rates will differ for GF13.)

*For more details on this, please refer to the guide *Guide to Financial Issues relating to FP7 Indirect Action*.*

http://ec.europa.eu/research/participants/portal/ShowDoc/Extensions+Repository/General+Documentation/Guidance+documents+for+FP7/Financial+issues/financialguide_en.pdf

2.4.1 Cost and funding breakdown

Provide one budget table per consortium members (one table in case of a proposal submitted by only one organisation). For more information about financial rules, please refer to the Guide to Financial Issues relating to FP7 Indirect Actions.

Please show your figures in euros (not thousands of euros)

Research projects submitted under call lines 1 to 12 are expected to claim RTD or Demonstration costs (if justified) but no ‘Other’ costs, except for management costs related to the provision of the Certificate for Financial Statement (CFS)

	RTD	Demonstration	Other	Total
1. Personnel costs				
2. Other direct costs (inc. equipment and subcontracting)				
3. Total direct costs (Sum of row 1 and 2)				
4. Indirect costs				
5. Total costs (Sum of row 3 and 4)				
6. Requested EC contribution				

In row 1, insert your personnel costs for the work involved, differentiating between:

RTD activities: activities directly aimed at creating new knowledge, new technology, and products including scientific coordination.

Demonstration activities: activities designed to prove the viability of new technologies that offer a potential economic advantage, but which cannot be commercialised directly (e.g. testing of product like prototypes).

Other activities: any specific activities not covered by the above mentioned types of activity such as training, coordination, networking, **roadmapping** and dissemination (including publications). These activities should be specified later in the proposal.

In row 2, insert any other direct costs, for example equipment, subcontracting or travel costs.

In row 3, calculate the sum of your personnel and other direct costs

In row 4, insert your indirect (overhead) costs.

Indirect costs are all those eligible costs which cannot be identified by the participant as being directly attributed to the project but which can be identified and justified by its accounting system as being incurred in direct relationship with the eligible direct costs attributed to the project

You may use your actual overhead costs if this is possible within your organisation's accounting system. If not, you may use a calculated figure of 20% of the sum in row 3. If you are a non-profit public body, a research organisation, a secondary or higher education establishment or a small or medium enterprise, you may use a calculated figure of 60% of the sum in row 3.

Note that indirect costs should be calculated based on the direct costs but excluding subcontracting and resources made available by third parties, which are not on the premises of the beneficiary.

For more information about Indirect Cost Model:

<http://ec.europa.eu/research/participants/help/pages/viewpage.action?pageId=1638473>

In row 5, calculate the sum of your direct and indirect costs.

In row 6, insert your requested EC contribution

RTD activities: you may request up to 50% of the total cost figure. If you are a non-profit public body, a research organisation, a secondary or higher education establishment or a small or medium enterprise, you may request up to 75% funding.

Demonstration: you may request up to 50% funding.

Other, Management (MGT): you may request up to 100% funding. MGT costs are limited to the costs for audit certificates or similar if required. Note that the maximum indirect reimbursement cost rate for 'Other' costs is 7%.

Note: If you are successful in the evaluation, your final costs and funding estimates agreed with the FET Flagship project will also be subject to legal and financial verification by the Commission services.

2.4.2 Budget explanation and use of resource

Describe how the totality of the necessary resources will be mobilised, including any resources that will complement the EC contribution. Show how the resources will be integrated in a coherent way, and show how your overall financial plan for the action is adequate.

Please identify any major non-personnel direct costs and explain why they are necessary for the activity you propose.

Section 3. Impact

Recommended maximum length of part 3: 4 pages

3.1 Expected impact

Describe how your activity will contribute towards the expected impacts listed in the call document and of the GRAPHENE Flagship project. Mention the steps that will be needed to bring about these impacts. Mention any assumptions and external factors that may determine whether the impacts will be achieved.

See Annex 4 for GRAPHENE Flagship summary of expected impact

3.2 Management of intellectual property

If relevant, describe your plans for the management of knowledge (intellectual property) acquired in the course of the action.

Section 4. Ethical Issues

Recommended maximum length of part 4: 2 pages

Describe any ethical issues that may arise in the action (if relevant).

Annex 1b – Proposal format – Road mapping projects (call topic 13)

Proposals must be submitted:

- **via the dedicated online platform**
- **in the language stated in the call announcement**
- **before the date and time given as the call deadline in the call announcement**

PART A - TO BE FILLED ONLINE

- Contact details and PIC (FP7 registration number) of the project coordinator (project leader)
- *In case of consortia:* Contact details and PIC (FP7 registration number) of all co-proposers
- GRAPHENE Flagship detailed call topic reference
- Project title
- Project length (months)
- Requested EC Contribution (Euros)
- Project effort (Number of person.months)
- Project abstract (*maximum 2000 characters summary of your proposed work*)
- Project key-words

PART B - TO BE PROVIDED AS A SINGLE PDF DOCUMENT

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Type of instrument (CP-CSA)

Date of preparation of the proposal

Proposal Title

Project Coordinator's legal organisation name

Project Coordinator's organisation address

Name of the Project Coordinator

Project Coordinator's telephone number

Project Coordinator's email

B- Contents page

(Show contents list)

C- Proposal

Section 1: Scientific and/or technical quality, relevant to the topics addressed by the call

Recommended maximum length of section 1: 7 pages (not including table 1.2a, 1.2b and 1.3c)

1.1 Concept and objectives

Describe in detail the objectives of your proposed action. Show how they relate to the topic(s) addressed by the competitive call. These objectives should be those achievable within your proposed action, not through subsequent development. They should be stated in a measurable and verifiable form.

1.2 Quality and effectiveness of the support mechanisms, and associated work plan

A detailed work plan should be presented, broken down into work packages¹³ (WPs) which should follow the logical phases of the implementation of your work, and include management and assessment of progress and results.

¹³ A work package is a major sub-division of the proposed work with a verifiable end-point - normally a deliverable or a milestone in the overall action.

Please present your plans as follows:

- i) Describe the overall strategy of the work plan
- ii) Show the timing of the different WPs and their components (Gantt chart or similar).
- iii) Provide a detailed work description broken down into work packages:
 - Work package list (please use table 1.2a);
 - Description of each work package (please use table 1.2b)
 - Deliverables list (please use table 1.2c);
- iv) Provide a graphical presentation of the components showing their interdependencies (Pert diagram or similar)
- v) Describe any significant risks, and associated contingency plans

Note: The number of work packages used must be appropriate to the complexity of the work, a small action with very specific goals could consist of one work package only. The planning should be sufficiently detailed to justify the proposed effort and allow progress monitoring by the GRAPHENE Flagship project coordinator.

Table 1.2a: Template - Work package list

Work package list

WP No ¹⁴	Work package title	Type of activity ¹⁵	Lead partic no.	Lead partic. short name	Person-months ¹⁶	Start month	End month
	TOTAL						

¹⁴ Workpackage number: WP 1 – WP n.

¹⁵ Please indicate one activity per work package:

RTD = Research and technological development; DEM = Demonstration; MGT = Management of the consortium; OTHER = Other specific activities if applicable in this call, including any activities to prepare for the dissemination and/or exploitation of project results and coordination activities.

¹⁶ The total number of person-months allocated to each work package.

Table 1.2b: Template - Work package description

Work package description

Work package number		Start date or starting event:	
Work package title			
Activity type¹⁷			
Participant number			
Participant short name			
Person-months per participant			

Objectives

Description of work (possibly broken down into tasks)
--

Deliverables (brief description) and month of delivery

Total effort (person months) -

¹⁷ Please indicate one activity per work package:

RTD = Research and technological development; DEM = Demonstration; MGT = Management of the consortium; OTHER = Other specific activities, if applicable in this call, including any activities to prepare for the dissemination and/or exploitation of project results, and coordination activities.

Table 1.2c: Template - Deliverables List

List of Deliverables

Del. no. ¹⁸	Deliverable name	WP no.	Nature ¹⁹	Dissemination level ²⁰	Delivery date ²¹ (proj. month)

¹⁸ Deliverable numbers in order of delivery dates. Please use the numbering convention <WP number>.<number of deliverable within that WP>. For example, deliverable 4.2 would be the second deliverable from work package 4.

¹⁹ Please indicate the nature of the deliverable using one of the following codes:

R = Report, **P** = Prototype, **D** = Demonstrator, **O** = Other

²⁰ Please indicate the dissemination level using one of the following codes:

PU = Public

PP = Restricted to other programme participants (including the Commission Services).

RE = Restricted to a group specified by the consortium (including the Commission Services).

CO = Confidential, only for members of the consortium (including the Commission Services).

²¹ Measured in months from your action start date (month 1).

Section 2. Implementation

2.1 Individual participants

For each participant in the proposed project, provide a brief description of the legal entity, the main tasks they have been attributed, and the previous experience relevant to those tasks. Provide also a short profile of the staff members who will be undertaking the work.

2.2 Consortium/team as a whole

Recommended maximum length of part 2.2: 2 pages

Describe how the participants (institutions or individuals from the same organisation depending if the proposals involves several organisations or only one) collectively constitute a consortium/team capable of achieving the project objectives, and how they are suited and are committed to the tasks assigned to them. Show the complementarity between participants/individuals. Explain how the composition of the consortium/team is well-balanced in relation to the objectives of the project. If appropriate describe the industrial/commercial involvement to ensure exploitation of the results, and how the opportunity of involving SMEs has been addressed.

2.4 Resources to be committed

Recommended maximum length of part 2.4: 2 pages without budget tables

Applicants should be aware that FP7 Rules for participation apply, in particular for the Maximum Reimbursement rates of eligible costs, these are:

- Non profit public bodies; higher education establishments; research organisations - 75%
- SME - 75%
- Large companies and other organisations - 50%

For more details on this, please refer to the Guide to Financial Issues relating to FP7 Indirect Action.

http://ec.europa.eu/research/participants/portal/ShowDoc/Extensions+Repository/General+Documentation/Guidance+documents+for+FP7/Financial+issues/financialguide_en.pdf

2.4.1 Cost and funding breakdown

Provide one budget table per consortium members (one table in case of a proposal submitted by only one organisation). For more information about financial rules, please refer to the Guide to Financial Issues relating to FP7 Indirect Actions.

Please show your figures in euros (not thousands of euros)

Research projects submitted under call lines 1 to 12 are expected to claim RTD or Demonstration costs (if justified) but no ‘Other’ costs, except for management costs related to the provision of the Certificate for Financial Statement (CFS)

The roadmapping projects submitted under call line 13 are expected to claim ‘Other’ costs but no RTD or Demonstration costs.

	Other
1. Personnel costs	
2. Other direct costs (inc. equipment and subcontracting)	
3. Total direct costs (Sum of row 1 and 2)	
4. Indirect costs	
5. Total costs (Sum of row 3 and 4)	
6. Requested EC contribution	

In row 1, insert your personnel costs for the work involved, differentiating between:

Other activities: as a support activity (not a research project) the road mapping project is only expected to claim costs that are labelled ‘other’

In row 2, insert any other direct costs, for example equipment, travel costs or subcontracting.

In row 3, calculate the sum of your personnel and other direct costs

In row 4, insert your indirect (overhead) costs.

Indirect costs are all those eligible costs which cannot be identified by the participant as being directly attributed to the project but which can be identified and justified by its accounting system as being incurred in direct relationship with the eligible direct costs attributed to the project

You may use your actual overhead costs if this is possible within your organisation's accounting system. If not, you may use a calculated figure of 20% of the sum in row 3. If you are a non-profit public body, a research organisation, a secondary or higher education establishment or a small or medium enterprise, you may use a calculated figure of 60% of the sum in row 3.

Note that indirect costs should be calculated based on the direct costs but excluding subcontracting and resources made available by third parties, which are not on the premises of the beneficiary.

For more information about Indirect Cost Model:

<http://ec.europa.eu/research/participants/help/pages/viewpage.action?pageId=1638473>

In row 5, calculate the sum of your direct and indirect costs.

In row 6, insert your requested EC contribution

Other: you may request up to 100% funding. Note that the maximum indirect reimbursement cost rate for 'Other' costs is 7%.

Note: If you are successful in the evaluation, your final costs and funding estimates agreed with the FET Flagship project will also be subject to legal and financial verification by the Commission services.

2.4.2 Budget explanation and use of resource

Describe how the totality of the necessary resources will be mobilised, including any resources that will complement the EC contribution. Show how the resources will be integrated in a coherent way, and show how your overall financial plan for the action is adequate.

Please identify any major non-personnel direct costs and explain why they are necessary for the activity you propose.

Section 3. Impact

Recommended maximum length of part 3: 4 pages

Expected impact

Describe how your activity will contribute towards the expected impacts listed in the call document and of the GRAPHENE Flagship project. Mention the steps that will be needed to bring about these impacts. Mention any assumptions and external factors that may determine whether the impacts will be achieved.

See Annex 4 for GRAPHENE Flagship summary of expected impact

Section 4. Ethical Issues

Recommended maximum length of part 4: 2 pages

Describe any ethical issues that may arise in the action (if relevant).

Annex 2a – Evaluation form - Research projects (call topics 1 to 12)

Proposal No. :	Acronym :
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1. Scientific and/or technological excellence (relevant to the topics addressed by the call) <i>Note: when a proposal only partially addresses the topics, this condition will be reflected in the scoring of this criterion</i> Sub-criteria: - Soundness of concept, and quality of objectives - Progress beyond the state-of-the-art - Quality and effectiveness of the S/T methodology and associated work plan	Score: (Threshold 3/5; Weight 1)
2. Quality and efficiency of the implementation and the management Sub-criteria: - Quality and relevant experience of the individual participants - Quality of the consortium/team as a whole (including complementarity, balance) - Appropriateness of the allocation and justification of the resources to be committed (staff, equipment...) - Feasibility of plans for integration/collaboration with the on-going GRAPHENE consortium and Work Plan	Score: (Threshold 3/5; Weight 1) <i>For the purposes of any subsequent negotiation, an above-threshold score for this criterion is regarded as an indication that the proposer(s) has the operational capacity to carry out the work</i>

0 The proposal fails to address the criterion under examination or cannot be judged due to missing or incomplete information; 1 Poor The criterion is addressed in an inadequate manner, or there are serious inherent weaknesses; 2 Fair While the proposal broadly addresses the criterion, there are significant weaknesses; 3 Good The proposal addresses the criterion well, although improvements would be necessary; 4 Very good The proposal addresses the criterion very well, although certain improvements are still possible; 5 Excellent The proposal successfully addresses all relevant aspects of the criterion in question. Any shortcomings are minor.

3. Potential impact - Contribution, at the European and/or international level, to the expected impacts of the GRAPHENE Flagship project - Appropriateness of measures for the management of intellectual property	Score: <i>(Threshold 3/5; Weight 1)</i>
Remarks	Overall score: <i>(Threshold 10/15)</i>

Does this proposal contain ethical issues that may need further attention ?

NO ☐

YES ☐

I declare that, to the best of my knowledge, I have no direct or indirect conflict of interest in the evaluation of this proposal

Name	
Signature	
Date	

Name	
Signature	
Date	

0 The proposal fails to address the criterion under examination or cannot be judged due to missing or incomplete information; 1 Poor The criterion is addressed in an inadequate manner, or there are serious inherent weaknesses; 2 Fair While the proposal broadly addresses the criterion, there are significant weaknesses; 3 Good The proposal addresses the criterion well, although improvements would be necessary; 4 Very good The proposal addresses the criterion very well, although certain improvements are still possible; 5 Excellent The proposal successfully addresses all relevant aspects of the criterion in question. Any shortcomings are minor.

Annex 2b – Evaluation form – Road mapping projects (call topic 13)

Individual evaluation/Consensus

Proposal No. :	Acronym :
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1. Scientific and/or technological excellence (relevant to the topics addressed by the call) <i>Note: when a proposal only partially addresses the topics, this condition will be reflected in the scoring of this criterion</i> Sub-criteria: - Soundness of concept, and quality of objectives - Quality and effectiveness of the support action mechanisms, and associated work plan	Score: (Threshold 3/5; Weight 1)
2. Quality and efficiency of the implementation and the management Sub-criteria: - Quality and relevant experience of the individual participants - Quality of the consortium/team (including complementarity, balance) - Appropriateness of the allocation and justification of the resources to be committed (staff, equipment...)	Score: (Threshold 3/5; Weight 1) <i>For the purposes of any subsequent negotiation, an above-threshold score for this criterion is regarded as an indication that the proposer(s) has the operational capacity to carry out the work</i>

3. Potential impact - Contribution, at the European and/or international level, to the expected impacts of the GRAPHENE Flagship project - Appropriateness of measures for the management of intellectual property	Score: <i>(Threshold 3/5; Weight 1)</i>
Remarks	Overall score: <i>(Threshold 10/15)</i>

Does this proposal contain ethical issues that may need further attention ?

NO ☐

YES ☐

I declare that, to the best of my knowledge, I have no direct or indirect conflict of interest in the evaluation of this proposal

Name	
Signature	
Date	

Name	
Signature	
Date	

Annex 3: List of GRAPHENE flagship beneficiaries

Country	Participant Name	EC Participant Identity Code
Austria	Varta Micro Innovation	969322456
Austria	Vienna University of Technology	999979888
Belgium	Catholic University of Louvain	999980664
Denmark	Technical University of Denmark	999990655
Finland	Aalto University	991256096
Finland	Nokia Finland	999912085
Finland	VTT Technical Research Centre of Finland	999901706
France	CEA French Alternative Energies and Atomic Energy Commission	999992401
France	CNRS National Center for Scientific Research	999997930
France	ESF European Science Foundation	999987939
France	Thales	999751938
France	University of Lille 1	999899378
France	University of Strasbourg	996569950
Germany	Alcatel Lucent	999912376
Germany	AMO (Gesellschaft für angewandte Micro und Optoelektronik)	999796558
Germany	Chemnitz University of Technology	999877844
Germany	Dresden University of Technology	999897729
Germany	Friedrich-Alexander University Erlangen-Nürnberg	999995408
Germany	Hamburg University of Technology	999838753
Germany	Max Planck Society	999990267
Germany	Philips Technology GmbH	999719831
Germany	RWTH Aachen University	999983962
Germany	University of Bremen	999987454
Germany	University of Freiburg	999841760
Germany	University of Hamburg	999905101
Germany	University of Regensburg	999868629
Greece	FORTH Foundation for Research and Technology - Hellas	999995893

Guidelines for Applicants - GRAPHENE Flagship Competitive Call for Consortium extension

Greece	Technological Educational Institute of Crete	999440180
Greece	University of Ioannina	999852818
Ireland	Trinity College Dublin	999845446
Ireland	University College Dublin	999974359
Italy	CNR National Research Council	999979500
Italy	FBK Bruno Kessler Foundation	999625450
Italy	IIT Italian Institute of Technology	999596447
Italy	Polytechnic University of Milan	999879881
Italy	Polytechnic University of Turin	999977754
Italy	STMicronics	999977657
Italy	University of Trieste	999842051
Poland	Institute of Electronic Materials Technology	999509729
Portugal	University of Minho	999995505
Spain	Airbus	999944095
Spain	Autonomous University of Barcelona	999986484
Spain	Avanzare	997826294
Spain	CIC energiGUNE	962434389
Spain	CIC NanoGUNE	999473160
Spain	CSIC Spanish National Research Council	999991722
Spain	Graphenea	971995582
Spain	Grupo Antolin	998785721
Spain	ICFO Institute of Photonic Sciences	999619436
Spain	ICN Catalan Institute of Nanotechnology	999606923
Spain	Repsol	999768913
Spain	University of Castilla-La Mancha	999840208
Sweden	Chalmers Industrial Technology	998006908
Sweden	Chalmers University of Technology	999980373
Sweden	Karolinska Institutet	999978530
Sweden	Linköping University	999852236
Sweden	Umeå University	999881821
Switzerland	EMPA Swiss Federal Laboratories for Materials Science and Technology	999907138
Switzerland	ETH Zürich	999976396
Switzerland	University of Basel	999907914
Switzerland	University of Geneva	999974650

Guidelines for Applicants - GRAPHENE Flagship Competitive Call for Consortium extension

Switzerland	University of Zurich	999979015
NL	Delft University of Technology	999977366
NL	Philips	999991625
NL	Radboud University Nijmegen	999992110
NL	University of Groningen	999989782
Turkey	Sabancı University	999856892
UK	Aixtron Ltd	953168173
UK	Lancaster University	999840984
UK	Nokia UK	952844678
UK	NPL National Physical Laboratory	999920330
UK	Oxford Instruments	959334463
UK	The Chancellor, Masters and Scholars of the University of Cambridge	999977172
UK	University of Manchester	999903840
UK	University of Oxford	999984350

Annex 4: Summary of the GRAPHENE flagship Expected Impact	
Type of impact	Summary of impact for the Graphene Flagship
Transformational impact on science and technology and substantial benefits for the European economy and society	Graphene has an inherent and unique possibility to become a disruptive breakthrough technology due to its unique physical properties which translate into advantages in widespread areas of application. The Graphene Flagship research maps into Europe's largest industry sectors, including ICT, energy and transportation, and will make a substantial contribution in addressing future societal challenges as well as strengthening Europe's industrial competitiveness. The fact that graphene technology is at an early stage means that there is a unique possibility to position Europe to reap the benefits of its research excellence. Academia-industry collaboration is a key feature in this knowledge exchange. The Graphene Flagship will construct and maintain the structure required for industrial growth via new patents, licenses, research collaboration contracts, spin offs, seed funding and other measures. New technology that changes the lives of Europeans will emerge as the Graphene Flagship progresses. This technology will contribute to, e.g., higher quality of life for an aging population through breakthrough ICT, enhancing resource efficiency through replacing scarce metals and materials, mitigating climate change effects through highly efficient ICT devices and light-weight materials, and promoting an energy secure society through new energy storage technology. Another feature that makes graphene research and technology particularly well suited for a Flagship project is the balance between the <i>technology push</i> by academic researchers – exploration and exposition of the possibilities offered by this new disruptive technology – and the <i>technology pull</i> recognized by industry – graphene and related materials offer technological advantages that can be exploited in radically new products with large commercial potential. This simultaneous push/pull creates the mutual incentives for academia and industry to work together towards the common goal of creating a disruptive technology.
European leadership in key scientific areas	The graphene revolution started in Europe in 2004, and graphene research has since grown into one of the highlights of European scientific and technological excellence. Nowhere is this excellence as visible as in this flagship, which brings together four recent European Nobel Laureates and a large number of ERC Advanced Grant holders, and stimulates them to work side-by-side with European industries. The coordinated, interdisciplinary effort of the Flagship will extend this scientific leadership to new areas. This will arise from several parallel actions: education of a new generation of researchers through their integration in the research activities and through dedicated actions such as winter schools and conferences; increased interaction across disciplinary borders to fertilize new collaborations and find interdisciplinary solutions to scientific and technological challenges; and interaction across the academia-industry boundary to identify relevant research topics and stimulate knowledge transfer between different sectors of the society.

	Coordination and critical mass of resources solidifies Europe's lead in this key research area and allows it to be extended to related areas of science and technology
Strengthening of the interfaces between ICT and other disciplines	Graphene is a multipotent material that exhibits great opportunities not only in ICT but in many other areas as well. There are already close connections between this flagship and the areas of materials science, energy research, transport and health, and they will be further strengthened during the ten year voyage of the flagship through the cross-disciplinary construction of the flagship project. Since the same materials platform can be used for a variety of tasks, it vastly expands the possibility to integrate with areas outside ICT. For instance, knowledge-driven innovations in material (WP1, WP11) and composite technologies (WP10) have direct impact on Transport (aerospace, automotive) and Health, introduction of graphene into energy storage and generation (WP9) is a profound importance to Energy and Transport, and graphene-based sensors have a multitude of applications in Health, Transport, Energy and Environment. Many areas will see multiple graphene technologies deployed simultaneously: e.g., automotive industry may exploit graphene in sensors, composites and energy storage in the relatively near future.
Progress towards the realisation of the fully operational phase of the FET Flagship, following the ramp-up phase	This Flagship is built upon the idea of progression: the center of mass will continuously move from the academic to the industrial domain during the ten year voyage of the Flagship. This approach is geared towards addressing the European Paradox by developing closer ties along the intellectual value chain from basic to applied research and to development and commercialization. If we are successful in this endeavor, the benefits of the flagship extend far beyond its specific technological targets. The CP-CSA phase will initiate and prepare for measures to maximize the impact of the flagship in H2020. This will be done via industry-academia events, centralized access to intellectual property, preparing for enhanced seed financing capability and proof of concept funding, and building and maintaining networks for collaboration and trust. Organizationally, the implementation of the flagship as an independent legal entity in Horizon 2020 will be prepared by the CP-CSA based on the boundary conditions that will be set by the EC during the ramp-up phase.
Leveraging effect through alignment and collaboration with regional, national, European and international programmes and activities	The CP-CSA invests considerable effort in making sure that there are constructive synergies between this central component of the flagship and related programs funded by other sources. We will work closely with the ERA-NET instrument that is planned to be launched in 2013, and are closely connected to most national graphene programs in Europe through our principal investigators. Working together with national agencies within the framework of the ERA-NET, we will work to avoid duplication of effort and insure efficient use of public and private funding. Together with the national agencies and the Commission, we aim to device most practical and appropriate implementation structure of the flagship in Horizon 2020. An important direction in this effort is, during the CP-CSA, the development of ambitious integrated IP handling policies that can be implemented in the Horizon 2020 phase.

Annex 5: Call topics

Details on each call topic is available in the call document

Topic Nr	Topic Title	Funding envelope / Topic (k€)
GF01	Standardization	708
GF02	Chemical sensor, bio-sensors and bio-interfaces	708
GF03	Membrane technologies: from nanofluidics to nanoresonators	708
GF04	Catalysts for energy applications	708
GF05	Functionalized materials for composites and energy applications	708
GF06	Functional coatings and interfaces in high-performance, low-weight technological applications	708
GF07	Integration of graphene and related materials (GRMs) with semiconductor devices: a scalable back-end approach	708
GF08	New layered materials and heterostructures	708
GF09	Passive components for RF-applications	708
GF10	Integration with Si photonics	708
GF11	Prototypes based on graphene, related two-dimensional crystals, and hybrid systems	708
GF12	Open topic (<i>Bottom Up</i>)	708
GF13	Updating the Science and technology roadmap for graphene, related two-dimensional crystals, and hybrid systems	250