

# Train Detection System [TDS]

**NGRT TDS is the core intelligence for all NGRT Applications, and patented globally. All NGRT Applications are designed to increase safety and reduce risk for train operators and infrastructure managers. The solution is based upon novel technology with a huge innovative factor that gives a significant cost advantage over traditional warning systems.**

The TDS is based on attaching a Detection Unit onto the rail, which transmits vibration & signals propagated from the rails back to the Main Assembly for further processing and analyses.

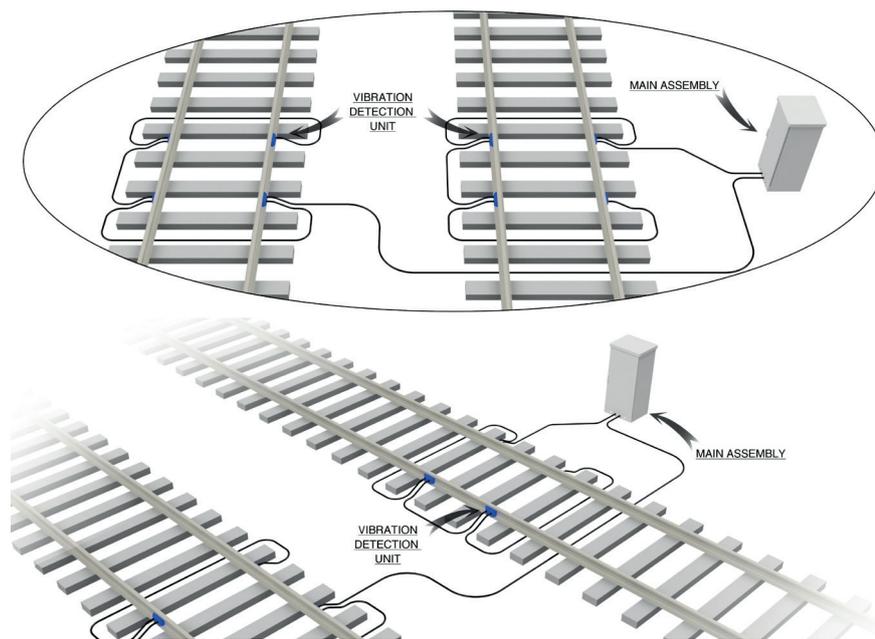
## Flexibility

Based on the TDS technology, Clients may add any application, either as a stand alone system, or in any combination – maximum up to 3 applications per Main Assembly across multiple tracks.

The TDS is built on “plug-and-play” principles, which gives our Clients the option to add new applications of their choice, just like from a menu chart.

## RAMS

In order to secure availability according to CENELEC standards in any NGRT application, Client may add redundancy on any applications, or in all at the same time.



### Current Applications available are:

- Broken Rail Detection
- Dragging Equipment Detection
- Rockslide & Avalanche Detection
- Flood & Wash-outs Detection
- Flat Wheel Detection
- Level Crossing Detection
- Worksite Protection

Each location has its own unique characteristics; therefore, the system needs to be calibrated according to the site specifics before going into operation. The more trains passing, the quicker the calibration period will take.

## Online

Since the system is always online, the Client will at any point in time have detailed status of the applications, even down to component level. This way, maintenance crew can perform preventive and proactive maintenance planning.

## Standards

All components are designed and built according to International Railway Safety Standards.