Partnering with the Graphene Flagship

Disclaimer: This document represents work in progress. It is <u>a living document</u> that will be regularly updated as experience is acquired on the selection and integration of partnering projects in the Flagship.

1. An introduction to Partnering Projects

The Graphene Flagship¹ was launched in October 2013 as a ten year-long initiative with a 1 Billion Euro budget. The Flagship aims to take graphene and related layered materials from the realm of fundamental science to industrial and societal applications in the space of ten years. It establishes a new technology platform that will leverage the advantages of these materials as compared to established materials such as silicon.

As a mean of achieving its goals and expected impact on the European economy and society, there is a need for the Graphene Flagship to leverage available resources in Europe and build a scientific and technological research community that extends beyond the Graphene Flagship Core Project (CP) consortium.

The concept of a Partnering Project (PP) was introduced in the Flagship model to define the principles by which research teams or organisations, which are not part of the CP consortium, can be integrated into the Graphene Flagship initiative. The aim is to provide flexible and efficient mechanisms to perform research and innovation activities which are in line with the overall Flagship objectives and be of mutual benefit to all parties. In the Flagship model, the CP is funded by the European Commission (EC) under Horizon 2020 and its budget corresponds to half of the budget of the whole initiative. The other half would come mainly from the Member States and possibly the private sector through, for example, financing Partnering Projects at regional, national or transnational level and also through in-kind contributions to the Flagship². A comprehensive presentation of the Flagship model, including the concepts of Core Project and Partnering Projects is available on the EC-FET webpages³.

PPs and their partners who become Associated Members (AMs) of the Flagship bring new knowledge, new competencies, new ideas and new resources to the Graphene Flagship. PPs and AMs are an integral part of the Flagship and contribute to its overall scientific and technological (S&T) agenda by performing research and innovation activities in cooperation with the CP consortium. By becoming part of the Graphene Flagship, PP partners gain access to Flagship's information and networking platforms and engage in collaboration with the CP partners and in future planning and research road mapping activities of the Flagship.

The rest of this document provides information on:

- what are Partnering Projects and Associated Members (section 2)
- what are the eligibility requirements for becoming PPs / AMs (section 3)
- what are the selection criteria and procedures of PPs (sections 4 and 5)
- what are the integration mechanisms of selected PPs in the Graphene Flagship (section 6)
- what are the benefits of AMs within the Graphene Flagship (Annex)

^{1 &}lt;a href="http://graphene-flagship.eu/">http://graphene-flagship.eu/

² Such in-kind contributions, from organisations in the Core and Partnering Projects, include access to research infrastructures, experimental facilities and use of technical equipment, extra personnel, etc.

http://ec.europa.eu/programmes/horizon2020/en/news/fet-flagship-model-implementation-and-governance-model-horizon-2020-short-overview-presentation

2. What are Partnering Projects and what are Associated Members?

A Partnering Project (PP) is a research or innovation project whose objectives are relevant to the Graphene Flagship. PPs contribute to the implementation of the Graphene Flagship Roadmap⁴ or bring in new research directions and expertise, by performing research, innovation and networking activities in cooperation with members of the Graphene Flagship CP.

Partnering Projects

- may involve one or more entities (e.g., public or private organisations, etc.), i.e., they
 may be multi-partner collaborative projects or single-partner / single-investigator
 projects;
- are funded by regional, national or European public research funding bodies or other sources (e.g., private industry, donors, etc.);
- are selected by the Graphene Flagship CP partners, working in close coordination with national and regional funding agencies and other organisations supporting the PPs and their partner(s);
- can include partners that are already members of the CP Consortium.

Partnering Projects are an integral part of the Graphene Flagship under Horizon 2020.

Associated Members (AM): Members of a Partnering Project that are not already members of the Core Project can become Associated Members (AMs) of the Flagship. This applies only to those members of a PP that wish to be associated with the Flagship. An organisation that is not part of a specific PP can also become AM as far as it comes with an own, publicly or privately funded, research activity contributing to the Graphene Flagship's S&T roadmap and objectives. Individual organisations wishing to candidate for becoming an Associated Member have first to be nominated by a member of the Executive Board⁵ or by a work-package Leader. Examples of such AMs include: a company having an own-funded internal R&D activity, a private or public research institute having a relevant own-funded or publicly-funded R&D activity, etc. Associated Members have to be legal entities based in EU or Associated Countries.

AMs enjoy all benefits of the CP partners except for those that involve exchange or exploitation of confidential or proprietary information or results (e.g. intellectual property) or EC funding. An overview of such benefits is provided in the Annex.

PPs and AMs facilitate the achievement of the S&T targets of the Flagship and promote the alignment and information flow between the CP and related national and regional activities. They help create synergies between the CP and activities receiving funding at regional, national or transnational level. This openness is key to the Flagship's abilities to remain agile and at the cutting edge of S&T developments.

All the procedures described in this document apply to all kinds of PPs / AMs as far as they fulfil the conditions described herein.

⁴ The current version of the Graphene Flagship Science and Technology Roadmap is available at: https://graphene-flagship.eu/the-european-roadmap-for-graphene-science-and-technology. The next edition, the Technology and Innovation Roadmap is expected to be publicly available in summer 2017.

⁵ The Executive Board (EB) is a decision-making body that includes 18 members of whom ten members-at-large are elected by the Core Project General Assembly, and the others are the Director, the Science and Technology Officer, Head of Innovation, and five Division Heads.

3. What are the eligibility requirements for Partnering Projects?

There are two eligibility requirements for becoming candidate PPs:

- i. The projects and their partners have already their own funding or can demonstrate that they will soon have it.
- ii. The projects significantly contribute to the Flagship's strategic research roadmap.

In many cases, PPs will be projects that have already been evaluated and have funding from national or regional funding agencies or other sources. Other natural candidates for PPs may arise from EU-funded projects or national and regional funding initiatives or bottom-up projects within the areas of the Graphene Flagship Roadmap. See below for the specific case of projects funded under the framework of a Joint Transnational Call (JTC) by the FLAG-ERA ERANET⁶ or its follow-up action under H2020.

4. Which are the selection criteria for Graphene Partnering Projects?

Candidate PPs / AMs are selected based on their level of complementarity and added expertise with respect to the existing competencies and future needs of the Graphene Flagship.

The specific selection criteria are:

- Relevance of the scientific and technological objectives to the Graphene Flagship work plan and roadmap;
- Complementarity and added value in terms of scientific, technological or innovation expertise and know-how;
- Potential for spreading excellence and widening participation across Europe.

5. What are the nomination, application and selection procedures for Partnering Projects and Associated Members?

Candidate PPs and AMs may be identified by:

- Graphene Flagship CP members
- European Commission (EC)
- national and regional funding agencies

In addition, members of a science and technology community may also wish to candidate for becoming a PP or an AM on their own initiative.

Candidate PPs that have been identified by the EC, national bodies or the CP partners should submit an application as described below. Spontaneous applications from projects interested in associating with the Graphene Flagship are also accepted and should follow the same procedures. The application submitted by the candidate Partnering Project shall indicate all institutions involved that wish to become Associated Members. A **Partnering Project Leader** (typically the PP's scientific coordinator) is responsible for the preparation and submission of the application.

Organisations that are candidates for becoming Associated Members without being part of a specific project (individual AMs) have first to be nominated and supported by a member of the Executive Board or by a Core Project Work Package Leader before they submit their application for becoming AMs. The main contact person (Principal Investigator) should contact the relevant Executive Board Member / Work Package Leader to discuss the nomination prior to the formal

⁶ Funding through a joint call linking several Member States and H2020 Associated Countries, see http://www.flagera.eu/

submission of the application. The Graphene Flagship Partnering Liaison Manager can provide assistance in identifying the appropriate contact.

Members of a candidate PP or AM are advised to contact the Graphene Flagship Partnering Liaison Manager prior to the submission of the formal application. The Graphene Flagship Partnering Liaison Manager is the main contact point for obtaining information about the application and association process. The contact person is Dr Ana Helman (graphene-eu@esf.org).

Application procedures

Applications for becoming a PP and AM are submitted to the Graphene Flagship Partnering Liaison Manager through the dedicated email [graphene-eu@esf.org]. Applications are accepted on a continuous basis and there is no submission deadline.

Each application shall consist of maximum three A4 pages comprising:

- (i) The name and contact information of the Partnering Project Leader or Coordinator;
- (ii) A statement on the origin of their application: own initiative / nomination by EC or national funding agency / other. In case of a nomination by a EU or national / regional funding agency, the name of the responsible project officer should be included;
- (iii) Title, source of funding (EC, national, regional, other), duration and total amount of funding of the existing project;
- (iv) The motivation for joining the Flagship as a PP;
- (v) A list of the entities that wish to be associated with the Flagship, with names of Principal Investigators;
- (vi) A description of how the research conducted by the applicants in their project aligns and complements the activities of the CP, and a description of how the applicants will facilitate alignment and information flow with the CP;
- (vii) A list of CP Work Packages where the applicants would like to see their activities integrated.

Applications can be shorter than three pages, provided they contain all the information requested above, and that the information is sufficient for the Graphene Management Panel⁷ to take a decision.

Application templates for individual (nominated) Associated Members and Partnering Projects are available here:

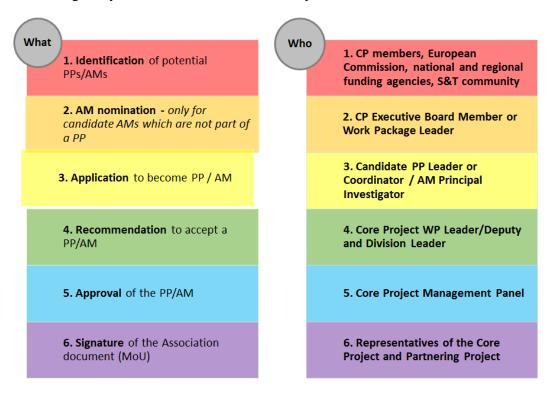
 $\frac{http://graphene-flagship.eu/project/partnering/Pages/Partnering-Mechanisms-under-Horizon-\underline{2020.aspx}$

Selection Procedure

Applications are reviewed by CP representatives, typically the relevant Work Package Leader(s) or deputy Leader(s) and Division Leader who provide a recommendation to the Management Panel on whether the candidate PP/AM should be accepted. In case of nominations by the EC or national funding agencies, the relevant programme manager may also be consulted. Based on the recommendations, the Graphene Management Panel makes the final decision and approves the PP and the AMs.

The Management Panel is an implementing governance body of the Core Project. It is chaired by the Science and Technology Officer, and includes the Director, heads of administrative units, and heads of research and innovation divisions.

Applicants will be informed of the decision by the Graphene Flagship Partnering Liaison Manager in writing or by electronic mail, within 60 days after submission.



If the application is not approved, the applicants will receive a note explaining such decision. Applicants who wish to appeal the decision may contact the Executive Board of the CP [admin@graphene-flagship.eu] and motivate why they think the decision was erroneous.

At least once per year, the Graphene Flagship Partnering Liaison Manager will be informing the Member States and the EC of the applications received and the results of the evaluation.

The specific case of Partnering Projects selected from FLAG-ERA Joint Transnational Call on Graphene

All projects that are successful from a FLAG-ERA Joint Transnational Call (JTC)⁶ on Graphene are natural candidates to become PPs of the Graphene Flagship. These projects have provided the information for the association with Graphene Flagship when they submitted their proposal to the JTC. Their potential to become PPs was checked by the evaluators of the JTC through an explicit evaluation criterion. Therefore, successful JTC projects are expected to become PPs of Graphene Flagship. The information they submitted to the JTC for the association with Graphene Flagship is then sent to the Graphene Flagship Partnering Liaison Manager for final consideration by the Graphene Flagship CP consortium. The feedback of the Graphene Flagship is communicated shortly. Graphene Flagship may raise objection to such association in few, very well justified cases.

6. How will Partnering Projects and Associated Members be integrated in the Flagship?

Since the Graphene Flagship is not a legal entity in its own right, it cannot sign agreements on the project level. Therefore, the key association mechanism is through the *Associated Membership*.

When a PP has been approved by the Management Panel, the PP and the CP representatives are expected to sign a non-binding *Memorandum of Understanding (MoU)*, which by itself does not give any rights or responsibilities for the PP or the CP. The Memorandum of Understanding document states that the PP is joining the Graphene Flagship and lists the organisations which have been granted the AM status. The MoU can be terminated by either side with written notice.

Once approved, the PPs and the organisations which have been granted the AMs status will gain access to the different information and networking platforms as specified in the Annex and are encouraged to actively engage in science and technology cooperation with the relevant partners of the Graphene Flagship CP consortium. This may include, but is not limited to:

- research collaborations in areas of mutual interest and in accordance with the specific grant agreements supporting the respective projects;
- exchange of information, data and material in accordance with the intellectual property agreements in place;
- networking and training activities, including support provided by the SCOPE project;
- identification of future opportunities for collaboration;
- engaging in road mapping and planning activities.

Additional collaborative agreements, such as non-disclosure agreements (NDAs), enabling a deeper collaboration may be established between AMs and some partners of the CP as seen appropriate by the agreeing parties. Such agreements will have to take into consideration the rights of CP partners, as well as the relevant grant agreements or existing consortium agreements. The additional collaborative agreements are typically expected to be completed on the level of CP work packages or tasks. If agreed by the relevant partners in the CP Consortium, AMs may be requested to sign a confidentiality undertaking before participating in a particular project activity.

Representatives of the AMs are integrated to the appropriate governance structures of the CP⁸via the Partnering Division Head and Deputy as to assure a proper information flow between the Partnering Division and the Graphene Flagship Management.

The PPs and their AMs do not have reporting obligations towards the Graphene Flagship and they need to follow the regular reporting procedures of their relevant funding agencies. In the interest of assessing the overall impact of the Graphene Flagship, the CP WP leaders should however monitor the progress of activities that involve PPs and AMs and include these in the regular reporting by specifying their contribution to the work plan. In agreement with the PP Coordinator or AMs, this information could be used by the Graphene Flagship Partnering Liaison Manager to provide feedback to the relevant EC or national funding bodies providing funding to the PPs with the purpose of assessing the alignment between the CP and other activities.

-

⁸ Executive Board and Management Panel

Annex: Benefits for the Associated Members of the Graphene Flagship

The benefits of an Associated Member are given in the table below.

Benefits	Non- Member	Associated Member	Associated Member with additional collaborative agreement	Core Project Partner
Participation in open activities	Yes	Yes	Yes	Yes
Publications listed on web page	No	Yes	Yes	Yes
Job listings published on web page	No	Yes	Yes	Yes
Automatic subscription to newsletter	No	Yes	Yes	Yes
Coverage of activities by Flagship Science Writer/Communications Officer	No	Yes	Yes	Yes
Included in the Flagship mailing list	No	Yes	Yes	Yes
Direct invitation to industrial workshops (priority access)	No	Yes	Yes	Yes
Direct invitation to Flagship conferences and schools (priority access)	No	Yes	Yes	Yes
Inclusion of results in Deliverable Reports to the EU	No	Yes ⁹	Yes ⁹	Yes
Attendance at non-confidential part of the Flagship General Assembly	No	Yes	Yes	Yes
Participation in confidential S&T activities	No	No	Yes	Yes
Attendance at Core Project WP meetings	No	No	Yes	Yes
Access rights to foreground and background	No	No	$\mathrm{No^{10}}$	Yes
Direct funding from the Core Project	No	No	No	Yes

⁹ Inclusion of published results by permission only. Work not funded by the CP will be clearly identified.

¹⁰ Unless otherwise agreed in the additional collaborative agreement