



## MIPRO'S LIFE-CYCLE MANAGEMENT SERVICES

### LIFE-CYCLE MANAGEMENT SERVICES TO GUARANTEE SYSTEM AVAILABILITY AND DEVELOPMENT

Mipro provides comprehensive maintenance and user support services to maximise the delivered systems' life-cycle. Our life-cycle management services are based on a globally unique concept that has a successful track record of over a decade.

The focus of our modern maintenance and support concept is co-operation that enables continuous development with all the necessary knowledge and expertise required to provide services according to customer needs.

Our expertise is based on the experience of over 20 years in developing and delivering interlocking and traffic control systems that meet the highest railway safety standards and are suitable for use in Safety Integrity Level (SIL) 4 applications.

### KEY BENEFITS:

- Helps keep the customer's systems up to date and at maximum functionality
- Ensures efficient and safe traffic in all situations
- Enables faster problem solving to meet the challenges of modern interlocking systems
- Helps foresee and recognise development needs
- Facilitates an optimal resource management
- Provides 24/7 customer support with our on-duty maintenance staff available without delay.

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Mipro's life-cycle management services form the basis for an efficient system maintenance and overall service including

- system updates
- management and planning of maintenance
- remote system support and problem solving.

### The services cover in detail:

- Round the clock (24 hours, 7 days a week) telephone hotline technical and problem solving support
- Remote on-line support, diagnostic, monitoring and statistic tools for the systems
- Regular system surveys
- Analysis and statistics of the systems for preventive maintenance purposes
- Management of inventory of necessary spare parts /system components
- Guidance on suitable spare parts and maintenance and installation of system components
- Training for maintenance personnel
- System documentation and maintenance manuals publication, for example, on a web portal
- Reporting to the purchaser and to the maintenance contractor.

The maintenance support agreements entered into are made according to customer needs and system availability requirements. The agreement comes into effect when the system is entirely delivered to the purchaser. The system support operations, however, are started beforehand at the time when the system is under implementation.

In addition to providing comprehensive in-depth services for our own systems we have a considerable knowhow on railway systems in general gained during our long history in the railway business.

# LIFE-CYCLE MANAGEMENT SERVICES TO GUARANTEE SYSTEM AVAILABILITY AND DEVELOPMENT

## TO PREPARE SYSTEMATICALLY FOR CHANGES AND RISKS

Life-cycle management services are an efficient way to prepare for changes, unexpected situations and risks caused by the environment. When system updates and extensions are made flexibly and in a preventative manner, the systems can be kept up to date and their adequate functioning can be secured. This also ensures a safe and smooth railway traffic.

## REMOTE CONNECTIONS TO ENSURE QUICK SUPPORT

The telephone hotline technical support and remote on-line diagnostic and monitoring tools provide real-time support in problem and trouble shooting situations. Problems and faults can be effectively localised and in most cases, the situation can be cleared by providing advice.

All events in the telephone hotline technical support are reported and analysed carefully. In this way system stabilisation, maintainability and safety can be improved when eventual problems and faults can be detected in time.

## REGULAR SYSTEM SURVEYS LENGTHEN SYSTEM LIFETIME

A corner stone of life-cycle management services is the preventive maintenance review carried out by our professionals and maintenance staff. At regular inspections, exceptional functions and eventual faults can be detected in time and corrective actions can be taken respectively. System surveys also help plan replacement investments before the damaged part of the hardware, for example, reduces the usability of the systems significantly.

## TO ENSURE QUICK ACCESS TO SPARE PARTS

Our spare parts management service helps the customer define the inventory needs of necessary spare parts. In this way critical spare parts are always quickly available and the functionality of the systems can be secured. The spare parts management service is also an efficient means to keep track on product life-cycle.