Call for research applications #1 Kompetenscentrum vägteknik (KCV)

The Swedish Competence Centre in Road Technology (Kompetenscentrum vägteknisk, KCV), funded by the Swedish Transport Administration, opens its first call for research applications. The call has a total budget of about 40 million SEK (10 million SEK per year for four years) with the intention to lead to increased competence and knowledge within road technology in Sweden. Deadline for the application is the 31 October 2023.

Background

In order to secure a long-term competence within road technology, the Swedish Transport Administration has decided to initiate and fund the Swedish Competence Centre in Road Technology (Kompetenscentrum vägteknisk, KCV). KCV aim to contribute to increased competence, increased knowledge, high quality education, high quality research, and increased attractiveness for the subject road technology. The work is performed in close collaboration between different actors within education, research, the public sector, and the private sector (consultants, industry). The research within KCV is organised in four multidisciplinary thematic research areas:

- Health, Environment, and Climate effects
- Condition assessment and deterioration models
- Sustainable and resource effective roads

https://urn.kb.se/resolve?urn=urn:nbn:se:trafikverket:diva-5717

• Digitalisation, automation, and electrification for a modern road infrastructure

During the autumn 2023, KCV will establish a research agenda which include these four research areas. In parallel with this process, this first call is opened.

Direction for call #1

In this first call for KCV we urge the partner organisations¹ researchers to submit research applications within the four above mentioned research areas. For further descriptions of the areas, please refer to the KCV webpage. The projects shall include research activities which lead to an increased competence and knowledge within road technology in Sweden. Furthermore, the activities should also contribute to published knowledge in the form of scientific papers or in the respective organisations own report series. The projects shall also relate to the Swedish Transport Administrations Research and Innovation plan². The projects may up to a certain degree also include educational moment, e.g. participation on courses of relevance for the project. The funds may not be used for undergraduate education.

¹ KCVs partner organisations is Chalmers University of Technology, KTH Royal Institute of Technology, Luleå University of Technology, Lund University, and the Swedish National Road and Transport Research Institute. ² The Swedish Transport Administrations Research and innovation plan for the years 2023-2028 (in Swedish)

The call is open for research applications from fundamental research to more applied research (up to and including TRL³-level 6), including licentiate and PhD-projects.

In this call, collaboration between KCVs organisations and in new constellations will be especially considered, particularly for fully new collaborations, meaning that projects performed between persons who have had no previous collaboration in earlier, or current, projects. Projects may build upon earlier collaborations, but the constellation should then be complemented with new collaborative partners on equal terms.

Persons with multiple affiliations are only allowed to represent one of these in the research project.

Scope and Budget

This call is aimed to researchers at KCVs partner organisations Chalmers University of Technology, KTH Royal Institute of Technology, Luleå University of Technology, Lund University, and the Swedish National Road and Transport Research Institute. The projects may also include partners outside of KCVs partner organisations.

This call has a total budget of about 40 million SEK available for projects granted support. In total about 10 research projects are expected to receive funding in this call. Of these funded projects, at least 5 are expected to be research educational projects (licentiate, from licentiate to PhD, or directly to PhD). The projects may run over a total of maximum four (4) years but can otherwise be of different time lengths.

The total project costs shall be presented in the template in the application formular. The total budget is including eventual co-funding. Co-funding is not mandatory. Eventual co-funds shall be visible in the application.

For information on which costs that are eligible for the research projects, see the Swedish Transport Administrations website⁴.

Requisitioning of funds can be done at three occasions per year. The last Requisitioning will be available after approved final report and presentation at KCV result conference. For relevant projects, a licentiate or PhD thesis can be counted as final report.

Requirements for the research application

The application shall, in order to continue to the assessment step, fulfil the following requirements:

- The main applicant shall be one of KCVs partner organisations: Chalmers University of Technology, KTH Royal Institute of Technology, Luleå University of Technology, Lund University, the Swedish National Road and Transport Research Institute.

³ TRL is the Technology Readiness Level and is an indicator for the maturity of certain technology with a scale 1-9. For more information and definition for respective level, see https://www.swedishmininginnovation.se/sv/utlysningar/trl-niva/

⁴ Lämna forsknings- och innovationsförslag - Bransch (trafikverket.se)

- The application shall be sent electronically in PDF format at the latest 31 October 23:59 to ansokan@kcvag.se
- Required is a project description and a project plan, including time plan, budget and plan for reporting and presentation of the results. The template
 "KCV_Projektansökningsmall" or the English version "Template project application" shall be used together with the Budget Excel sheet in English or Swedish. The given limitations in the template shall not be exceeded. The templates are available on KCVs webpage.
- In connection to the finish of the project, a research report⁵ is expected to be delivered together with a financial report to KCV. The research report shall be peer-reviewed and publicly published in DiVA⁶.
- In connection to the finishing of the project, a presentation of the final results at KCVs yearly results conference in Lund is expected. This is a prerequisite to receive the final payment in the project.

Assessment of project and decision

The latest version submitted before the call deadline is the one which will be considered. No complements will be accepted after the last application date, except for those KCV specifically asks for.

KCV may require complements given the need after the submission of the application. It is important to quickly give this complementing information if asked for.

The submitted applications will be assessed by the research areas and the research council by the below given criteria. The projects will be ranked and the KCV board will take the decision of recommendation for funding. This recommendation will be submitted to the Swedish Transport Administration for the final decision on funding.

The decision is expected to be taken by the Swedish Transport Administration during December. Decision and motivations will be delivered to the applicants by the KCV office.

Assessment criteria

The projects contribution to competence development and research in road technology

- How well do the project match with KCV and the Swedish Transport Administrations objectives?
- To which extent does the project contribute to new or current competence in road technology in Sweden?
- Does the project contribute to the development of the subject area within Sweden?
- By which extent is the project cross-disciplinary?
- Is the project connected to multiple research areas?

The projects contribution to cooperation within road technology

⁵ Scientific literature published open access with a Swedish summary fulfils this requirement. Licentiate and PhD-thesis also fulfils this requirement.

⁶ www.diva-portal.org

- How does the project contribute to increased cooperation within road technology in Sweden?
- How does the project contribute to increased cooperation within road technology internationally?
- Is a reference group with relevant external INTRESSENTER proposed?
- Does the project have cooperation with any organisation outside of KCV?

The projects feasibility

- By which extent is the methodology, the methods, and the projects planning well motivated, reasonable, and relevant?
- By which extension is the project assessed to have a relevant and believable budget and plan in relation to the projects goads, expected results and deliveries?
- How well composed is the project group based on competence, equality, and other activities in the project?

The projects plan for reporting and/or implementation of results

- Have consideration been taken for a reasonable reporting?
- Have consideration been taken for the mandatory results conference within KCV? Is there a plan for external peer-review of the research results?

Contact information

For question regarding this call, please contact:

General questions: info@kcvag.se Budget questions: ekonomi@kcvag.se

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