Ministerie van Infrastructuur en Milieu

2013 Work Programme

KiM Netherlands Institute for Transport Policy Analysis

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KiM Netherlands Institute
for Transport Policy Analysis

January 2013

Knowing more about transport

The KiM Netherlands Institute for Transport Policy Analysis is an independent institute within the Ministry of Infrastructure and the Environment (IenM). The Institute conducts strategic research and policy analyses to support transport policy design. KiM focuses on all forms of transport.
The content of KiM publications is independent and does not need to reflect the views held by the minister of IenM.

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About KiM and this Work Programme

0.1 Introduction

This is the 2013 Work Programme of the Netherlands Institute for Transport Policy Analysis (KiM).

This year (2013) is an important year for the Ministry of Infrastructure and the Environment (IenM). In its coalition agreement, Prime Minister Mark Rutte's second government sets out its ambition to get the Netherlands out of the crisis stronger than it was before. The agreement states that infrastructure and accessibility are vital to the Dutch economy and that the government will work to improve accessibility by investing in new projects and by making better use of the existing transport infrastructure. Public transport must be reliable, accessible and efficient, and connections between different forms of public transport must be improved. The government is promoting the development of the mainports of Schiphol and Rotterdam and opts for economic growth that avoids adverse ecological and environment impacts. The coalition agreement also proposes a clearer demarcation of tasks and responsibilities within and between the different tiers of government, arguing that effectively safeguarding public interests must be accompanied by room for reform.

Essential to making and implementing policies for all these topics is having an up-to-date, theoretical and empirical knowledge base. In 2013 KiM will continue its efforts to make a significant contribution to bringing together the required knowledge and making it relevant and applicable to policy and practice.

0.2 Objective and role of KiM

Knowledge functions

KiM's stated objective is to strengthen and broaden the strategic knowledge base for mobility policy and thus enhance the quality of that policy. The term used for this is 'evidence-based policy': basing policy choices on relevant facts, sound analyses and reliable estimates of risks within the context of nationally and internationally available knowledge.

In this role, KiM has three knowledge functions:

- **Research projects**: exploratory studies and policy analyses based on factual information and reviews of scientific and other literature, which are then translated into a form that is applicable to policy and practice. The resulting publications are publicly available.
- **Knowledge at the Table:** introducing knowledge into policy processes in the following ways:
  - discussions, presentations and short reports on the available knowledge and empirical evidence;
  - answering ad hoc questions;

- giving the Ministry of IenM access to national and international knowledge networks (what knowledge can be obtained from which sources?);
- giving assistance to the IenM policy directorates in formulating research questions and methods for research to be contracted out to third parties;
- participating in steering committees;
- advising on and assisting with the planning of knowledge development programmes for research institutes outside the Ministry of IenM.

– **Observational reports:** reports in which KiM draws attention within the ministry to various topics in response to current policy and research developments or reports by third parties. These reports are not included in the Work Programme, although capacity is made available within KiM for this purpose.

Focal points in 2013

'Knowledge at the table' is an effective, efficient and valued form of knowledge delivery. Moreover, KiM intends to prevent any drop in the number of research questions under study each year, even though the available research capacity is being appreciably reduced in line with the targets set by the previous government (Rutte I). For this reason a larger share of the research capacity has been reserved for knowledge-at-the-table projects. In 2012 the percentage of the available research capacity allocated to knowledge-at-the-table projects was raised from 20% to 35%. For 2013 this has been raised yet again to 50% of the available research capacity.

KiM keeps its knowledge base up to date via the research projects it carries out. The greater emphasis on knowledge-at-the-table projects makes it necessary to make a more conscious effort to maintain and broaden the Institute's knowledge base. This must also reflect the integrated approach the ministry takes to policy issues, which leans more heavily on knowledge and empirical evidence about the relation between mobility and spatial development and mobility and the environment. We will determine which areas of the knowledge base require specific attention in 2013 and how this will be addressed in practice, taking into account the type of requests KiM expects over the next few years.

Distinguishing features of KiM's products and services

KiM's products and services have several distinguishing features, which are characterised by the following:

– For the ministry's policymakers: KiM carries out projects in close contact with the policymakers of the Ministry of IenM; the short lines of communication between the policymakers and KiM help to strengthen the knowledge base because they facilitate a better exchange of policy questions and research results.
– Strategic policy research: concerned with broad principles and knowledge relevant to the first phase of the policy cycle (agenda setting, policymaking and evaluation).
– Policy input: the type of policy input given by KiM depends on the phase of policy development:
  - Agenda setting: KiM outlines substantive developments and identifies *leverage points for policy intervention*.
  - Policymaking: KiM provides ex ante assessments of the effects of *policy levers* or *policy instruments* proposed by the policy directorates; where necessary KiM indicates that the pallet of *policy levers* is wider than initially proposed by the policy directorates and, in consultation with policymakers, evaluates this broader range of *policy levers*.
  - Policy evaluation: KiM provides ex durante or ex post assessments of the impacts of implemented *policy instruments*.

KiM may not and does not make policy recommendations, because the expected impacts of policy are just one of the considerations in the political decision-making process.

– KiM does not undertake any fundamental research, but it may raise proposals for fundamental research for consideration. Neither does KiM carry out tactical/operational

research (for example, to support the practical design of specific policy instruments).
- Macro and meso level: KiM focuses on the macro level (society as a whole) and the meso level (groups in society). KiM does not concern itself with insights at the level of the individual that cannot be generalised to larger groups in society.
- Multidisciplinary: topics are addressed from different angles and from several disciplines, which makes KiM's analyses more robust. Even in studies with a single dominant perspective, the results are evaluated from a range of different perspectives to increase their robustness. This is also reflected in the wide range of disciplines represented within KiM (which include economics, social geography, regional planning, sociology, psychology, traffic engineering and public administration).
- Analytical: not only descriptive (which trends are apparent – the 'what' question), but also explanatory (what are the underlying factors – the 'how' question).
- A focus on one or more key mobility policy portfolios: our intention to strengthen and broaden the ministry's knowledge base relates to the full range of the ministry's policy responsibilities, including the relation between mobility and spatial development and mobility and sustainability. The needs and benefits are greatest in the most important policy fields (important in the sense of a policy's contribution to solving social problems and the degree to which an issue gives rise to public and political debate).

Differences and cooperation with the policy assessment agencies

There are clear differences between KiM and the policy assessment agencies. A key difference is that the policy assessment agencies examine issues in different policy areas (including mobility) from a certain perspective (economy, environment and behaviour), whereas KiM addresses specific issues within the field of mobility policy from various different perspectives (economy, environment and behaviour). In addition, KiM's work is almost entirely demand led, whereas the policy assessment agencies are free to add topics to their own agendas, for which of course they keep their ear to the ground in the government departments. KiM also puts more emphasis on its knowledge-at-the-table function.

However, these differences have not precluded KiM and the policy assessment agencies from making multiyear agreements for an effective and efficient division of tasks. Agreements have also been made for productive cooperation on topics of common interest. These include making optimal shared use of the available expertise, participating in each other's feedback groups, contributing to each other's publications, holding joint brainstorming sessions and critiquing each other's products.

0.3
Positioning and working methods

Positioning

KiM is positioned within the Ministry of IenM to facilitate the uptake of KiM products and direct interaction with the policy directorates. As a research institute within the ministry, KiM's stated objective is to strengthen and broaden the strategic knowledge base for mobility policy in order to enhance the quality of transport policy (evidence-based policy).

Cooperation

The products listed in section 0.2 were developed by KiM either on its own or in collaboration with the policy assessment agencies (see section 0.2), external knowledge institutes, universities and the Rijkswaterstaat Centre for Transport and Navigation (RWS-DVS). KiM does this mainly on the basis of knowledge developed elsewhere (in the Netherlands and abroad), which KiM then integrates and makes applicable to policy and practice. KiM sometimes subcontracts parts of research projects to private organisations (or universities) and then integrates the results into a KiM product.

Contacts with the scientific community

KiM is associated with ten professors in various disciplines from the Netherlands and abroad: the KiM fellows. These fellows provide the academic backing for KiM's work. A core task of the fellows is to review project plans and draft publications. In addition they are invited to give lectures and presentations and to take part in brainstorming sessions to give extra impetus to new research projects.

The professors associated with KiM are:

Naam	Vakgebied	Universiteit
Professor Martin Dijst	Urban Development and Spatial Mobility	Utrecht University
Professor Marc Gaudry	Emeritus Professor, Centre de Recherche sur les Transports	Université de Montréal, Université de Strassbourg
Professor Piet Rietveld	Transport Economics	VU University, Amsterdam
Professor Stef Proost	Transport, Environmental and Energy Economics	Transport and Environment, Catholic University of Leuven
Professor Luca Bertolini	Planning	University of Amsterdam
Professor Bert van Wee	Transport Policy	TU Delft
Professor John Preston	Rail Transport; director of the Transport Research Group	University of Southampton
Professor Henriëtte Prast	Personal Financial Planning	Tilburg University
Professor Ernst ten Heuvelhof	Public Administration	TU Delft
Professor Eddy van de Voorde	Transport and Regional Economics	University of Antwerp

KiM aims to be a pivotal link between the Ministry of IenM and the universities in the field of mobility. To this end KiM plays an active role in the development of research networks, such as TRAIL, and in multiyear research programmes such as Sustainable Accessibility of the Randstad (DBR), which is part of the VerDus knowledge initiative on Connecting Sustainable Cities. Members of the KiM staff are involved in all the relevant DBR projects and KiM will contribute to the uptake of the results of DBR research into policy.

Researchers in the field of civil aviation cooperate in the *Airneth* international scientific network for aviation research and policy. Both Airneth and KiM aim to support aviation policy with insights from research. For this reason, KiM took over the management of Airneth in mid 2012, following periodic coordination with the ministry's Civil Aviation Department. KiM's role in steering Airneth activities enhances their demand-driven character and thus the effectiveness of the research input to aviation policy. Airneth activities are therefore geared to providing evidence to support KiM's responses to the questions from the policy directorates. Airneth's objectives are otherwise unchanged: to further expand, maintain and make use of the scientific network in the field of aviation. KiM commissions Airneth to organise workshops, seminars and lectures and prepare position papers to make the results of external scientific research more accessible to aviation policymakers. Another of Airneth's objectives is to introduce policy issues to the academic world.

International orientation

Many research questions involve the acquisition of knowledge through international academic cooperation or have a strong international context. However, the international research community is vast and KiM's capacity is limited. Our international strategy is therefore primarily geared towards 'gathering' knowledge. To be able to 'gather' knowledge it is sometimes necessary to 'give' knowledge and have 'acquaintances' or contacts. To give and gather knowledge and to maintain contacts with acquaintances, KiM has special relationships with several relevant international research institutes. KiM staff members also participate in conferences and symposia and work to a limited extent in international projects, and KiM participates in several international forums, such as the Joint Transport Research Committee (JTRC).

Publications

Only the results of KiM's research projects contained in the Work Programme are published in the public domain. Publication occurs within three months of completion of the research. In some cases an exception is made, for example if the research forms an input to the development of a major policy document, in which case the relevant research reports are published simultaneously with the release of the policy document.

0.4
Core Themes

The research projects carried out by KiM fall within several core themes. These core themes are designed in the first instance to clarify what knowledge and expertise is available within KiM and to perform an agenda-setting function for identifying the knowledge that will be needed to answer future policy questions.

The key features of the core themes are that they:
- help to define KiM's profile by indicating the type of information and expertise KiM can be called upon to deliver;
- logically integrate the 'individual' studies and knowledge-at-the-table questions, which are an inevitable consequence of demand-driven research;
- communicate and reinforce the hallmarks of a typical KiM product;
- give direction to future mobility research and coherence to the focus areas of current research; in other words, a core theme provides a multiyear, agenda-setting framework for concrete projects;
- can in time be discontinued, while new core themes can be added when required.

Core themes also provide the basis for structuring KiM's activities because they consist of complementary clusters of projects and other activities.

The core themes in 2013 are listed below.

1. **Mobility, accessibility and spatial planning.** Description and explanation of national and international developments in mobility and transport. The theme includes reviewing past developments (drawing conclusions in the light of socio-economic, spatial, demographic and technological developments and policy effects) as well as looking forward (formulation of medium- and long-term outlooks to support robust policy development), paying specific attention to the interaction with spatial development and urban planning. In addition, this theme focuses on accessibility, operationalising the concept of accessibility, developments and trends, and analysing of improvement measures. Studies encompass both passenger and freight transport, as well as transport networks, chains and hubs.
2. **Mobility of groups.** This core theme is about the mobility of specific groups. The research aims to derive a picture of the mobility of specific groups, the autonomous and induced changes in the mobility behaviour of such groups and the underlying factors involved. Insights gained at the macro level are translated to the meso level: to groups or market segments. The underlying factors provide not only explanations, but also offer possible pointers for policy development.
3. **Sustainable mobility, safety and transition.** This core theme is about sustainable mobility and mobility-related safety aspects. It includes the consequences for liveability and the safety of the current mobility system as well as scenarios for a more sustainable and safer mobility system in future. Much of the research effort in this core theme will be devoted to the transition process: what will a sustainable and safe mobility system look

like, what are the obstacles to achieving this and what points of policy leverage exist to facilitate this transition?

4. **Models and data.** Stimulating the model development and data collection required for preparing mobility and transport policies. Development of policy indicators for monitoring policy objectives for strategic issues.
5. **Social importance, the role of government and market organisation.** Providing insights into the important part played by mobility, transport and infrastructure in the social, spatial and economic development of the Netherlands, with an emphasis on the significance of the mainports and other transport hubs. Attention is given to the possibilities for government to safeguard this vital national interest. The theme also explores and analyses effective and efficient government–market relations in the various sectors (road, regional public transport, rail, inland shipping, maritime shipping, aviation). Finally, the theme examines the question of how administrative relations between the various tiers of government can be made more effective and efficient.
6. **Policy evaluations and assessment frameworks.** Ex ante and ex post evaluations of the effectiveness and efficiency of policy instruments for mobility and transport. The theme covers refining and broadening the methodology for ex ante and ex post evaluations (including social cost-benefit analyses – SCBAs), with attention to the economic and administrative aspects in which people, profit and planet are integrated, as well as advising the policy directorates on performing evaluations, carrying out evaluations ourselves and reviewing third party evaluations.

Defining projects in 2013

Many research projects and other activities (knowledge-at-the-table) are conducted within the core themes. Some projects and activities focus on a specific policy area and a specific policy directorate, while others are of wider significance for the ministry's policies. The table below lists for each core theme the defining projects in terms of their wider significance, as well as their expected impact on policy discussions. This is only a snapshot; political and social developments may lead to new situations in which other projects may come to be regarded as the most illustrative of their respective core themes.

Core Theme	Defining Project	Page
1. Mobility, accessibility and spatial planning	Mobility Report 2013	14
2. Mobility of groups	Target groups in and outside the rush hour	23
3. Sustainable mobility, safety and transition	Exploratory studies for a sustainable mobility system in 2050	28/29
4. Models and data	Mobility Research Panel	32
5. Social importance, the role of government and market organisation	System responsibility versus outcome responsibility	39
6. Policy evaluations and assessment frameworks	Adaptive policy	44

Management team

The KiM management team consists of Jaap de Wit (scientific director), Arjen 't Hoen (deputy director and core theme manager) and Jan van der Waard (core theme manager). Responsibility for the core themes is divided between the core theme managers as listed in the table below.

Core Theme	Responsible MT Member
1. Mobility, accessibility and spatial planning	Jan van der Waard
2. Mobility of groups	Jan van der Waard
3. Sustainable mobility, safety and transition	Arjen 't Hoen
4. Models and data	Jan van der Waard
5. Social importance, the role of government and market organisation	Arjen 't Hoen
6. Policy evaluations and assessment frameworks	Arjen 't Hoen

Relation to the SKIA

The ministry's Strategic Knowledge and Innovation Agenda (SKIA) sets out its strategic research questions, divided into seven topic areas. Where these research questions relate to KiM's research activities and the policy directorates have specifically requested KiM to investigate them, they have been included in this Work Programme. The SKIA topic areas relate to KiM's core themes as follows.

SKIA topic ...	... is addressed specifically in these KiM core themes
A – Dynamic society, governance and decentralisation	5 Social importance, the role of government and market organisation
B – Financing, earning models and other market approaches	5 Social importance, the role of government and market organisation
C – Individualisation and behaviour	1 Mobility, accessibility and spatial planning 2 Mobility of groups
D – Area development	1 Mobility, accessibility and spatial planning 5 Social importance, the role of government and market organisation
E – Hubs and networks	1 Mobility, accessibility and spatial planning 4 Models and data 6 Policy evaluations and assessment frameworks
F – Sustainable mobility	3 Sustainable mobility, safety and transition
G – Closing energy, materials and water loops	–

SKIA topics E and F are addressed in many areas of the KiM Work Programme 2013. There is less overlap with SKIA topics A, B, C and D.

0.5
About the Work Programme

Preparation of the Work Programme

KiM's Work Programme is demand-driven (with the exception of the observational reports mentioned in section 0.2), in line with KiM's stated objective of strengthening the strategic knowledge base for mobility policy. The demand for research is not a case of one-way traffic from the policy directorates to KiM, in the sense of placing an order for a product. The articulation of research questions is based on an active dialogue in which KiM regularly alerts the policy directives to strategic developments, social trends and other issues affecting mobility that may require a policy response. In other words, KiM has an important strategic task of making the required knowledge available for developing and maintaining policy.

Ideas for new projects are prioritised through a critical assessment of the urgency of projects to the commissioning departments concerned, the match between the research questions and the pool of knowledge and expertise within KiM, and the degree to which a typical KiM product (see section 0.2) can be delivered. This requires agreement with the ministerial departments at various levels. Moreover, the Work Programme is discussed with the Netherlands Environmental Assessment Agency (PBL), the Netherlands Bureau for Economic Policy Analysis (CPB) and the Netherlands Institute for Social Research (SCP). The Work Programme is formally adopted by the secretary-general of the Ministry of Infrastructure and the Environment.

A dynamic Work Programme

This Work Programme is dynamic in nature. Interim adjustments and additions to the Work Programme may lead to a different set of priorities, other forms of implementation or to the cancellation of research on certain topics.

0.6
Explanatory remarks on Chapters 1 to 6

Chapters 1 to 6 of this Work Programme contain descriptions of the projects and activities per core theme.

For each core theme we first describe the subject matter covered and then the topics under investigation. For each topic we first describe the projects (research projects and 'Knowledge at the Table'), including the ongoing projects from 2012 and the new projects starting in 2013. The following information is given for each project: title, project type (research or Knowledge at the Table), the commissioning department, project number, expected capacity requirements (large, medium, small[1]) and the year quarter in which it is expected to start. This is followed by a brief description of small knowledge-at-the-table projects that fall within a core theme topic.

The projects listed in this Work Programme will together require full use of KiM's capacity. This means that while requests submitted after the publication of this Work Programme are welcome, they may lead, in discussion with the relevant commissioning departments, to a reordering of priorities.

[1] In general, the expected capacity requirement for a small project is 0.1 FTE, for a medium project is 0.3 FTE and for a large project is 0.6 FTE.

1 Mobility, Accessibility and Spatial Planning

1.1 Explanation of the core theme

The transport and traffic system is complex. Many factors determine the scale and nature of the demand for mobility of people and goods, including demographic and socio-economic trends, technological developments, computerisation, and spatial planning and urban design. Because specific factors influence the way the demand for mobility and transport are met, these factors also determine the level of accessibility associated with this mobility. For example, technological developments make new forms of transport facilities possible. Understanding the factors determining mobility and accessibility and the interactions between transport and traffic and the physical environment provides pointers to possible policy levers, and thus provides the basic knowledge required for policymaking in the field of mobility and accessibility. The increasingly rapid changes in these influential factors make it more important to closely monitor these developments and their consequences for mobility.

The fact that the policy fields of infrastructure, spatial planning and the environment have been brought together within the Ministry of Infrastructure and the Environment (IenM) makes it possible to develop more integrated policies for spatial planning and mobility: infrastructure/accessibility policy, spatial development and spatial policy are all closely related. Mobility policy can influence spatial structures, while new infrastructure can have a desirable – or sometimes even an undesirable – structuring effect on the physical fabric of the surrounding area. Conversely, spatial planning decisions, such as major urban development projects, can have desirable or undesirable consequences for mobility and accessibility. Knowledge about the interaction between spatial planning, urban design and accessibility is important for gauging the effects of policy interventions and making balanced decisions on the use of policy instruments.

The core theme Mobility, Accessibility and Spatial Planning focuses on describing and explaining national and international trends in mobility and transport, and of their consequences for accessibility. This involves reviewing past social developments and implemented policy to explain trends in mobility and accessibility, as well as exploring possible (but unknowable) developments in future. The latter can be attempted by developing environmental scenarios to support robust policy development and through medium- and long-term outlooks.

As a primary objective of national transport and traffic policy is to improve accessibility, this core theme pays special attention to accessibility, focusing on the development and application of knowledge for operationalising the concept of accessibility, problem analysis and exploring possibilities for improving accessibility through specific policy measures, such as investing in infrastructure, spatial and urban planning, capacity utilisation measures, mobility management and fiscal measures. We take a broad approach that encompasses both passenger and freight transport (smart use of networks and smart logistics, both unimodal and multimodal), transport chains and hubs, and the interaction with spatial development and urban planning.

Two topics are central to this core theme:
– The internal linkages within the transport and traffic system and how the system interacts with the surrounding environment
– Accessibility and accessibility policy

The recent dialogue with the policy directorates has led to the formulation of a number of research questions in this area. The following sections show per topic which concrete activities (research projects and Knowledge at the Table) KiM will be undertaking in 2013 to provide answers to these research questions.

1.2
The internal linkages within the transport and traffic system and how the system interacts with the surrounding environment

To explain recent mobility trends in the light of social developments and implemented policy, it is essential to understand the internal linkages within the transport and traffic system and how the system interacts with the surrounding environment, such as the spatial system. The knowledge activities in this area involve describing the system in the past, present and future and explaining actual developments in mobility and their consequences for accessibility. Besides the functioning of the transport system, the focus of these studies is on gaining insight into the relevant actual and/or expected changes in the factors influencing the transport system. Knowledge of these changes, together with knowledge of the linkages within the transport and traffic system, is essential for obtaining a better understanding of the expected trends in mobility and accessibility. Early recognition of possible developments allows policymakers to anticipate potential negative consequences and develop adaptive strategies. In this respect, there is a clear relation with core themes 4 (regarding model development) and 6 (regarding policy instruments and assessment frameworks).

Projects

DGB Strategy Unit
Research project, BR1301, large, first quarter

Mobility Report 2013
The purpose of the annual Mobility Report is to provide objective (background) information to policymakers, researchers, politicians and organisations active in the field of transport and traffic. The publication reviews the current state of mobility in the Netherlands. In addition to a description of the trends in mobility, the report gives explanations for the growth in passenger and goods transport. It therefore provides input to the development of policy and for the public debate about mobility in general. Specific topics to be highlighted in the Mobility Report 2013 will be identified in consultation with the policy directorates. Potential topics include urbanisation and mobility, the role of cycling and inter- and multimodality.

DGB Civil Aviation Department
Research project, OG1107, medium, ongoing

Recent and future developments in aviation
Dutch aviation policy operates within the context of several known and uncertain trends in aviation, including the liberalisation of the aviation market, increasing consolidation of airlines, increasing competition from the Middle East (Dubai, the United Arab Emirates, etc.), demographic trends, global economic trends, international tourism, changes in low-cost carrier (LCC) business models, concentration in the LCC sector, progressive internalisation of external environmental costs, etc. Some developments have been visible for some time, whereas others are relatively new or lie some way off in the future. During the project the significance of these developments for the ministry's policies will be analysed in workshops. During the project the results will be actively discussed with the Directorate-General for Mobility and Transport (DGB) to enable policymakers to anticipate and respond to any desirable or undesirable developments. When results become available they will also be used for the annual report by DGB Civil Aviation Department. When the project is completed a decision can be made on whether there is a need for a deeper analysis of specific trends.

DGB Civil Aviation Department
Research project, OG1204, medium, first quarter

Factors influencing demand at regional airportse
In recent years the regions airports have seen a rapid increase in their market share. This trend can also be seen in other countries. This growth is clearly associated with the rise of low cost airlines like Ryanair, but other factors also play a part. Drawing on an analysis of national demand for air travel carried out in 2012, the project will investigate which factors determine the function and role of the regional airports of national significance. The regional governments are important actors in this respect as they are also responsible for weighing up the economic and accessibility benefits against the costs (particularly noise disturbance). The study will investigate the decisions these authorities come to and the circumstances and considerations influencing these decisions. Because, in the final instance, consumer preferences are decisive in the use made of the different airports, the research will examine travel behaviour and airport choice by Dutch aviation consumers (including their use of Amsterdam Airport Schiphol). The study will also examine the size of the catchment area of these airports outside the Netherlands and, vice versa, the demand pull exerted by foreign regional airports on Dutch residents. Drawing on the capacity study recently carried out (using the AEOLUS model), the project will further prioritise the large number of identified specific questions.

DGB Strategy Unit
Knowledge at the Table, OG1209, small, ongoing

OECD Territorial Review
During 2012 and 2013 the OECD is conducting its Territorial Review of the Netherlands. The review takes limited account of infrastructure and accessibility. KiM is drawing on the available sources of information and its specific knowledge of the mobility system to give active inputs to answers provided by the Ministry of Infrastructure and the Environment to questions from OECD in the field of infrastructure and mobility.

DGMI International Affairs
Knowledge at the Table, OG1208, small, ongoing

Contribution to IenM Horizon 2020 team
Horizon 2020 is the name of the EU framework programme for research and innovation. The transport related part of Horizon 2020 is the Strategic Transport Technical Programme. A portfolio team in the Ministry of Infrastructure and the Environment is working to influence the content of the research programme relevant to the ministry. KiM is providing Knowledge at the Table to the portfolio team.

DGB Strategy Unit
Knowledge at the Table, OG1210, medium, ongoing

Updating long-term scenarios
In 2010 the Netherlands Bureau for Economic Policy Analysis (CPB) published the outlines of four new futures scenarios in the report The Netherlands in 2040, replacing the four WLO scenarios published in 2006. In 2012, the CPB and PBL Netherlands Environmental Assessment Agency started their Horizon Scan study on Welfare, Prosperity and Quality of the Living Environment *(Horizonscan Welvaart en Leefomgeving)*, in which they explore new trends with policymakers to determine which new trends deserve further examination and whether there is cause to translate these into scenarios and investigate their implications for various specific sectors. Plans have not yet been drawn up for a possible subsequent scenario study, but it is possible it may begin in 2013. KiM is providing input to the project in the area of passenger and goods transport.

DGB Strategy Unit (other department involved: DGRW Spatial Development)
Research project, BR1302, medium, first quarter

Mobility and differentiated population growth
The growth of the population has been differentiated by location. The growth and changes in composition of the population are significantly different in the major cities than in the rural areas and in less urbanised areas. With the active involvement of PBL, the project will examine the consequences of these demographic and spatial trends for mobility and accessibility. The project will link these with existing demographic scenarios, new long-term scenarios, mobility aspects of 'smart cities' and with possible concepts for adaptive policymaking.

DGRW Spatial Development
Knowledge at the Table, BB1211, small, ongoing

Contribution to the government project team Government Vision on the Southern Randstad
KiM is making an active contribution, in the form of Knowledge at the Table, to the central government project team as part of the wider project to prepare the Government Vision on the Southern Randstad *(Rijksvisie op de Zuidvleugel)*. This input consists of expertise on the interaction between the spatial system and the transport and traffic system. In 2013 similar activities can be expected for other projects to develop central government spatial visions for specific regions or areas.

DGRW Regional and Project Development (other department involved: DGB Strategy Unit)
Research project, BR1303, medium, first quarter

Policy instruments for multimodal hubs
Multimodal hubs are where major transport infrastructure interchanges and urban development are integrated, not only in terms of physical planning but also in their financing and commercial operation. A combination of changing housing preferences, changing business location preferences and changing transport planning create a new environment in which these hubs can be developed. But what instruments does central government have at its disposal to stimulate the establishment of such hubs for passenger and freight transport? The project will analyse several examples and make an inventory of success and failure factors for well-functioning multimodal hubs. The success factors will be used to identify options for practical policy instruments. This project may be integrated with project BM1205 (Differences between hubs) in core theme 5.

DGB Strategy Unit
Knowledge at the Table, BR1304, medium, second quarter

Refinement of the Quick Scan of Policy Aspects of the Logistics Top Sector
In the 2012 project 'Quick scan of policy aspects of the Logistics Top Sector', KiM made a global analysis of the effects of the action agenda for the Logistics Top Sector (*Partituur Topsector Logistiek*) on the objectives of the Ministry of Infrastructure and the Environment. This project takes the analysis a stage further. Where should this top sector focus its efforts (within its own action agenda) to generate maximum/optimum positive spin-off for social objectives (accessibility, liveability and safety)? More specifically, the study will explore questions such as 'What actions could the different sectors/modalities take to create a synchromodal system?' and 'What possible points of leverage/means do stakeholders (government and the private sector) have to raise the utilisation of capacity?' and then determine the effects of such actions on achieving the ministry's policy objectives.

DGMI Safety and Risks
Research project, OG1213, medium, third quarter

Consequences of global developments in the production and use of hazardous substances and hazardous waste for transport in the Netherlands
There is evidence of a global shift in the production locations for hazardous substances and a potential increase in the use of LNG and hydrogen as a transport fuel (car, inland shipping). In addition, it is expected that the transport of wastes, including hazardous waste, and biofuels will increase over the coming years. This research aims to shed light on the possible consequences of these developments for the transport of such substances in the Netherlands.

Global description of small knowledge-at-the-table activities

KiM regularly carries out small knowledge-at-the-table activities related to this topic within the core theme. The emphasis in these activities is on answering questions on national and international trends in mobility and accessibility and on social trends associated with mobility.

1.3
Accessibility and accessibility policy

The transport and traffic system consists of a set of complementary transport modes. The main transport modes are road, rail, water and air, but within these there is a wide range of forms of transport, such as cars, goods vehicles, trains, pedal and electric bicycles, buses, trams, metro and taxis. Each of these means of transport has its own advantages and its own markets. Depending on things like journey purpose and origin and destination, the traveller or shipper will choose the optimum transport mode. Cars and goods vehicle are a particularly popular choice.

The first focus within this topic is operationalising the concept of accessibility. This involves broadening the concept of accessibility as a policy objective as well as gaining more in-depth understanding of specific aspects of accessibility, such as comfort and the reliability of journey times. Following a series of strategic policy documents in which the concept of accessibility was concerned largely with the loss of journey time on the trunk road network, the *Mobility Policy Document (Nota Mobiliteit)* introduced a greater emphasis on reliability and robustness as core concepts in national transport and traffic policy, which in turn has given rise to the need for further elaboration of these concepts. To this end KiM has conducted studies to refine the definition of these concepts, but gaps in our knowledge still

remain with regard to further operationalising these concepts within the policy process. In the National Policy Strategy for Infrastructure and Spatial Planning (SVIR) the concept of accessibility has been considerably expanded by the introduction of an operationalisation based on generalised costs.

A second focus is on how accessibility can be improved by adapting the transport and traffic system and aspects of adjoining areas (for example the spatial system). The research encompasses all transport modalities. Special attention is given to multimodal trips in which various modes of transport are used to make a single journey. For example, walking distance and the availability and ease of use of cycle storage facilities are two factors affecting the attractiveness of public transport, while the quality of bus, tram and metro services have an influence on the attractiveness of travelling by train. Moreover, the presence of bicycle interchanges is a crucial factor in the attractiveness of travelling the first and final stages of a journey by bicycle. Besides research to identify points of leverage for new policy, this theme also looks at assessing the effectiveness of such options in achieving accessibility objectives.

Projects

DGB Strategy Unit
Knowledge at the Table, BB1103, small, fourth quarter

Robustness and reliability in concrete projects
The potential effects of policy measures to improve robustness and reliability cannot yet be satisfactorily assessed using the available models, whereas recent KiM research has now made it possible to produce a monetary valuation of these variables. It is therefore necessary to estimate these effects for concrete projects. This can be done using rules of thumb derived from research specifically conducted for this purpose or by making calculations using modelling tools yet to be developed. In 2013 Rijkswaterstaat Centre for Transport and Navigation (RWS-DVS) will carry out much development work on such tools for the Directorate-General for Mobility and Transport (DGB) (see core theme 4). When these instruments and algorithms have been prepared, KiM will be able to work on a methodological framework for using these methods in projects.

DGRW Regional and Project Development
Knowledge at the Table, BB1218, medium, first quarter

The importance of infrastructure for Top Sectors
The various top sectors have different mobility needs according to the scale and nature of their activities. The Logistics top sector is clearly dependent on the quality of infrastructure, but what demands do other top sectors such as 'Agri&food' and 'High Tech' make on the transport and traffic system and in what ways do they burden the system? It is proposed to obtain this information by carrying out an area analysis, a possible option being Brainport Avenue. The study could be expanded to cover a wider range of spatial requirements of specific sectors.

DGB Strategy Unit (other department involved: DGRW Regional and Project Development
Knowledge at the Table, BR1305, medium, third quarter

Do changing expectations for the future necessitate new policy instruments for accessibility?
The Mobility Report 2012 shows that projections for the future are becoming increasingly uncertain because new, as yet unrecognised social trends can rapidly emerge, bringing with them uncertain effects on trends in mobility and accessibility. What are the axioms in accessibility policy and to what extent do they still tally with the new evidence on macro-economic trends and behaviour? New directions will be explored in one or more essays on this topic. The essays may focus on the potential role of travel information in this respect, which will tie in with project BB1106 (Quality needs of the modern public transport passenger).

DGB Strategy Unit (other department involved: DGRW Regional and Project Development) Research and Knowledge at the Table, BR1306, large, second/third quarter

Medium/Long-term study of accessibility in various policy scenarios
Changes in social trends with strong repercussions on developments in mobility and accessibility regularly force us to explore the possible consequences. Such analyses in effect represent the problem analysis that can serve as a reference for evaluating the effectiveness of current and new options for accessibility policy. This approach will allow us to answer such questions as 'How will mobility evolve if, for a long period, we no longer invest in new infrastructure, but only in the better use of capacity and in management and maintenance?', 'What will improve the robustness of the mobility system and allow it to respond better to differentiation in demand (growth versus decline; Randstad versus region et cetera)?' and 'What are the no-regrets options for accessibility policy?'

DGB Public Transport and Rail Research project, BB1108, small, ongoing

Bicycles in the chain – Assessment framework
Bicycles play an increasing role in multimodal travel, an example being the popularity of the public transport bike *(OV-fiets)*. This role could be expanded further by making cycling an easier option. At the moment, however, there is no assessment framework for cycle facilities. The Directorate-General for Mobility and Transport (DGB) has commissioned studies to take the firsts steps in creating such an assessment framework. KiM is providing guidance to this project in the form of Knowledge at the Table. At a later stage KiM may be asked to carry out a more in-depth study into the time valuation by cyclists.

DGB Infrastructure Efficiency Programme Knowledge at the Table, BB1113, small, ongoing

KiM Contribution to monitoring and evaluation of the Infrastructure Efficiency Programme
A monitoring and evaluation methodology at programme level is being developed in conjunction with the implementation of regional packages of measures under the Infrastructure Efficiency Programme (Beter Benutten). The aim is to determine at the programme level what does and what does not work, and find a method of doing this without evaluating each project individually. KiM was asked to provide expert assistance on developing a monitoring and evaluation methodology and possibly on contracting external services, and to take on a quality control function on an ad hoc basis.

DGB Roads and Traffic Safety Knowledge at the Table, BB1112, small, ongoing

Review of the evaluation method for the Traffic Management Trial Amsterdam (PPA)
The goal of the Traffic Management Trial Amsterdam (*Praktijkproef Amsterdam*, PPA) is to investigate how network-wide coordinated traffic management measures can improve the efficiency of the road network in the Amsterdam region. It is a joint project between central government and the regional and local authorities. The trial will run for about three years. KiM conducts reviews of the planned ex ante and ex post evaluations of the PPA for the Directorate-General for Mobility and Transport. Each review contains an independent scientific judgement on the evaluation methods used and the results of the evaluations.

DGB Public Transport and Rail Research project/Knowledge at the Table, BB1106, medium, second quarter

Quality needs of the modern public transport passenger
Public transport policy is becoming increasingly oriented towards the needs of the passenger. In connection with this, it is important to know what exactly potential users want. The rapid improvements in the quality and availability of up-to-date information about travel options make it possible to gain an insight into whether passengers are prepared to change their travel behaviour on the basis of information presented to them, and if so, which passengers; do people switch to public transport when presented with good quality information? What does this mean in terms of appropriate quality levels and how can such factors be better integrated into the current system of policy-driven contract financing? Drawing on existing knowledge, KiM can make an initial contribution to the development of policy in this area through the provision of Knowledge at the Table. Knowledge gaps can be filled by carrying out research.

DGB Roads and Traffic Safety (other departments involved: DGB Strategy Unit, DGRW Spatial Development)
Knowledge at the Table, BB1201, small, third quarter

Instruments for accessibility policy via spatial planning
The relation between spatial planning and urban design and mobility is a much studied topic. Changing the structure and layout of development leads to changes in people's activity patterns and changes in the demand for mobility, which in turn have an effect on accessibility. For example, concentrating services in central locations around existing public transport stations (the 'A locations' of earlier policy) in combination with parking restrictions reduces car traffic. Locating major new housing developments on the edges of cites (the 'Vinex' sites) can lead to more traffic congestion. Conversely, building new transport infrastructure (roads and public transport) has an effect on the spatial behaviour of people and businesses. As a consequence of the 'new' mobility thus stimulated, the accessibility of some locations may be reduced and bottlenecks may be created in the transport system. KiM is preparing a report based on a literature study which will draw on past experiences and foreign examples to show how this interaction between spatial planning, mobility and accessibility works. Which principles, derived from both the spatial planning system and the transport system, have a beneficial influence on accessibility and which have a less favourable influence on accessibility? PBL Netherlands Environmental Assessment Agency will be actively involved in the implementation of this project.

DGMI International Affairs
Knowledge at the Table, BB1204, small, ongoing

Contribution to IenM TEN-T policy team
KiM is contributing to the ministry-wide TEN-T policy team with Knowledge at the Table on infrastructure planning, transport development and appraisal methods. KiM may be asked to assist with assessing new applications for TEN-T subsidies.

DGB Infrastructure Efficiency Programme
Research project, BB1216, medium, ongoing

Effects of flexible working on congestion
Flexible working *(Het Nieuwe Werken)* is designed to give employees more freedom, responsibility and technological support so that they can work more effectively. It is expected that it will allow employees more choice about when and where they work and that they will make less use of the mobility system, particularly at peak travel times (e.g. traffic queues on the roads). However, so far little is understood about how widespread flexible working is in the Netherlands and its effects on mobility and congestion. The goal of this project is to determine the actual effects of flexible working (including teleworking and home working) on the development of congestion on the roads. A distinction is made between the effects of teleworking in the relatively short term and of

flexible working over the relative long term. The project is also partly an extension of the method used within KiM to describe and quantify the contribution made by the relevant factors to the development of congestion. In view of the specific data requirements for this project, KiM has enlisted the cooperation of Statistics Netherlands (CBS).

DGB Roads and Traffic Safety Knowledge at the Table, BR1307, medium, first quarter

KiM Contribution to systems analysis of the road network, packages of measures and effects
Under the BOA agreements (Policy support and advice, Beleidsondersteuning en advies (BOA)), DGB Roads and Traffic Safety has asked Rijkswaterstaat Centre for Transport and Navigation (RWS-DVS) to carry out a systems analysis of the road network. Besides a problem analysis, an assessment will be made of the merits of the various alternative concepts for the road system (e.g. extreme network alternatives). KiM has a facilitating role based on the available expertise on the functioning of the transport and traffic system. KiM may play a leading role in any subsequent specific studies (e.g. further elaboration of specific alternatives or CBAs).

DGB Public Transport and Rail Knowledge at the Table, BR1308, small, second quarter

Critical review of proposals for an optimal rail system
As part of the long-term agenda for Rail, Prorail and NS have been challenged to develop proposals for an optimally functioning rail system that meets a range of objectives. In the course of 2013, DGB Public Transport and Rail will submit these proposals to a critical review. KiM can contribute to this review with its in-house expertise and/or play a facilitating role by drawing on its Fellows network and other contacts within the academic community.

Global description of small knowledge-at-the-table activities

KiM regularly carries out small knowledge-at-the-table activities related to this topic within the core theme. The emphasis in these activities is on answering questions about the accessibility indicator in the National Policy Strategy for Infrastructure and Spatial Planning (SVIR) and providing second opinions on policy analyses in the field of accessibility policy.

Doctoral research

VU Amsterdam and KiM Doctoral research, P801

Reliability of journey times
The research questions are:
- How wide is the range of door-to-door journey times? Has this increased over time?
- Is the range (approximately) proportional to total journey time, or to total delays?
- What expectations do passengers and transport companies have regarding journey times? Are these expectations rational? Or is there a systematic bias?

1.4
Project overview table

Department	Title	Project Number	Project Type	Start	Size
DGB Strategy Unit	Mobility Report 2013	BR1301	Research project	First quarter	Large
DGB Civil Aviation Department	Recent and future developments in aviation	OG1107	Research project	Ongoing	Small
DGB Civil Aviation Department	Factors influencing demand at regional airports	OG1204	Research project	First quarter	Medium
DGB Strategy Unit	OECD Territorial Review	OG1209	Knowledge at the Table	Ongoing	Small
DGMI International Affairs	Contribution to IenM Horizon 2020 team	OG1208	Knowledge at the Table	Ongoing	Small
DGB Strategy Unit	Updating long-term scenarios	OG1210	Knowledge at the Table	Ongoing	Medium
DGB Strategy Unit	Mobility and differentiated population growth	BR1302	Research project	First quarter	Medium
DGRW Spatial Development	Contribution to the government project team 'Government Vision on the Southern Randstad'	BB1211	Knowledge at the Table	Ongoing	Small
DGRW Regional and Project Development (and DGB Strategy Unit)	Policy instruments for multimodal hubs	BR1303	Research project	First quarter	Medium
DGB Strategy Unit	Refinement of the Quick Scan of Policy Aspects of the Logistics Top Sector	BR1304	Knowledge at the Table / research project	Second quarter	Medium
DGMI Safety and Risks	Consequences of global developments in the production and use of hazardous substances and hazardous waste for transport in the Netherlands	OG1213	Research project	Third quarter	Medium
DGB Strategy Unit	Robustness and reliability in concrete projects	BB1103	Knowledge at the Table	Fourth quarter	Small
DGRW Regional and Project Development	The importance of infrastructure for Top Sectors	BB1218	Knowledge at the Table	First quarter	Medium
DGB Strategy Unit (and DGRW Regional and Project Development)	Do changing projections for the future necessitate new policy instruments for accessibility?	BR1305	Knowledge at the Table	Third quarter	Medium
DGB Strategy Unit (and DGRW Regional and Project Development)	Medium/Long-term study of accessibility in various policy scenarios	BR1306	Research project / Knowledge at the Table	Second quarter	Large
DGB Public Transport and Rail	Bicycles in the chain - Assessment framework	BB1108	Knowledge at the Table	Ongoing	Small
DGB Infrastructure Efficiency Programme	KiM Contribution to monitoring and evaluation of the Infrastructure Efficiency Programme	BB1113	Knowledge at the Table	Ongoing	Small
DGB Roads and Traffic Safety	Review of the evaluation method for the Traffic Management Trial Amsterdam (PPA)	BB1112	Knowledge at the Table	Ongoing	Small
DGB Public Transport and Rail	Quality needs of the modern public transport passenger	BB1106	Research project / Knowledge at the Table	Ongoing	Medium
DGB Roads and Traffic Safety	Instruments for accessibility policy via spatial planning	BB1201	Knowledge at the Table	Third quarter	Small
DGMI International Affairs	Contribution to IenM TEN-T policy team	BB1204	Knowledge at the Table	Ongoing	Small
DGB Infrastructure Efficiency Programme	Effects of flexible working on congestion	BB1216	Research project	Ongoing	Medium
DGB Roads and Traffic Safety	KiM Contribution to systems analysis of the road network, packages of measures and effects	BR1307	Knowledge at the Table	First quarter	Medium
DGB Public Transport and Rail	Critical review of proposals for an optimal rail system	BR1308	Knowledge at the Table	Second quarter	Small
VU Amsterdam and KiM	Reliability of journey times	P801	Doctoral research	Ongoing	

2 Mobility of Groups

2.1
Explanation of the core theme

People travel because they have to or want to undertake different activities in different places. Goods are transported so that they can be used elsewhere. Personal mobility behaviour, goods transport and the choices behind travel behaviour differ between groups in society. Describing and explaining these differences in mobility behaviour throws up important insights for making policy, which must increasingly differentiate between different groups in society in order to be effective.

The core theme Mobility of Groups is about the mobility of specific groups. It focuses mainly on the autonomous and induced trends in mobility behaviour of these groups and the underlying factors that explain these trends. The underlying factors provide not only explanations, but also offer possible pointers for policy development.

Projects

DGB Infrastructure Efficiency Programme (other department involved: DGB Roads and Traffic Safety)
Research project, GB1101a, medium, ongoing

Target groups in and outside the rush hour
Within the IenM Infrastructure Efficiency Programme *(Beter Benutten)* measures are being sought to get rush-hour travellers to travel less frequently, travel at different times or use a different mode of transport. The aim of this KiM study is to identify the different groups of rush-hour travellers and then to determine which group or groups are most receptive to certain stimuli.

DGB Strategy Unit (other department involved: DGB Infrastructure Efficiency Programme)
Research project, MG1305, medium, first quarter

In-depth study of the mobility behaviour of young adults
The Mobility Report 2012 notes that the levelling off of growth in mobility is due largely to changing mobility behaviour among young adults. Comparable phenomena can also be seen to varying degrees in other Western countries and are attributed to various underlying causal factors. However, no clear-cut picture of the reasons for these changes in mobility behaviour has yet emerged. This project takes a deeper look at the trends in mobility behaviour among young adults, centring on questions concerning changing attitudes to the car and the consequences of observed trends for future generations.

DGB Infrastructure Efficiency Programme (other department involved: DGB Strategy Unit)
Research project, MG1301, medium, first quarter

Influence of the e-society and other social trends on specific groups
What influences do social media have on how specific social groups keep in touch (digital versus physical contact)? What are the consequences of other social trends, such as individualisation and the rise of the experience economy, for the mobility behaviour of specific groups? Do these developments make specific demands on the mobility system? The objective of this study is to answer these questions and identify possible

policy leverage points. Cooperation with the Netherlands Institute for Social Research (CSP) may be sought for this project.

DGB Roads and Traffic Safety
Research project, MG1302, medium, third quarter

Role of travel information in road traffic
Developments in ICT mean that there is now a large amount of travel information available to car drivers, and the range and type of information will probably increase in future. How do the various groups of 'mobilists' make use of travel information? What policy levers will serve not only the collective goal of better traffic flows but also individuals (e.g. information about the quickest route or the least interrupted route)?

DGB Roads and Traffic Safety
(other department involved: DGB Infrastructure Efficiency Programme)
Research project, GB1204, medium, ongoing

Incentive policies
Policy instruments that reward people for acting in certain ways are attracting increasing interest. The aim of this project is to provide an understanding of when incentives work better than disincentives, and which types of incentive work best, in which situations and for which target group. For example, the literature and practical experience suggest that monetary rewards for good behaviour can be effective, but the question is whether this is also true over the longer term. The project will also look into ways of preventing such incentives having an adverse effect on the intrinsic motivations of the participants.

DGB Infrastructure Efficiency Programme
Research project, MG1303, medium, third quarter

Meta-evaluation of the Infrastructure Efficiency Programme and target groups
The ministry's Infrastructure Efficiency Programme *(Beter Benutten)* aims to develop specific measures to reduce traffic congestion. These include measures to encourage rush-hour travellers to travel less frequently (e.g. by working at home) or at different times or to use a different mode of transport (e.g. bicycle or public transport). The measures being developed in the programme are currently being evaluated. This meta-study will identify the lessons that can be learned from this evaluation, making a distinction between different groups.

DGB Infrastructure Efficiency Programme
Knowledge at the Table, MG1304, medium, third quarter

Motives for employers to adopt Smart Working, Smart Travel
Smart Working, Smart Travel is a core element in the ministry's Infrastructure Efficiency Programme. The objective of this study is to gain an understanding of the motives for employers to actively adopt the principles of Smart Working, Smart Travel. The study will build on the results of the process evaluation currently being conducted by the Infrastructure Efficiency Programme as well as the results of the ongoing KiM project GB1101a (Target groups in and outside the rush hour).

Global description of small knowledge-at-the-table activities

KiM regularly carries out small knowledge-at-the-table activities related to this core theme.

2.2
Project overview table

Department	Title	Project Number	Project Type	Start	Size
DGB Infrastructure Efficiency Programme	Target groups in and outside the rush hour	GB1101a	Research project	Ongoing	Medium
DGB Strategy Unit	In-depth study of the mobility behaviour of young adults	MG1305	Research project	First quarter	Medium
DGB Infrastructure Efficiency Programme	Influence of the e-society and other social trends on specific groups	MG1301	Research project	First quarter	Medium
DGB Roads and Traffic Safety	Role of travel information in road traffic	MG1302	Research project	Third quarter	Medium
DGB Roads and Traffic Safety	Incentive policies	GB1204	Research project	Ongoing	Medium
DGB Infrastructure Efficiency Programme	Meta-evaluation of the Infrastructure Efficiency Programme and target groups	MG1303	Research project	Fourth quarter	Medium
DGB Infrastructure Efficiency Programme	Motives for employers to adopt Smart Working, Smart Travel	MG1304	Knowledge at the Table	Third quarter	Medium

3 Sustainable Mobility, Safety and Transition

3.1 Explanation of the core theme

This core theme is about sustainable mobility and mobility-related safety aspects. It includes the consequences for the liveability and safety of the current mobility system (and the leverage points for policy intervention) as well as the development of a more sustainable and safer mobility system in future.

Much of the research effort in this core theme will be devoted to the transition process: what will a sustainable and safe mobility system look like, what are the problems and obstacles in the transition process, what is the role of government and where can points of policy leverage be found to facilitate this transition? Transitions are 'long-term change processes characterised by a high degree of complexity and uncertainty. This complexity is caused by the large number of different actors and sectors involved in the change processes; the uncertainty is the result of the unpredictability of the course of the transition and the influence of exogenous factors.'[2] The core theme contributes to long-term issues of importance to the ministry, such as reducing dependence on oil, the introduction and use of sustainable fuels, reducing greenhouse gas and other polluting emissions, and traffic safety. These issues are the subject of intense policymaking activity, both in the EU and the Netherlands.

In this core theme the concept of 'sustainability' is interpreted in a broad sense and relates to all aspects of the living environment, such as land use, nature, air quality, climate change and noise. In fact, safety also falls under the broad approach to sustainability mentioned above. This is explicitly mentioned in the title of the core theme – perhaps unnecessarily – because the term sustainability is often associated only with environmental issues.

Projects in this core theme are grouped under the following topics:
– Consequences for the liveability and safety of the mobility system
– Transition to a more sustainable and safer mobility system

3.2 Consequences for the liveability and safety of the mobility system

This topic revolves around the consequences for the liveability and safety of the current mobility system as well as explaining the relevant trends and points of policy leverage for influencing these effects.

[2] VROM-raad & Algemene Energieraad, *Energietransitie: klimaat voor nieuwe kansen*, The Hague, December 2004

Projects

DGB Infrastructure Efficiency Programme (other department involved: DGB Strategy Unit) Research project, DT1301, medium, first quarter

Possibilities for an integrated approach to accessibility, liveability and sustainability
The ministry's Infrastructure Efficiency Programme *(Beter Benutten)* aims to develop specific measures to reduce traffic congestion. Particular emphasis will be given to measures to stimulate people to travel less frequently (e.g. by working at home) or at different times or to use a different mode of transport (e.g. bicycle or public transport). What are the possibilities for linking the Infrastructure Efficiency Programme to liveability and sustainability objectives? This study will expand upon on the KiM publication Smart Utilisation *(Slim Benutten)*.

Global description of small knowledge-at-the-table activities

KiM regularly carries out small knowledge-at-the-table activities related to this topic within the core theme. An example is providing a second opinion policy evaluation on social safety.

3.3
Transition to a more sustainable and safer mobility system

This topic within the core theme is about the transition process to a more sustainable and safer mobility system: what will a sustainable and safe mobility system look like, what are the problems and obstacles in the transition process, what is the role of government and where can points of policy leverage be found to facilitate this transition?

In 2013 the research effort will concentrate on a series of projects that will explore the contours of a sustainable and safe mobility system in 2050 for each of the various sectors and identify the transition process that will be required to establish such systems.

Projects

DGB Civil Aviation Department Research project, TD1102a, medium, ongoing

Exploratory study for a sustainable aviation system in 2050
The aviation industry makes an important contribution to the economy, but is also accompanied by adverse impacts such as noise nuisance, local air pollution and greenhouse gas emissions. The ministry is looking for ways to make aviation more sustainable. The aim of this project is to identify and describe options for doing this and to explore possible policy scenarios for realising the potential of these options.

DGB Roads and Traffic Safety (other department involved: DGMI Climate, Air and Noise) Research project, TD1208, medium, ongoing

Sustainable road transport in 2050 – Source control policy and traffic reduction policy
The KiM report Towards Sustainable Road Transport in 2050 *(Naar duurzaam wegverkeer in 2050)*, published in 2011, describes a transition process towards a more sustainable road transport system. However, the question of what policy levers can be pulled to realise the potential of the options was only investigated in outline. The objective of this follow-up project is to examine this in more detail. How can the obstacles be removed? What role could government play and what are the feasible policy scenarios? The project is exploring the opportunities for both source control and traffic reduction policies.

DGMI Climate, Air and Noise
Research project, DT1302, medium, third quarter

Follow-up questions on source control policy for sustainable road transport 2050
This project comprises possible follow-up questions arising from the outcome of Sustainable Road Transport in 2050 – Source control policy and traffic reduction policy (project TD1208), such as in-depth studies for innovation frameworks and trials/ demonstration projects.

DGB Maritime Affairs
Research project, TD1102b, medium, first quarter

Exploratory study for a sustainable maritime system in 2050
The maritime sector (maritime shipping, inland shipping and ports) makes an important contribution to the economy, but this sector also has adverse effects. The ministry is looking for ways to make the maritime sector more sustainable. The aim of this project is to identify and describe the options.

DGB Public Transport and Rail
Research project, TD1201, medium, third quarter

Exploratory study of the public transport and rail sector in 2050
What are the possibilities for creating a sustainable mobility system for the public transport and rail sector, and what policy instruments could be used? As part of the study, the innovative capacity of the public transport and rail sector will be identified and described.

DGMI Ucos
Research project, DT1303, medium, fourth quarter

Sustainable mobility system in 2050 via spatial planning
What are the possibilities for creating a sustainable mobility system via spatial planning? As a follow-up to and broadening of the sectoral studies described above, this project will explore the possibilities afforded by spatial planning.

Global description of small knowledge-at-the-table activities

KiM regularly carries out small knowledge-at-the-table activities related to this topic within the core theme. Examples include a 'kebab skewer approach' to sustainability and a comparison of the different transport modes by examining total costs and effects across the chain.

3.4 Project overview table

Department	Title	Project Number	Project Type	Start	Size
DGB Infrastructure Efficiency Programme and DGB Strategy Unit	Possibilities for an integrated approach to accessibility, liveability and sustainability	DT1301	Research project	First quarter	Medium
DGB Civil Aviation Department	Exploratory study for a sustainable aviation system in 2050	TD1102a	Research project	Ongoing	Medium
DGB Roads and Traffic Safety and DGMI Climate, Air and Noise	Sustainable road transport in 2050 – source control policy and traffic reduction policy	TD1208	Research project	Ongoing	Medium
DGMI Climate, Air and Noise	Follow-up questions on source control policy for sustainable road transport 2050	DT1302	Research project	Third quarter	Medium

DGB Maritime Affairs	Exploratory study for a sustainable maritime system in 2050	TD1102b	Research project	First quarter	Medium
DGB Public Transport and Rail	Exploratory study of the public transport and rail sector in 2050	TD1201	Knowledge at the Table	Third quarter	Medium
DGMI Ucos	Sustainable mobility system in 2050 via spatial planning	DT1303	Knowledge at the Table	Fourth quarter	Medium

4 Models and Data

4.1 Explanation of the core theme

The quality of answers to just about every research question in the field of transport and traffic depends on the quality of the underlying data. The quality of data on historical and current trends in transport and traffic depends on standard data collection procedures, and the quality of data relating to future developments depends on the models used to generate those data.

KiM has extensive knowledge of the available pools of data, data collection methods and transport and traffic models, and can use this knowledge to support policymaking by articulating the need for models and data collection relevant to mobility and transport policy. At the same time, KiM is able to assist the policy process with the development and use of policy indicators for monitoring strategic policy objectives.

KiM only occasionally compiles data on mobility and accessibility itself (except for specific projects) and does not develop or manage transport and traffic models. For the production of knowledge for the policy directorates, KiM therefore relies on standard data collection and model development and management by other organisations, such as Statistics Netherlands (CBS) (mobility and freight transport), Rijkswaterstaat Centre for Transport and Navigation (RWS-DVS) (traffic data, models), the National Data Warehouse for Traffic Information (NDW) (traffic data), TNO (models), universities (incidental data collection and models) and private organisations (incidental data collection and models). Making such data available for processing and analysis is a key issue within the core theme.

Two topics are central to this core theme:
– Basic information about mobility and accessibility;
– Transport and traffic models.

The following sections show per topic which concrete activities KiM will be undertaking in 2013 to provide answers to the research questions identified by the policy directorates.

4.2 Basic information about mobility and accessibility

This topic within the core theme concerns standard data collection in the field of mobility and accessibility, with the sharpest possible focus on information needed for the monitoring and evaluation of mobility and transport policy. The information requirements for policymaking (and therefore for KiM) are determined directly by current and possible future policy indicators for monitoring strategic policy objectives. Interaction is clearly an issue here, because information demands are often limited by the availability of suitable data and the possibilities for and constraints on data collection. KiM's knowledge and expertise on

data collection and modelling methods is used to translate policy information needs into the continuous and improved collection and processing of data. These data are not collected by KiM itself, but by organisations such as Statistics Netherlands (CBS), Rijkswaterstaat Centre for Data and ICT (RWS-DID) and Rijkswaterstaat Centre for Transport and Navigation (RWS-DVS). Conversely, KiM can play a role in 'translating' the available data into policy-relevant information.

Projects

DGB Strategy Unit
Research project, DM1102,
large, ongoing

Mobility Research Panel
Increasing attention is being given in transport and traffic policies to the behaviour of specific target groups in society. Accordingly, there is a growing demand for insights into the trends in the mobility of specific target groups over time and into the effects on mobility behaviour of changing circumstances among individuals and groups (changes in family composition, moving house, etc.). In 2012 KiM started a longitudinal mobility study, which will last at least four years, to obtain this type of information and understanding. The aim is to conduct a first survey in the autumn of 2013, when specific attention will be given to trends in the costs of mobility as a proportion of the household budget. The project will be implemented in cooperation with Goudappel Coffeng and the University of Twente, and with the involvement of RWS-DVS and PBL.

DGB Civil Aviation Department
Research project, E928,
small, ongoing

Factsheet aviation data
The aviation data factsheet provides an annual overview of trends in traffic at Amsterdam Airport Schiphol and other (competing) airports. The airports covered are the Dutch regional airports, the major North-West European hubs and a number of Belgian and German airports that serve part of the Dutch market. The trends in global aviation are also presented for reference purposes. The factsheet is purely informative.

DGB Strategy Unit
Knowledge at the Table, DM1301,
medium, first quarter

Support for operationalising the SVIR accessibility indicator
The National Policy Strategy for Infrastructure and Spatial Planning (SVIR) includes the new accessibility indicator. In the 2011 project 'Accessibility: An alternative view', KiM provided an input to the choice of indicator and in 2012 KiM supported its further development by the Directorate-General for Mobility and Transport (DGB) with knowledge-at-the-table activities. However, the indicator has not yet been fully operationalised and the intention is to complete this in 2013. The indicator should then be fully developed for use in monitoring and area-based policy initiatives, including the identification of the types of data that will be needed, which data are available or can be made available and which data are not yet available, and the actions that should be taken to fill this gap. The project will also study whether it is possible to define target values, and will investigate how out-of-pocket costs, comfort/quality aspects and reliability can be included in the accessibility indicator. KiM is assisting DGB by providing Knowledge at the Table for these activities, drawing where necessary on the relevant expertise available at PBL Netherlands Environmental Assessment Agency.

DGB Strategy Unit
Knowledge at the Table, DM1113, medium, ongoing

Contribution to the Infrastructure and Spatial Planning Monitor
In 2012 PBL Netherlands Environmental Assessment Agency started monitoring spatial planning and mobility policy, in cooperation with KiM. This Infrastructure and Spatial Planning Monitor covers the thirteen national interests set out in the National Policy Strategy for Infrastructure and Spatial Planning (SVIR). The information will be used to report to the House of Representatives once or twice a year on progress with the policy. A baseline assessment was published in 2012. In 2013 the groundwork will be laid for the second assessment, which will be carried out in 2014. Work in 2013 will concentrate on the further development and refinement of the accessibility indicator (see the project 'Support for operationalising the SVIR accessibility indicator'). In the baseline assessment for the Infrastructure and Spatial Planning Monitor this indicator is proposed only for car transport based on MON data 2004–2009. The next Infrastructure and Spatial Planning Monitor should also include trends in accessibility via public transport. In addition, the aim is to make use of actual measured travel speeds, instead of reported speeds, for both the car and public transport. For DGB, KiM supplies knowledge-at-the-table information on mobility and accessibility to PBL and ensures the information in the Infrastructure and Spatial Planning Monitor is aligned with and complements the Mobility Report (see Mobility Report 2013 – BR1301).

DGB Strategy Unit (other departments involved: DBG-wide, DGM Climate, Air and Noise, DGM Safety and Risks, DGRW Spatial Development)
Research project/Knowledge at the Table, DM1101, medium, ongoing

IenM needs for data collection regarding mobility and accessibility
To satisfy its information needs the Ministry of Infrastructure and the Environment (IenM) is dependent on the availability of data and information on mobility (passenger and freight transport, aviation) and accessibility (network usage, congestion, transshipment, etc.). Such data are collected both within IenM and by third parties (for example, haulage and shipping companies). They are not only a means for creating knowledge within KiM, but also for meeting policy monitoring needs. The goal of this project is to identify the information that should be available to KiM and the policy directorates and how the delivery and/or availability of other data collections can be secured (for example from Statistics Netherlands, Rijkswaterstaat, Trans Link Systems, etc.). In addition, the project will establish whether KiM should meet any identified specific monitoring needs, such as the Freight Transport Monitor *(Goederenvervoermonitor)* and the customer valuation barometers for regional public transport, and if so, how.

DGB Maritime Affairs
Knowledge at the Table, DM1205, medium, ongoing

Possible integration of Maritime Monitors
The Directorate for Maritime Affairs finances two annual studies to monitor economic and other developments in the Dutch seaports and the Netherlands Maritime Cluster. In the 2013 budget of the Ministry of Infrastructure and the Environment, the results of these monitors are used as standard figures under article 18, Navigation and Seaports. Given the merging of policies for navigation and seaports within a single budget item, the question is whether the monitors can also be combined and what the advantages and disadvantages of this would be. KiM is providing knowledge at the table for this exploratory study.

DGB Civil Aviation Department
Knowledge at the Table, DM1302, small, third quarter

Information on international travel behaviour of Dutch nationals and travel behaviour of foreign nationals in the Netherlands
From analyses of international travel behaviour carried out for the Mobility Report 2012 it has become apparent that existing data collections provide only limited possibilities for compiling an integrated picture of international mobility, including both the mobility of foreign nationals making use of the Dutch transport infrastructure and the mobility of Dutch nationals abroad. The aim of this project is to obtain an initial insight into the volumes in the above-mentioned market segments and to identify and define which aspects of the various policy processes may be relevant for obtaining a more detailed understanding of this travel behaviour. Those aspects which prove to be highly relevant will then be investigated to determine how these specific data needs can be met in future.

Global description of small knowledge-at-the-table activities

KiM regularly carries out small knowledge-at-the-table activities related to this topic, in which the emphasis is on explaining the content and nature of existing statistical databases and data collections (e.g. OVG/MON/OViN, traffic safety data) and data collection methods.

4.3
Transport and traffic models

Transport and traffic models make an important input to the development of policy. In ex ante evaluations of policy measures the policy effects of interest are almost always revealed by using models. These models are continually being adjusted in the light of new information, understanding and technical possibilities. Over the past few decades this innovation process has been driven largely by two, partly conflicting, objectives: on the one hand, the need for comprehensive information that meets the needs of current policy questions, and on the other hand the scientific desire to describe the world as accurately as possible. Over the past decade these developments have led to problems with using models in the policy process because the information supplied is, in a certain sense, too complex. This has increased the chances of mistakes occurring, and thus adds to the vulnerability of the policymaking process. A rigorous quality control mechanism is needed because the existing models apparently do not match the policy requirements well enough. The challenge for the future is to find better ways of interpreting model outcomes in the policy process. In previous research, KiM has concluded that if the models are to remain workable in future, they will have to be improved and subject to better quality assurance procedures, and the outcomes will have to be presented more effectively. KiM does not intend to develop and manage models itself (except for simple models to be used in the production of the Mobility Report and the Medium Term Outlooks (MLTs)). However, KiM does have extensive knowledge of the available models and modelling techniques as well as knowledge of the policy process, and can use this knowledge to stimulate the development of models and data collection relevant to mobility and transport policy. At the same time, KiM can assist the policymaking process by translating specific (both substantive and process-related) information needs into model development criteria.

Projects

DGB Strategy Unit
Knowledge at the Table, DM1106, medium, ongoing

Support for the development of Integration and Governance Models
In the DGB project 'Integration and governance models' KiM is working to improve the steering of mobility model development, in part as a follow-up to recommendations made in the 'Governance models' project conducted by KiM in 2010. The focus is on structuring the relevant information needs for various policy processes, the modelling tools needed to do this, and the development of improved governance processes for developing and using these instruments. KiM is supporting the design of the steering mechanism, determining the new information needs and translating these into modelling criteria by providing knowledge at the table for various ongoing projects within DGB.

DGB Strategy Unit
Knowledge at the Table, DM1107, large, ongoing

Model development for MLT
In 2010 KiM published its first Medium Term Outlook (MLT 2011–2015), which was enthusiastically received within the ministry. The Executive Board proposed that the report should be produced more often and improved by introducing spatial differentiation and including more information on the relation between mobility and congestion. The aim of this project is to make the available forecasting methods suitable for obtaining the desired spatial differentiation and in-depth analyses. An assessment of the broad effects of policy instruments may be added if required, possibly by drawing on improvements already made to the ministry's more powerful models (NRM/LMS). In 2012 several improvements were made to the model concerning the relation between mobility and congestion. A broader range of improvements to update the model are planned for 2013. At the same time, KiM will look into possibilities for improving the available aviation and freight transport forecasting models.

DGB Roads and Traffic Safety
Knowledge at the Table, DM1303, small, first quarter

Modelling journey time reliability
For some time it has been known that road users are severely inconvenienced by the unreliability of journey times caused by to fluctuations in journey times and the risk of excessive travel times (e.g. because the network is not robust enough). We can therefore expect great benefits from improving journey time reliability. In 2012 KiM completed a study into the valuation of journey time unreliability. To be able to determine the benefits of potential improvement measures, current information on the valuation of journey time unreliability has to be supplemented with an understanding of future trends in journey time reliability. However, the transport and traffic models used by the ministry do not yet have the capacity to provide the required information. Under the BOA agreements (Policy support and advice, Beleidsondersteuning en advies (BOA)), DGB Roads and Traffic Safety has asked Rijkswaterstaat Centre for Transport and Navigation (RWS-DVS) to adapt the modelling tools so that they are capable of delivering this output. KiM is providing input to this project (steering committee) that draws on the available expertise on the valuation of journey time reliability and the modelling tools.

Global description of small knowledge-at-the-table activities

KiM regularly carries out small knowledge-at-the-table activities related to this topic. The emphasis in these activities is on answering questions about the content and nature of existing national and international models and participating in steering groups on model development and application projects within the ministry.

4.4
Project overview table

Department	Title	Project Number	Project Type	Start	Size
DGB Civil Aviation Department	Factsheet aviation data	E928	Research project	Ongoing	Small
DGB Strategy Unit	Mobility Research Panel	DM1102	Research project	Ongoing	Large
DGB Strategy Unit	Support for operationalising the SVIR accessibility indicator	DM1301	Knowledge at the Table	First quarter	Medium
DGB Strategy Unit	Contribution to the Infrastructure and Spatial Planning Monitor	DM1113	Knowledge at the Table	Ongoing	Medium
DGB Strategy Unit	IenM needs for data collection regarding mobility and accessibility	DM1101	Research project / Knowledge at the Table	Ongoing	Medium
DGB Maritime Affairs	Possible integration of Maritime Monitors	DM1205	Knowledge at the Table	Ongoing	Medium
DGB Civil Aviation Department	Information on international travel behaviour of Dutch nationals and travel behaviour of foreign nationals in the Netherlands	DM1302	Knowledge at the Table	Third quarter	Small
DGB Strategy Unit	Support for the development of Integration and Governance Models	DM1106	Knowledge at the Table	Ongoing	Medium
DGB Strategy Unit	Model development for MLT	DM1107	Research project	Ongoing	Large
DGB Roads and Traffic Safety	Modelling journey time reliability	DM1303	Knowledge at the Table	Ongoing	Small

5 Social Importance, the Role of Government and Market Organisation

5.1 Explanation of the core theme

The coalition agreement of Prime Minister Mark Rutte's second government talks of the critical importance of infrastructure and accessibility for the Dutch economy. The government will promote the development of the mainports of Schiphol and Rotterdam because of their vital importance to the Dutch economy. They will be given more room to grow, with a continual focus on providing a good living and working environment. The coalition agreement also emphasises a compact, strong and service-oriented government, which requires a clear demarcation of tasks and responsibilities.

These themes from the coalition agreement have increasingly come under the spotlight over recent years and this has led to an increase in the number of research questions to KiM in this area. How important are mobility and transport? Are they only important for the economy, or is there also a social and cultural component? What is the function of the major transport hubs, such as the mainports? To what extent should government facilitate their functioning and what can better be left to market players? What instruments does government have at its disposal? How can the government bring about an effective and efficient market organisation? And how can the public sector's roles and tasks be allocated astutely across the various tiers of government?

This core theme addresses this broad pallet of questions and is broken down into the following topic areas:
– The social importance of mobility and transport, and especially of the mainports;
– The role of government and market organisation;
– Relations between the tiers of government.

The recent dialogue with the policy directorates has led to the formulation of a number of research questions on these three topic areas. The following sections show per topic which concrete projects (research projects and Knowledge at the Table) KiM will be undertaking in 2013 to provide answers to these research questions.

5.2 The social importance of mobility and transport, and especially of the mainports

The key question in this topic is how we can provide reliable quantitative evidence of the importance of mobility, transport and infrastructure to the social and economic development of the Netherlands. The approach we take adheres as far as possible to the broad concept of welfare that is widely used in the field of welfare economics, supplemented with the cultural dimension. Subtopics are the relation between accessibility and economic

growth, the importance of the mobility and transport sector (and subsectors) to the economy, the importance of mobility broken down by motive (travel to work, business, social/recreational) and the functioning and importance of mainports, brainports and greenports.

Projects

DGB Strategy Unit
Research project, BM1101, medium, ongoing

The social, economic and cultural importance of mobility
The importance of mobility and transport to society is not easy to determine, with approaches ranging from 'without transport everything grinds to a halt' to 'the importance of mobility and transport is limited because they serve other activities'. The annual Mobility Reports contain quantitative estimates of the travel expenses and journey times individuals and businesses are prepared to invest in mobility and transport. This project examines other possible approaches that take account not only of the economic significance but also the social and cultural significance of mobility. The various approaches will be discussed with a wide range of experts, after which one or two approaches will be worked up in more detail.

DGB Maritime Affairs
Research project, BM1204, medium, first quarter

Relation between the Dutch fleet and the maritime cluster
One of the reasons for maintaining a merchant fleet under the Dutch flag is its relation with the maritime cluster in the Netherlands. Research conducted several years ago described and quantified this relation. An update of this research is required to support the evaluation of the fleet policy in 2013.

DGB Maritime Affairs
Knowledge at the Table, MM1301, small, ongoing

Factors determining the competitiveness of Dutch seaports
DGB Maritime Affairs wants to identify and describe the factors influencing the decisions made by companies on which port to locate in. This project is an update of a research study carried out in 2007. KiM will play a facilitating role.

DGB Maritime Affairs
Knowledge at the Table, MM1302, small, ongoing

Steering for added value
How can the government steer developments in the seaports to raise their added value and what are the consequences of investing in added value? DGB Maritime Affairs will contract the research into these questions to an external consultancy. KiM will have a supervisory role. The research may also examine the level playing field for seaports and port industry in North-West Europe.

DGB Maritime Affairs
Knowledge at the Table, BM1106, small, ongoing

Research studies for Ports Alliance
Over the past year various studies have been carried out for the Ports Alliance on topics including goods flow prognoses and land use. A final study will examine the relation between land use, inland connections and infrastructure. KiM is providing Knowledge at the Table for this final study. These studies may be taken forward by the new seaports association or by DGB Maritime Affairs.

DGB Civil Aviation Department
Knowledge at the Table, BM1203
small, ongoing

The role of Schiphol as a European air freight hub
The databases available at KiM are being mined to obtain information on the role of Schiphol as a European air freight hub. The insights gained will be an important input to policies for air freight, while information derived from the databases can give further empirical substantiation to the Mobility Report and may also help with quantifying and measuring the concept of 'international competitiveness'.

Global description of small knowledge-at-the-table activities

Currently there are no small knowledge-at-the-table activities planned for this topic.

Doctoral research

VU Amsterdam and KiM
Doctoral research, P1201

Transport infrastructure and agglomeration effects
Spatial economic research has shown that companies and employees are generally more productive in agglomerations than elsewhere. Transport infrastructure brings people and companies closer together and thus reinforces these agglomeration effects. The processes involved include non-linear effects, which can lead to additional benefits in an SCBA for transport infrastructure. However, little is known about the size of these extra benefits. The ministry is therefore contributing to a doctoral study at the VU University Amsterdam into the relation between transport infrastructure and agglomerations. In turn, this doctoral research will provide inputs to KiM projects.

5.3
The role of government and market organisation

This topic is about effective and efficient relations between government and the market. How can public interests be safeguarded and what will be the effects of a shift towards more market liberalisation or, alternatively, to more government intervention? How can government make transport markets work better? How can the government steer semi-public and private organisations in such a way that they contribute to meeting government objectives? Apart from the fundamental tasks of government (such as defining ownership rights), the issue here is the degree to which government can operate as implementer, facilitator and regulator. This topic also includes examination of forms of public-private partnerships and financing mechanisms.

Projects

DGB Public Transport and Rail
(other department involved: Finance, Management and Control
Research project, MM1303,
medium, third quarter

System responsibility versus outcome responsibility
The government is fairly regularly called upon to deal with issues for which it is not responsible, or at least not directly responsible. Besides its direct responsibilities for policies and outcomes, the government is also expected to oversee the operation of the system as a whole: have the responsibilities been allocated and fulfilled? The term used to describe this is 'system responsibility'. However, the question is what precisely this system responsibility entails: what can the government be expected to be accountable for, and which instruments does the government have to meet its system responsibility? This project will be carried out through case studies in various policy areas for which the ministry is responsible.

DGB Public Transport and Rail Research project, MO1201, medium, third quarter

Increasing market responsiveness of public transport
Central government may be able to make public transport more responsive to the needs of the customer by removing constraints and barriers and by taking measures to facilitate a more market-oriented approach. What measures will be most effective in this transition from a supply-led to a demand-led system? What are the main obstacles that have to be removed in densely populated areas, especially on the transport and real estate markets? What opportunities are there in sparsely populated areas to integrate public transport with contract transport? Answers to these questions can make an important contribution to meeting this challenge, which is set out in the vision on regional public transport. This project will start after completion of the project 'Quality needs of the modern public transport passenger' (BB1106).

DGRW Regional and Project Development Research project, BM1205, medium, first quarter

Differences between transport hubs
Around some transport/multimodal hubs there is an impetus for new development and at others there is not. The question is what are the underlying causes of these differences and what are the dos and don'ts for government intervention to stimulate these developments. This project builds on the 'Steering transport hubs' project, which was completed in 2012. The results of this project can be used when drawing up the regional agendas and developing policy for re-urbanisation.

DGRW Spatial Development Knowledge at the Table, MM1304, small, third quarter

Voluntary agreements for area development
In area development projects the government often acts as a partner and sets the terms of reference for developments. This regularly leads to formal voluntary agreements, or covenants, as the basis for coalition-forming. KiM will input ideas and help to identify the dos and don'ts for drawing up such covenants.

Global description of small knowledge-at-the-table activities

Within this theme KiM supplies Knowledge at the Table on various subjects, including market organisation in public transport and the design of transport and management franchises.

5.4 Relations between the tiers of government

This topic is about how the division of responsibilities and cooperation between the various tiers of government can be designed to be as effective and efficient as possible. Important lessons can be learned from other countries and from other sectors. The topic covers inter-departmental and inter-authority relations within the Netherlands and the consequences of European transport policies for the Netherlands.

Projects

DGB Public Transport and Rail Research project, MO1293, medium, ongoing

Action plan for monitoring rail decentralisation in Limburg
The minister of infrastructure and the environment has undertaken to set up, with the province of Limburg, a monitoring system to measure the effects of the decentralisation of two local train services. This will be used to examine the practical consequences of several operators running services on the same section of track, involving both competition and decentralisation of operating responsibilities. KiM will draw up an action plan for this monitoring system.

DGRW Spatial Development Knowledge at the Table, MM1305, medium, third quarter

International comparison of spatial planning governance
The policy on decentralising spatial planning set out in the National Policy Strategy for Infrastructure and Spatial Planning (SVIR) is currently being implemented. This must be executed in a way that works in day-to-day practice. Important lessons can be learned from an international comparison of spatial planning governance models. KiM will contribute to this with knowledge-at-the-table input.

Global description of small knowledge-at-the-table activities

Currently there are no small knowledge-at-the-table activities planned for this topic.

5.5 Project overview table

Department	Title	Project Number	Project Type	Start	Size
DGB Strategy Unit	The social, economic and cultural importance of mobility	BM1101	Research project	Ongoing	Medium
DGB Maritime Affairs	Relation between the Dutch fleet and the maritime cluster	BM1204	Research project	Ongoing	Medium
DGB Maritime Affairs	Factors determining competitiveness of Dutch seaports	MM1301	Knowledge at the Table	Ongoing	Small
DGB Maritime Affairs	Steering for added value	MM1302	Knowledge at the Table	Ongoing	Small
DGB Maritime Affairs	Research studies for Ports Alliance	BM1106	Knowledge at the Table	Ongoing	Small
DGB Civil Aviation Department	The role of Schiphol as a European air freight hub	BM1203	Knowledge at the Table	Ongoing	Small
VU Amsterdam and KiM	Transport infrastructure and agglomeration effects	P1201	Doctoral research	Ongoing	
DGB Public Transport and Rail (and Finance, Management and Control)	System responsibility versus outcome responsibility	MM1303	Research project	Third quarter	Medium
DGB Public Transport and Rail	Increasing market responsiveness of public transport	MO1201	Research project	Third quarter	Large
DGRW Regional and Project Development	Differences between transport hubs	BM1205	Research project	First quarter	Medium
DGRW Spatial Development	Voluntary agreements for area development	MM1304	Knowledge at the Table	Third quarter	Small
DGB Public Transport and Rail	Action plan for monitoring rail decentralisation in Limburg	MO1293	Research project	Ongoing	Medium
DGRW Spatial Development	International comparison of spatial planning governance	MM1305	Knowledge at the Table	Third quarter	Medium

6 Policy Evaluations and Assessment Frameworks

6.1 Explanation of the core theme

This core theme focuses on ex ante and ex post evaluations of mobility policy and the assessment frameworks required for these evaluations. What are the most effective and efficient policy options for solving problems and exploiting opportunities?

Identifying effective and efficient policy options has been part of KiM's core business since its establishment. In the current climate of budget cuts, arguments for proceeding with infrastructure projects and deploying policy instruments are subject to more critical scrutiny. This underlines the need for transparent assessment frameworks that give extra weight to efficiency and effectiveness.

Social cost-benefit analysis (SCBA) is an important assessment method in the field of infrastructure and spatial planning. This is further underlined in the coalition agreement of Prime Minister Rutte's second government. However, SCBA is itself under scrutiny because sometimes too much emphasis is placed on the final balance of costs and benefits and because of questions about the capacity of SCBA to indicate actual progress towards achieving specific policy objectives. These issues require express attention within this core theme.

Four topics are central to this core theme:
- Developing and broadening methodology;
- Improving the uptake of insights from assessment frameworks;
- Learning from ex post evaluations;
- Implementing and reviewing evaluations.

The recent dialogue with the policy directorates has led to the formulation of a number of research questions on these four topic areas. The following sections show per topic which concrete projects (research projects and Knowledge at the Table) KiM will be undertaking in 2013 to provide answers to these research questions.

6.2 Developing and broadening ex ante evaluation methodology

KiM's methodological development work is primarily concerned with the questions surrounding cost-benefit analysis. Despite the fact that the OEI method for infrastructure impact assessment has been used for more than ten years, various aspects are still subject to development. These relate to broadening the applicability of the instrument (for example to area-based projects and to management and maintenance decisions) and to accommodating the latest insights into the types of effects generated by mobility projects (for example,

reliability benefits). Besides methodological development, we aim to devote more attention to examining the position of SCBA within the full range of policy analysis methods.

Projects

DGRW Regional and Project Development
Research project, EA1301, large, first quarter

Adaptive policy
The aim of this project is to identify and describe the opportunities, risks and methods of adaptive policy. The focus is on the possibilities for using adaptive policy for planning projects in the Multi-annual Programme for Infrastructure, Spatial Development and Transport (MIRT) and the regional agendas. Lessons can be learned from examples of the use of adaptive policy in other sectors and countries. The administrative aspects of adaptive policy will be given special attention. This project also examines the use of scenarios for adaptive policy and the methods for instrumentalising adaptive policy, such as the real option theory in relation to SCBA. Within KiM there are important areas of common ground with core themes 1 (scenarios), 3 (transition to sustainable mobility), 4 (model development) and 5 (administrative aspects).

DGB Infrastructure Efficiency Programme
Knowledge at the Table, EA1217, small, ongoing

SCBA and innovative projects
The effects of innovative projects are often uncertain. As the costs and benefits of these projects are uncertain, it is particularly difficult to evaluate them using SCBA. In this project KiM is exploring the possibilities for assessing these projects using the SCBA methodology in a balanced and consistent manner.

Finance, Management and Control
Knowledge at the Table, EA1218, small, ongoing

Open space in SCBAs
Maintaining open space is often a politically and socially important consideration when coming to decision on investments in infrastructure projects. In this project KiM is exploring how open space is currently treated in SCBAs and how the valuation of open space in SCBAs can be better aligned with social preferences.

DGB Public Transport and Rail
Knowledge at the Table, EA1302, medium, first quarter

Assessment framework for optimising the rail transport system
There is a growing demand for an assessment framework for optimising the rail transport system. This should involve comparing various options for organising the rail transport system in such a way that diverse aspects, such as maximising the satisfaction of customers' wishes, capacity utilisation, safety issues and environmental impacts, can be weighed against each other and optimised. KiM will investigate the possibilities for such an assessment framework and work up proposals.

Finance, Management and Control (other directorates involved: DGB, DGRW, DGMI, RWS)
Knowledge at the Table, EA1102, medium, ongoing

Various supra-project questions on SCBA methodology
When cost-benefit analyses are conducted, questions arise that are not limited to one particular project and for which an appropriate and consistent solution must be found, in consultation with relevant parties such as the Netherlands Bureau for Economic Policy Analysis (CPB), PBL Environmental Assessment Agency and Rijkswaterstaat Centre for Transport and Navigation (RWS-DVS). Work on this project in 2013 may cover topics such as the shadow price of CO_2 and the size of the discount rate and the risk markup of irreversible effects.

Global description of small knowledge-at-the-table activities

Currently there are no small knowledge-at-the-table activities planned for this topic.

6.3 Improving the uptake of insights from assessment frameworks

At least as important as developing new knowledge is making sure that the insights gained by the research community are actually taken up by the ministry's policy officers. KiM pays a pivotal role in making knowledge about SCBAs and other assessment frameworks ready for use and aspires to continue in this role in future. This includes explaining in understandable terms how SCBA works as well as presenting and communicating the results of SCBAs of specific projects and programmes.

Concrete projects

Finance, Management and Control (other directorates involved: DGB, DGRW, DGMI)
Knowledge at the Table, E712, medium, ongoing

Communicating OEI and SCBA

KiM is jointly responsible for providing information about OEI and SCBA. Its tasks are:

- preparing and coordinating the production of new cross-departmental guidance document on SCBA;
- participating in the SCBA Development Agenda programme team;
- updating and coordinating information on OEI and SCBA on the central government website;
- making information on OEI available for presentations and reports and contributing to conferences and courses;
- running the secretariat of the inter-departmental OEI core team.

Global description of small knowledge-at-the-table activities

Within this topic, small knowledge-at-the-table activities often consist of contributions to projects by other knowledge institutes and the policy assessment agencies.

6.4 Learning from ex post evaluations

In recent years KiM has gained experience with ex post evaluations. Considerable ex ante evaluation research has been conducted for infrastructure projects, in stark contrast to the more limited use currently being made of ex post evaluations. Nevertheless, ex post evaluations of infrastructure projects have some important advantages. Learning from the past can improve the quality of future ex ante evaluations, and therefore the quality of decision making. Moreover, ex post studies and meta-evaluations can provide information of wider significance by revealing which policies have been successful and under what circumstances, and which policies have not.

As part of this theme, KiM provides second opinions on policy screenings included in the central government budget and conducted by third parties.

Projects

Commissioning department(s) not yet known
Research project, EA1206, medium, third quarter

Learning from ex post evaluations
There is clear support for the selective use of ex post evaluations covering several projects, programmes or measures: the 'kebab skewer approach'. This approach could be used, for example, to asses the effects of subsidy schemes. The purpose of such exercises is to improve the learning capacity within the ministry. It is a sign of strength to review the outcomes of several projects with a common theme to see whether something has worked or not – and in this time of spending cuts, to save time and money. Learning from evaluations occurs at the meta level, across several departments within the ministry or across several topics.

DGRW Spatial Development
Research project, EA1303, medium, third quarter

Ex post evaluation in the SCBA development agenda
Under the supervision of the Directorate-General for Spatial Development and Water Affairs (DGRW) a number of ex post evaluations (case studies) will be commissioned as part of the SCBA development agenda. Depending on the chosen topics, KiM can undertake one of these ex post evaluations.

Global description of small knowledge-at-the-table activities

On request, KiM can provide second opinions on policy screenings included in the central government budget.

6.5 Implementing and reviewing evaluations

As well as conducting ex ante evaluations of concrete policy instruments, KiM gives second opinions on SCBAs, takes part in the supervision of SCBAs and advises the policy directorates on the implementation of SCBAs and the role of SCBA in the decision-making process.

Projects

DGB Civil Aviation Department
Research project, EA1304, medium, first quarter

Market-based measures for civil aviation emissions
The ICAO is developing three models for market-based measures in the civil aviation industry. These could be an alternative to the current civil aviation component of the EU Emissions Trading Scheme. To support the formulation of the Dutch government's position on this, KiM will assess the effects of these three models on the competitive position of the Netherlands, the Dutch aviation sector, consumers and the environment.

DGB Maritime Affairs
Research project, EA1214, medium, ongoing

Market-based measures for CO_2 reduction in maritime shipping
Market-based measures for reducing CO_2 emission are currently being considered by IMO, the UN organisation for the global maritime shipping industry, and by the EU. Market-based measures (MBMs) are measures that allow flexibility in the way CO_2 emissions reduction are achieved, such as emissions trading, carbon taxes and carbon offsetting (compensating for CO_2 emissions in the maritime sector with reductions in another sector).

This research will investigate the distinguishing features of available systems, the aspects or consequences of the MBMs for the Netherlands that are of potential importance, the 'levers' they provide and the steering mechanisms they offer, and the risks (and opportunities) associated with each system that may lead to unexpected consequences and how these risks can be managed.

Directorate-General for Mobility and Transport

Supervision and second opinions on SCBAs (as currently planned):
- **Supervision of SCBA sea access IJmuiden** (DGB Maritime Affairs, Knowledge at the Table, E1012, small, ongoing)
- **Supervision of SCBA canal zone Gent-Terneuzen** (DGB Maritime Affairs, Knowledge at the Table, E1012, small, ongoing)

Finance, Management and Control Knowledge at the Table, EA1209, small, ongoing

Indicators in the new budget system
Work is progressing within the ministry on filling in the details of the new budget system ('responsible budgeting'). The further development of the set of key figures and indicators requires particular attention. KiM is looking into this and making suggestions.

Global description of small knowledge-at-the-table activities

Within this topic, small knowledge-at-the-table activities often consist of contributions to projects by other knowledge institutes and the policy assessment agencies, such as the PBL project on identifying the best instruments to use for specific objectives.

6.6 Project overview table

Department	Title	Project Number	Project Type	Start	Size
DGRW Regional and Project Development	Adaptive policy	EA1301	Research project	First quarter	Large
DGB Infrastructure Efficiency Programme	SCBA and innovative projects	EA1217	Knowledge at the Table	Ongoing	Small
Finance, Management and Control	Open space in SCBAs	EA1218	Knowledge at the Table	Ongoing	Small
DGB Public Transport and Rail	Assessment framework for optimising the rail transport system	EA1302	Knowledge at the Table	First quarter	Medium
Finance, Management and Control	Various supra-project questions on SCBA methodology	EA1102	Knowledge at the Table	Ongoing	Medium
Finance, Management and Control	Communicating OEI and SCBA	E712	Knowledge at the Table	Ongoing	Medium
To be determined	Learning from ex post evaluations	EA1206	Research project	Third quarter	Medium
DGRW Spatial Development	Ex post evaluation in the SCBA development agenda	EA1303	Research project	Third quarter	Medium
DGB Civil Aviation Department	Market-based measures for civil aviation emissions	EA1304	Research project	First quarter	Medium
DGB Maritime Affairs	Market-based measures for CO_2 reduction in maritime shipping	EA1214	Research project	Ongoing	Medium
DGB Maritime Affairs	Supervision of SCBA sea access IJmuiden	E1012	Knowledge at the Table	Ongoing	Small
DGB Maritime Affairs	Supervision of SCBA canal zone Gent-Terneuzen	E1012	Knowledge at the Table	Ongoing	Small
Finance, Management and Control	Indicators in the new budget system	EA1209	Knowledge at the Table	Ongoing	Small

List of abbreviations

CBA	Cost-benefit analysis
CBS	Statistics Netherlands *(Centraal Bureau voor de Statistiek)*
CPB	Netherlands Bureau for Economic Policy Analysis *(Centraal Planbureau)*
DBR	Sustainable Accessibility in the Randstad *(Duurzame Bereikbaarheid van de Randstad)* (NWO research programme)
DGB	Directorate-General for Mobility and Transport *(Directoraat-Generaal Bereikbaarheid)*
DGMI	Directorate-General for the Environment and International Affairs *(Directoraat-Generaal Milieu en Internationaal)*
DGMI UCOS	DGMI Strategy Unit (UCOS) *(Unit Coördinerend Opdrachtgeverschap en Strategie)*
ICAO	International Civil Aviation Organisation
ICT	Information and communication technology
IenM	Ministry of Infrastructure and the Environment *(Ministerie van Infrastructuur en Milieu)*
JTRC	Joint Transport Research Committee
KiM	Netherlands Institute for Transport Policy Analysis *(Kennisinstituut voor Mobiliteitsbeleid)*
LMS	National Model System *(Landelijk Model Systeem)*
MON	Mobility Research Panel *(Mobiliteitsonderzoek Nederland)*
NRM	New Regional Model *(Nieuw Regionaal Model)*
NS	Netherlands Railways *(Nederlandse Spoorwegen)*
OECD	Organisation for Economic Co-operation and Development
OEI	OEI method for infrastructure impact assessment *(Overzicht Effecten Infrastructuur)*
OV	Public transport *(openbaar vervoer)*
OVG	Travel behaviour research *(Onderzoek verplaatsingsgedrag)*
OViN	Journeys in the Netherlands research *(Onderzoek Verplaatsingen in Nederland)*
PBL	Netherlands Environmental Assessment Agency *(Planbureau voor de Leefomgeving)*
RWS-DID	Rijkswaterstaat Centre for Data and ICT *(Data-ICT-Dienst)*
RWS-DVS	Rijkswaterstaat Centre for Transport and Navigation *(Dienst Verkeer en Scheepvaart)*
SCBA	Social cost-benefit analysis
SCP	Netherlands Institute for Social Research *(Sociaal en Cultureel Planbureau)*
SKIA	Strategic Knowledge and Innovation Agenda *(Strategische Kennis- en Innovatieagenda)*
SVIR	National Policy Strategy for Infrastructure and Spatial Planning *(Structuurvisie Infrastructuur en Ruimte)*
TEN-T	Trans-European Transport Network
VerDuS	Connecting Sustainable Cities (NWO research programme)
WLO	Welfare, Prosperity and Quality of the Living Environment *(Welvaart en leefomgeving)*

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