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CATALIST

Line 41 – Bucharest Light Rail

Summary:

General dates

The main parts of the system

Technical Solutions

Exploitation results



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General dates:

Track length – 10.2 km double track

Two multimodal terminals

Seven power substations

Twelve stations



The main parts of the system

The entire project consist in the rebuilding of the track, platforms, overhead contact line systems and reinforcement the power supply systems in order to improve the commercial speed on this line and the passenger comfort (by purchasing new trams with air conditoning or increasing the tram frequency).



Technical Solutions

The track was build in several solutions as is showing in following pictures:



Track on ballast platform (segregate area) which represent the main solution



Technical Solutions



Track on concrete platform (used on bridges and tunnels segregated area)



Technical Solutions



Track on concrete cast in situ with bumpers for noises and vibrations (segregate area)



Technical Solutions



Track on slabs with bumpers for noises and vibrations (demisegregate area only for emergency)



Technical Solutions



Multimodal terminal for trams and busses with track area covered by slabs



Technical Solutions

Overhead contact line – two wires (contact wire and messenger wire) tensioned at 10kN each.



Technical Solutions

All route is served by seven power substations (five new in container and two old adapted). The new power substations have one rectifier (2500A) and the old one have 3x2500A.



Exploitation results

Due to segregated track the commercial speed increased from 16 km/h to 25 km/h and the route of tram 41 is the fastest the most loaded in the city.



Thank you for your attention!

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