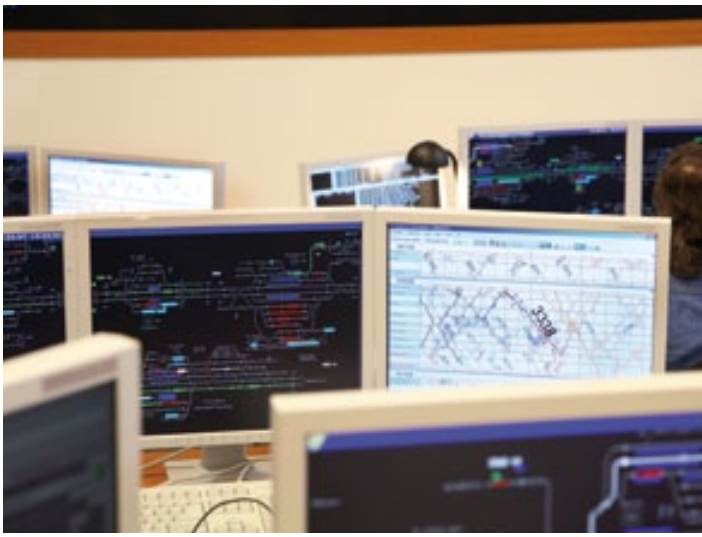
GTN – GRAPHICAL AND TECHNOLOGICAL LAYER OF SIGNALLING SYSTEM

- **Presents the current survey of the traffic situation in the real time**
- **Automatically keeps traffic records**
- **Minimises voice communication in favour of visual communication**
- **Offers more time for decision making and continuous concentration to the railway employees**
- **Provides two-way data exchange with information systems of operational control**
- **Provides train traffic data for passenger information system**
- **Makes available diagnostic information on moving train**

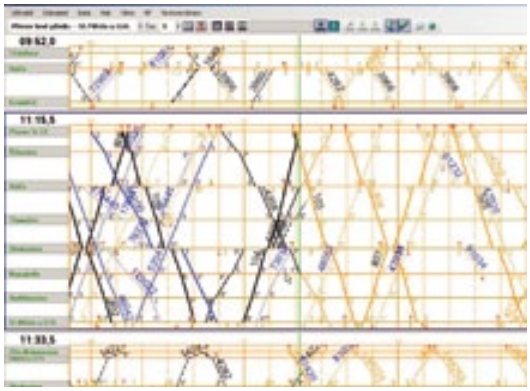


General Description

GTN is a telematics layer of the signalling equipment designed to support traffic processes at defined section of the railway network. The basic requirement is a train number transmission within the signalling system. Its use is preferred on lines with remote control system but it can be applied also at independent stations.

GTN represents computer application which:

- monitors the signalling system operation in a real time
- displays and records traffic of respective track sections and at relevant stations by the train graph
- checks the train routes set related to train number
- continuously updates train position and instantaneously evaluates traffic process situation
- signalizes conflicting situations in the current train graph
- in conjunction with ESA® 11 and ESA® 33 it provides automatic route setting according to train graph

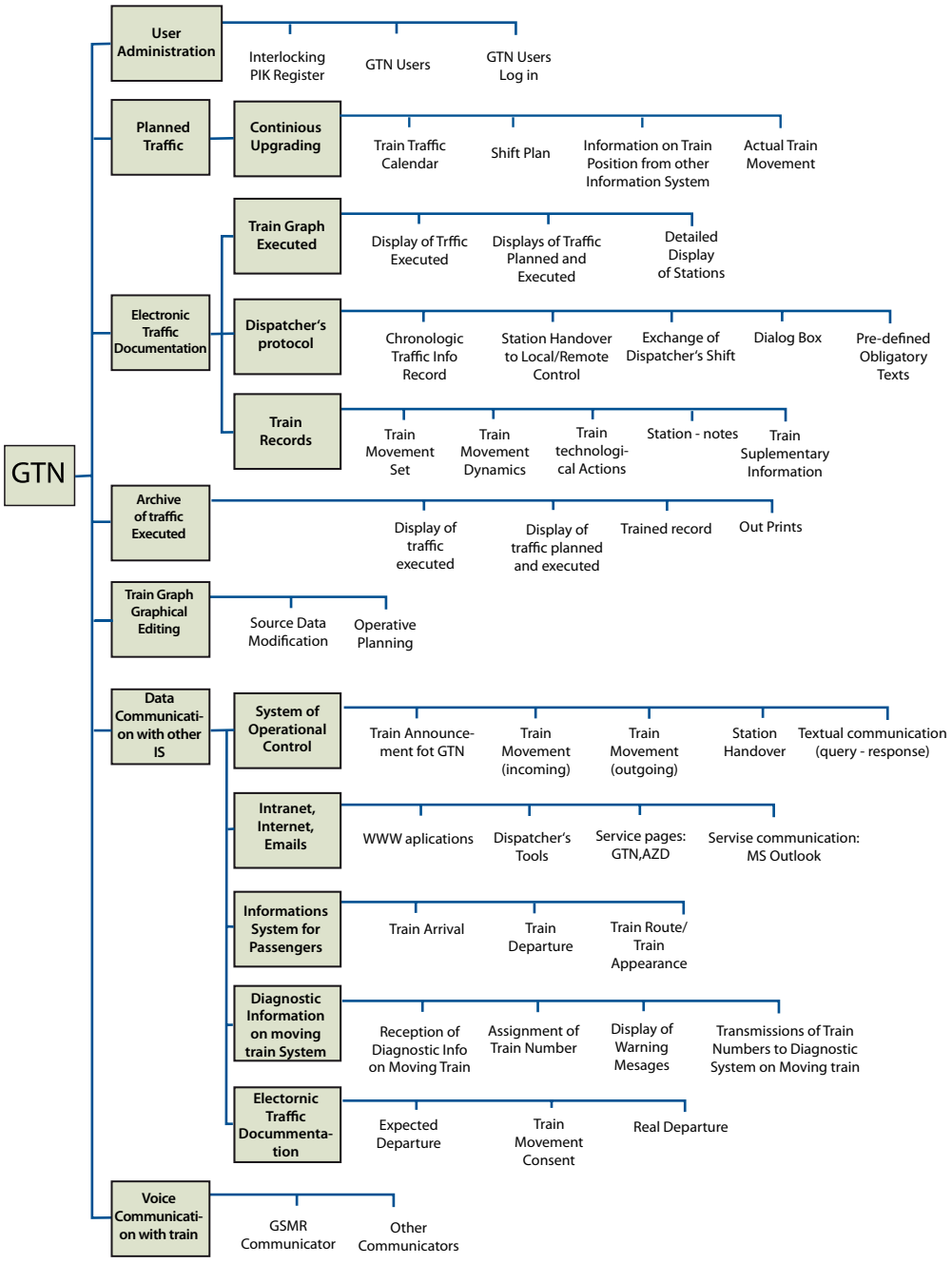


GTN Operational Use

Graphical & technological layer can be used:

- at workplace of a remote control dispatcher or a station dispatcher to support the line and local traffic control processes
- by a station dispatcher for manual control of traffic electronic documentation in a station not equipped by interlocking equipment transmitting the train number
- as a workplace for checking and investigation activity, train graph entry data processing, browsing through GTN archive data and traffic situation analyses
- and installed to ordinary PC at any office with connection to Intranet of the Railway route operator.

PRAHA



Block diagram of GTN integration