



**ERTMS**  
Trains across Europe



**GALILEO**  
Satellite positioning system



Automatic train driving

2

**Technological innovations in rail signalling**



**Technological innovations in railway communications**

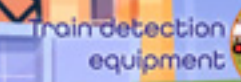
5



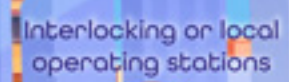
5G communications



**FRMCS**  
Future system of mobile communication



Train detection equipment



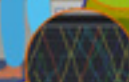
Interlocking or local operating stations



Railway signals  
Switches  
Level crossings



Blocking equipment



Operational mesh

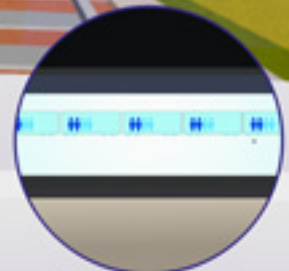
1



Central Circulation Post

**Main elements of signalling**

4



Occupancy level in metro cars



Occupancy level in stations

**Technological innovations in occupancy and information analysis**

**Technological innovations in railway management**

3



**LANZARINA DAVINCI 2.0**  
Advanced integrated rail traffic management system



**ÓPTIMA**  
Help platform for rail traffic management

