



EQUIPMENT AND OPERATIONAL ASPECTS

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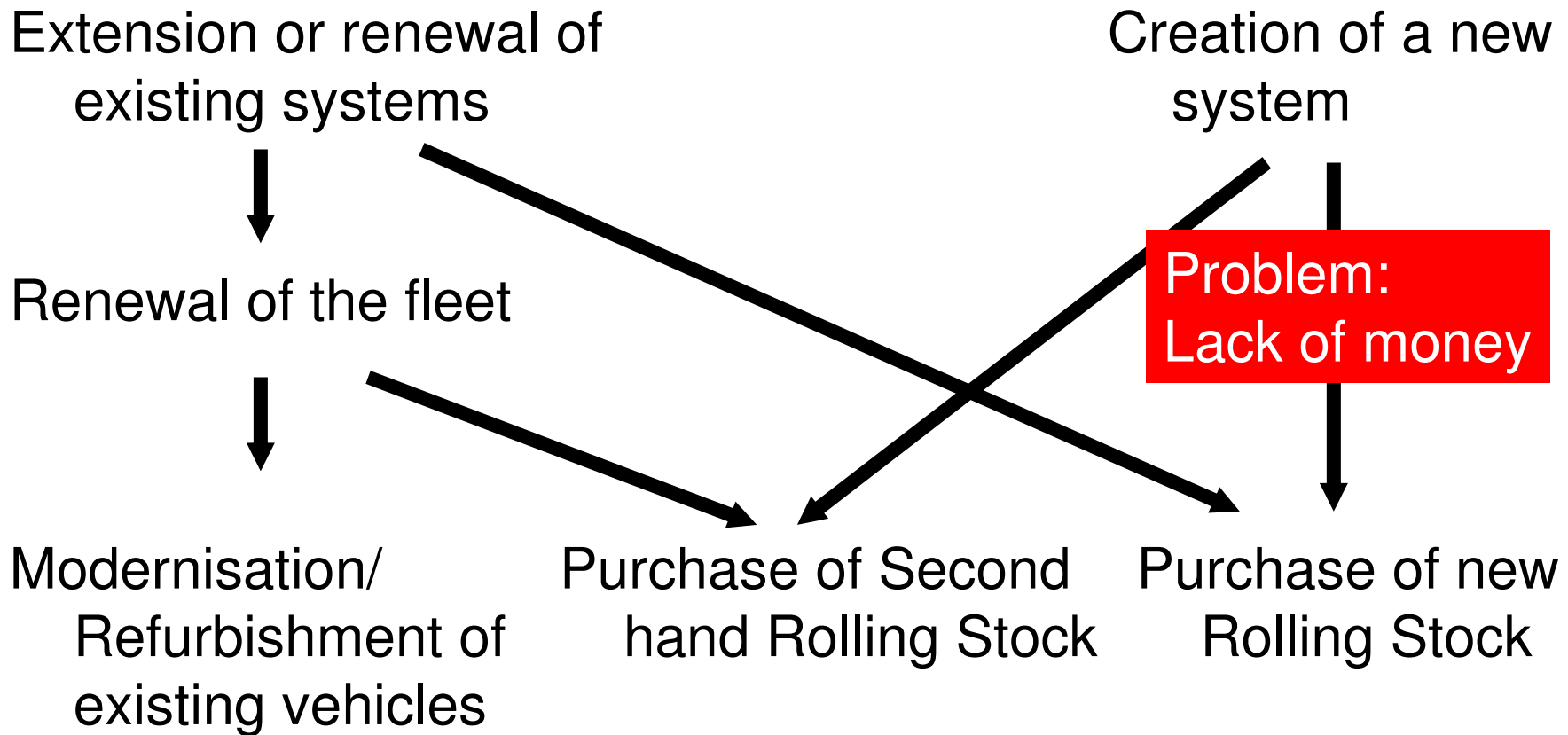
Main Topics

- Priority topic:
Exchange database for Second hand Rolling Stock and Spare Parts
- Additional topic:
Fleet management



Second hand Rolling Stock and Spare Parts

Source: Bettina Hick, MAN Ferrostaal





Second hand Rolling Stock and Spare Parts

Source: Bettina Hick, MAN Ferrostaal, Andreas Schwendemann, Siemens Austria

Extension or renewal of
existing systems

Creation of a new
system

Renewal of the fleet

Modernisation/
Refurbishment of
existing vehicles

Purchase of Second
hand Rolling Stock

Purchase of new
Rolling Stock

Short term goal

Long term goal

Mid term goal



Second hand Rolling Stock and Spare Parts

- **The Golden Rule**

Modernisation of Rolling Stock

follows

Modernisation of Infrastructure



Second hand Rolling Stock and Spare Parts

Source: Andreas Schwendemann, Siemens Austria

- Short term goals (purchase of used cars)
- Mid term goals (refurbishment of cars)
- Long term goals (purchase of new cars)

- Combined with refurbishment of infrastructure
- Combined with development of network
- Combined with marketing and communication
- Combined with branding of Public Transport



Second hand Rolling Stock and Spare Parts

- Short term goals
- Mid term goals
- Long term goals

- Problem even in CEEC many times:
- Not the responsables for company/operation do decide – politicians (majors) do decide!
- That´s a short term problem!!! It doesn´t solve long term goals and long term problems



Second hand Rolling Stock and Spare Parts

- Railbound Rolling Stock (Tram)
Many specific parameters
Necessity of Feasibility
- Busses
Large variety of demand and offer
Interoperability
- Trolley busses
Very exotic mixed form
Diesel busses can be upgraded to Trolleys
Great relevance for CEEC



Second hand Rolling Stock and Spare Parts

Scale of possible solutions

One Dollar solution:
buy-as-you-has-
seen



Turnkey
solution

More Dollars,
less problems



Second hand Rolling Stock and Spare Parts

Elements of turnkey solution

- Feasibility studies
- Procurement/Tendering
- Guarantee
- Spare part supply
- Transport
- Maintenance/Workshop
- Financing/Leasing
- etc.

Security in planning



Fleet Management

- Main objective:
Availability (= Quality)
Vehicles have to be in operation and punctually

We have to offer max quality!

- All other topics are add-ons:
Passenger information system
Ticketing system
Monitoring/Location
etc.