

## **Conceptual Appraisals in the Swedish Transport Sector**

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<http://www.concept.ntnu.no/english/>

**Studies for  
Strategic Choice of  
Measures - a new  
methodology for  
early studies.  
Experiences in  
brief.**

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**TRAFIKVERKET**  
**SWEDISH TRANSPORT ADMINISTRATION**

# Construction of transport infrastructure is expensive - and not the first option!

- Not always the transport sector who is the only problem-owner
- The “needs” are much greater than budgets of long term plans

This presentation is about:

- economising with resources
- finding cheaper, faster solutions
- selecting and prioritizing earlier
- in open dialogue processes
- mainly based on available knowledge and information

# Background

- The Swedish Government initiated commissions for describing a new merged authority + for development of a new planning system for the transport system
- Inspiration from Norwegian "Konceptvalg utredninger" + earlier from "multi modal studies" in UK
- The Swedish Transport Administration was established 2010 with responsibility for long term planning of all four transport modes, + maintenance and construction - for state roads and rail
- A new methodology was developed in 2010 – 2011 for **Strategic Choice of Measures studies (sv.: åtgärdsvalsstudie, ÅVS)**
- The new methodology applied more regularly from 2012

# The aim and benefits of the methodology for SCM-studies

SCM-studies should give a base for a prioritization of efficient solutions within the frame of available economic resources and contribute to the further development of the function of the whole transport system as part of sustainable development.

With SCM-studies we look for smart solutions that give more benefits, greater number of problem-solving (more accessibility etc.) for the money. Dare to think wider! It facilitate that quick and cost-efficient solutions, which contribute to the transport policy goals, more often can be implemented.

The multi-modal perspective and the 4-step principle can be applied more unprejudiced with SCM-studies.

Increased precision and awareness in choice of measures.

# How?

- Involving concerned actors / problem-owners and other stakeholders
- Finding a joint picture of the problems and their reasons
- Identifying and describing usable goals for the problem solving
- Generation alternative approaches by using the 4-step principle
- Sorting out main alternative approaches, assess and evaluate
- Forming recommendations in terms of direction and feasible type of measures,
  - often packages of measures
  - often combinations of type of measures with synergy effects
  - often a combination of short term measures, medium term and sometimes long term measures
  - often several actors responsible for implementing different measures
  - often connection with urban development
  - coordination and collaboration need to continue during implementation

# Characteristics

Problem and need oriented

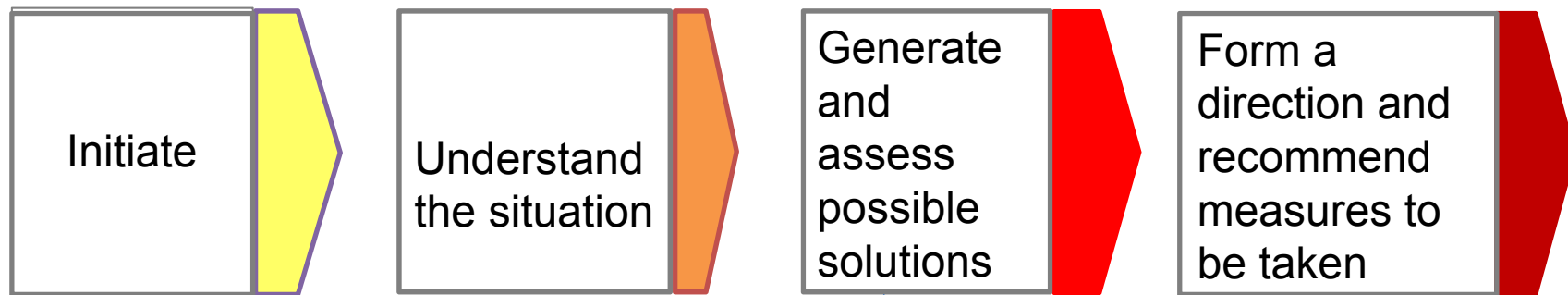
Process oriented

Dialogue oriented

Preparatory - for different kind of planning at project level (depending on type of measures)

# Strategic Choice of Measures studies

- principal methodology according to handbook



The 4-step principle

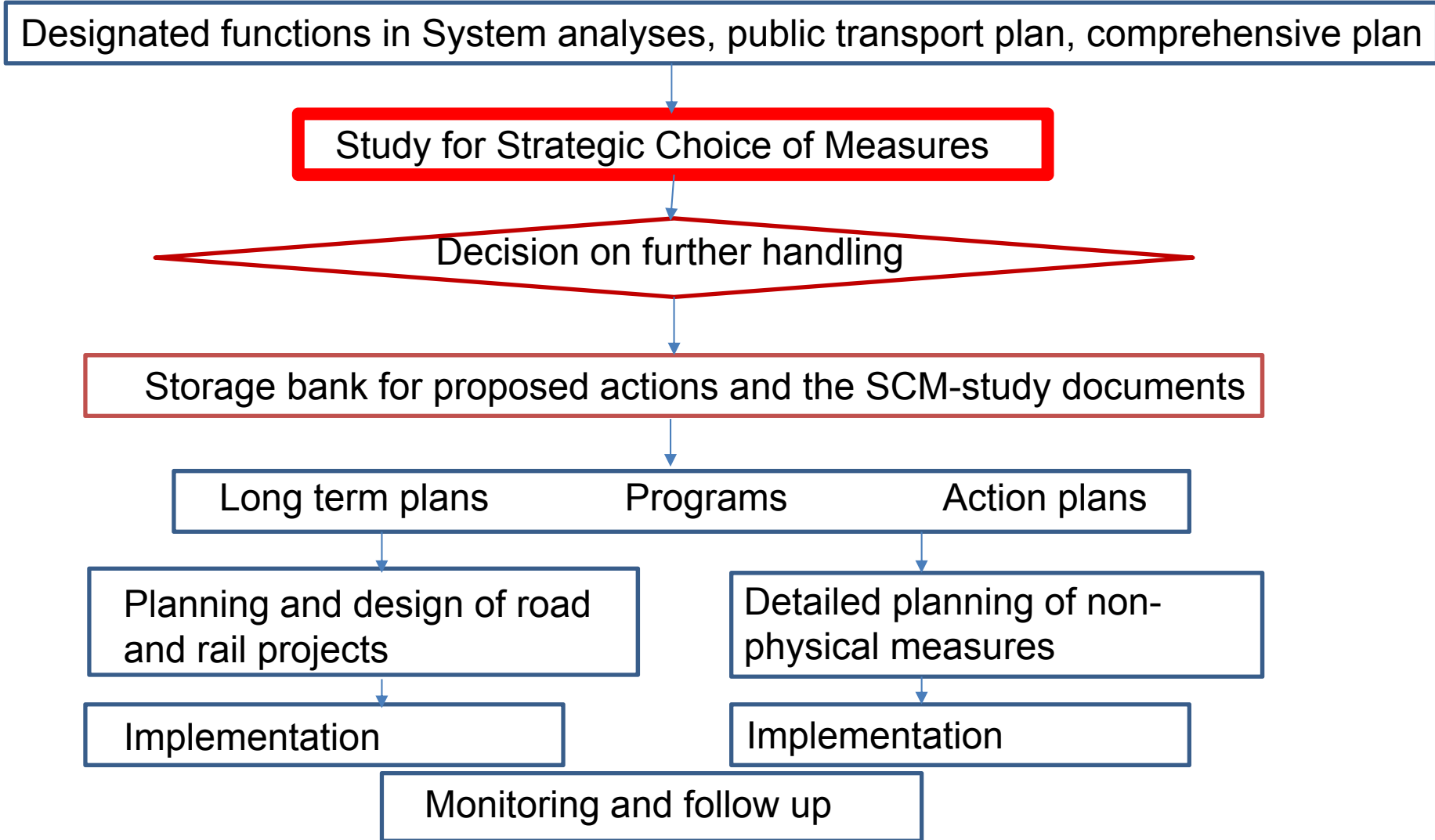
1. Think differently! Demand management
2. Optimize the use!
3. Reconstruct! Improve the existing infrastructure
4. New construction



# The 4-step principle

- Was introduced 15 years ago, at the former Rod Administration and promoted often by the Swedish government.
- Also municipalities have promoted the use of it.
- But it was difficult at project planning for road and rail projects, most of the choice of measures were already done.
- Even initial studies for road projects were too late.
- Long term plans has a program-character, but show now that space can be left for solutions that are not already defined.
- One of the biggest implemented Step-1 measures are the congestion charging (tax) in Stockholm and Göteborg.
- **Strategic Choice of Measures studies is now the place where the 4-step principle most fully can be applied.**

# SCM-studies, **one** piece in the planning system for the transport system



# Stated in government bill 2011/2012:118

## ”planning system for transport infrastructure”

- The formal planning of individual road and rail projects should be preceded by a preparatory study which means an unprejudiced multimodal analysis with application of the ”four step principle”.
- An informal and flexible SCM-study process!
- The government has expressed that these preparatory studies must not develop to something taken in into legislation, with formal procedures
- However a common methodology and common type of document output.

# First evaluation in late 2011

Six "test" cases were used for trying the methodology for SCM-studies. The Swedish Transport Administration engaged KTH, John Odhage, to evaluate the actual process characteristics of the applied methodology.

Two of the cases were delayed and could not be evaluated.

One of the four, Västkuststråket, is an example on a higher geographical level of study covering a long multi-modal transport corridor. This kind of SCM-study will be followed by sub-SCM-studies within the corridor.

Recommendations from Odhage concerned:

- competence issues, quality review, the number of studies – resources, the preparatory character
- how to handle conflicting goals and needs
- anchoring during the process (steering groups) and concerned stakeholders

## In 2012 – a growing number of SCM-studies

Also other actors than the Swedish Transport Administration can initiate a SCM-study.

STA need to prioritize problems and cases to lead and be involved in.

Great power at regional bodies responsible for regional transport plans (regional state roads etc.) and regional public transport plans. They are listing future SCM-studies in their plans which they decide on.

Two categories were defined:

- SCM-study
- simplified SCM-study (simplified report)

**During 2013:** 200 SCM-studies carried out (of different size)

## During 2014 – number of SCM-studies

|                        |                  |
|------------------------|------------------|
| <b>Total</b>           | <b>250 - 300</b> |
| SCM-studies            | 40 %             |
| Simplified SCM-studies | 60 %             |
| STA lead               | 79 %             |
| External lead          | 15 %             |
| Shared lead            | 6 %              |

# Benefits of SCM-studies

- Long term impact on way of thinking, taking responsibility and cooperating (experience declared by actors, spring 2014)
- Innovative solutions?
- More effective measures? (partly covered by coming research)
- Effective processes? (research going on)
- More cost effective type of measures (e.g. the case Kivik in Skåne)
- Mostly proactive
- Sometimes old solutions stays, but sometimes old solutions are replaced by newer, more adequate.
- Facilitate a following more detailed planning phase where they can refer to a study which was a base for why specific measures were selected.

So that planning at project level can focus on relevant issues for that stage.

## Limited steering: Inefficiencies and quality variations => Develop and improve application and competence .....

- Joint handbook STA, Swedish National Board of Housing Building and Planning Swedish Association of Local Authorities and Regions.
- A few joint tools, including a checklist for quality review.
- A formal routine-description within STA, leaving much freedom to the regional offices who are the ones usually responsible for SCM-studies.
- A coordinating and evaluating role of central STA, gathering the contact persons from STA regions (including competence realising activities).
- Improving through common:
  - seminars for consultants and consultant procurement framework negotiation
  - seminars for municipalities, regional actors and others