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# How ProRail successfully outsourced maintenance

## *Lessons learned*

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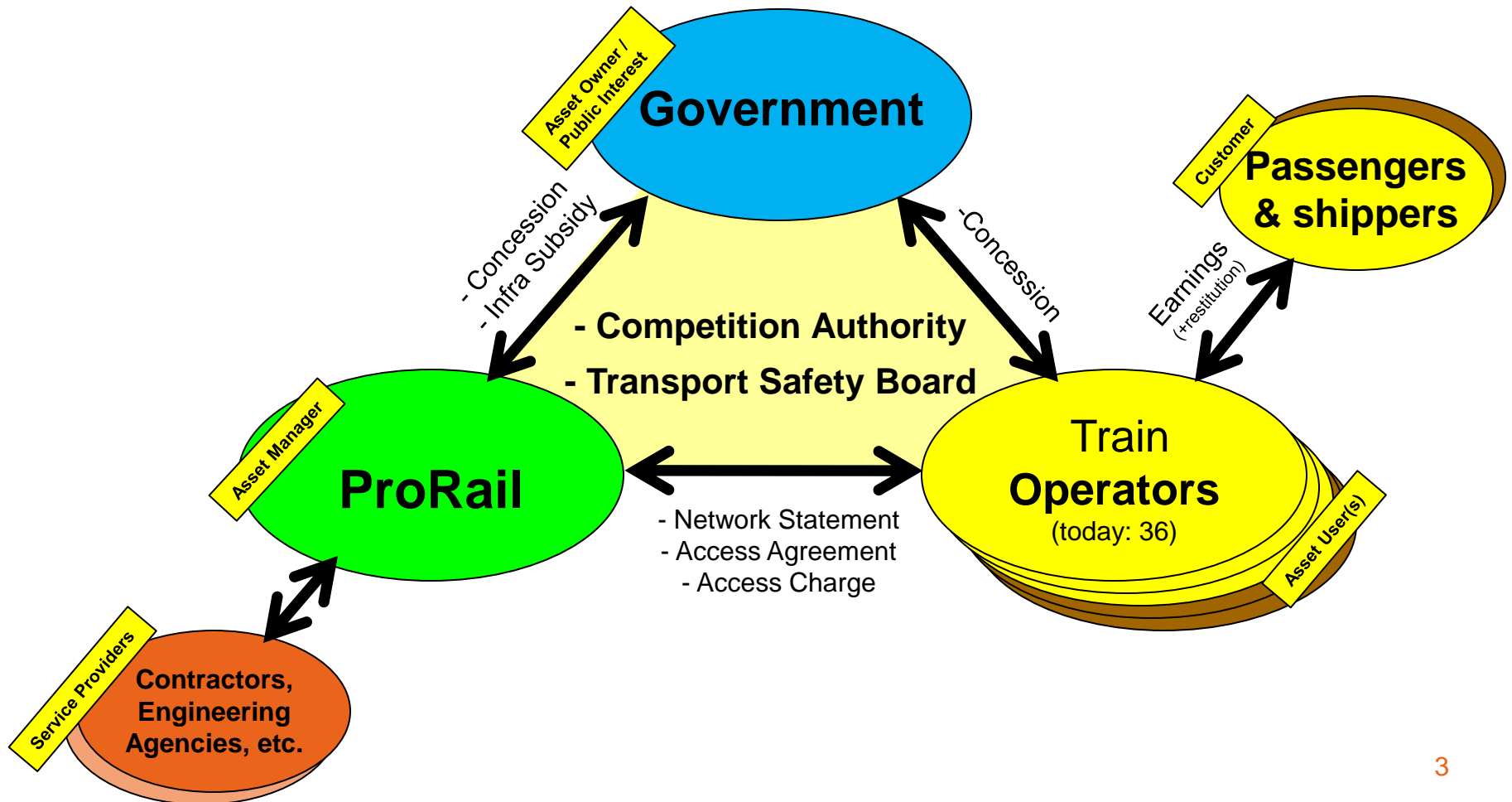
Version 04

## ProRail is the rail asset- and network manager of the Netherlands

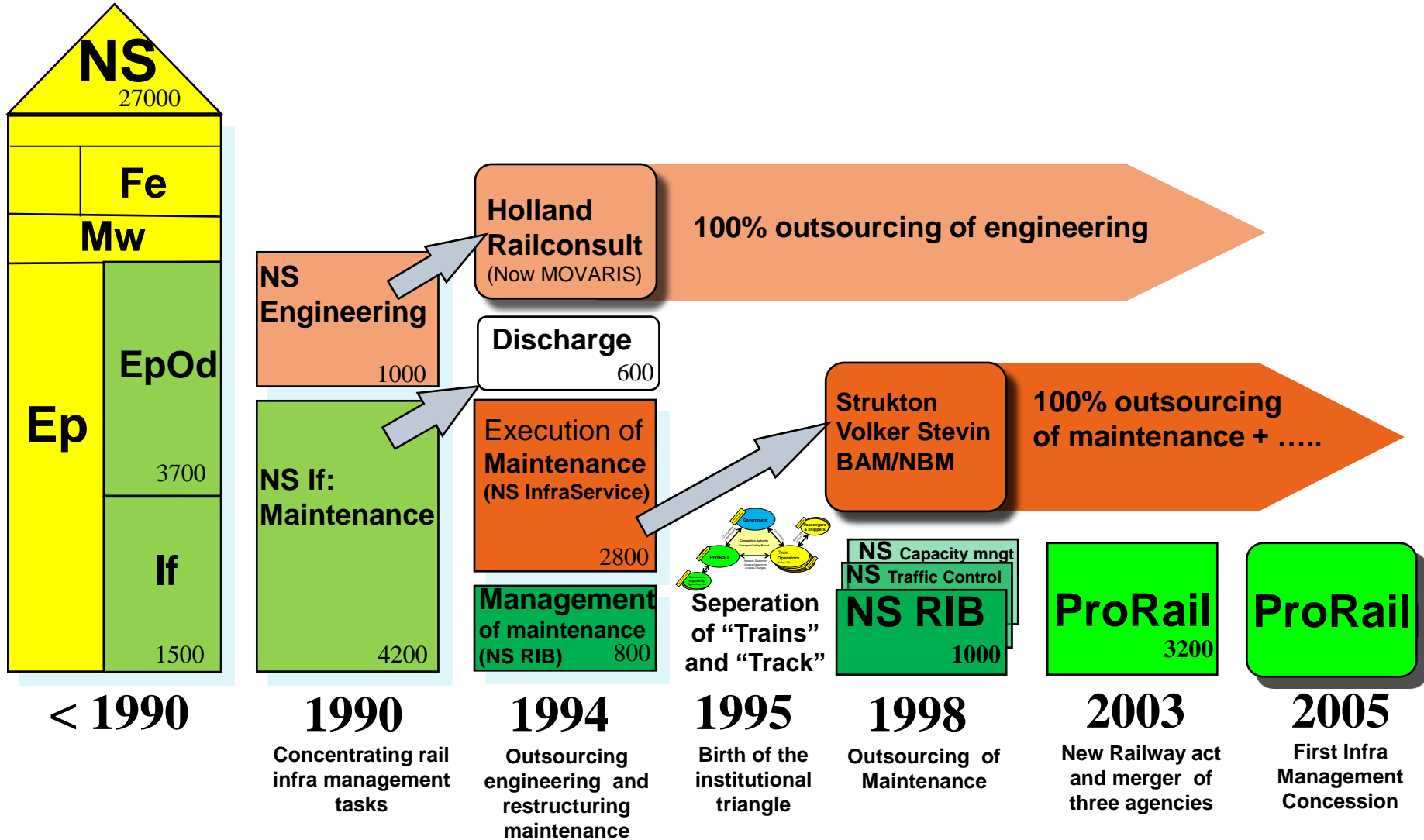


- Public enterprise with 100% of our shares owned by the Dutch government
- Active in public arena
- Responsible for:
  - Traffic Control
  - Capacity management
  - Infrastructure Management (Rail + Stations)
- ProRail has approx. 3800 employees
- The network is the most densely used in Europe (together with Switzerland)

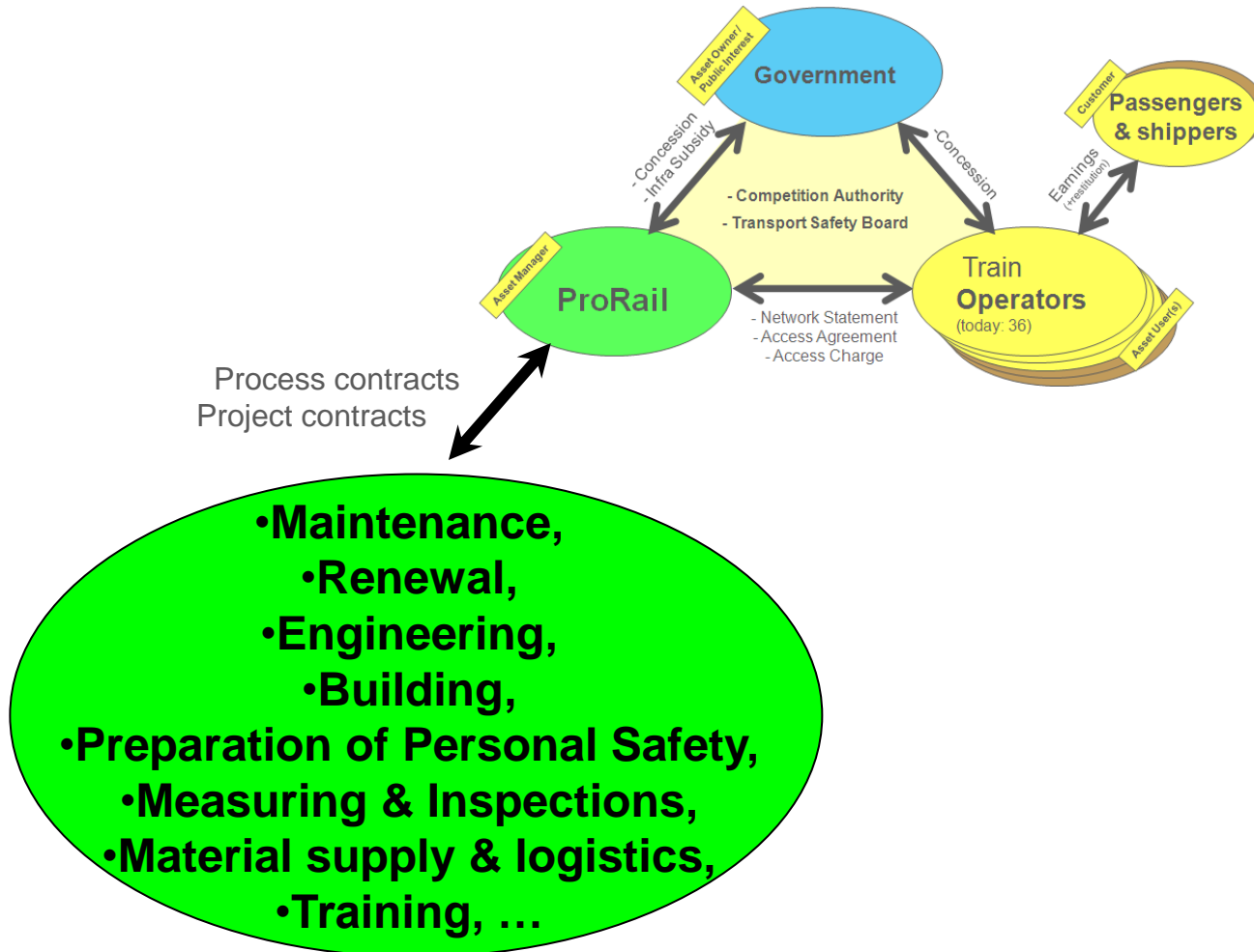
## “Trains” and “Infra” are separated but indissoluble connected in an institutional triangle



# The origin of ProRail; separation and outsourcing



## ProRail is a pure asset manager; all executive activities are outsourced



## Reasoning behind outsourcing

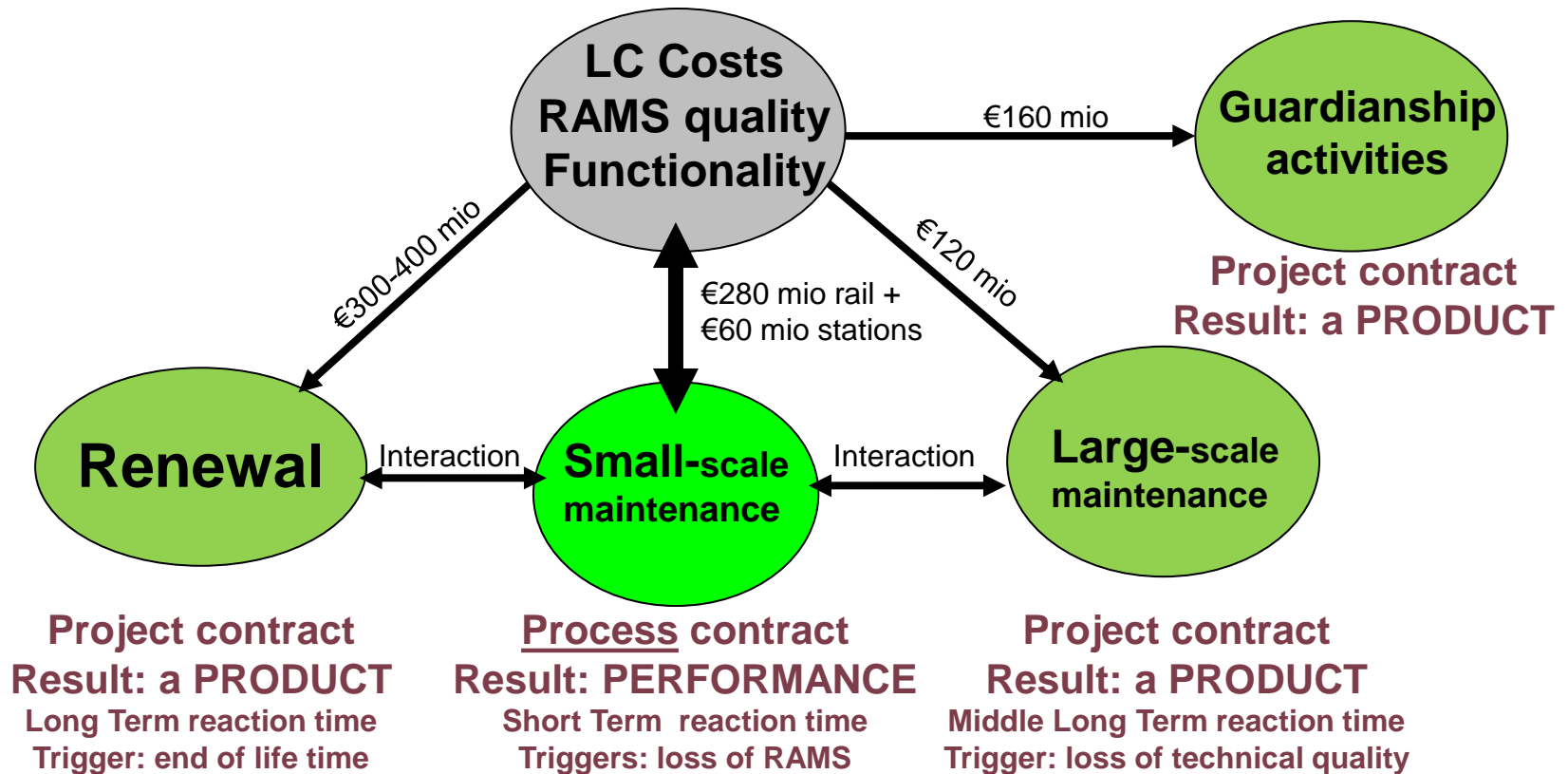
### Officially:

- Forced by EU-regulation (*a false argument !!*)
- Increased efficiency and innovation through competition.
- Stronger infrastructure management; shift in focus from technical to operational.

### Unofficially and additional:

- It was “fashionable” to outsource in the nineteen nineties.
- Selling infra-maintenance generated funds for NS who expected to be privatized in those days.

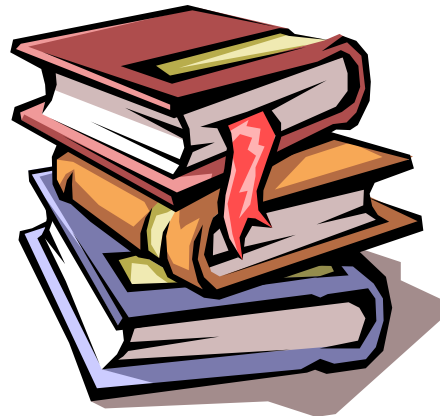
# Outsourcing of Maintenance is difficult because it is a continuous process and the result is not tangible



# Small-scale maintenance is outsourced with three types of contracts

## All infra systems

Track
Bridges
Level Crossings
Energy supply
Signaling
Telecom
Traffic Control
Stations



### RAILINFRA

- sub- and superstructure
- Approx. 25 contracts
- 5 certified contractors
- Duration contracts: 5-7 years



### TELEMATICA

- computers & communication
- Partly outsourced

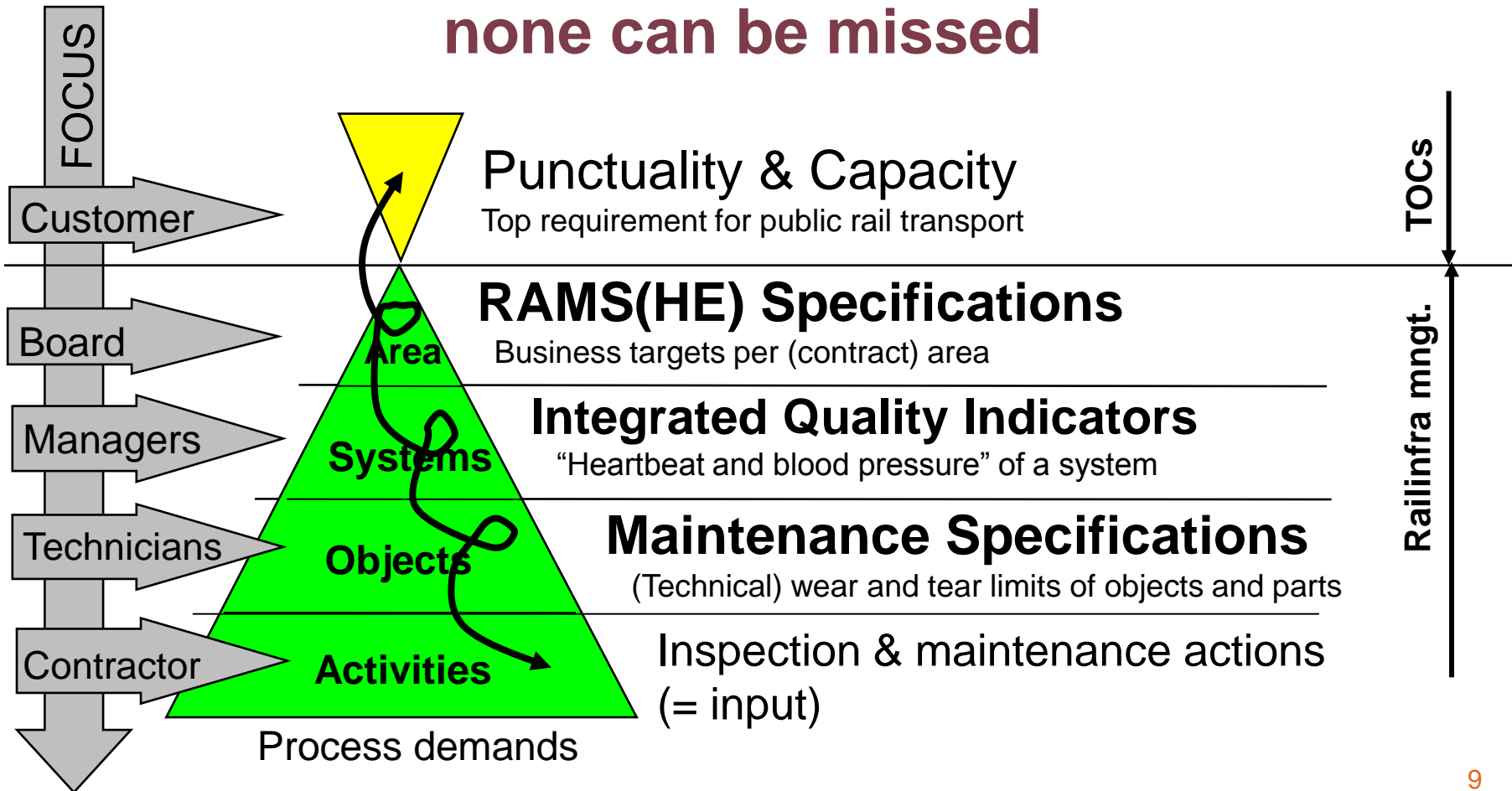


### STATIONS

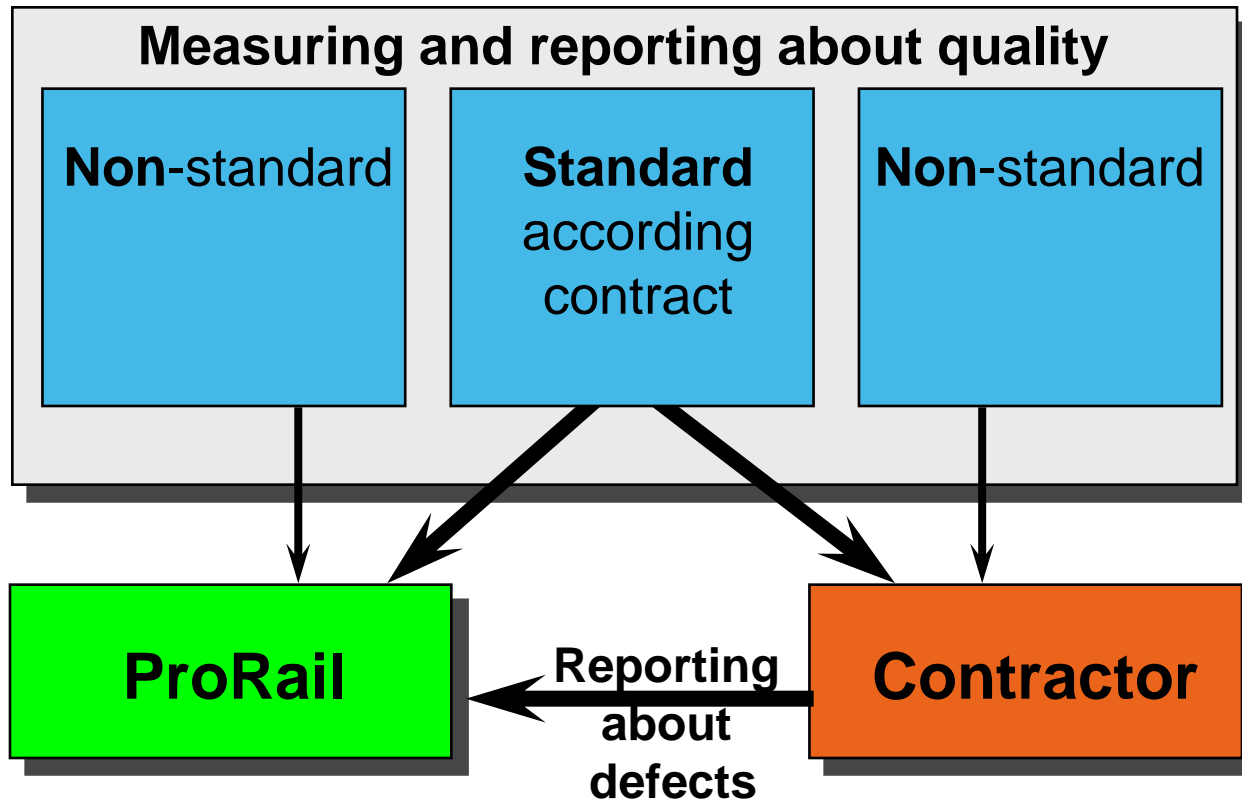
- Transfer part of stations, owned by ProRail
- Guardianship contract with NS Poort



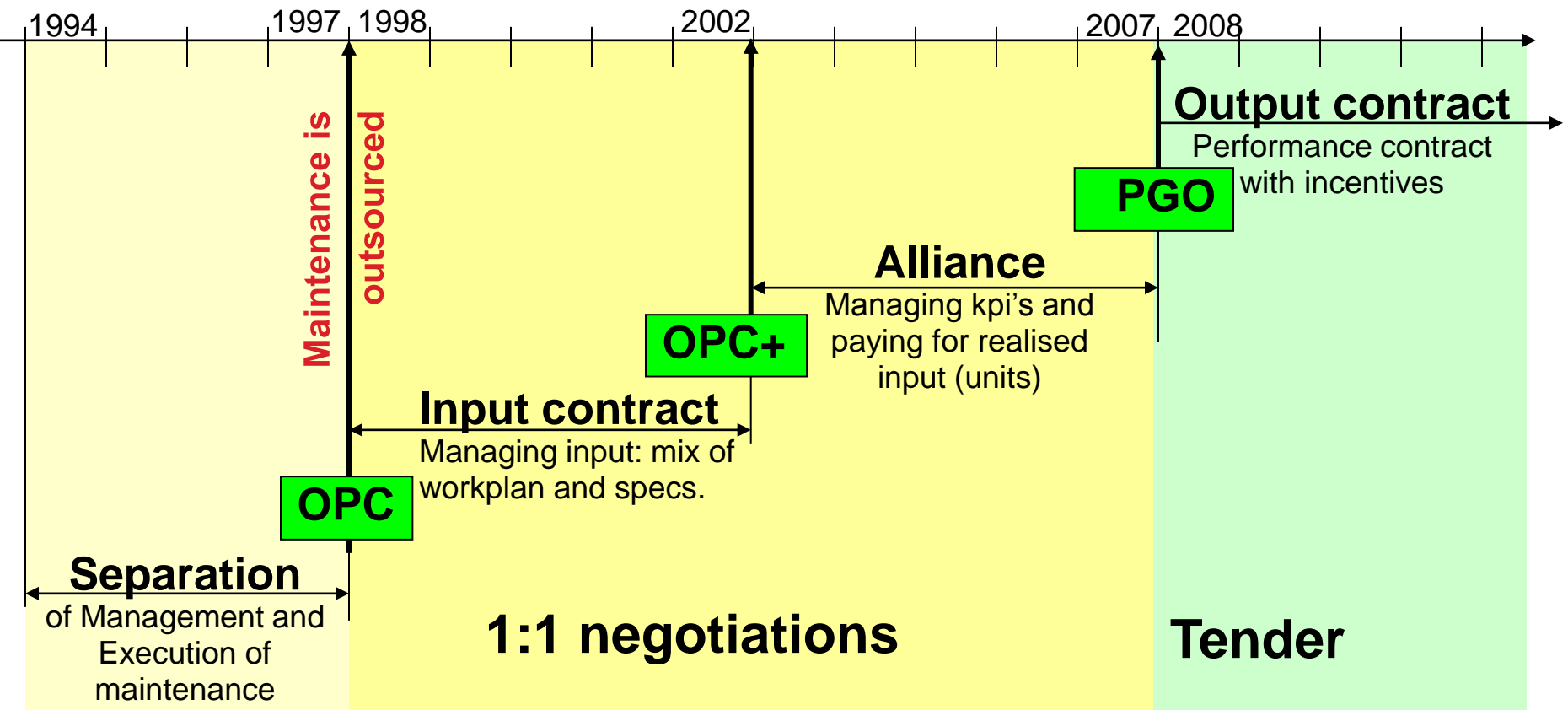
# Customer targets and maintenance activities are connected through output specification levels; none can be missed



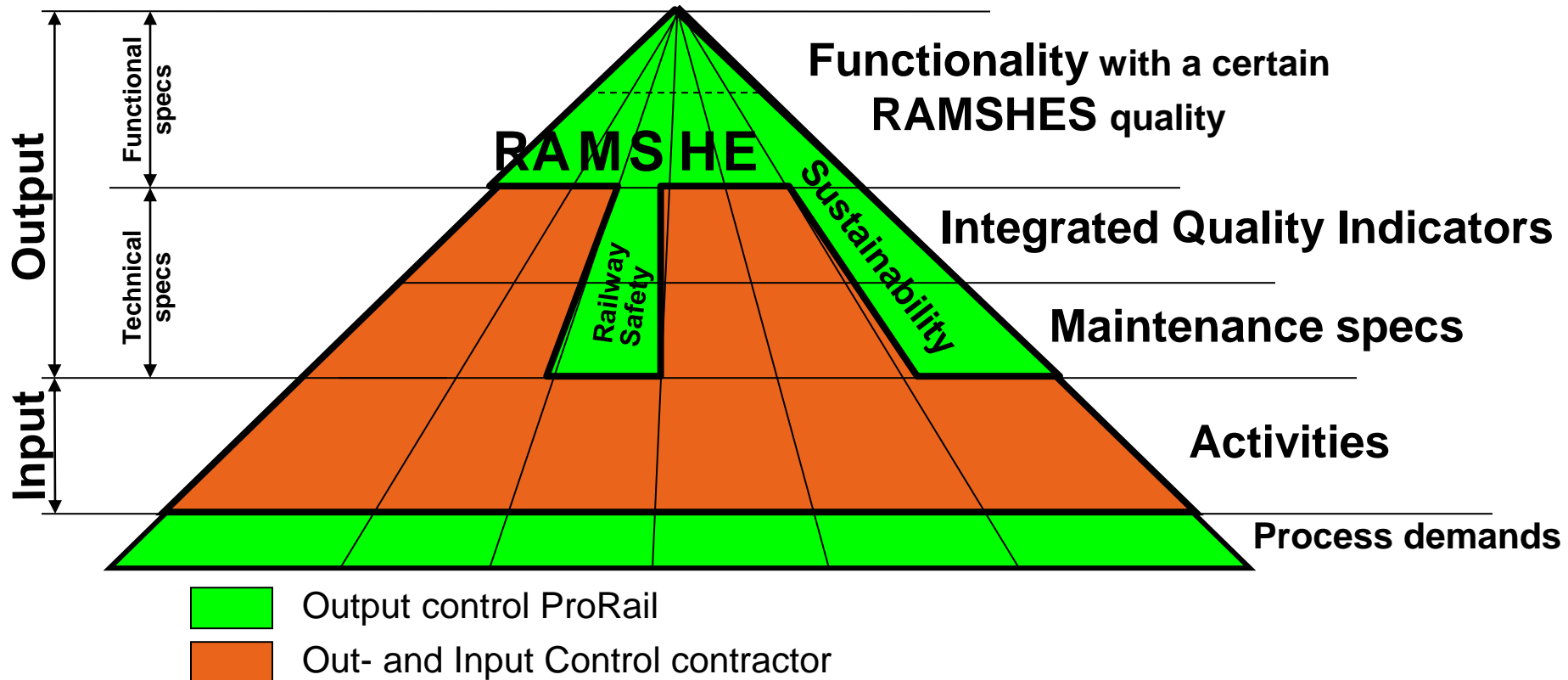
**Measuring and reporting about Performance is outsourced too; all quality information is shared**



# The sector was able to tender & manage maintenance performance contracts (PGO) successfully, but only after ten years of learning



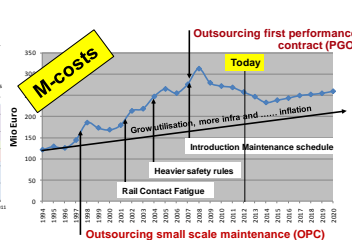
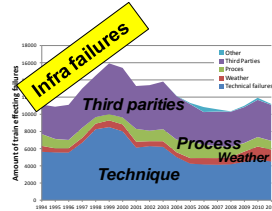
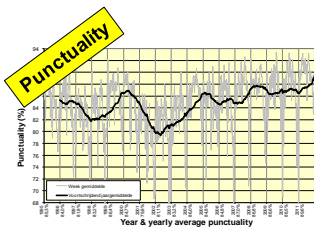
Situation today: ProRail specifies and manage performance at different levels depending risk, and the contractor choose the most optimal M-activities



## All business results have improved but the most important improvement was the professionalization of the whole infra sector

### Business results

- 15% less technical failures
- 20% M-cost reduction (after 10 years)
- Better station quality and facilities
- Better punctuality: from 84% to >88%
- 20% more passenger trains
- 50% more freight



### Business capabilities

#### ➤ On line information:

- dashboard
- asset
- product
- Performance; failure, punctuality, M-specs, ...
- Financial
- Planning; long & short term production plans
- .....

#### ➤ Management techniques:

- Contract management
- Process/Quality management
- Life Cycle Management
- Risk management
- Information management
- Securing cost knowledge & info
- Transparant Cost-Performance relation
- Auditing, certifying,
- .....

## Axiom's:

- \* The market will not give you anything for free.*
- \* Outsourcing is not a solution for your financial or managerial problems.*
- \* Tasks are outsourced but not the end responsibility for the overall results.*
- \* Only if you can specify & measure it, you can manage it.*

## Advice

1. Outsourcing should not be a goal but a way to improve.
2. Do not outsource if you don't know how to keep in control of costs and performance.
3. Be well prepared if you outsource small scale maintenance.
4. Choose a reliable and experienced maintenance contractor.
5. Outsourcing and performance management needs a culture change and (a lot of) time.
6. Outsource step by step: plan, experience, prepare, ....

# Lessons learned

1. **Outsourcing of (renewal) projects is not risky because:**
  - The result is tangible and visible
  - clear start and end
  - a mature European market with competition
  - enough experienced project managers
  
2. **Outsourcing of maintenance is difficult and risky because:**
  - the result is a service; it is not tangible and visible
  - continuous process
  - not a mature European market
  - no experienced maintenance contract managers
  
3. **Keywords to outsource maintenance successfully:  
dedication to RAMSHE (= guardianship), full process control,  
sharing information & knowledge and trust.**
  
4. **You have to know your business and be in control of it:**
  - Integrated information system; assets, costs, quality, work,.....
  - Risk management attitude, -skills and –instruments, risk register, .....
  - Long term (LCC) thinking
  - Mature contract management attitude and skills
  - .....

***If SZDC would like to know more about our experiences and developments, you are very welcome to visit us.***



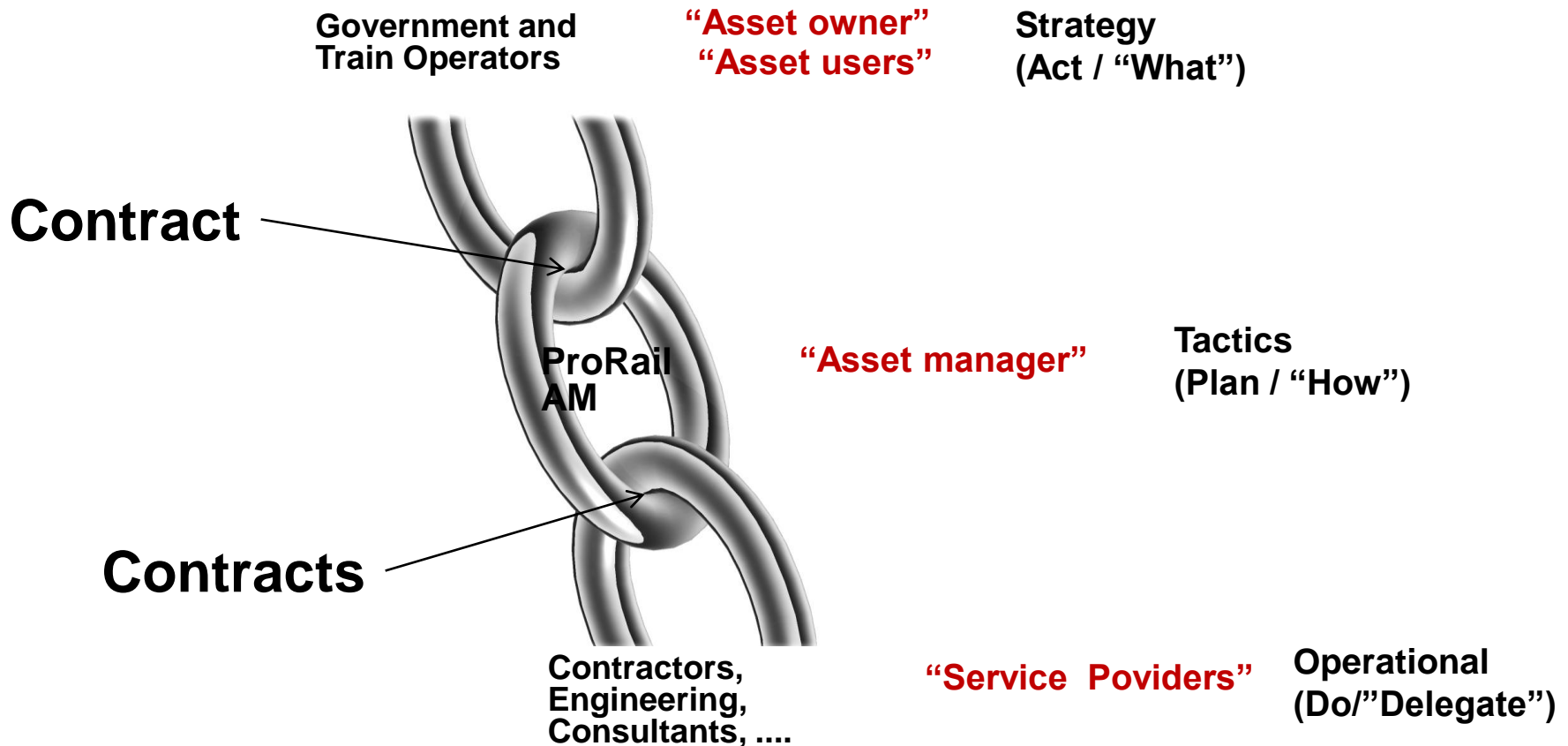
# Our ambition: the best rail infra manager in Europe





# Backup sheets

# Rail infrastructure is a means of production and the asset manager is an indispensable link in the process chain





## The state has stimulated the development of ProRail AM with four strategic goals

Transparency in the relationship between activities, costs and performance.

**A**

Awareness of the interaction between performance of infra and train operation.

**B**

Awareness of the long-term effects of maintenance (LCM).

**C**

Structures and systems for effectively using the insights referred to A, B and C.

**D**

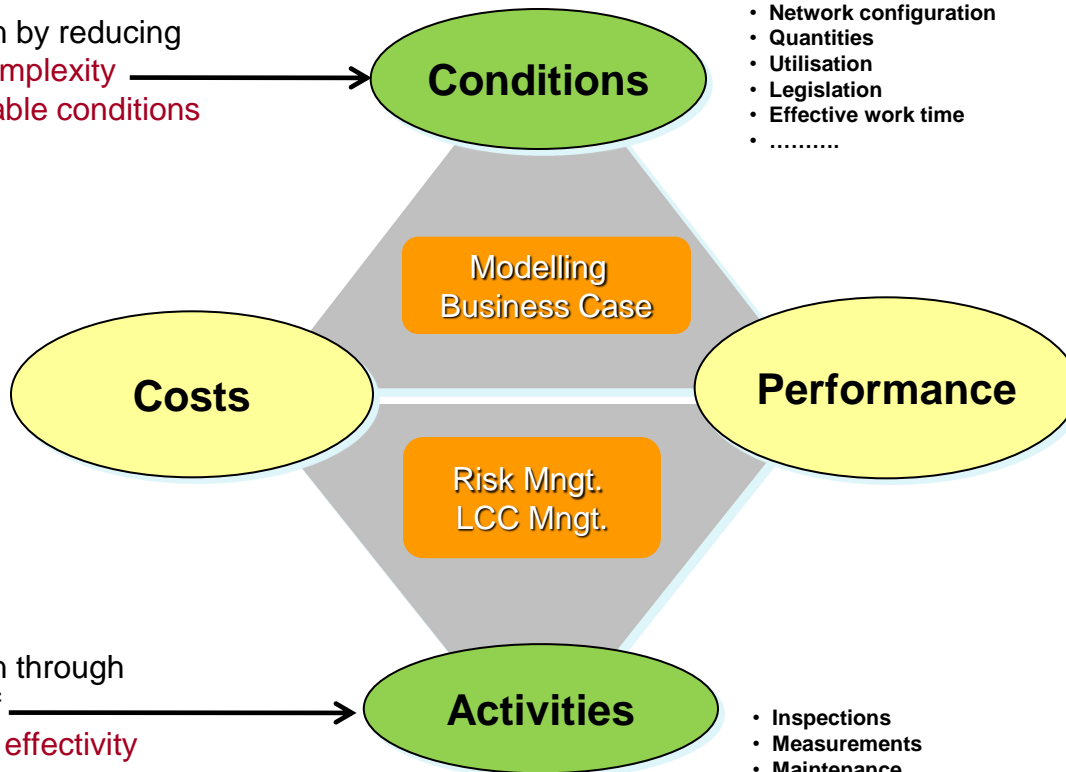
### **Professional asset management**

(AM; Optimise Whole Life Business Impact of costs, performance and risk exposure of the company's physical assets)

*Asset management is a highly skilled, information intensive profession*

# The cohesion between costs and performance is managed through activities and conditions

Cost reduction by reducing the **system complexity** and **unfavourable conditions**



Cost reduction through an increase of **efficiency** and **effectivity**

# The key to manage costs & performance of assets

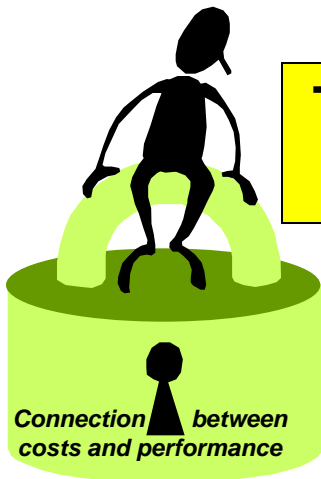
**Only if you can specify and measure it)\*  
you can manage it**

)\* Performance, Costs, Time and Conditions

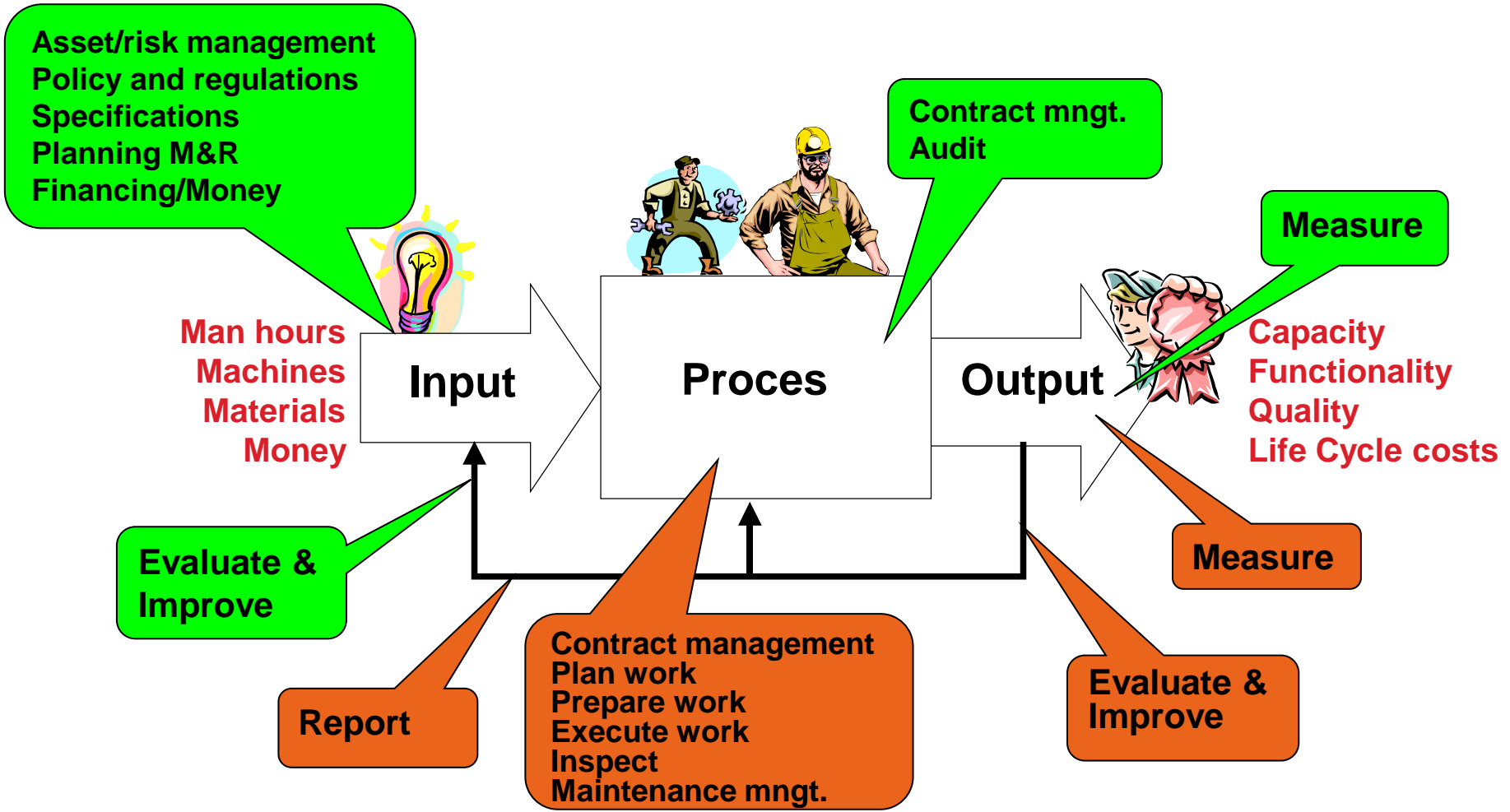
**Actual cost management )\*\* is achieved only  
when you can manage performance**

)\*\* and not budget management

**To manage performance, process control and  
dedicated instruments are necessary**



# Outsourcing means a separation of tasks between the **Asset Manager** and **Contractor**



# Performance and organization capabilities have improved significantly after 15 years of hard and fundamental changes

- >20% more passenger trains
- >50% more freight
- Better station quality and facilities
- Better punctuality: from 84% to >88%
- 15% less technical failures
- 20% M-cost reduction, regaining increased cost inefficiency

