

Purpose:

Track as-built with alignment optimisation and pre-measurement for track reconstruction projects. Suitable for sidings and regions without permanent track marks.

Configuration:

Trimble GEDO IMS-GNSS system: GEDO trolley + GEDO IMU + Trimble control unit combined with a Trimble GEDO Profiler and Trimble GNSS receiver.

Workflow:

Combines inertial measurement with GNSS to capture high-accuracy internal track geometry and the absolute track location where no control points exist. Control points can be established during the as-built survey for subsequent reconstruction/maintenance measurement.

Alignment optimisation:

Optimised track alignment is calculated in Trimble GEDO NovaTrack using absolute coordinates and rail-specific alignment elements. The absolute track location and optimised alignment become the basis for pre-measurement for track conversion and tamping machines.

Deliverables:

- Absolute track location and internal geometry dataset
- Optimised alignment (NovaTrack) based on absolute coordinates with rail-specific elements
- Established control points for later reconstruction/maintenance measurements

