CLAIMS:

1. A system to provide an integrated platform to remotely manage a railway network over a network , the system comprising:

a memory to store machine-readable instructions pertaining to operation, and maintenance of a plurality of trains and an infrastructure of the railway network; and

a processor coupled to the memory and operable to execute the machine-readable instructions stored in the memory, wherein the processor comprises:

a depot management module to manage a plurality of operations pertaining to a depot and monitors movement of a plurality of trains within the depot, wherein the depot management module comprises:

a first authentication sub-module to receive a first plurality of credentials from a first user, wherein the first plurality of credentials comprises a first user identification information and a first password;

a train overview sub-module to display a plurality of updates pertaining to the trains, wherein the plurality of updates comprises a number of trains available in the depot, a number of spare trains in the depot, a number of down trains in the depot, and number of trains in mainline;

a spare train sub-module to provide an identification number of the spare train, locations of the spare train in the depot, and information of total kilometers traveled by the spare train;

a down train sub-module to provide an identification number of the down train, locations of the down train in the depot, and fault information pertaining to the down train;

a track schedule sub-module provides a first view of a daily schedule of a plurality of railway tracks and further provides a second view of a weekly schedule of each of the railway track; and

an assignment sub-module to assign a task to an employee selected from a plurality of profiles stored in a local memory;

a maintenance management module to detect a plurality of rail incidents and respond to the detected rail incidents by coordinating with a plurality of emergency trains to initiate a recovery operation, wherein the maintenance management module comprises:

a second authentication sub-module to receive a second plurality of credentials from a second user, wherein the second plurality of credentials comprises a second user identification information, and a second password;

a status sub-module to provide a unitary interface to depict a first status pertaining to the plurality of trains, and a second status pertaining to an infrastructure of the railway network, wherein the status sub-module further predicts a probability of failure of a plurality of components pertaining to the train and the infrastructure of the railway network; and

an incident interface sub-module to display a graphical map of a plurality of real-time situations of the plurality of trains, and the infrastructure of the railway network, wherein the plurality of situations comprises: detection of faults in a train in mainline, location of the trains in mainline, location of emergency train, and detection of fault in the infrastructure of the railway network, wherein the incident interface sub-module on detection of faults coordinates with a plurality of emergency trains to move towards the location of the trains in mainline; and

an operation management module to monitor a plurality of routine operations pertaining to the trains and the infrastructure of the railway network and projects a plurality of responses on detection of faults in the trains and the infrastructure of the railway network, wherein the operation management module comprises:

a third authentication sub-module to receive a third plurality of credentials from a third user, wherein the third plurality of credentials comprises a third user identification information, and a third password;

a geographical sub-module to display a geographical view of an operating fleet in a plurality of geographical regions, wherein the geographical sub-module further displays information pertaining to headway arrival, dwell time, and unable to board corresponding to each of the geographical region;

a first monitoring sub-module monitors a plurality of status of trains concerning the geographical regions, wherein the plurality of status comprises: running status of the train, scheduled arrival time, deviation from the scheduled arrival time, and platform number;

a second monitoring sub-module to predict and project a plurality of graphs pertaining to the number of passengers arrive in a predefined time duration, number of passengers affected on detection of a fault in the train; and

a response sub-module to assess the severity of the detected fault to project a plurality of response plans, wherein the response sub-module enables a third user to select at least one of the projected response plan.

2. The system according to claim 1, wherein the plurality of profiles comprises a picture of the employee, a contact number of the employee, name of a team corresponding to the employee, designation of the employee, and current assignment of the employee.

3. The system according to claim 1, wherein the assignment sub-module enables the first user to search and select a team from a plurality of team profiles stored in the local memory.

4. The system according to claim 1, wherein the assignment sub-module further provides information pertaining to team members of the team.

5. The system according to claim 1, wherein the second monitoring sub-module further monitors a plurality of key performance indicators pertaining to the plurality of trains and the infrastructure of the railway network.

6. A method implemented by one or more processors for providing an integrated platform for remotely managing a railway network over a network, the method comprising:

managing, by one or more processors , a plurality of operations pertaining to a depot and monitoring movement of a plurality of trains within the depot through a depot management module;

detecting, by one or more processors , a plurality of rail incidents and responding to the detected rail incidents by coordinating with a plurality of emergency trains to initiate a recovery operation through a maintenance management module; and

monitoring, by one or more processors , a plurality of routine operations pertaining to the trains and infrastructure of the railway network and projecting a plurality of

responses on detection of faults in the trains and the infrastructure of the railway network through an operation management module;

wherein the step of managing the plurality of operations pertaining to the depot and monitoring movement of the plurality of trains within the depot comprises the steps of:

receiving, by one or more processors, a first plurality of credentials from a first user through a first authentication sub-module, wherein the first plurality of credentials comprises a first user identification information and a first password;

displaying, by one or more processors, a plurality of updates pertaining to the trains through a train overview sub-module, wherein the plurality of updates comprises a number of trains available in the depot, a number of spare trains in the depot, a number of down trains in the depot, and number of trains in mainline;

providing, by one or more processors, an identification number of the spare train, locations of the spare train in the depot, and information of total kilometers traveled by the spare train through a spare train sub-module;

providing, by one or more processors, an identification number of the down train, locations of the down train in the depot, and fault information pertaining to the down train through a down train sub-module;

providing, by one or more processors, a first view of a daily schedule of a plurality of railway tracks and further providing a second view of a weekly schedule of each of the railway track through a track schedule sub-module; and

assigning, by one or more processors , a task to an employee selected from a plurality of profiles stored in a local memory through an assignment sub-module , wherein the assignment sub-module enables the first user to search and select a team from a plurality of team profiles stored in the local memory, and further provides information pertaining to team members of the team.

7. The method according to claim 6, wherein the step of detecting the plurality of rail incidents and responding to the detected rail incidents by coordinating with the plurality of emergency trains to initiate a recovery operation comprises the steps of:

receiving, by one or more processors, a second plurality of credentials from a second user through a second authentication sub-module, wherein the second plurality of credentials comprises a second user identification information, and a second password;

providing, by one or more processors , a unitary interface to depict a first status pertaining to the plurality of trains, and a second status pertaining to an infrastructure of the railway network through a status sub-module , wherein the status sub-module further predicts a probability of failure of a plurality of components pertaining to the train and the infrastructure of the railway network; and

displaying, by one or more processors , a graphical map of a plurality of real-time situations of the plurality of trains, and the infrastructure of the railway network through an incident interface sub-module , wherein the plurality of situations comprises: detection of faults in a train in mainline, location of the trains in mainline, location of emergency train, and detection of fault in the infrastructure of the railway network, wherein the incident interface sub-module on detection of faults coordinates with a plurality of emergency trains to move towards the location of the trains in mainline.

8. The method according to claim 6, wherein the step of monitoring the plurality of routine operations pertaining to the trains, and the infrastructure of the railway network and projecting a plurality of responses on detection of faults in the trains and the infrastructure of the railway network comprises the steps of:

receiving, by one or more processors, a third plurality of credentials from a third user through a third authentication sub-module, wherein the third plurality of credentials comprises a third user identification information, and a third password;

displaying, by one or more processors, a geographical view of an operating fleet in a plurality of geographical regions through a geographical sub-module, wherein the geographical sub-module further displays information pertaining to headway arrival, dwell time, and unable to board corresponding to each of the geographical region;

monitoring, by one or more processors, a plurality of status of trains concerning the geographical regions through a first monitoring sub-module, wherein the plurality of status comprises: running status of the train, scheduled arrival time, deviation from the scheduled arrival time, and platform number;

predicting and projecting, by one or more processors , a plurality of graphs pertaining to the number of passengers arrive in a predefined time duration, number of passengers affected on detection of a fault in the train through a second monitoring sub-module, wherein the second monitoring sub-module further monitors a plurality of key performance indicators pertaining to the plurality of trains and the infrastructure of the railway network; and

assessing, by one or more processors, the severity of the detected fault to project a plurality of response plans through a response sub-module, wherein the response sub-module enables a third user to select at least one of the projected response plan.

9. The method according to claim 6, wherein the plurality of profiles comprises a picture of the employee, a contact number of the employee, name of a team corresponding to the employee, designation of the employee, and current assignment of the employee.