Driver Advisory System C-DAS (Nexus Lodestar)

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Siemens Nexus Lodestar

Connected-Driver Advisory System (C-DAS)

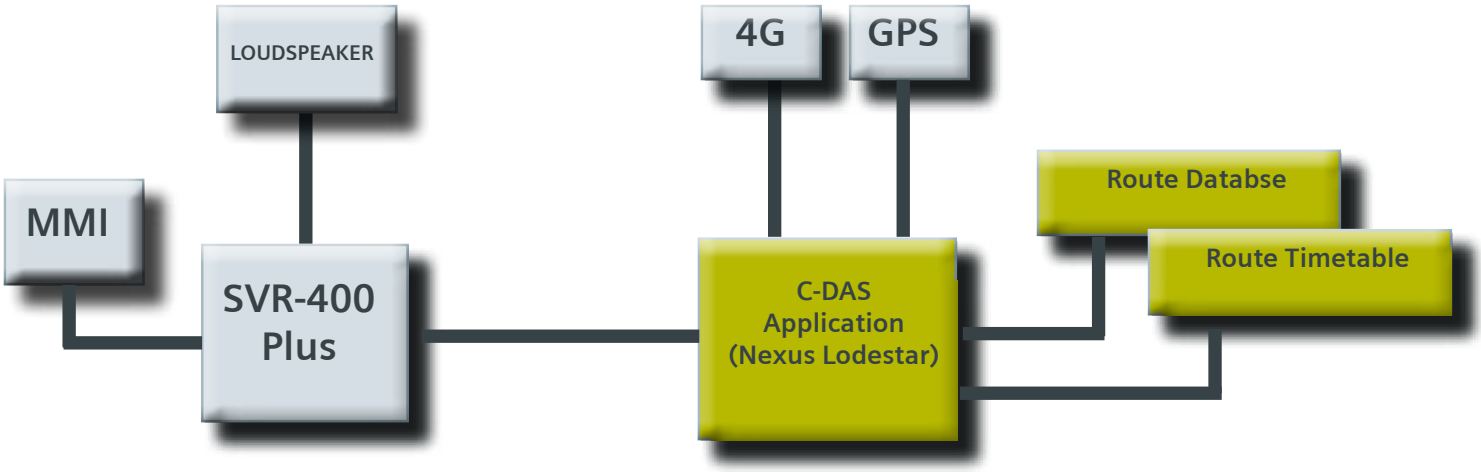
Whilst digitalization challenges are growing every day, Siemens have adapted their Driver Advisory System to a Connected-Driver Advisory System (C-DAS) with integrated connectivity of GNSS and LTE. C-DAS will enable the provision of scheduling, routing and speed restriction updates in real-time which has the power of optimizing the train's performance, energy & dramatically reduce risk.

With negligible or very low installation costs, Siemens Connected-Driver Advisory System is in fact a software application that does not require any additional hardware as it uses the installed Cab Radio asset already existing on the train. The software application can interface with the traffic management system that will provide real-time updates which will promote a consistent and economical driving style.

Features

- Promotes a consistent and economical driving style
- Safety warning can be issued to drivers when current line speed is broken by configurable margin.
- Provides audio advice via existing loudspeaker (selectable)
- Provides driver performance statistic

During trials, Nexus Lodestar (C-DAS) was able to record energy savings of up to 20%. This is achieved as C-DAS mitigates the excess energy usage by advising the driver on the necessary speed in order to adhere to timetable requirements. In turn, this stops the train arriving at a station needlessly early which would ordinarily occur due to the train being driven too fast and burning unnecessary energy.



What is “connected” in C-DAS?

Software
Hardware

Our connected-Driver Advisory System has an integrated connectivity of GNSS and LTE. This connectivity allows real-time updates of route data, timetable updates and temporary speed restrictions.

Benefits

- Significant energy savings achieved by avoiding unnecessary braking and running at reduced speed while maintaining on-time arrivals
- Reduces CO2 emissions
- Installation costs are negligible or very low due to the use of existing equipment
- Reduces maintenance cost due to the high Mean Time Between Failure (MTBF) of siemens GSM-R equipment
- Lifetime expert technical support, obsolescence watch and training availible
- Reduction in braking leads to reduce maintenance cost
- Reduction in red signal approaches
- Familiar display minimises driver training
- Supports recovery of delay minute cost
- Improves train punctuality and optimises line capacity
- Application software remotely installed onto the existing Siemens Cab Radio.
- Real-time updates of route data, timetable updates and temporary speed restrictions.

The information in this document contains general descriptions of the technical options available which do not always have to be present in individual cases. The required features should therefore be specified in each individual case at the time of closing the contract.

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