



COMET - Competence Centers for Excellent Technologies

The competence centres programmes launched in 1998 are among the most successful technology policy initiatives in Austria. Today, some 1,500 researchers from science and industry work on jointly defined research programmes at more than 40 centres. The programmes are internationally recognised as best practice models.

Building on these experiences the programme COMET - Competence Centres for Excellent Technologies has been launched. Special support will be given to those research activities which operate at the cutting-edge and which also promise a high international profile. The competences of the players working at the centres are to be bundled to a greater extent than in the past, with the aim of systematically leveraging content-related synergies in order to obtain a global competitive advantage. Finally, the programme should also make a major contribution to developing human resources in Austria with attractive offers for researchers.

Focus and target groups

The programme addresses existing competence centres and networks, as well as new consortia with participants from science and industry. All three programme lines are thematically open. However, every centre and every research project must have a defined theme.

COMET is sponsored by the Ministry for Transport, Innovation and Technology (BMVIT) and the Ministry of Economy, Family and Youth (BMWFJ), which are following up on the success of their previous competence centre programmes. The Austrian provinces also support COMET with additional funds.

The Austrian Research Promotion Agency FFG is responsible for the management of COMET.





COMET – The Programme

The competence centres programmes (Kplus, K_ind, K_net) launched in 1998 are among the most successful technology policy initiatives in Austria. Today, some 1,500 researchers from science and industry work on jointly defined top level research programmes at more than 40 centres.

COMET is going to continue and develop this success story. The objective is to strengthen the new culture of cooperation between science and industry even further to achieve joint strategic top-level research and to initiate new scientific and technological developments as well as enforcing their implementation.

The distinct new element of the programme is the ambitious orientation towards excellence, the involvement of international research expertise, and the development and assurance of technological leadership of companies to strengthen Austria as a research location.

Application and evaluation process

"K1/K2-Centres" and "K-Projects" will be selected by way of regular calls. The selection of centres (K1 and K2) is based on two-stage, criteria-based selection process. K-Projects are selected in a single step.

The applications are evaluated and selected according to defined quality criteria in a competitive process by a jury consisting of internal and external experts. All applications for the COMET Programme have to be submitted electronically via eCall as well.

Result of the evaluation of the short application is a recommendation of Panel 1 naming the consortia that should be invited to submit a full application. Applications from existing centres that are not invited are examined according to their eligibility towards a phasing-out. Panel 2 results in a recommendation for funding for all three programme lines.

The jury for Panel 1 consists of nine voting members; each organisation involved in the evaluation of applications (FFG, FWF and CDG) nominates three of them. This ensures a balance between national and international experts form science and industry. The chair person is nominated by FFG.

The jury for Panel 2 is completed by three experts of international renown and consists therefore of a total of 12 voting members. Both panels allow for more participating than voting members. The participation of representatives of the Austrian federal states is equally possible in both panels.

The submitted full proposals are subject to an internal as well as external evaluation. The external evaluation is coordinated by FWF and CDG and carried out by international experts. The internal evaluation is carried out by FFG.

The funding decision is prepared by a jury consisting of 12 members. Basis to this decision are peer reviews of the applications as well as hearings with the applicants.





Evaluation

The funded centres will be evaluated several times during their funding period.

Ex-ante Evaluation

The application and the research programme are assessed through a panel of experts consisting of members from the following organisations: Austrian Promotion Agency (FFG), Austrian Science Fund (FWF) and Christian Doppler Research Association (CDG).

Review

The review of the centres and projects is carried out by FFG. K-Projects are reviewed in the middle of their duration, K1-Centres in their second and K2-Centres in their third year of their duration. Result of the review are recommendations towards the K-Centres and K-Projects.

Mid-term Evaluation

The mid-term evaluation of the centre, its targets, its results and the research programme for the next funding period is carried out by external evaluators. K1-Centres are evaluated in the fourth and K2-Centres in the fifth year of their duration. Funding for the second period depends on a positive outcome of the mid-term evaluation.

Ex-post Evaluation

The ex-post evaluation of the centres and projects and their respective outcomes is carried out by external evaluators the final year of the second funding period.

COMET funding criteria

General criteria (apply to all COMET Projects)

- Research programme defined jointly by science and industry
- Research competence and connection to science
- Relevance of implementation in industry
- Quality of collaboration between science and industry
- Management and implementation

Criteria for centres (additional for K1 and K2-Centres)

- Bundling of players to strenghten synergies
- Human resources development
- International integration

Criteria for K2-Centres

- International visibility and world-leading research
- Active integration of international industry, scientific partners and scientists





COMET Programme Lines

The COMET Programme has three lines which are scaled according to their target, ratio of public financing and duration.

K-Projects

The objective of the "K-Project line" is to initiate high-quality research in science-industry cooperation with a medium-term perspective and a clearly defined subject having the potential for further improvement. This is to increase the flexibility of the programme and to enable those consortia and research topics to participate, whose potential is not yet sufficient for a K1 application.

Number: approximately 20 Public financing: 40 – 50% Project duration: 3 -4 years

COMET K-Projects

K-Projects are multi-firm projects carried out jointly by science and industry (minimum number of company partners: 3).

The projects get a strategic orientation by developing lasting profiles in the medium-term.

AAP - Advanced Audio Processing, Styria

ECV - Embedded Computer Vision, Vienna

<u>e-motion</u> - e-Motion - Research in ICT for the tourism, sport and leisure industries, Salzburg <u>holz.bau</u> - holz.bau forschungs gmbh - Das Kompetenzzentrum für Holzbau und

Holztechnologie, Styria

MacroFun - BioEngeneering of Macromolecules, Styria

MPPF - Multifunctional Plug & Play Facade, Styria

FB | Donau-Universität Krems, Lower Austria

HFA-TiMBER | Holzforschung Austria, Vienna

Textiles | Technologiezentrum Ski- und Alpinsport GmbH, Tyrol

ZPT | FH UPPER AUSTRIA Forschungs und Entwicklungs GmbH, Upper Austria

AdvAluE | Advanced Aluminium Applications within ECO Transport | Upper Austria

AIR | Advanced Interface Research | Vienna

APMT | Advanced Polymeric Materials and Process Technologies | Upper Austria

BioPersMed | Biomarkers for personalized medicine in common metabolic disorders | Styria

ECO-PowerDrive | Emission- and Fuel Consumption Reduction for Two-Wheeler and Small Engine Applications | Styria

FFT | Future Farm Technology | Lower Austria

IPOT | Intelligent Photovoltaic mOdule Technologies | Carinthia

JOIN4+ | Network of Excellence for Joining Technologies JOIN 4+ | Styria

K-Licht | Energy Efficient Lighting for Humans Considering Biological & Quality Aspects Using

LED, Daylight & Adaptive Controls | Vorarlberg





micromat | Reliability and lifetime of material interconnects in electronics | Vienna

PAC | Process Analytical Chemistry - Data Acquisition and Data Processing | Upper Austria

ProDSS | Integrated Decision Support Systems for Industrial Processes | Vorarlberg

PVM | Preventive Veterinary Medicine-Improving pig health for safe pork production | Lower Austria

<u>SNML-TNG</u> | Salzburg NewMediaLab - The Next Generation | Salzburg <u>Softnet II</u> | Softnet II - Competence Network in Next Generation Software Engineering | Styria





K1-Centres

The objective of K1-Centres is the initiation of high-quality research defined jointly by science and industry with a medium-term to long-term perspective. K1-Centres implement top-level research with a focus on scientific and technological developments to qualify for the markets of the future.

Number: approximately 15 Public financing: 40 – 55% Project duration: 7 years

COMET K1-Centres

K1-Centres are to a high extent corresponding with present Kplus and K_ind-Centres according to rule (joint research programme, at least 5 company partners, mid-term evaluation in the fourth year). Where possible and appropriate, existing structures and focal points of excellent research are to be bundled, or to be newly created, respectively.

Bioenergy 2020+, Styria

RCPE - Competence Center for Pharmaceutical Engineering, Styria

<u>CEST</u> - Centre of Excellence in Electrochemical Surface Technology and Materials, Lower Austria

<u>CTR</u> - CTR Carinthian Tech Research AG – Competence Centre for Advanced Sensor Technologies, Carinthia

evolaris - evolaris next level, Styria

<u>FTW</u> - Competence Center for Information and Communication Technologies, Vienna <u>K1-MET</u> - Competence Center for excellent Technologies in Advanced Metallurgical and Environmental Process Development, Upper Austria

<u>KNOW</u> - Know-Center Graz – Kompetenzzentrum für wissensbasierte Anwendungen und Systeme GmbH, Styria

ONCOTYROL - Center for Personalized Cancer Medicine, Tyrol

SCCH - Software Competence Center Hagenberg, Upper Austria

<u>Wood COMET</u> - Kompetenzzentrum für Holzverbundwerkstoffe und Holzchemie, Upper Austria <u>ACMIT</u> | Austrian Center for Medical Innovation and Technology, Lower Austria

PCCL-K1 | Competence Center in Polymer Engineering and Science, Styria

SBA 2 | Secure Business Austria 2, Vienna

<u>VRVis-Center</u> | Visualization, Rendering and Visual Analysis Research Center, Vienna <u>alpS</u> | Centre for Climate Change Adaptation Technologies, Tyrol





K2-Centres

The objective of K2-Centres is bundling of existing national expertise in the long-term and cooperation with the world's leading researchers, scientific partners and company partners in joint strategic research programmes at highest level. This is to achieve long-term strengthening and a significant increase of Austria's attractiveness as a research location internationally.

Number: maximum 5 Public financing: 45 – 60% Project duration: 10 years

COMET - K2-Centres

K2-Centres are characterised by outstanding research programmes corresponding to high risks in development and implementation. High international visibility and international networks mark K2-Centres.

ACCM - Austrian Center of Competence of Mechatronics, Upper Austria
K2-Mobility - K2-Mobility SVT sustainable vehicle technologies, Styria
MPPE - Integrated Research in Materials, Processing and Product Engineering, Styria
ACIB | Austrian Center of Industrial Biotechnology, Styria
XTribology | Excellence Center of Tribology, Lower Austria





COMET-1st Call

The 1st Call for applications allowed funding for 3 K2-Centres, 11 K1-Centres and 6 K-Projects with a total of 125 million Euro federal funding.

The selection procedure for centres was based on a two stage procedure. K-Projects were selected in one stage.

Results of the 1st Call

K2-Centres:

ACCM - Austrian Center of Competence of Mechatronics, Upper Austria K2-Mobility - K2-Mobility SVT sustainable vehicle technologies, Styria MPPE - Integrated Research in Materials, Processing and Product Engineering, Styria

K1-Centres:

ABC&RENET - Bioenergy 2020+, Styria

CCPE - Competence Center for Pharmaceutical Engineering, Styria

CEST - Centre of Excellence in Electrochemical Surface Technology and Materials, Lower Austria

CTR - CTR Carinthian Tech Research AG – Competence Centre for Advanced Sensor Technologies, Carinthia

evolaris - evolaris next level, Styria

ICT - Competence Center for Information and Communication Technologies, Vienna

K1-MET - Competence Center for excellent Technologies in Advanced Metallurgical and Environmental Process Development, Upper Austria

KNOW - Know-Center Graz – Kompetenzzentrum für wissensbasierte Anwendungen und Systeme GmbH, Styria

ONCOTYROL - Center for Personalized Cancer Medicine, Tyrol

SCCH - Software Competence Center Hagenberg, Upper Austria

Wood COMET - Kompetenzzentrum für Holzverbundwerkstoffe und Holzchemie, Upper Austria

K-Projects:

AAP - Advanced Audio Processing, Styria

ECV - Embedded Computer Vision, Vienna

e-motion - e-Motion - Research in ICT for the tourism, sport and leisure industries, Salzburg holz.bau - holz.bau forschungs gmbh - Das Kompetenzzentrum für Holzbau und Holztechnologie, Styria

MacroFun - BioEngeneering of Macromolecules, Styria

MPPF - Multifunctional Plug & Play Facade, Styria





COMET - 2nd Call

The 2nd Call for applications allowed funding for 2 K2-Centres, 5 K1-Centres and 4 K-Projects with a total of 76 million Euro federal funding and a total of 231 million Euro in total costs (numbers include one downgraded K1-Centre).

K2-Centres:

- ACIB | Austrian Center of Industrial Biotechnology, Styria
- XTribology | Excellence Center of Tribology, Lower Austria

K1-Centres:

- alpS | Centre for Climate Change Adaptation Technologies, Tyrol
- ACMIT | Austrian Center for Medical Innovation and Technology, Lower Austria
- PCCL-K1 | Competence Center in Polymer Engineering and Science, Styria
- SBA 2 | Secure Business Austria 2, Vienna
- VRVis-Center | Visualization, Rendering and Visual Analysis Research Center, Vienna

K-Projects:

- FB | Donauuniversität Krems, Lower Austria
- HFA-TiMBER | Holzforschung Austria, Vienna
- Sports Textiles | Technologiezentrum Ski- und Alpinsport GmbH, Tyrol
- ZPT | FH UPPER AUSTRIA Forschungs und Entwicklungs GmbH, Upper Austria





COMET - 3rd Call

The 3rd Call for applications allowed funding for 15 K-Projects with a total of 37 million Euro federal funding and a total of 126 million Euro in total costs.

AdvAluE | Advanced Aluminium Applications within ECO Transport | Upper Austria AIR | Advanced Interface Research | Vienna

APMT | Advanced Polymeric Materials and Process Technologies | Upper Austria BioPersMed | Biomarkers for personalized medicine in common metabolic disorders | Styria ECO-PowerDrive | Emission- and Fuel Consumption Reduction for Two-Wheeler and Small Engine Applications | Styria

FFT | Future Farm Technology | Lower Austria

IPOT | Intelligent Photovoltaic mOdule Technologies | Carinthia

JOIN4+ | Network of Excellence for Joining Technologies JOIN 4+ | Styria

<u>K-Licht</u> | Energy Efficient Lighting for Humans Considering Biological & Quality Aspects Using LED, Daylight & Adaptive Controls | Vorarlberg

micromat | Reliability and lifetime of material interconnects in electronics | Vienna

<u>PAC</u> | Process Analytical Chemistry - Data Acquisition and Data Processing | Upper Austria

ProDSS | Integrated Decision Support Systems for Industrial Processes | Vorarlberg

<u>PVM</u> | Preventive Veterinary Medicine-Improving pig health for safe pork production | Lower Austria

SNML-TNG | Salzburg NewMediaLab - The Next Generation | Salzburg

Softnet II - Competence Network in Next Generation Software Engineering | Styria