

SESAR Engage KTN – Call for PhDs and post-graduate theses

1. Overview

The Engage KTN will foster the growth of a community of early stage researchers in Europe, dedicated to advancing the state of the art in air traffic management. Summer schools and regular presentations of research progress to informed audiences (from thematic workshops, to SIDs, ICRAT and ATM seminars) will provide continuous support and opportunities for early stage researchers to mature their ideas and research directions in interaction with established peers.

A core part of the Engage KTN's activity is the financial support of PhDs and other post-graduate thesis dissertations. A budget of nearly one million euros is allocated to this activity, to be shared proportionally between the number of eligible post-graduate dissertation and PhD proposals submitted.

Cost constraints are set out below. A ranking will be applied based on merit alone. The Awards Board is comprised of Engage consortium members, the SESAR Joint Undertaking, ASDA, NEXTOR II and industry partners. It is chaired by EUROCONTROL (with a casting vote)^{Note a}.

2. Research themes

Proposals must contain innovative research ideas and address the (long-term) evolution of the European ATM system. Alignment with the thematic challenges of the Engage KTN (published on the KTN website in August 2018) is not a requirement, nor will this confer any advantage in the evaluation *per se*. However, such alignment may help candidates by having thematic challenge research activities running in parallel with their research (see also attendance and participation requirements in Section 3.2) and may also be more likely to receive industry co-funding.

The Engage KTN also welcomes 'blue sky' / exploratory research, which may be aligned with interdisciplinary areas^{Note b} or, indeed, other fields as judged by the Awards Board to offer suitable potential contributions to the wider benefit of ATM, enhancing cross-fertilisation. When appropriately motivated, student mobility between academia and industry is encouraged.

Submissions should carefully consider the selection criteria specified in Section 3.4.

3. Submission and selection procedures

3.1 General conditions

- Proposals may be submitted by a single entity or by a consortium of entities. A consortium may be composed of four entities at most. In any case, at least one of the entities must be an educational establishment entitled to issue PhD and/or post-graduate degrees.
- The proposal is submitted by a 'proponent'. In case of a submission from a single entity, the proponent must be the academic supervisor. In case of a consortium of entities, and if the proponent does not belong to an educational establishment entitled to issue PhD and/or post-graduate degrees, a formal letter of commitment from an academic supervisor with such an entitlement should be enclosed with the application.

- Funding is allocated to the entity to which the proponent belongs, which is responsible for managing the payments to the student. The entity requesting funding should be located in a country eligible to receive funding through Horizon 2020 grants. Please note that the same eligibility conditions apply to this Call as for the original Call for Proposals leading to the award of the Engage KTN (refer to [1]).
- The duration is limited to 36 months; PhD/post-graduate activities should complete within this timeframe.
- This Call closes on **01 November 2018** at 17:00 (Brussels time).

3.2 Eligible costs

Only the following costs of the funded research degrees will be covered:

1. Gross salary (or grant/scholarship) of one PhD student for three years or of one post-graduate student for the duration of his/her programme.
2. Data and other supporting material costs, including computing infrastructure (e.g., cloud resources). All taxes eligible under Horizon 2020 rules are covered.

Nota Bene:

- In addition to funding student salary/data costs, the Engage KTN will also offer travel bursaries for each PhD student to attend at least two Engage summer schools (in total), pertinent (Engage) thematic workshops, and the SESAR Innovation Days each year (2019, 2020 and 2021). Travel bursaries will also be available to post-graduate students to attend corresponding Engage events for the duration of their programme.
- All other costs, such as overheads or supervision, are **ineligible**.
- Attendance and participation requirements: three SESAR Innovation Days, plus pertinent thematic workshops and summer schools.

To increase the number of funded PhDs and post-graduate dissertations, the selected proposals (see Section 3.4) will receive financial support as follows:

- If the financial request is lower than or equal to EUR 50 000 (for the full duration of the PhD or the post-graduate programme), the entire amount is covered;
- If the financial request is higher than EUR 50 000 (for the full duration), 60% of the request is covered considering that:
 - *at least* EUR 50 000 is covered
 - *no more than* EUR 150 000 is covered
- Separate travel bursaries to cover participation at Engage events (see *Nota Bene* above).

3.3 Material

Proposals are to be submitted in English as a PDF file.

Each proposal should comprise a:

- Project description (see details below);
- Short CV of the academic supervisor (max 3 pages), including his/her five most relevant publications.

3.3.1 Submission material for proposals

Proposals should include the following parts:

- (1) Summary (1 page)
 - Concise statement of the goals, milestones and significance of the project
- (2) Background and significance to ATM
- (3) Scientific goals and objectives, explicitly highlighting alignment with the themes identified in Section 2, i.e. containing innovative research ideas addressing the (long-term) evolution of the European ATM system, whereby ‘blue sky’ / exploratory research and interdisciplinary coordination are encouraged
- (4) Research plan
 - General description of the scientific approach, highlighting its novelty
 - Description of the data sources and their use, if applicable
 - Workpackages and milestones spanning the funding period, with milestones indicating achievements and/or outputs (i.e. outputs where applicable, such as scientific publications as per Section 4) for each six month period
- (5) Financial plan (concise summary)
 - Provide evidence of eligible costs, as specified in Section 3.2
 - Provide evidence of co-funding, if applicable

Proposals should be written in a font no smaller than 11-point. Parts (2) – (4) above, inclusive, should comprise no more than 5 pages.

The proposal must clearly state when the selected PhD or post-graduate student is expected to start his/her activities. In any case, the starting date cannot be later than within the first quarter of 2019 and funding is available for a maximum of 36 months.

Submissions with the attached PDF material should be e-mailed to

EngageKTN-coordinator@westminster.ac.uk

using the subject line “**PhD Call**”. All proposals received before the Call closes will be acknowledged by e-mail. In the event of a failure with the Engage e-mail account, a message will be posted on the PhD Call page on the KTN website (www.engagektn.com) with alternative submission instructions.

3.4 Selection criteria

Proposals will be evaluated by the Engage Awards Board based on four criteria (Table 1, column C). In order for a proposal to be eligible, each criterion must receive a score higher than, or equal to, the threshold (Table 1, column T). For eligible proposals, the score of each criterion is then weighted (Table 1, column W) to obtain the final score. Eligible proposals are then ranked in decreasing order of the final score and funded according to the eligible expenses as outlined in Section 3.2, until the total available budget is exhausted.

Table 1. Selection criteria, thresholds and weights

Criterion (C)	Threshold (T)	Weight (W)
Impact on ATM	7/10	30%
Scientific relevance	7/10	20%
Quality of the research plan	7/10	25%
Scientific merit of the academic supervisor (CV+publications)	7/10	25%

4. Scientific and financial periodic reporting

Every six months, a scientific progress report (max two pages) and financial report (max two pages) are to be submitted to the Engage Executive Board (Engage consortium members) using the coordinator e-mail account. The scientific report should include the progress made during the period, activities foreseen for the following period and any changes or deviations from the initial research plan. The financial report should detail all spending during the period. The scientific and financial reports have to be submitted no later than 60 days after the end of the activities of the corresponding period. Payments will be made to the entity to which the proponent belongs every six months, following the scientific and financial progress reports. Please note that if the final scientific and financial reports are due after December 2021 (based on elapsed months since the start date), these reports will be brought forward and submitted in December 2021.

Scientific publications (planned and actual) should also be included in the periodic reports. In particular, for PhD students, a workshop paper, a conference paper, and a journal paper are expected at the end of year 1, year 2, and year 3, respectively. For post-graduate students, the same requirements apply depending on the number of years of the post-graduate programme the student is enrolled. If the paper is not available as a publication, the submitted paper has to be included with the scientific report.

5. Contractual procedure

An agreement will be signed between the University of Westminster (as Engage coordinator) and each proponent's establishment. This will confirm the compliance of parties to Horizon 2020 rules.

Payments will be made by the University of Westminster to the proponent's establishment every six months. Payments will be released only after approval has been given to both the scientific progress report and the financial report by the Engage Executive Board.

6. Contact

For questions regarding the submission of proposals, go to the "Contacts" page of the Engage website (www.engagektn.com), and select "PhD calls" from the dropdown when submitting your query. We will post these questions, and their responses, in a dedicated FAQ section on the Engage website.

7. References

- [1] SESAR Joint Undertaking, 2015. Decision ADB(D) 02-2015 concerning the adoption of the SESAR Joint Undertaking ad hoc Financing Decision relating to the 'Exploratory Research 2020' Call for Proposals. (Refer to Section V of the Annex for a list of countries eligible to receive funding through Horizon 2020.)
http://ec.europa.eu/research/participants/data/ref/h2020/other/legal/jtis/h2020-sesar-fin-decision-er_en.pdf

8. Submission checklist

- Submission deadline: 01 November 2018 (17:00 Brussels time).
- Submit proposal to: EngageKTN-coordinator@westminster.ac.uk (using the subject line “PhD Call”).
- Proposal written in English, as a PDF file, following the document structure and formatting guidelines (Section 3.3.1).
- If required for a consortium of entities, include a formal letter of commitment from an academic supervisor (Section 3.1).

Note a. Each institution has one vote. If the same faculty or college of the home institution of a Member of the Awards Board submits a proposal, or if a Member’s home institution similarly belongs to a proposing consortium, the said Member (and thus institution) will not vote at all in the Awards Board. Any member participating in the Awards Board must self-declare any other conflict of interest arising and likewise abstain from voting.

Note b. Including, but not limited to: cybersecurity, cryptography, open sourcing, distributed applications, digital synchronisation, advanced meteorological methods, artificial intelligence, machine learning, big data, complexity science (including physics, biology and communications), agent-based modelling, behavioural modelling and novel forecasting methods.



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