



## ARTEMIS

### Automatic Object Detection

#### Product description

ARTEMIS automatically detects railway infrastructure assets. The system combines deep learning algorithms with advanced data processing modules to identify object types, determine their geolocation, and also extract relevant metadata (e.g. text or numerical information).

Detected objects and their information are stored in a database, where they can be compared with existing datasets to identify changes. This capability enables smarter and more efficient lifecycle management of railway infrastructure.

Furthermore, the results generated by the ARTEMIS detection system can be used for the automated creation of as-is models of the captured railway environment.

The name is derived from the initials of:  
**A**utomatic **I**nf**R**as**T**ructure**E** **M**onitor**I**ng **S**ystem.

#### Our services

- Digitisation of railway infrastructure as the foundation for predictive maintenance
- Comparison with existing datasets and automated condition assessment
- Support for maintenance planning
- Creation and updating of asset databases

#### Your benefits

- Transparent comparison with existing asset data
- Reduced manual intervention in track areas, increasing operational safety
- Creation of a BIM as-built model
- Faster and data-driven decision-making

#### Contact

Digital Rail Services  
 drs.ch@rsrg.com  
 +41 43 322 23 23

