Differences and Similarities Between Road and Railway Asset Management

Mrs Vivianne Karlsson – Senior Advisor, Swedish Transport Administration
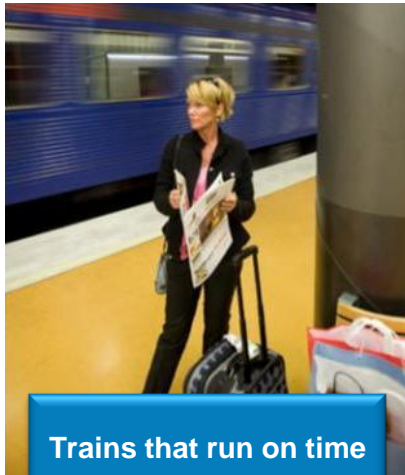**Session I -12.10.2015**

We deliver public service – every single day ...
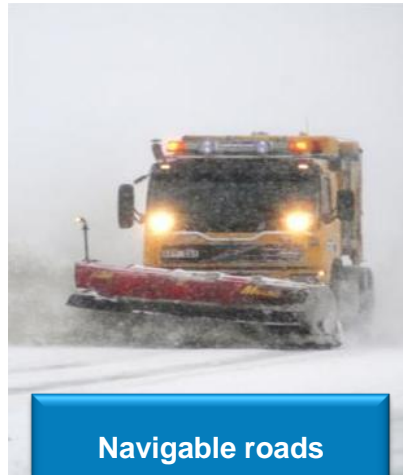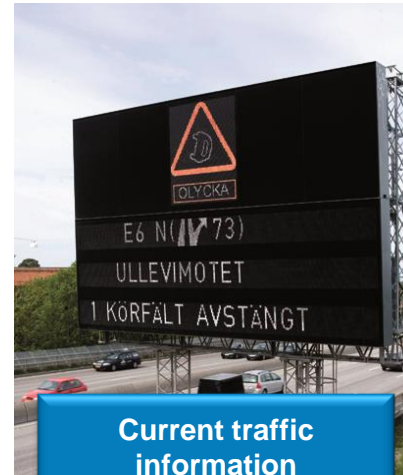
Trains that run on time
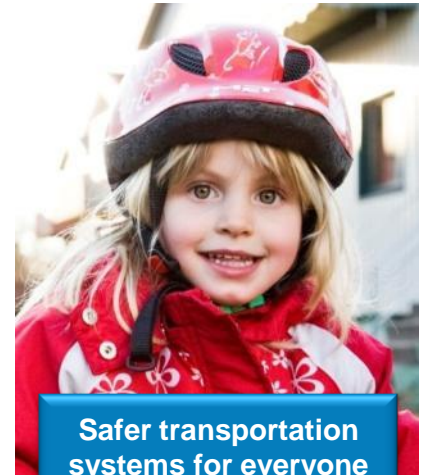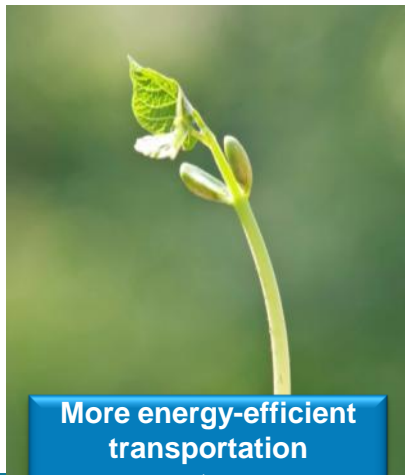
Navigable roads

Current traffic information

Safer transportation systems for everyone

More energy-efficient transportation systems

Infrastructure for people and nature
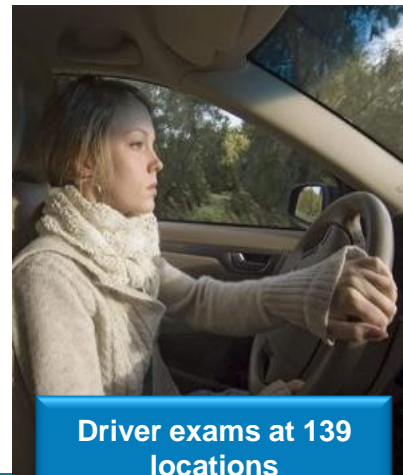
Driver exams at 139 locations

38 ferry routes on sea and inland waterways

Agenda

- The Swedish Transport Administration

- Differences and similarities

- Challenge and absolute necessity

Brief data about the Swedish Transport Administration

The Board

Director General
Lena Erixon

6 300 employees, 150 occupations

Business volume in 2014
SEK 50 000 000 000
Of which

Investments SEK 21,5 billion
O&M and traffic control SEK 19,5 billion
Miscellaneous SEK 9,0 billion

North

Central

West

East   Stockholm

South

General organisation

Board of Directors

Internal Audit

Director-General

Central Functions

Finance and Control	Purchasing and Logistics
Strategic Development	Legal Matters and Plan Review
Human Resources	IT
Communication and Information Management	

Business Areas

Market and Planning | **Traffic Management** | **Maintenance** | **Investment** | **Major Projects** | **Profit Centres**
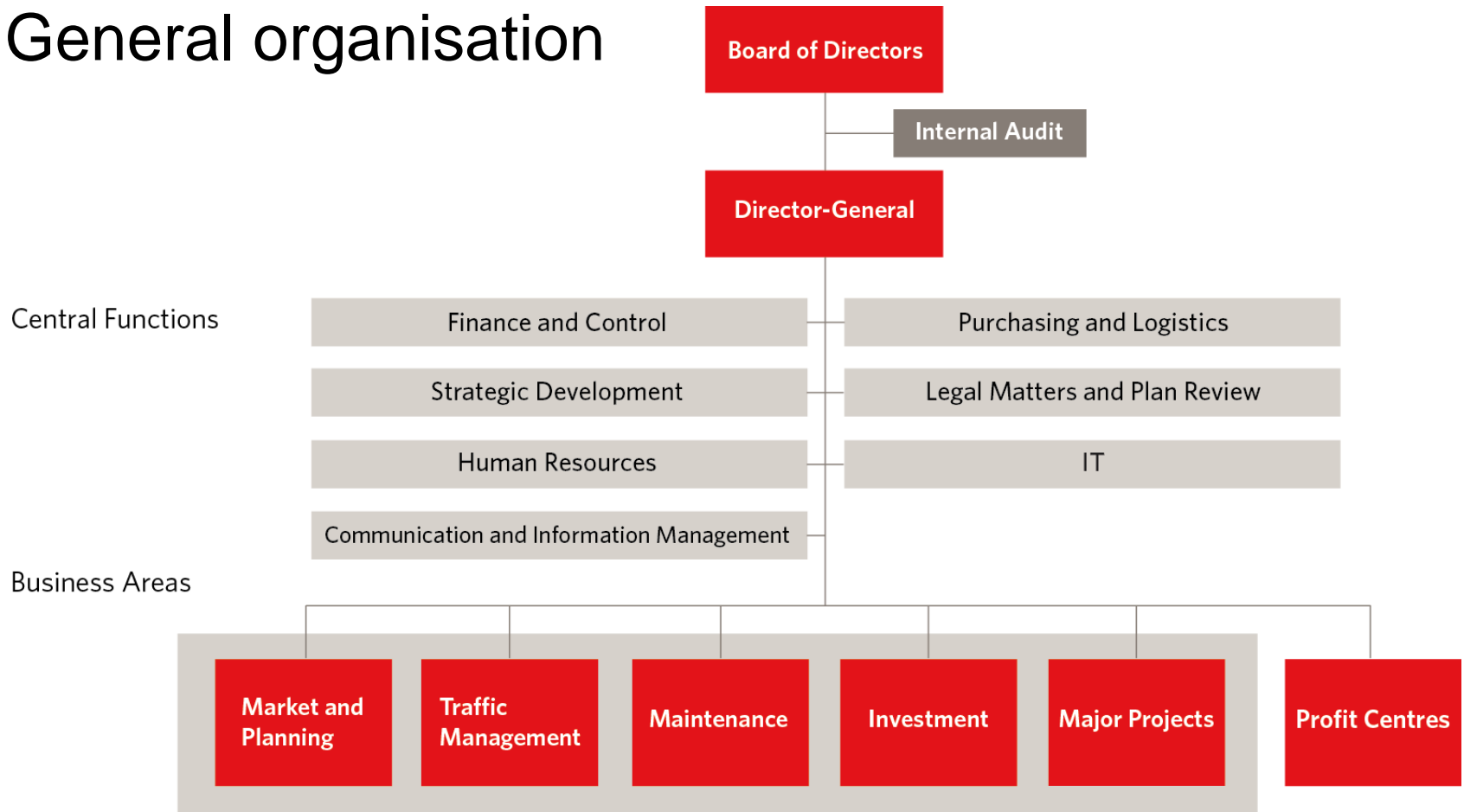
Sweden's roads and railways

Total= 400 000 km roads including private roads etc.

13 000 km of main tracks

76 100 km of private roads with a state subsidy

586 stations for embarking and disembarking

41 ferry lines

16 000 bridges (3 781 railway bridges)

11 400 switches

98 400 km of State roads

41 000 km of municipal streets and roads
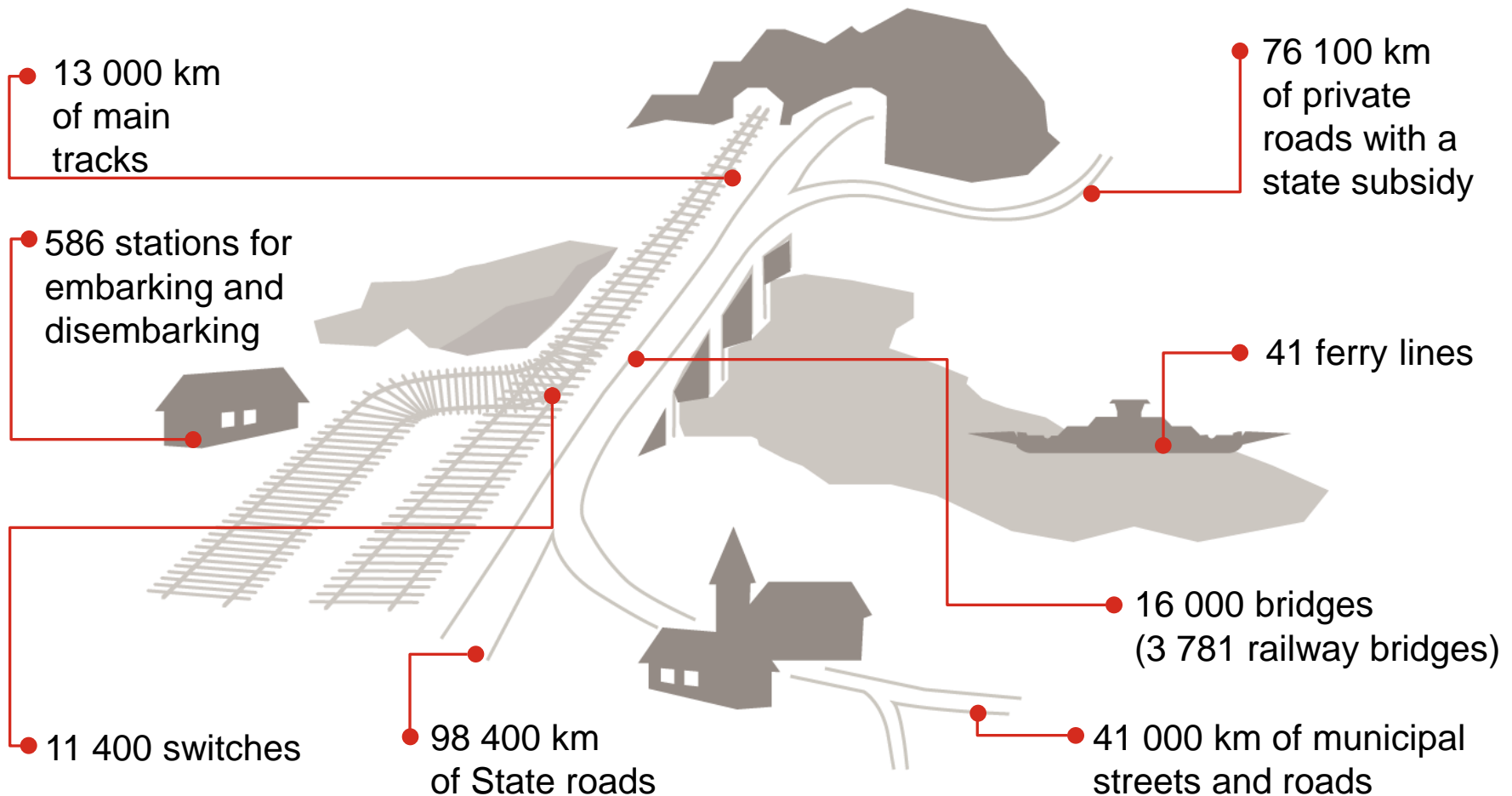
From infrastructure authority
to social developer

Infrastructure

Transportation

Community development

Social development

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The delivery qualities for the Transport system – Relevant for Railways and Roads

Same objectives

Punctuality
- The transport systems ability to fulfil and deliver the planned travel and transport times and the ability to instantly provide correct and useful information during disturbed traffic.

Capacity
- The transport systems ability to handle the requested volume of travel and transport.

Robustness
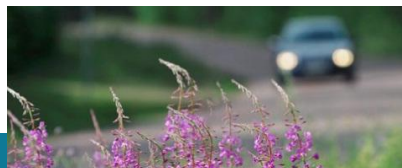- The transport systems ability to prevent and handle incidents that causes disturbed traffic.

Usefulness
- The transport systems ability to satisfy the different customer needs and requests for transport and travel.

Safety
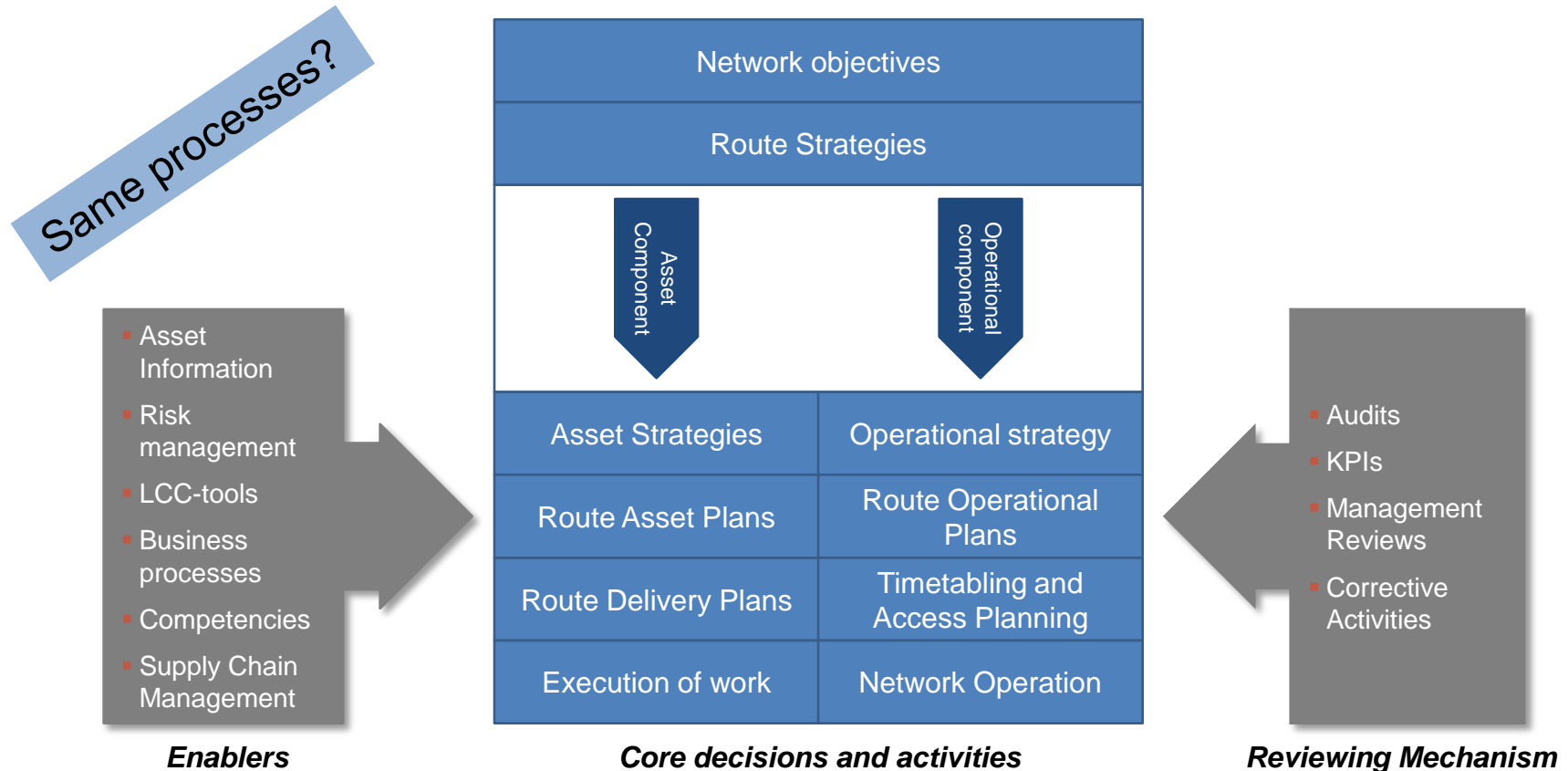- The transport systems ability to minimize the number of fatalities and seriously injured.

Environment and health
- The transport systems ability to minimize the negative impact on and support the positive development of climate, landscape and health.

Asset management Framework

Same processes?

Network objectives
Route Strategies

Asset Component

Operational component

Enablers
- Asset Information
- Risk management
- LCC-tools
- Business processes
- Competencies
- Supply Chain Management

Core decisions and activities

Asset Strategies	Operational strategy
Route Asset Plans	Route Operational Plans
Route Delivery Plans	Timetabling and Access Planning
Execution of work	Network Operation

Reviewing Mechanism
- Audits
- KPIs
- Management Reviews
- Corrective Activities

What is Applicable on Road Asset Management?

Network L -

Probably not the same maturity for road management
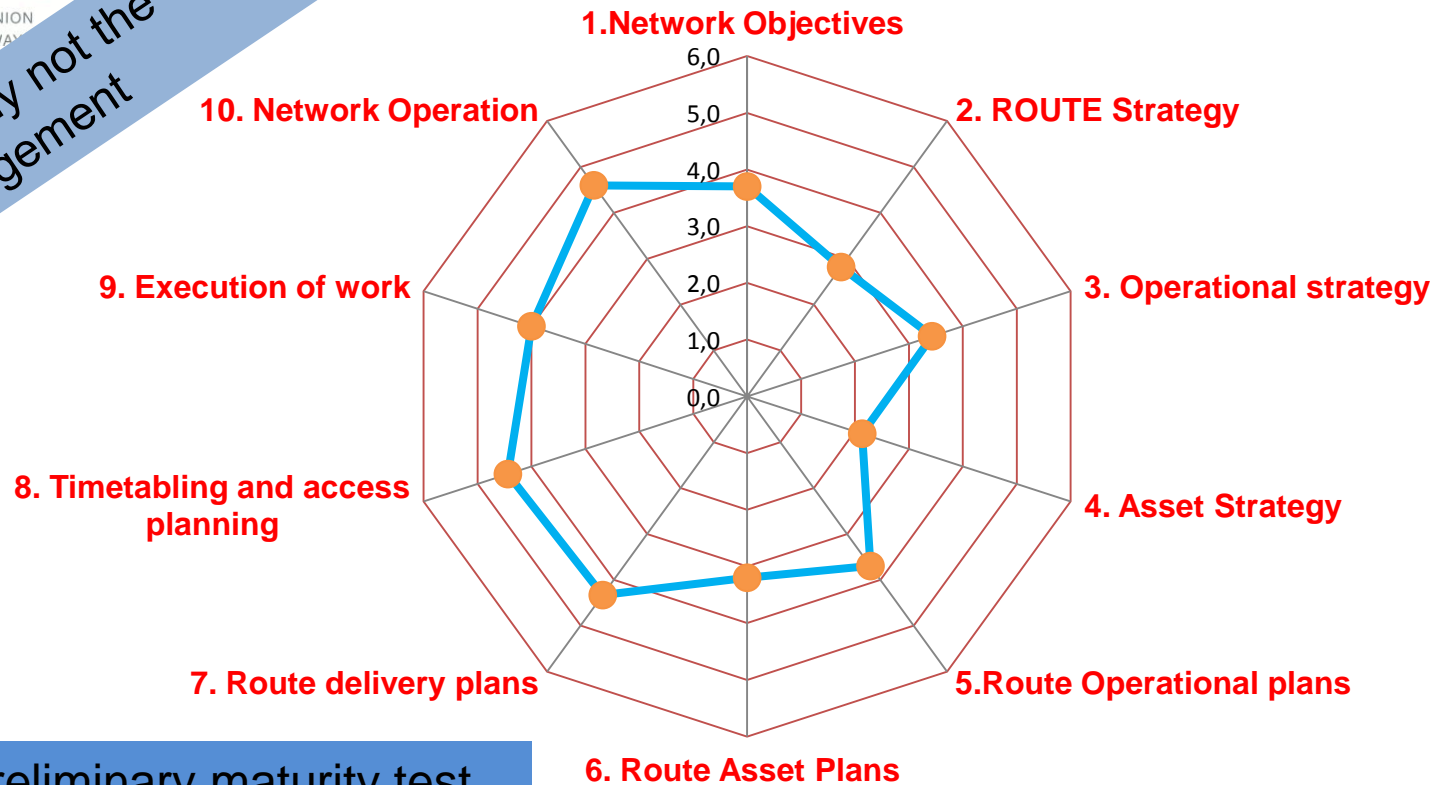
A preliminary maturity test for the Swedish Railway

Same processes

Diagnose for Road Management Capability, oct-dec

Some reflections:

- **Timetabling** (mostly for buses) is a bit different – Higher flexibility, easier to chose another road, but loss of travelling time has the same importance on roads.

- **Capacity** – Most roads doesn´t have capacity problem, exceptions are peak hours in City's, some tunnels – Important, but not the same focus.

- **Asset Structure** – Hierarchies with components, not the same need and therefore not established in the same way as for railways.

- **Possession times** for maintenance and renewal aren´t a big issue today – But it ought to be, loss of travelling time is important.

BUT ALMOST ALL PROCESSES DESCRIBED FOR RAILWAYS IN THE MATURITY TEST ARE RELEVANT FOR ROADS.

Some differences in present Asset Management

Roads

- Travellers have greater acceptance of "delays" (deviations in expected travel time)

- Common route strategies isn´t in place

- Lack of systemic view

- Well established asset strategies and asset management information systems but separated for paved roads, bridges, equipment etc., (with tools for historic analyses and forecasting)

- Rarely prioritisation between asset categories. If costs for snow clearance increase it always comes with less pavement activities.

Railways

- Passengers and operators have high expectations on punctuality

- Common route strategies partly in place

- Systemic view is a necessity

- Combined asset management information systems to handle failures, inspections, asset register etc. but a need for more tools for historic analyses and forecasting and established asset strategies

- Prioritisation between asset categories.

- "

# Decisions makers need alignment and transparency
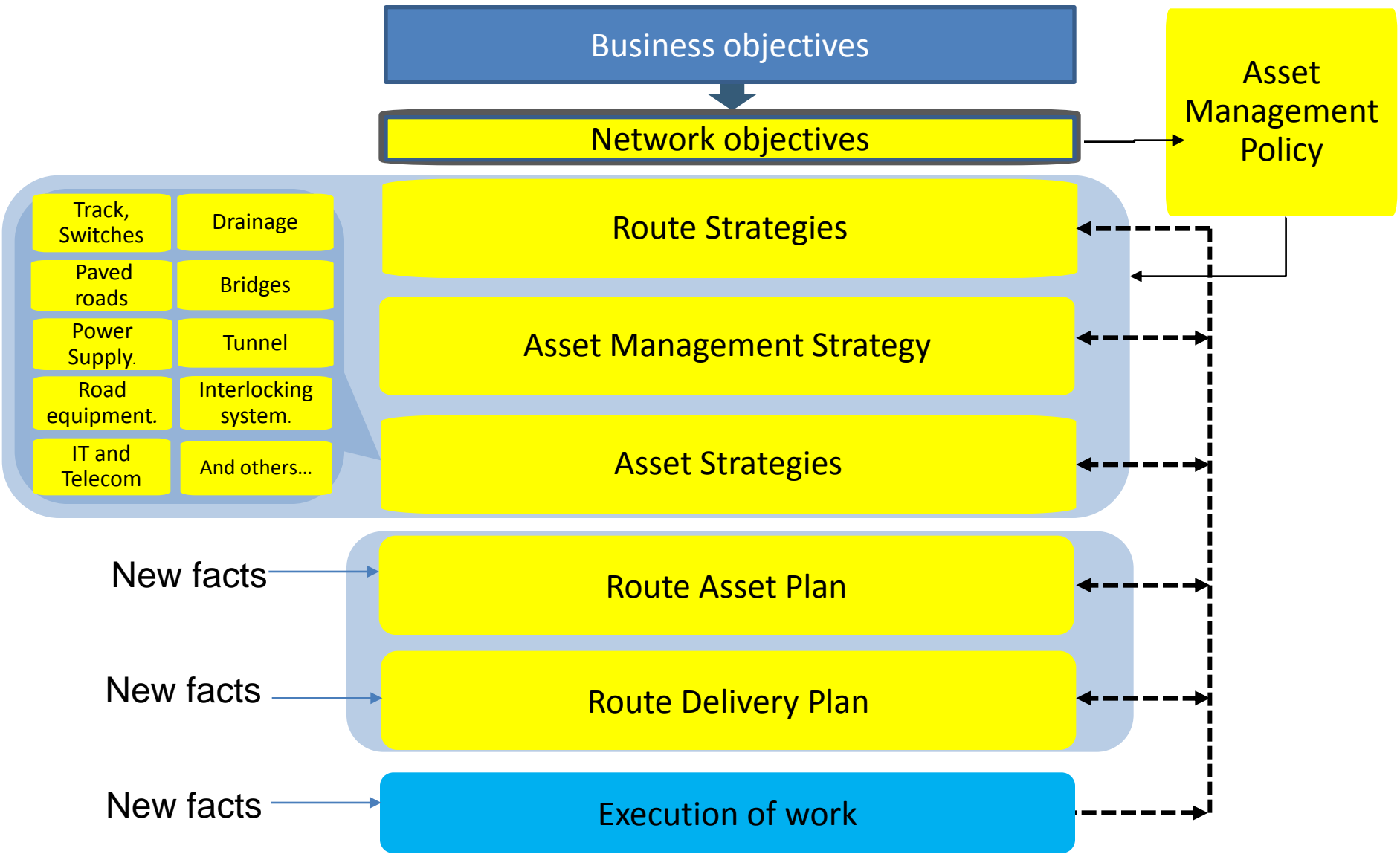
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One of the biggest challenges is:

- a uniform, reliable and efficient information management of the road and railway network, including transport network data, with a durable structure throughout the lifecycle

Today:

- Different and not always compatible information structures
- Different definitions, languages
- Information demands that aren´t aligned
- Lack of history
- Discussions about responsibilities
- Problem with data availability
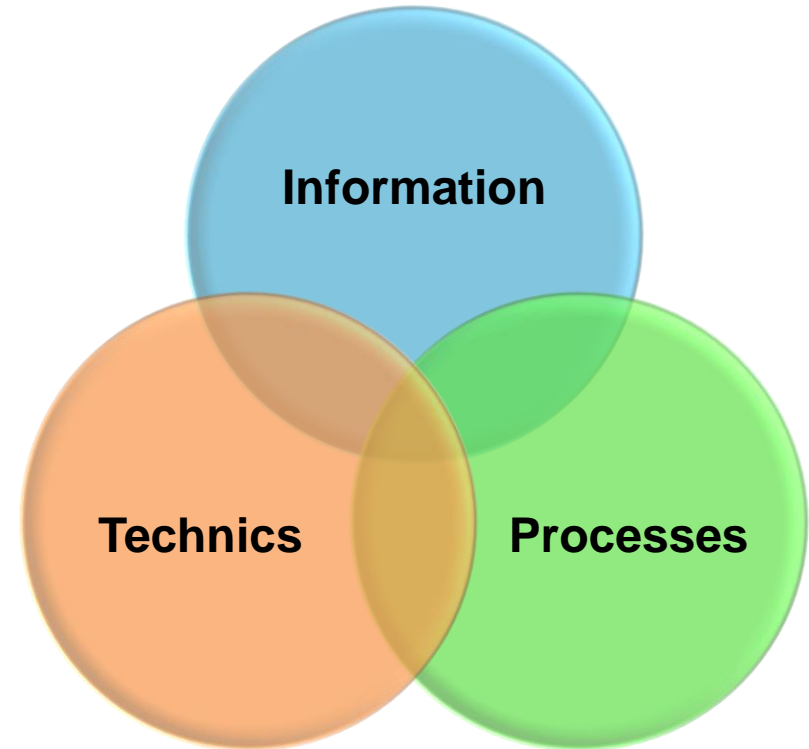
The executives need this to be transparent decision makers

Thanks for your attention