

Strategisk utveckling

TJÄNSTEUTLÅTANDE
2014-10-10
Version

Ärende/Dok. id.
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Trafiknämnden
2014-11-04, punkt 6

Beslut om fortsatt medfinansiering till K2 – nationellt forskningscentrum för kollektivtrafik

Ärendebeskrivning

Ärendet avser medfinansiering till nationellt forskningscentrum för kollektivtrafik (K2) för åren 2015-2019. För trafikförvaltningens del innebär medfinansieringen 3 miljoner kronor per år under femårsperioden.

Beslutsunderlag

Förvaltningschefens tjänsteutlåtande den 10 oktober 2014 (TN 2014-0001-2)
Beslut om medfinansiering för åren 2013-2014, TN 1109-190
Utvärderingsrapporten Evaluation of the Preparation phase 2013-2014, The K2 National Knowledge Centre for Public Transport

Förslag till beslut

Trafiknämnden föreslås besluta

- att* medfinansiera K2 under åren 2015-2019 med 3 miljoner kronor per år, totalt 15 miljoner kronor för femårsperioden,
- att* ge förvaltningschefen i uppdrag att inarbeta medfinansieringen i trafikförvaltningens budget,
- att* ge förvaltningschefen i uppdrag att underteckna avtalet för K2 etapp 2 avseende åren 2015-2019,
- att* ge förvaltningschefen i uppdrag att återkomma till Trafiknämnden med årliga lägesrapporter avseende trafikförvaltningens samverkan med K2.

Förvaltningens förslag och motivering

Sammanfattning

K2 leds av Lunds universitet, Malmö högskola och VTI (Statens väg- och transportforskningsinstitut) enligt uppdrag från Vinnova, Trafikverket och Formas. Regionala medfinansierare är Stockholms läns landsting genom trafikförvaltningen, Västra Götalandsregionen och region Skåne.

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Under 2013-2014 har K2 etablerats och under september 2014 genomfördes en utvärdering som grund för de statliga finansierarnas beslut om fortsättning för K2 efter de två första åren. Utvärderingen visar att inledningsfasen av K2 varit mycket framgångsrik och lyckad. K2:s ledning och styrelse har kunnat bygga upp ett förtroende och utvecklade relationer med kollektivtrafiksektorn. K2 har en lovvärd process för att identifiera områden för forskning som avtalats med de berörda parterna.

För trafikförvaltningens del innebär en fortsatt medfinansiering 3 miljoner kronor per år för åren 2015-2019.

Bakgrund

Forskning och utveckling inom kollektivtrafiken syftar till att stärka kopplingen mellan vetenskap och praktisk verklighet. Stockholms läns landsting och trafikförvaltningen arbetar med att etablera och utveckla kontakter och samarbeten med universitet och högskolor. Trafikförvaltningen har samarbetsavtal med Kungliga Tekniska högskolan (bl.a. Järnvägsgruppen och Centrum för transportstudier), Chalmers universitet (Charmec) och SAMOT (forskningscentra vid Karlstads universitet). Under 2014-2015 förbereds för samarbetsavtal också med Stockholms universitet.

Lunds universitet, Malmö högskola och VTI (Statens väg- och transportforskningsinstitut) fick under 2012 i uppdrag av Vinnova, Trafikverket och Formas att etablera ett nytt forskningscentrum (K2) under åren 2013-2014. Förutom de statliga medfinansierarna deltar även Stockholms läns landsting genom trafikförvaltningen, Västra Götalandsregionen och region Skåne med regional medfinansiering.

K2 är en nationell forskningssatsning med målsättningen att göra Sverige till ett internationellt föredöme när det gäller kollektivtrafik som medel för utveckling av hållbara och attraktiva storstadsområden. Ett huvudmotiv för centrumets bildande är kollektivtrafikbranschens behov av ökad kunskap och kompetens för att möta framtidens utmaningar. K2 har visionen:

"2030 är Sverige en europeisk föregångare för kollektivtrafik som medel för utvecklingen av hållbara och attraktiva storstadsområden. Kollektivtrafik är det huvudsakliga transportsystemet för personresor i storstadsområden och erbjuder resurseffektiv tillgänglighet till vardagens målpunkter samtidigt som det bidrar till ökad hälsa och livskvalitet."

Parterna vill med ett nationellt forskningscentra åstadkomma fokus på kollektivtrafik i urbana miljöer och en stärkt samverkan mellan bransch och akademi samt forskning inom kollektivtrafikens kunskapsbehov. En kollektivtrafik som utvecklas ur en kombination av vetenskap och beprövad erfarenhet och ett lyft för forskningens och branschens kunskapsnivå. Samverkan är ett viktigt nyckelord.

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K2 innebär en stark förnyelse inom kollektivtrafikforskningen. Förnyelsen ligger dels i den genuint tvärvetenskapliga ansatsen, dels i konceptet med forskning genom samproduktion, som innebär att forskare och branschen tillsammans identifierar gemensamt prioriterade forskningsområden och forskningsprojekt och samverkar i hela genomförandeprocessen.

Eftersom K2 strävar efter att bli både ett nationellt och internationellt föredöme bedriver K2 sin verksamhet med engelska som arbetspråk. K2 har delat in verksamheten i fem forskningsområden:

1. Kollektivtrafikens finansiering och styrning
2. Kollektivtrafikens bidrag till samhällsutvecklingen – maximera, analysera och bedöma kollektivtrafikens effekter
3. Samverkansprocesser för bättre kollektivtrafik (inklusive kollektivtrafikanpassad bebyggelseplanering)
4. Den informerade kollektivtrafikresenärens bruk av integrerade mobilitetslösningar
5. Resenärers attityd och beteende

K2 ska också erbjuda grundutbildning och forskarutbildning, vidareutbildning för praktiker i branschen, sammanhållna forskningsprogram, industridoktorander för företag i branschen samt kommunicera och informera om forskning.

Kostnader förknippade med trafikförvaltningens engagemang de första sju åren fastställdes i trafiknämnden i september 2012 (TN 1109-190). Trafikförvaltningen avsätter egen tid i samverkan med K2 samt ingår i styrelsen för K2.

Innan beslut om fortsättning för K2 efter de två första åren 2013-2014 har de statliga finansörerna låtit genomföra en utvärdering av K2:s etableringsfas 20 månader efter start (se bilagd utvärderingsrapport Evaluation of the Preparation phase 2013-2014, The K2 National Knowledge Centre for Public Transport).

Utvärderingen genomfördes under september 2014 av ett utvärderingsteam bestående av två vetenskapliga experter och en generell utvärderare. Utvärderingsteamet har haft möten med K2:s ledningsgrupp, K2:s styrelse, representanter för värdinstitutioner, regionala representanter och doktorander. De statliga finansörerna Vinnova, Trafikverket och Formas deltog på alla möten inom utvärderingen.

Utvärderingsteamet anser att inledningsfasen av K2 varit mycket framgångsrik och lyckad. De är imponerade av hur K2:s ledning och styrelse har kunnat bygga upp ett förtroende och utveckla relationer med kollektivtrafiksektorn. Processen

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att identifiera områden för forskning som avtalats med de berörda parterna är lovvärd. De viktigaste överväganden för två år sedan inför etableringen av ett nationellt kollektivtrafikcentrum har uppfyllts på ett mycket tillfredsställande sätt.

Utvärderingen resulterar dels i rekommendationer till K2 dels i rekommendationer till Vinnova. För att K2 ska lyckas i nästa fas, etapp 2 åren 2015-2019, har utvärderingsteamet lämnat elva rekommendationer. Rekommendationerna avser styrelsens sammansättning, vetenskaplig kompetens i ledningsgruppen, lokalisering som möjliggör expansion, forskningsgrupp för att bli attraktiv både nationellt och internationellt, handlingsplan för att synliggöra K2:s specialkompetens, rekrytering av doktorer och post docs, en International Advisory Board som speglar K2:s fem forskningsområden, utveckla forskningssamarbete med internationella forskargrupper, examensarbeten inom projekt i K2, aktivitetsplaner för 2015 och för de kommande fem åren, samt en budget som söker ytterligare finansiering.

Utvärderingsteamet har lämnat fyra rekommendationerna till Vinnova. De avser att övervaka K2:s mer detaljerade planer för etapp 2, att överväga en gradvis ökning av grundfinansiering under ett par år från nuvarande till full nivå, att begära ett mer detaljerat program för nästa etapp inklusive milstolpar för att göra det möjligt att övervaka och utvärdera K2 framsteg samt att för framtida forskningscentra definiera vilken typ av planer som förväntas till etapp 2.

Överväganden

Trafikförvaltningen har varit partner i K2 sedan starten 2013 och var en av flera aktiva initiativtagare under åren 2011-2012 då förberedelser pågick, med Vinnova som samordnande, inför beslut om ett nationellt utvecklingscentrum för kollektivtrafik. Det är naturligt att trafikförvaltningen fortsätter samarbetet. Samarbetet är förenligt med Inriktning för trafikförvaltningens strategiska samarbeten (beslutad av förvaltningschefen 2013-05-06).

Enligt trafikförvaltningen är det bra att ett nationellt forskningscentra för kollektivtrafikfrågor i storstadsområden nu finns etablerat. Genom styrelseplats, deltagande i workshop och seminarier samt medverkan vid rundabordsamtal inom K2:s verksamhet kan trafikförvaltningen påverka forskningsagendan inom K2 i syfte att få god effekt av forskningen så att dess resultat kommer Stockholms kollektivtrafikverksamhet till godo.

Eftersom utvärderingen visar att inledningsfasen av K2 varit mycket framgångsrik och lyckad bedömer trafikförvaltningen att ett fortsatt engagemang i K2 skapar nytta för kollektivtrafikens utveckling och trafikförvaltningens verksamhet.

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Ekonomiska konsekvenser av beslutet

Medfinansieringen för åren 2015-2019 innebär för trafikförvaltningens del en kostnad om 3 miljoner koronor/år, totalt 15 miljoner kronor för femårsperioden. Dessa belopp behöver inkluderas i trafikförvaltningens budget.

Sociala konsekvenser

Beslutet om att medfinansiera K2 bedöms inte medföra några sociala konsekvenser.

Konsekvenser för miljön

I enlighet med landstingets Miljöpolitiska program 2012-2016 har hänsyn till miljön beaktats och slutsatsen är att det inte är relevant med en miljökonsekvensbedömning i detta ärende.

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Chef Strategisk utveckling

För mer information om K2, se hemsidan www.k2centrum.se

Evaluation of the Preparation phase 2013-2014

The K2 National Knowledge Centre for Public Transport

At
Medicon Village, Lund, Sweden

A National Centre for Research and Innovation with funding from VINNOVA, FORMAS, The Swedish Transport Administration and Regional Authorities in Region Skåne, Stockholm County Council and Region Västra Götaland

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Introduction

Participants

This first evaluation of K2 concerns the preparatory phase 2013-2014 and took place 20 months after the start. The 10. September 2014 the Management team, Members of the Board, Host institutions representatives, Regional representatives and PhD students had meetings with the evaluation team at Ideon Science Park. The national funding agencies; VINNOVA, FORMAS and the Swedish Transport Administration took part at all sessions. The scientific experts of the evaluation team, Marika Kolbenstvedt and Bård Norheim, addressed matters concerning research strategy and programme, dissemination, partners, projects and progress. The generalist evaluator, Dag Kavlie (Chair) addressed matters such as organization and management, finance, interaction with the Centre partners and educational activities. We thank all members of the Centre, VINNOVA, FORMAS and the Swedish Transport Administration for their efforts in providing background material, information and efficient facilities for the evaluation.

Guidelines for the evaluation

The funding agencies had defined four objectives for the first evaluation of K2:

1. Evaluate progress in scientific work as well as in usefulness for the public transport industry, though taken into account the short period since K2 started,
2. Evaluate to what extent K2 at this point has established a ground for and has the potential to develop a successful centre in a longer perspective.
3. Deliver proposals on how the centre should work to be successful.
4. Comment the national state funders evaluation scheme, both written material as well as the facilities at hand for the implementation of the evaluation.

Two sets of evaluation criteria were defined; one scientific and one for general aspects related to the organization and economy. They will be commented in the following chapters, followed by proposals to K2 and to the funders.

Concerning the 4th point the evaluators found the whole scheme to form a good basis for giving relevant feedback to the centre and its funders. The comprehensive written material distributed was very valuable. However, the evaluation sessions definitely showed the value of discussing the development of K2 face to face with the different actors related to the centre.

Scientific Evaluation

The research area / vision and mission

K2 has presented their vision to the public transport industry, local authorities and other researchers on several arrangements and on their webpage. It is stated as follows:
"In 2030, Sweden is a European role model for public transport as a means for creating sustainable and attractive metropolitan areas. By that date, public transport will be the central mobility system in the country's largest cities, providing resource-efficient accessibility to everyday destinations and contributing to liveable metropolitan areas. "

The vision and mission of K2 are based on an evident need for changing a situation with a fragmented knowledge base for the public transport industry and policymaking. This is well illustrated by the generic long term goal of K2, being:

“To provide high quality and accessible knowledge, training and new research that helps public transport to make a significantly greater contribution to the sustainable development of Swedish metropolitan areas than has hitherto been the case.”

Strategy and goals

K2 describe their over-arching objectives or methods to achieve the goal like this:

1. *“Become an established and trusted actor within public transport research in Sweden and abroad. K2 will be the centre to turn to and engage with for researchers, students, public and private actors who want to learn more about public transport and/or take part in the knowledge building process.*
2. *Build trans-disciplinary knowledge of high scientific quality through close collaboration with industry.*
3. *Contribute substantially to the development of public transport in line with long term goals, such as the public transport industry’s goal to double public transport’s modal share.”*

Our general impression is that K2 has succeeded well with their collaborative goal, i.e. in building contacts and establishing a fruitful network with the industry and with other research partners in Sweden. K2 has also carried through an extensive process of defining their future research program together with the industry (see below).

In the preparation phase it was not expected that K2 should conduct or deliver high quality research for practical use or international academic branding. What was expected, however, was a more detailed strategy and plans for development over the next years with measurable goals and criteria for success. This is not visible in the current documents and should be included in a working plan for the next years.

Research Program

The first two years K2 has focussed on networking between different research institutions and between industry and researchers to investigate the main challenges and research areas for the public transport sector in the future. “Industry” is here defined as a broad range of both public and private sector actors whose work is related to public transport.

K2 has arranged several seminars and workshops to achieve a common set of research areas. The evaluation team appreciate this effort which is in line with the comments to and evaluation of K2s original proposal. We are confident that this work in itself will create new arenas for research in the three urban areas (Malmö in Region Skåne, Stockholm and Göteborg in the Region Västra Götaland) connected to K2 and reduce barriers between the different stakeholders and research institutions.

This creative process has ended up in a priority list of five research areas, encompassing 19 themes, to be focused in K2:

1. Public transport financing and management
2. Public transport’s contribution to a wider societal development – how to maximise, analyse and evaluate this

3. Collaborative working for improved public transport, including spatial planning that supports public transport
4. Thee informed public transport customer's use of integrated mobility solutions from informed public transport organisations
5. Travellers' attitude and behaviour.

Priority areas

The evaluation team is confident with the selection process and the list of areas. Nevertheless, in the working plan for the next years the intention behind the priority list should be clarified and more evidence be given to what extent this research will bring public transport forward. Visualising the "research gaps" planned to be reduced, the most important challenges that should be investigated in the three urban areas and on which themes K2 can make unique contributions, will help to make the necessary priorities.

The financial budget for K2 is substantial, but insufficient to cover all research themes listed, with the ambition to be world leading in the field. If 50 % of the K2 budget is dedicated to research, a rough budget will indicate around 3-4 mill kroner each year per theme over five years. This is probably a small amount related to the ambition of being world leading. The project and action plans for K2 must be linked to certain priority areas and the research ambitions should be more visible in the forthcoming proposal for the next phase of work.

The evaluation team will not propose any priority, but we strongly urge the centre to create a visible plan with concrete targets for the next five years of work. An example of such an ambition for K2 could be *"to improve the implementation of public transport in existing and new type of transport models"*. The project of KTH to investigate *"crowding in public transport"* is an example of a project that could be linked to the mentioned research ambition for K2.

Living Lab

The priority list of research areas for K2 is developed in close contact with the industry and research organisations in the three main urban areas in Sweden. We feel confident that the list have a strong link to the most urgent problems and challenges for public transport in these areas, but the internal evaluation report and the work plan there suggested are not clear or specific on these points.

From an international point of view, the added value of the research in K2 would be increased if the priority of research areas were linked to new and interesting developments for public transport in the three urban areas,. The development of congestion charging in Stockholm and Göteborg, de-regulation of local public transport in Sweden and the "twin-cities" of Malmö and Köpenhavn are all "living labs" of great interest for international research.

The potential for K2 to be a leading public transport research centre in the world lies primarily in the ongoing "experiments" to investigate connected to their research areas. These areas could also attract foreign researchers and professors to the centre. We expect that these issues has been a vital part of the priority of the five research areas, but it must be more visible in a work plan, both for the priority of research topics and the possibility to attract foreign researchers to the centre with close access to data from the "living labs".

Competence profile

To build a strong competence centre it is necessary to clarify the competence assets in other research institutions, nationally and internationally. The public transport research competence is divided between several research institutions and one of the objectives of K2 is to bridge the gaps between these institutions.

The first two years has been a good starting point for this work. It is however, not clear for the panel how K2 would build up complementary or competitive competence to the other research institutions or centres in Sweden – and internationally. K2 has not yet, due to the open and time-consuming process of defining research areas, defined their own crucial competence in relation to other research institutions.

The strategic plan with prioritised research areas and themes and plans for recruitment of researchers to the centre should define where K2 should be complementary to other research institutions and centres, and where a close cooperation to the other centres with specific supplementary competence is needed. We are confident that this is taken care of, based on the first two years of work, but this is not clearly visible in the internal evaluation report and preliminary work plan.

Research independence

The vision and idea for K2 is to develop the research in close cooperation with the industry. Co-production formulated as: *“Continuous interaction between research and practice ensures a relevant research agenda and creates the conditions for effective dissemination and practical application of research results.”* is given a prominent place. This is a more clearly defined applied vision than other competence centre's in the transport sector.

At the same time K2 endeavours to produce research results of world class quality that are publishable in prestigious scientific journals. Even if the later focus is of utmost importance for the first one, this double vision gives a challenging situation concerning the balancing between research and practical application in all parts of the research process. It will influence decisions on the use of resources, defining the research agenda, carrying through the projects, making priorities between different dissemination channels and finally yet importantly handling independency and conflicts related to results.

Public transport research include topics with a high degree of conflict, between stakeholders, different political interests and organisations. We expect, and hope, that K2 will conduct research within the next five years that are totally independent from the stakeholders in the board and that the organisation is prepared for the possible conflicts that can be the outcome of specific projects. This is not only a question of quality control and independence for a new report, but even more for the possibility to get new funding for controversial research. It is not clear to the panel how K2 will secure this independency.

Organization and Management of the Centre

The Board

The Board has eight members. The three regions behind the centre: Skåne, Stockholm and Västra Götaland have one each, one comes from National Transports Administration (Trafikverket), one is from the public transport industry, the chair is director of City planning in Stockholm and one is from a research institute in Norway. The three host institutions have only one member together in the Board. This is quite unusual. Even if the three representatives from the host research institutions, The Swedish National Road and Transport Research Institute (VTI), Malmö University (MU) and Lund University (LU/LTH), claimed that the present composition of the Board works well, the evaluation team feels that the balance between users and research representatives is not ideal. K2 has stated that it is a goal to become a national centre of excellence in public transport research and innovation, as well an internationally recognized research centre. The users may be to dominating in the Board when only two of the eight board members have a research background. Our impression is that K2 has a solid backing from the research host institutions and the public transport sector/industry, but in Phase 2 (E2) of the centre research should play a more important role than during the first two years.

Organisational Independence

The independence of the centre has been an issue in the past. With a location of the centre in Medicon Village it has its own identity and a location separate from its three host institutions.

The board has a majority of its members representing the public and private users in the sector. The Board members all have leading positions within their organisations. The Board has made decisions in matters that are important for the development of the centre. The representatives from the public transport sector expressed their satisfaction with the centre, in particular with the process for selecting the five main research areas.

The host institutions employ K2 staff members. Since the centre is not a legal entity and is not supposed to be supported permanently, this is considered by the panel to be a wise decision. One should also keep in mind that K2 must not become so independent that the host institutions do not feel they have a strong commitment to give their support, by providing high-competent staff to K2 and providing different kinds of in-kind contributions. A competence centre like K2 needs a strong support from the research institutions behind it.

On this basis we consider the question of independence to be quite satisfactory answered.

The management of the centre

The management group consists of the Director, and five persons responsible for the following areas: Administration, Communication, R&D, Collaboration and Education. This management group may have been quite appropriate during the first two years where the tasks connected to the establishment of the centre and building relations with user and scientific partners have been dominating. This is line with K2 Cooperative vision.

For the next phase (E2) research and innovation will play a much more important role. We will advise the centre to consider if the composition of the management team should reflect this

change. It is unusual to have all administrative functions represented in the management group when the main focus is R&D activities. At present the leaders of the five prioritised research areas are not members of the management group. They are not even visible in the organogram. It was explained that the R&D manager has a special responsibility to communicate with them.

The management group should have senior scientists as members that can support the director in the evaluation of project proposals and in the running of research projects. The panel recognise the importance of having a representative from each of the three host institutions in the management group. It was explained the even if it is not visible by the tasks given to each of the members of the present management group, there are senior scientists in the group. The panel still suggests that the persons in charge of the three areas: Communication, collaboration, and education might report to the administrative leader who is a deputy leader of the centre.

The present Director, Christina Scholten who has been in charge of communication, stepped in when the former Director Tom Rye, wanted to concentrate on R&D aspects of the centre. The centre is now in the process of hiring a new director. The competence profile for the director was presented to the panel. It is in line with the competence we believe is relevant for a director of this type of centre. With a director who is not the leading scientist, it becomes even more important that he/she has solid scientific backing. The Director is of vital importance for a centre like K2. We will recommend giving the hiring process high priority.

To support the administration, a web-based administrative system has been implemented. The system supports financial accounting, all project processes and serves as a database for documentation of K2 activities. All project managers report to the web-based administrative system from which quartile financial reports are produced. This is considered a good solution for economic follow up of activities.

The Physical Hub of K2

The Panel visited the physical location. At the present stage of development, the office space may be satisfactory, but in phase 2 (E2) it will certainly not be sufficient. To create a centre it is important that there is a critical mass of researchers working in the physical premises of the centre. The number of PhDs and Postdocs will be increased in E2, international guest researchers should be invited to work here and senior researchers, in particular those from VTI, will also have their work place in the centre.

It is not feasible that all activity of K2 take place in the centre. Industrial partners are located other places, and also a number of part time researchers are working at the three host institutions VTI, LU/LTH and MAH. There should be sufficient space for personnel in these categories to work for shorter or longer periods in the centre. To create a critical mass is however considered important. We recommend that researchers financed by the centre should be expected to spend significant part of their time in the hub of the centre.

The present location will certainly become too small when research activity expands. The centre is aware of this problem, and they are working to find a solution. This must be given high priority.

Centre Partners and National Cooperation

In the call for the centre it was spelled out that other prospective partners like public transport operators, industrial companies etc should be invited to join the centre. At present K2 has no plans for adding industrial partners to the consortium of the centre. Co-production has however a prominent place in the working agenda of K2. Transport operators will join as partners on specific projects even if they are not partners in the K2 consortium. In phase 2 (E2) we will

recommend that the question of inviting public transport operators to join as consortium partners should be considered.

From the beginning, it has been an expectation and an ambition to create a National centre for a knowledge-based public transport system. The centre has approached research groups in Västra Götaland and Stockholm. A decision has been made to develop joint project proposals with Stockholm. Discussion is going on with respect to create a node in Västra Götaland.

The panel welcomes these initiatives. It is of particular importance to establish cooperation with researchers and research groups with competence that is complementary to K2's own staff. It must not be a goal to build up a competence by the three host institutions in areas where other national research groups already are strong. This point underlines the importance of defining high priority areas and competence profiles for K2 and the borders to other institutions, see the section on Research Program above.

Competence

Education

Education is an important aspect of K2. During the start-up phase K2 has worked on the following tasks:

1. Identify the existing education and training offer in public transport in Sweden.
2. Identify educational needs in the industry enabling the development of a K2 policy on education.
3. Initiate and participate in educational activities.

The demand from people in the industry in need of vocational and further education will also be dealt with in the further work related to education. We consider the attention given to education on all levels to be commended.

What has not been included in the self evaluation report is to take advantage of the potential for inviting master students to do their master thesis within projects in K2. We consider it important in the next phase to supply the users/the sector with master candidates who have a competence within the prioritised areas. The master students in their thesis work can give a valuable contribution to the projects in which they are involved. This also may create a basis for later recruiting PhD students.

PhD and Post Docs

The centre has recruited four PhD students so far. The panel met with the PhD-students. They gave a very favourable impression. Each of the PhD students has a "home" department, at one of the partner research organisations that are part of K2. They spend part of their time at this "home" department and a regular period each week at the K2 office. We see this as a very good approach.

In cooperation with research institutions in Sweden they plan to develop post-graduate courses and investigate options for developing and starting a PhD programme with focus on public transport. What so far is missing is a more specific strategy and concrete goals for further recruitment of PhDs and Post Docs connected to prioritised themes. Post Docs will represent a valuable increase of seniors at the centre and may also be useful in networking with foreign research groups.

Communication and Internet portal

K2 has at present its own home page where important information about the centre can be found. K2 has an ambition to become a national information hub and area for collaboration and knowledge exchange. An internet portal is planned to cover the needs of different stakeholders. The database KOLL from VTI will be integrated into the K2 portal. Information and communication on research projects, reports, development projects, seminars, conferences, education and training, etc. will be hosted, in an open source to everyone interested in public transport related issues. We see this as an important contribution to support transfer of results to users.

International Cooperation and International Advisory Board (IAB)

International partners

As for many other centres, the senior researchers in K2 have an international network of their own. What is still missing is a strategy for the centre to establish formal cooperation with selected research groups in the field of public transport. This would create opportunities for exchange of researchers and for PhD students to spend time abroad.

They have reported contact with research groups in Korea, but higher priority should be given to identify and establish formal cooperation with leading research groups in Europe. This can also create a basis for winning contracts for EU research projects, now especially Horizon 2020.

The International Advisory Board (IAB)

The centre is going to make use of an International Advisory Board (IAB). At present IAB is only partly established. Three members have accepted to join, two are from the United States (MIT). To complete the exercise of finding the remaining members is considered utmost important.

The composition of IAB should mirror the five prioritised research areas. It should include members from strong European groups. It may be useful to select the members of IAB from the institutions one desire to develop a more extensive cooperation with.

Planning for the next phase of the centre (E2)

Setting priorities

The centre has described how they have involved user groups in the extensive process of selecting the five main areas of research. This is commendable. The five areas are, however, quite wide and there is an urgent need to take the next steps. What is still missing is to decide on priorities within each of the five areas based on to what crucial challenges in the sector they should contribute, selecting projects to be started in E2 and describe the projects in much more detail.

A question in this connection is also how K2 will make use of the IAB to get an evaluation of their plans seen from the international perspective. We consider it to be valuable to involve the IAB in this process to see the research agenda in an international perspective.

A challenge for K2 is that, if successful to go on to E2, they should be prepared for a heavy increase in activities in 2015. This requires:

- Plans and budget for the whole duration of E2

- An action plan for 2015 including a detailed description of projects ready to start early 2015.

At present this is not the situation. What has been outlined in the K2 self evaluation report is on a very general level with lack of details. Hard work in the remaining part of 2014 is needed to put this in place.

Financial matters

The funding for the first two years is on a level that has not allowed the centre to finance much research. The financial reports and budget for 2013 and 2014 respectively show that the extensive process together with the public transport industry of identifying the most important research areas have consumed most of the funds. Still they have been able to attract some additional funding for some research projects.

A jump in core funding from five mill kroner in 2014 to 27 mill kroner for each year 2015-2019 may not be recommendable to do in one-step. A more gradual increase is advisable, based on a solid budget proposal.

There are at present not any complete financial plans for the next five years. Already in 2014, it is considered important to present ambitions for the funding and activities for the next phase. The budget should include external funding in addition to the core funding. Even if K2 is not directly comparable to the industrial competence centres of VINNOVA, additional funding of several million kroner per year should be attainable. This should also include international project funding. In particular, we would like to see a strategy for winning EU projects.

Recommendations to the centre

It is the opinion of the panel that the start-up phase of K2 has been very successfully managed. We are impressed by the way the Centre management and Board have been able to build trust and develop relationship with the public transport sector. The process to identify areas for research that are agreed upon by the parties involved is commendable. The key considerations spelled out by the panel that selected K2 two years ago have been met in a very satisfactory way.

To be successful when going into the next phase (E2) the panel recommends that:

1. The composition of the Board with respect to representation of host institutions in the Board is considered.
2. The tasks of the members of the Management group should be reconsidered to make it visible that a major responsibility in the next phase is to support the centre leader in R&D management.
3. Steps are taken to find a new office for K2 within Medicion Village that can give room for expansion in E2.
4. The centre develops plans for how to build a group of researchers in the physical centre of K2 that makes the centre attractive both nationally and internationally.
5. An action plan for the national research cooperation that complements the competence of K2 host organisations in the five prioritised research areas and makes K2s special competence visible is made.
6. A more detailed strategy for further recruitment of PhDs and Post docs is develop.
7. The task to establish an International Advisory Board mirroring the five research areas is given high priority.
8. A strategy to establish formal research cooperation with strong international research groups, especially in Europe, is developed.

9. Master students are invited to do their thesis work within projects in the centre.
10. Activity plans for 2015 and for the next five years, including detailed description of prioritised projects is made.
11. A budget for the next five years is developed including ambitions to attract further funding

Recommendations for VINNOVA

The panel recommends that:

1. The evaluation report should be reviewed by VINNOVA with special emphasis on monitoring the work to prepare more detailed plans for phase 2 (E2).
2. A gradual increase in core funding over a couple of years from the present to full level is recommended.
3. A more detailed program for the next phase including milestones should be asked for, to make it possible to monitor and evaluate the K2 progress.
4. For future centres it might be wise to define what type of plans that are expected as a basis for the phase 2.

Oslo 23. September 2014

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