

Zoom Projet

GRAND LYON
communauté urbaine



Take-over of the operation of traffic-light-controlled junctions on lines T1 and T2 – Greater Lyon

The Greater Lyon Urban Community was the contracting authority for this project, in partnership with Sytral. It also acted as the main contractor. CeRyX Traffic System was involved as part of a consortium including SEA Signalisation. It acted as the agent and was responsible for managing the operation and conducting all studies. Its task also included deploying the new working arrangements.

PROJECT DETAILS AND BACKGROUND

Tram lines T1 and T2 have been in service since 2001. The lines needed to be modernised and updated to improve priority at traffic lights and cut journey times. An experiment was conducted on four junctions on the T1 line in 2008. The results of this experiment were highly promising, and a decision was made to apply these same principles to all junctions on both lines.

CeRyX Traffic System provided the following services :

- An assessment of the layout and workings of the existing system
- Recommended changes (layout and workings)
- Production of operational documentation in line with the new principles
- Adjustments after deployment
- Preparation of the lists of completed work



Line T1 (63 junctions) was part of the firm stage of the contract, to be completed within 6 months.

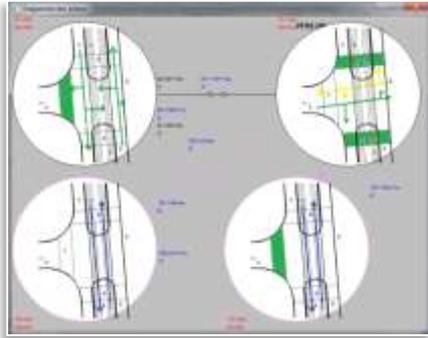
Line T2 (68 junctions) was a conditional stage, which was confirmed following successful completion of the work on T1. The deadline for this second stage was 8 months.

ANALYSIS AND METHODOLOGY

During the assessment phase, CeRyX Traffic System analysed the results of field surveys conducted by SEA Signalisation and produced a summary report on observed instances of non-compliance, the condition of existing equipment, and layout and operational issues. It then put forward a series of recommended improvements and,

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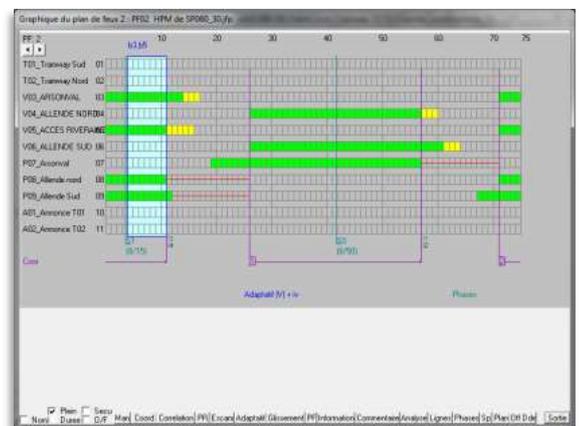
where necessary, the Greater Lyon Urban Community took over the associated development work. Once the assessment phase was complete, CeRyX Traffic System worked alongside the contracting authority to decide what action should be taken at each junction.



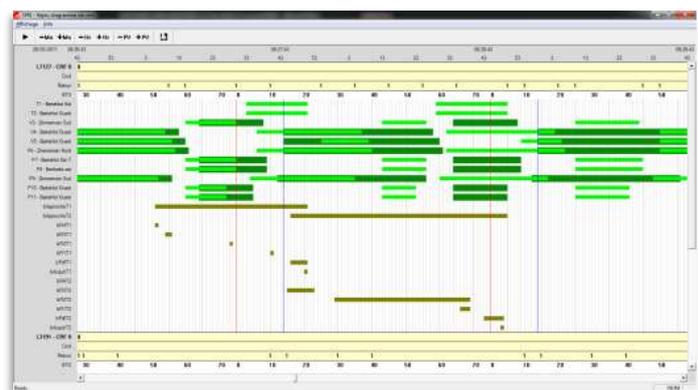
Following the assessment, CeRyX Traffic System determined how the new junctions would work, based on existing working files and the decisions taken during the assessment phase. All documentation was produced to Greater Lyon Urban Community standards using its own software. The general junction control principles were defined during the experiment on four T1 junctions, which was conducted by CeRyX Traffic System.

Once the documentation had been approved, it was sent to SEA Signalisation for scheduling. CeRyX Traffic System was on hand to answer any technical questions that arose during the scheduling phase.

During the factory acceptance and deployment phases, CeRyX Traffic System was available to conduct compliance checks and suggest corrective measures whenever any problems arose.



CeRyX Traffic System then collected data from the CRITER control centre to ensure that the junctions were working correctly. It also conducted journey time surveys between different detection points. These data were used to fine-tune carriage approach times and optimise traffic light priority arrangements. CeRyX Traffic System adapted approach times to suit the specific characteristics of each location. Where a station was located near a junction, for example, a decision was made to trigger the tram phase of the traffic lights only once the tram had left the station, wherever possible. This meant that a carriage standing at the station would not trigger a tram phase too early, helping to keep crossing tram traffic running smoothly.



SOLUTIONS DELIVERED

Once the final adjustments had been made, CeRyX Traffic System supplied the list of completed work, including the working file, the schedule, the wiring diagram and the inter-junction connection diagram.