

## **SLR Navigator**

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*Abstract:* SLR Navigator which is an acronym for Sri Lankan Railway Navigator is a multi agent system which has been designed to handle the train delays and avoid unpredictable train crashes in a dynamic situation as a human thinkable train scheduling system. The system has been implemented to overcome the current issues in the manual train scheduling system. SLR Navigator consists of two modules; In Motion Train Tracking System (module 1) and Intelligent Train Control System (module 2).

The system has been implemented as a Multi Agent System so that it can have all the strengths provided by MAS technologies. Each and every agent can have an idea about the overall situation by reading the message space continuously. They can then contribute to the decision making process when necessary. A two way communication will be established among trains and signal towers as trains may also need to pass messages to the control agent in a panic situation. The ultimate output of the system will be a proper train scheduling process which can smoothly handle train delays and avoid train crashes.