



## FP3-IAM4RAIL Cluster B

### Workshop on Data Availability

Madrid, GTSD's premises and Laboratories



On November 12<sup>th</sup> 2024, Cluster B held a Workshop dedicated to showcase the availability of data coming from Work Package 3 (WP3) with the goal of supporting the development of Data Analytics and Machine Learning applications in WP4.

The meeting was held in Madrid, in the Hitachi GTS (formally Thales GTS) facilities and saw the participation of all Cluster B partners, both connected remotely and present physically.



Cluster B members at the Hitachi facilities in Madrid

The goal of the workshop was to present the current state of data collection coming from WP3 and the kind of information already stored and processed in the early Intelligent Asset Management System (IAMS) applications.

In use case 1 (UC1), most installations have been carried out, with minor activities pending related to the configuration and fine tuning of the Interlocking (IXL) data collection system installed in Quadrivio Turro. Traffic Management System (TMS) and maintenance data are being collected daily and stored in the IAMS database ready to be correlated with the operational data from IXL once they'll be available. In the meantime, the collected data has been used to create initial dashboards for the monitoring of traffic related data, mainly events related to train transits time or movement of the switch&crossings monitored. These initial



results will be presented also during the FP3-IAM4RAIL Mid-Term Event at the end of November 2024. In parallel, extensive tests have been carried out in Mola di Bari, in Mermec's facilities and laboratories for the fine tuning of the Obstacle Detection System.

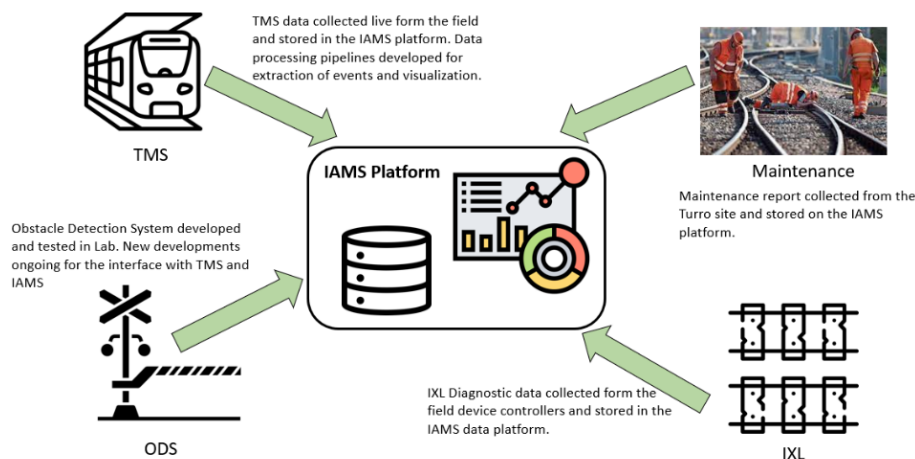
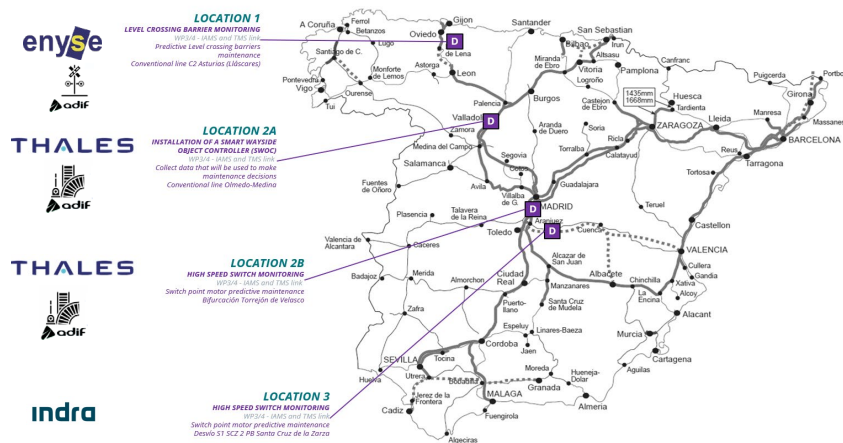


Diagram of data collection interfaces for UC1

UC2 monitoring systems will be installed on the line in the coming weeks, with the GTS switch vibration sensors already operational on both Conventional and High-Speed lines. Data collection is ongoing and UC2 partners have already started work on integrating the vertical monitoring solutions into the common IAMS data platform. This component will incorporate a common database, and both specific and common dashboards required to operate the IAMS, resulting in a fully integrated system to monitor the assets present in the Spanish demonstrator.



Map of the site location for UC2

The next activities will be focused on the improvement of the data analytics pipeline description and the actual implementation in the 2 use cases demonstrators, but that is a story for the next newsletter...

Stay tuned to learn more!



Founding Members



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