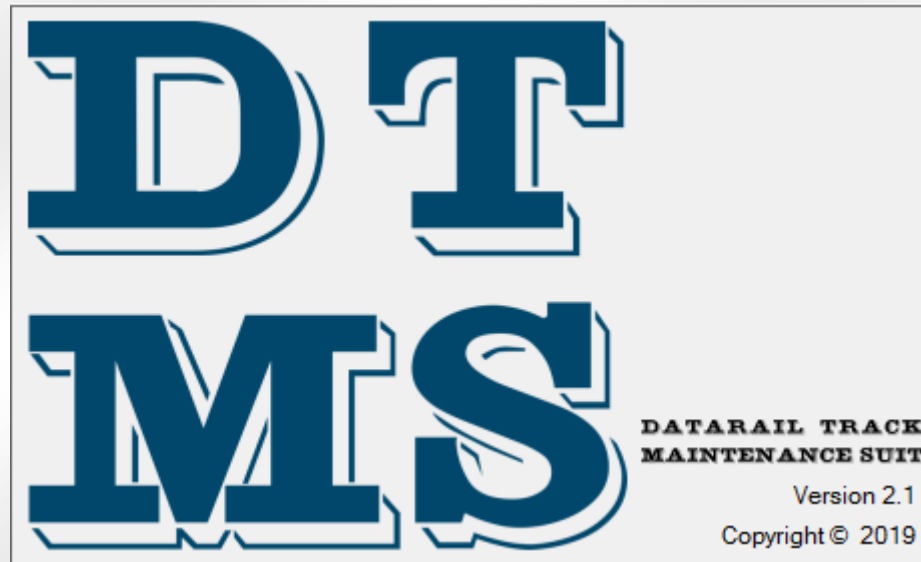


D.T.M.S.

Datarail Track Maintenance Suit



Group of applications for Track Geometry Data Processing and Maintenance Task Scheduling

Overview

What DTMS is?

- **DTMS** stands for Datarail Track Maintenance Suit, which is a group of applications for Track Geometry Data Processing and Maintenance Task Scheduling, running under the same Graphical User Interface. Furthermore produces Quality Indexes according to EN13848-6.

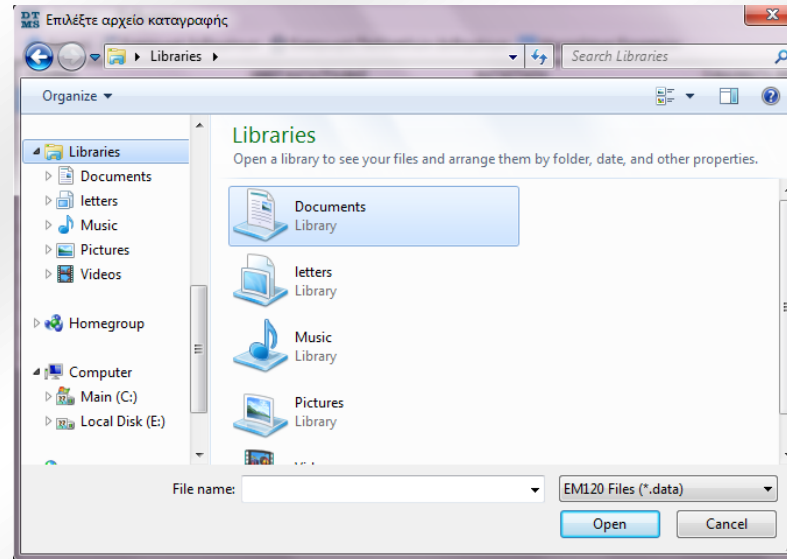
Why DTMS?

- **All** track data in one database and one application
- **Easy** track rating
- **Quick** detect of weak spots
- **Priority** maintenance planning
- **Reliable** results
- Resource and staff **saving**
- **Improves** Track Quality

Details

Features

- Import of Track design data (if available)
- Import of Track data from recording vehicles (e.g. EM120) and tamping machines.
- Manual data input from on-site measurements



- Common database for all track sections

| ΓΡΑΜΜΗ | ΗΜΕΡΑ ΚΑΤΑΓΡΑΦΗΣ | ΚΑΤΑΣΤΑΣΗ | ΣΦΑΛΜΑΤΑ (ΜΕΤΡΑ) | ΑΠΟ-ΕΩΣ(ΧΛΜ) | ΣΥΝΟΛΟ ΧΛΜ | ΑΡΧΕΙΟ ΠΡΟΕΛΕΥΣΗΣ |
|-------------|------------------|-----------|------------------|-------------------|------------|---------------------------|
| SKA-AIRPORT | 23/9/2015 | E3 | 473 | 0 - 30.014 | 30.014 | 20150923_SKA-AIRPORT.data |
| ATH-THESS | 8/6/2015 | E3 | 17418 | 166.305 - 289.067 | 122.762 | 20150608_TITH-DOMR.data |
| DEMO_TRACK | 9/11/2019 | E3 | 473 | 0 - 30.014 | 30.014 | 20150923_SKA-AIRPORT.data |
| DEMO_TRACK | 9/11/2018 | E3 | 473 | 0 - 30.014 | 30.014 | 20150923_SKA-AIRPORT.data |
| DEMO_TRACK | 9/11/2017 | E3 | 473 | 0 - 30.014 | 30.014 | 20150923_SKA-AIRPORT.data |
| DEMO_TRACK1 | 9/11/2019 | E3 | 473 | 0 - 30.014 | 30.014 | 20150923_SKA-AIRPORT.data |
| DEMO_TRACK1 | 9/11/2018 | E3 | 473 | 0 - 30.014 | 30.014 | 20150923_SKA-AIRPORT.data |
| DEMO_TRACK1 | 9/11/2017 | E3 | 473 | 0 - 30.014 | 30.014 | 20150923_SKA-AIRPORT.data |
| DEMO_TRACK2 | 9/11/2019 | E3 | 473 | 0 - 30.014 | 30.014 | 20150923_SKA-AIRPORT.data |
| DEMO_TRACK2 | 9/11/2018 | E3 | 473 | 0 - 30.014 | 30.014 | 20150923_SKA-AIRPORT.data |
| DEMO_TRACK2 | 9/11/2017 | E3 | 473 | 0 - 30.014 | 30.014 | 20150923_SKA-AIRPORT.data |

- Data analysis for individual sections and for the overall network

Σημεία

Εύρος

Μέσο Εύρος (100m)

Μηκοτομή

Υπερύψωση

Μέση Υπερύψωση (40m)

Οριζοντιογραφία

Στρέβλωση

ΣΦΑΛΜΑΤΑ
Εύρος: 3 μέτρα
Υπερύψωση: 470 μέτρα
Μηκοτομή: 0 μέτρα

ΧΡΟΝΟΣ ΑΠΟΚΑΤΑΣΤΑΣΗΣ
ΣΦΑΛΜΑΤΩΝ (Εκτός Σφαλιμάτων Εύρους)

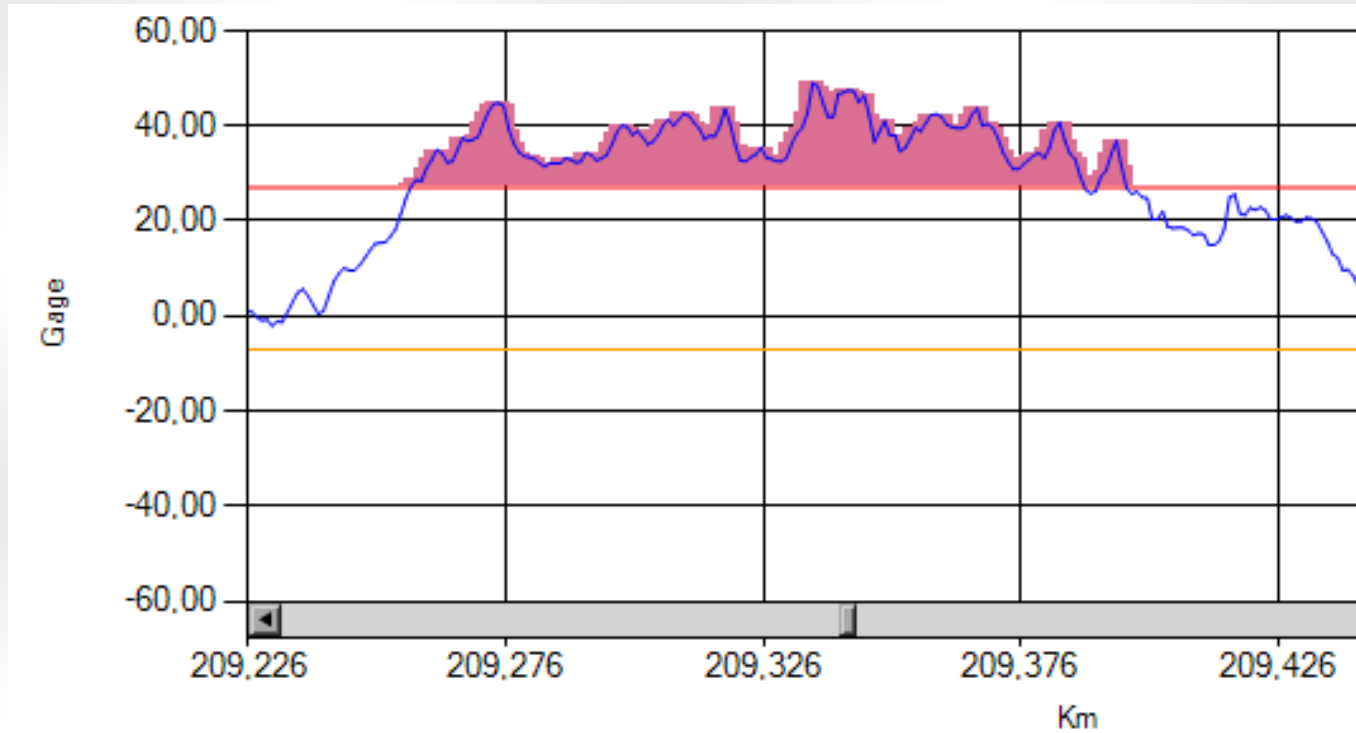
Καθαρός χρόνος εργασίας για αποκατάσταση: 235 λεπτά (03:55)

Πραγματικός χρόνος εργασίας (περιλαμβάνει μετακινήσεις από και προς τα σημεία εργασίας και χρόνο προετοιμασίας του μηχανήματος): 268 λεπτά (04:28)

- Full customization according to European and International standards and regulations
- Customization of specifications for available tamping machines
- Merge data from old and new measurements so that the last data appears in each line section

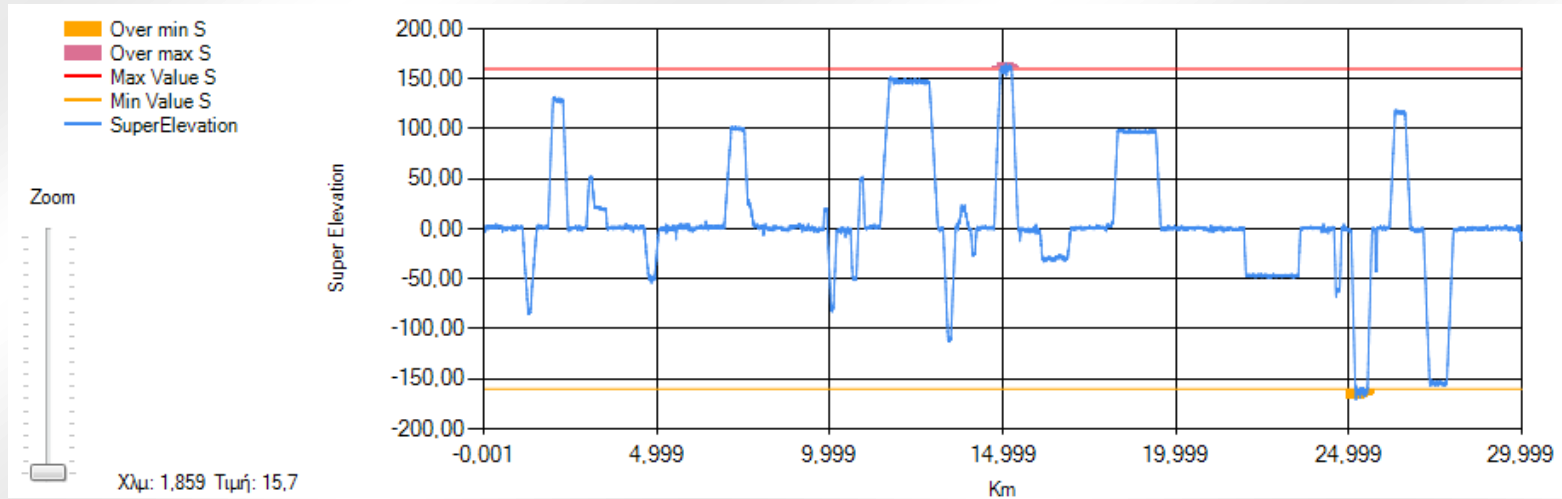
| SETTING | E1 | E2 | E3 |
|-------------|----|----|----|
| GAGE_MAX_T1 | 25 | 32 | 35 |
| GAGE_MAX_T2 | 22 | 29 | 32 |
| GAGE_MAX_T3 | 20 | 27 | 30 |
| GAGE_MAX_T4 | 16 | 23 | 27 |
| GAGE_MAX_T5 | 13 | 20 | 25 |
| GAGE_MAX_T6 | 10 | 16 | 22 |

- Quick and easy detection of defects



- Risk Classification of defects
- Track Quality Indexes

- Data views in graphs and lists



- Customized maintenance plans depending on, the risk of defects, duration of repairs, location and availability of tamping machines

- Customized reports defects and TQI
- Virtual correction of defects
- Geometry file creation to be used in Plasser & Theurer's tamping machines

DTMS Report

DATARAIL

ΓΡΑΜΜΗ SKA-AIRPORT

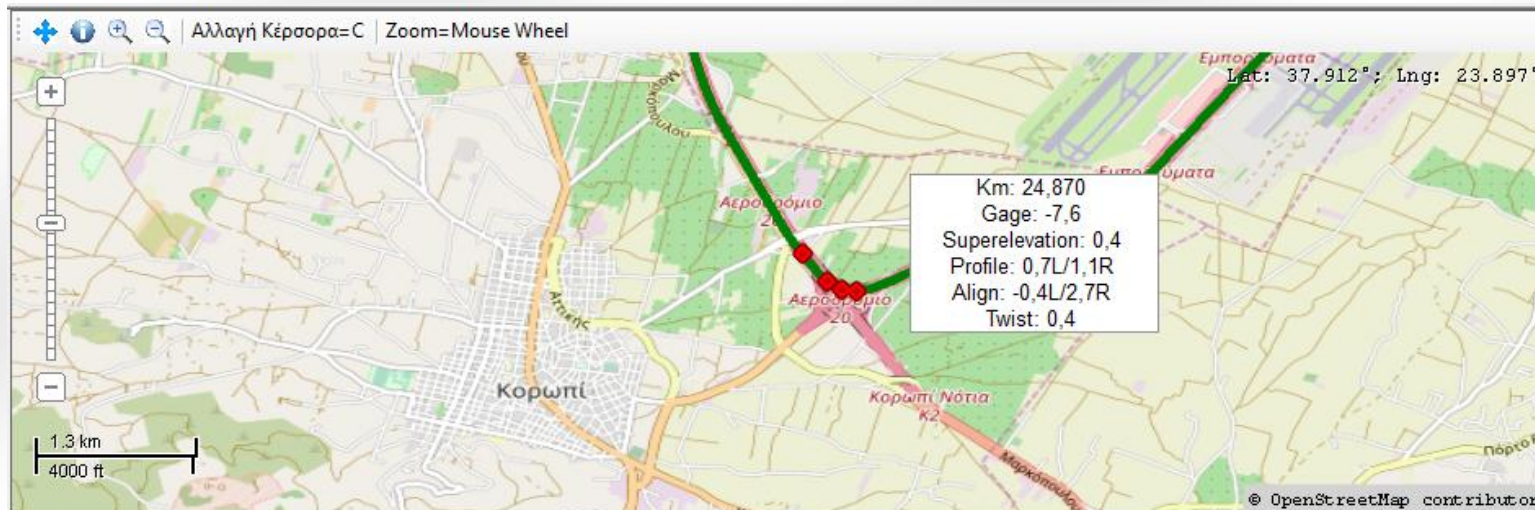
| | | | |
|-----------------------|---------------------|--------------------|-------------------|
| Ημερομηνία Καταγραφής | Ημερομηνία αναφοράς | Μήκος Γραμμής (Km) | Αρχή - Τέλος (Km) |
| 23/09/2015 | 09/11/2019 | 30,014 | 0 - 30,014 |

| ΣΦΑΛΜΑΤΑ | ΜΗΚΟΣ ΣΦΑΛΜΑΤΩΝ (m) | ΚΑΘΑΡΟΣ ΧΡΟΝΟΣ ΑΠΟΚΑΤΑΣΤΑΣΗΣ (min) | ΠΡΑΓΜΑΤΙΚΟΣ ΧΡΟΝΟΣ ΑΠΟΚΑΤΑΣΤΑΣΗΣ (min) |
|-----------|---------------------|------------------------------------|--|
| ΕΥΡΟΣ | 3 | | |
| ΥΠΕΡΥΨΩΣΗ | 470 | | |
| ΣΥΝΟΛΟ | 473 | 235 (03:55) | 268 (04:28) |

! Στους χρόνους αποκατάστασης δεν συμπεριλαμβάνονται τα σφάλματα εύρους.
Ο πραγματικός χρόνος αποκατάστασης περιλαμβάνει μετακινήσεις από και προς τα σημεία εργασίας και χρόνο προετοιμασίας του μηχανήματος.

| LOCATION | GAGE | SUPER |
|------------------|--------------|------------------|
| 14,938 TO 15,247 | -0,6 TO 6,3 | 160,1 TO 165,2 |
| 24,87 TO 24,872 | -7,6 TO -7,4 | 0,4 TO 1,6 |
| 25,203 TO 25,542 | 9,8 TO 17,3 | -170,9 TO -160,1 |

- View defects and TQI on GIS map, with the corresponding geometry values



- Work calendar for assignments to available maintenance machines and progress monitoring

| Ανάθεση Εργασίας | | | | | | |
|---|-------|---------|--------|-----------|---------|---------|
| Δευτέρα | Τρίτη | Τετάρτη | Πέμπτη | Παρασκευή | Σάββατο | Κυριακή |
| 02 Δεκ | 3 | 4 | 5 | 6 | 7 | 8 |
| 2 - 8 Δεκ | | | | | | |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 9 - 15 Δεκ | | | | | | |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 16 - 22 Δεκ | | | | | | |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 23 - 29 Δεκ | | | | | | |
| 30 | 31 | 01 Ιαν | 2 | 3 | 4 | 5 |
| 30 Δεκ - 5 Ιαν YA4/SKA-AIRPORT/10-25 KM 06/Jan 12:00 πμ | | | | | | |
| 30 Δεκ - 5 Ιαν | | | | | | |

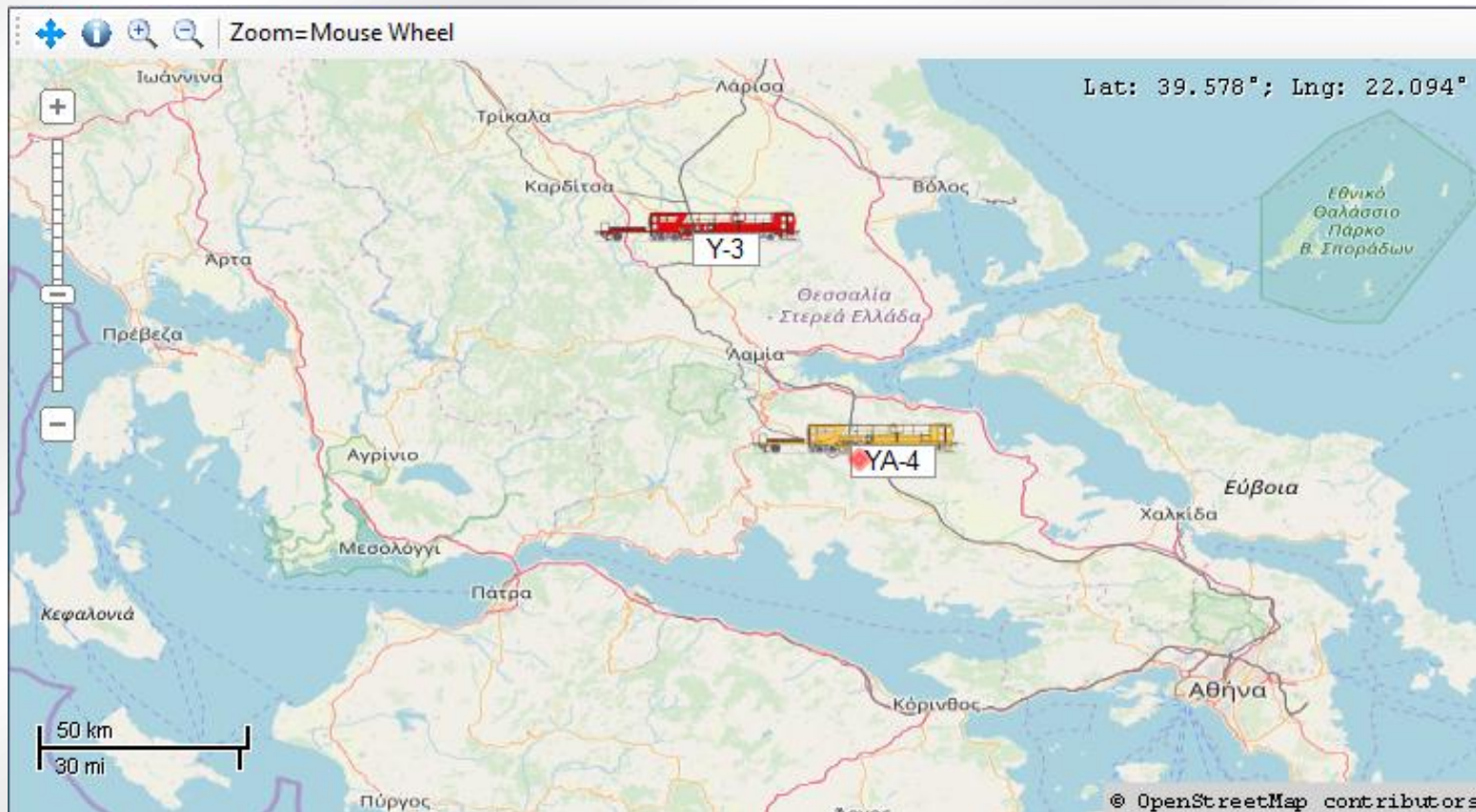
| Δεκέμβριος 2019 | | | | | | |
|-----------------|----|----|----|----|----|----|
| Δε | Τρ | Τε | Πε | Σα | Κυ | |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 30 | 31 | | | | | |

| Ιανουάριος 2020 | | | | | | |
|-----------------|----|----|----|----|----|----|
| Δε | Τρ | Τε | Πε | Σα | Κυ | |
| 30 | 1 | 2 | 3 | 4 | 5 | |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 | 31 | | |

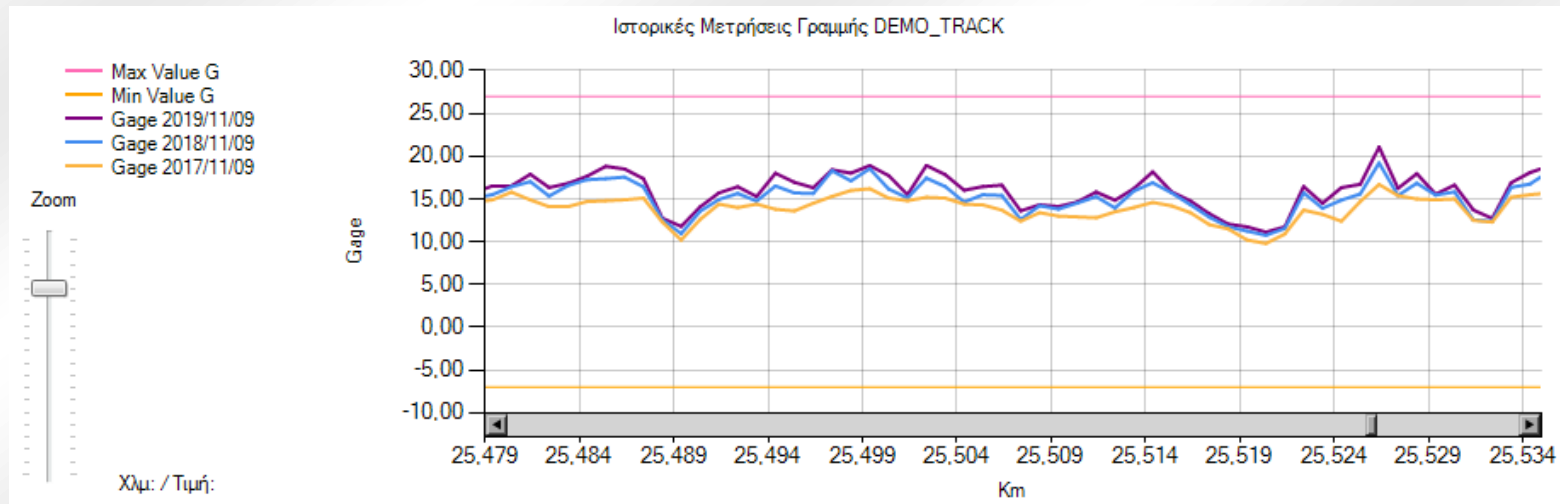
| Φεβρουάριος 2020 | | | | | | |
|------------------|----|----|----|----|----|----|
| Δε | Τρ | Τε | Πε | Σα | Κυ | |
| | | | | | 1 | 2 |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | |

| Μάρτιος 2020 | | | | | | |
|--------------|----|----|----|----|----|----|
| Δε | Τρ | Τε | Πε | Σα | Κυ | |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 30 | 31 | 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |

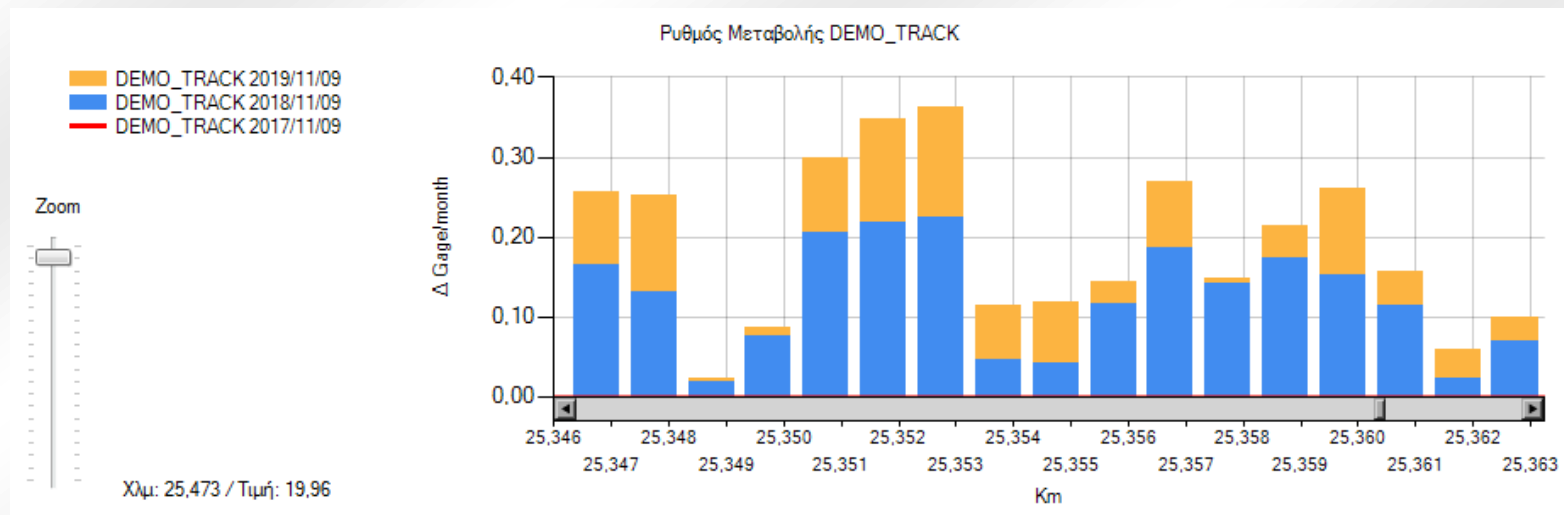
- View the position and type of machines on GIS map



- Test tracks for defects at different applied speeds
- Graphs and comparison reports with selected historical measurements



- Graphs and rate of change reports of geometry data in relation to time and statistical prediction of track status in the future



* All the above functions and features are not included in the basic version of the program

How it works

- DTMS application run under Windows 7 and later (32 and 64 bit) operating systems
- The database can be stored on a local pc or server or on a remote server
- It is fully customizable with the current standards and regulations and the capabilities of tamping machines
- Analyzes and evaluates data with smart algorithms
- Presents analysis and results in graphs and reports

Services provided by Datarail

If you want to avoid training your staff or want to get rid of the cost of purchasing this application, then Datarail with its trained staff, can undertake the analysis and management of your data, providing you with the maintenance plans and all the information you will need, whenever you need them and in any form, in order to proceed without delay in the repairs.