



RAILWAY  
SYSTEMS



## DEVELOPMENT OF MAINTENANCE STRATEGIES & PLANNING

Maintenance strategy & planning are the base for the successful usage of the railway infrastructure.

Maintaining rail infrastructure is a complex issue and needs well-engineered concepts and profound strategy. The main issues regarding your assets are safety, lifecycle costs and availability. We can help you to optimize these issues.

Starting points are your current maintenance activities, the technical characteristics of your network and the way it is used (rolling stock, load per year, traffic, etc.).

With these parameters we are calculating the Life Cycle of the turnouts & tracks which are the base for preparing the maintenance strategy / planning.

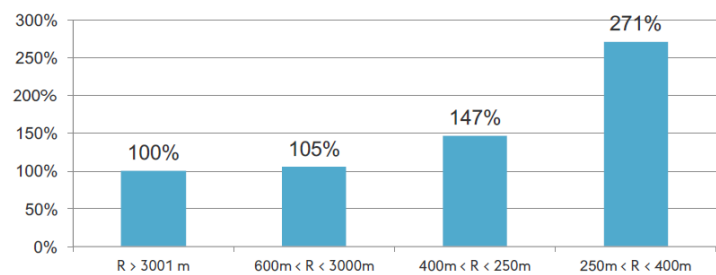
The focus is preventive measures to avoid unforeseen costs, to extend the lifetime and to help securing your assets.

### Benefits to the customer

- » Optimization of the existing maintenance strategy /planning
- » Lifetime extension of tracks and turnouts
- » Increasing availability of infrastructure because of correct maintenance activity planning
- » Overall cost reduction because of preventive maintenance
- » Optimal level of maintenance provides safe infrastructure and accident-free operation
- » Accurate cost forecast enables accurate budget
- » Precise activity forecast facilitates the planning of maintenance activities
- » Predictable lifetime and cost



## Dependency between lifecycle cost & curve radius



# DEVELOPMENT

## ANALYSES

### Analyzing the existing maintenance activities

- » Technical characteristics of the network
- » Characteristics of the usage of the infrastructure
  - » Rolling stock (rail- wheel contact)
  - » Axle loads, yearly gross tones
  - » Traffic and available time windows for maintenance
- » Current maintenance activities
- » Staff planning
- » initial inspection of the railway network
- » Status of the current spare parts management

### LCC Calculations

- » Life Cycle Cost Calculations with our software based on the individual characteristics of the railway network

### LEGAL REQUIRMENTS

- » Auditing the legal compliance of the usage of the railway network

## MAINTENANCE STRATEGY

### Setting up the maintenance strategy

- » Inspection and maintenance intervals and time slots
- » Technical strategy
- » Staff planning
- » Maintenance Cost calculation

## MAINTENANCE PLANNING

### Setting up the maintenance plan

- » Inspection activities and preventive maintenance activities
- » Inspection and maintenance checklists
- » Inspection and maintenance equipment
- » Detailed staff planning
- » Education plan for the staff
- » Proposal for a strategic spare parts management