

Abbreviation	CAS System Full Name	CAS System Description Function
ABE	Acoustic Bearing Evaluator	The primary function of this measurement system is to monitor the sound of the bearing. This system is not an alarm system but a trending system which provides various levels of conditions for the bearing
ASW	Assized Weighbridge	The MSW measures the total mass of a wagon, the total mass of each bogie as well as the total mass of each side (left or right) automatically, whilst a train is moving over the system
AWIM	Assized Weighing In-Motion	The AWIMS measures the total mass of a wagon, the total mass of each bogie as well as the total mass of each side (left or right) automatically, whilst a train is moving over the system
CWRM	Continuous Welded Rail Monitoring System	The aim of the system is to measure the rail temperature and stress and to trend the health status of the rail. The processed information is then sent to a user interface, the system is seen as a trending system where the information is used to de-stress sections of rail and to schedule rail replacement.
DED	Dragging Equipment Detector	The primary function of this system is to detect hanging equipment or material from the train and raise a severity alarm
ITCMS	Integrated Train Condition Monitoring System	Train vehicles were manually inspected before and after the departure of trains for any signs of failures or weaknesses
MSW	Massize Weighbridge	The MSW measures the total mass of a wagon, the total mass of each bogie as well as the total mass of each side (left or right) automatically, whilst a train is moving over the system
SBD	Skew Bogie Detector	Detect skew bogies by measuring the lateral forces and gauge spreading, exerted by the wheels on the track.
VIS	Vehicle Identification System	The purpose of the Vehicle Identification System is to determine vehicle consist information at predefined trackside positions, couple the vehicle consist information to train numbers obtained from the TMS
WILMA	Wayside Intelligent Long stress Management System	The aim of the system is to measure the rail temperature and stress and to trend the health status of the rail. The processed information is then sent to a user interface, the system is seen as a trending system where the information is used to de-stress sections of rail and to schedule rail replacement.
WIM-WIM	Wheel Impact Monitor Weighing In-motion	The primary function is to measure wheel impacts of each wheel on a railway vehicle and report alarm conditions
WTMS	Wheel Temperature Monitoring System (E.g. WTMS - HTK, WTMS & PHX)	The primary function of the hot wheel detector is to provide an alarm system for when a wheel has exceeded a prescribed maximum temperature limit. This could be an indication of stuck brakes. There are various alarm types namely: to stop train or continue to the next station/depot; where the wagon with the detected hot wheel alarm will be removed from the train-consist.
BBCMS	Brake Block Condition Monitoring System	The BBCMS is a model for reducing turn-around time in pre-departure yards
BLD	Bad Load Detector	The BLD system consist mainly of a Non-Assized in-motion weighing system with the added functionality of being able to send alarms as well as adding a visual aid (photograph) of the interior of the wagon with each
HBEDS	Hot Bearing Evaluator and Detector System (E.g. HTK, PHX).	The primary function of the hot bearing detector is to provide an alarm system when a bearing has exceeded a prescribed temperature limit before the bearing will fail and might cause a derailment
LPMS	Load Profile Monitoring System	The load profile measurement system primary function is to detect objects protruding outside the standard structure gauge of rail vehicles
UBRD	Ultrasonic Broken Rail Detector	The UBRD system is utilised to continuously monitor the rail for any rail breaks in covered sections.
WAPMS	Wayside Automated Pantograph Measurement System	The primary function of this measurement system is to detect defects in the collector head of the pantograph and to raise an alarm depending on the severity of the condition of the collector head
WPMS	Wheel Profile Measurement System	The primary function of the wheel profile measurement system is to provide wheel profile data to the wagon
RLSMS	Rail Longitudinal Stress Monitoring System	The RLSMS family of equipment encapsulates the all the continuous welded rail monitors (CWRM and WILMa systems. The aim of the system is to measure the rail temperature and stress and to trend the health status of the rail. The processed information is then sent to a user interface, the system is seen as a trending system where the information is used to de-stress sections of rail and to schedule rail replacement.