



# **CONNECTING EUROPE DAYS**

## **28-30 June 2022, Lyon**

***EU support to Lyon and the Auvergne-Rhône-Alpes region for the trans-European transport network***

Dear participant to the Connecting Europe Days in Lyon,

Wherever you have started your journey, one thing is sure: EU funded projects will have made your trip easier, quicker and safer. Many of these projects will have been or still are supported by the various EU-funded programmes that aim to improve transport infrastructure, conduct research into new technologies and application, foster safer approaches and technologies and promote smarter and greener solutions.

If you arrived in Lyon by rail, you will have benefitted from improvements in rail infrastructure brought by several Connecting Europe Facility (CEF) funded projects<sup>1</sup>. These projects have made the Lyon railway node much more efficient now than it was a decade ago. Arriving in the Lyon Part Dieu station, you will see that some projects are still on going to cope with the growing traffic in one of the most important European rail node.

If you arrived by bus or car, you will have benefitted from reduced traffic congestion and improved safety courtesy of the [TIMELY](#) project. If this road journey was made in an alternatively fuelled vehicle, you will have found many electric and hydrogen charging stations, installed thanks to CEF support (with more to come).

If you travelled to Lyon by plane, the French air navigation service provider made sure that your flight was smooth and safe by using Single European Sky ATM Research (SESAR) technologies that have been deployed thanks to CEF funding. Some airlines also upgraded their aircraft with the latest SESAR technologies also thanks to CEF funding.

Once in Lyon, you will probably use public transport via the provider [SYSTRAL](#), which is greening its public transport fleet by rolling out fuel cell or fully electric vehicles.

These are just a few examples of how the EU programmes helps connecting Europe in one of Europe's regions. Read on to find out more about support from [CINEA's funding programmes](#) to the Auvergne-Rhône-Alpes region.

## 1. IMPROVING LYON'S RAIL INFRASTRUCTURE AND MULTIMODAL CONNECTION

Lyon is located at the crossing between the Mediterranean and North-Sea Mediterranean Trans-European Network for Transport (TEN-T) core network corridors. This special position within the French railway network means that, on a given day, more than 1,200 trains (regional, national and international) cross the city, and it can be very congested. This is currently one of the biggest bottlenecks on the French railway network. For this reason, the EU is supporting two main types of projects:

- Those aiming at improving the rail infrastructure in Lyon;
- Those aiming at providing alternative rail links to bypass Lyon for the trains that do not need to stop in Lyon.

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<sup>1</sup> An overview of all transport projects in France supported by CEF can be found at: [France | Innovation and Networks Executive Agency \(europa.eu\)](#)

## 1.1. Lyon node

CEF is co-funding projects to upgrade the railway infrastructure in the node of Lyon in order to improve capacity and enable passenger and freight traffic flows to operate smoothly. The total costs of these projects exceed EUR 160 million.

EU-funded improvements between Lyon Part-Dieu, Lyon Perrache and Venissieux are taking place, including in the Part-Dieu station itself.

CEF funding also improved the railway access to the multimodal logistic hub at the Edouard Herriot Port of Lyon and the elimination of a level crossing where fatal accidents occurred in the past.

## 1.2. Lyon railway bypass

The railway bypass around Lyon consists of a new double track mixed traffic railway line (72 km) to the east and south of Lyon. It will connect the Lyon-Ambérieu-en-Bugey line with the Rhône valley, including a new Rhône river crossing to the south of Lyon. CEF is supporting several studies to prepare the works phase.

These projects are complemented by other initiatives that will strengthen Lyon's position as the crossroads of the two TEN-T core network corridors:

- CEF is supporting the installation of the European Rail Traffic Management System (ERTMS) and electronic interlocking on the Paris-Lyon high speed line. This combination will lead to a capacity increase from 14 to 16 trains per hour.
- CEF is also supporting the new Lyon-Torino cross border section with the projects [Cross Border Section of the New Lyon-Turin Rail Link Mont Cenis Base Tunnel](#) and [the Studies for the realisation of the French accesses to the Lyon-Torino tunnel](#) a 65 km railway line extending between St-Jean-de-Maurienne and Susa in Italy, whose main element is the 57.5 km long Mont Cenis base tunnel. It is an essential part of the Mediterranean corridor and will provide Lyon with an efficient direct rail connection to Italy and beyond.

## 2. MAKING ROAD TRAFFIC CLEANER, SAFER AND MORE SUSTAINABLE IN THE REGION

CEF is also promoting projects aiming at ensuring that road transport is safer, more efficient, and greener.

### 2.1. The Intelligent Transports System projects (ITS)

As part of the [TIMELY](#) project, traffic sensors and traffic control cameras were installed and linked to a traffic control centre. A mobile app was launched ([ONLYMOOV](#)) to provide real-time transport information to citizens and promote “park and ride” strategies. These measures have led to a reduction of traffic congestion between 4% and 9%. They also improved the traffic flow of tramways that are now granted green-light priority.

In addition, the Lyon area is one of the test sites for cooperative intelligent transport systems (C-ITS). C-ITS services allow cars and their drivers to receive information from other cars and from roadside devices. In this context, several services for local commuters, notably between Lyon and Grenoble, or for seasonal road users accessing ski resorts are being tested. Services include rerouting measures and associated travel time targeted display as well as real-time warnings.

## **2.2. Supporting the uptake of electric and hydrogen vehicles**

The Auvergne-Rhône-Alpes region is at the forefront within the EU for the promotion of hydrogen mobility. CEF is supporting the deployment of a network of 20 hydrogen refuelling stations, 5 of which will be in Lyon. As part of the same project, 1,000 fuel cell vehicles will be purchased to ensure a minimum demand for the stations. CEF is also promoting a cleaner and more efficient urban transport by supporting a project to adapt infrastructure to the use of zero-emission vehicles in Lyon. This project will contribute to greening the public transport fleet with the acquisition of 165 between electric buses, fuel-cell buses and trolleybuses.

In addition, several CEF funded projects are deploying charging points for electric vehicles. While many are still ongoing, 50 charging stations have already been deployed in the Auvergne-Rhône-Alpes region and 22 of these are located in the Grand Lyon metropolitan area, with most of them being ultra-fast (capable of charging at 150kW, thus meaning that charging times are kept down to 20-30 minutes).

## **3. FOSTERING THE REGION'S RESEARCH AND INNOVATION CAPACITY IN TRANSPORT**

The Auvergne-Rhône-Alpes- region has become a leading transport research and innovation hub in the EU. Technologies tested and validated with the support of EU research funds become available for deployment on the TEN-T network. The EU is supporting several transport research projects in the region, such as:

**ESPRIT** (Easily diStributed Personal RapId Transit) aimed at improving transport from/to and around city centres. ESPRIT developed lightweight electric vehicle. These vehicles can be stacked together in a train-like fashion to gain space.

**AVENUE** aims to design and test urban transport automation by deploying, for the first time worldwide, fleets of autonomous minibuses in low to medium demand areas of 4 European cities (Geneva, Lyon, Copenhagen and Luxembourg). In Lyon, these minibuses will transport passengers between the Décines Grand Large tram stop and the Groupama Stadium.

The goal of the **LEAD** project is to improve the operation and efficiency of parcel delivery, reduce costs and externalities through forecasting and predictions and support advanced decision making through the entire logistics lifecycle. 6 cities are involved (Madrid, The Hague, Lyon, Oporto, Budapest, Oslo). In Lyon, electric bikes and vans will be used to deliver parcels.

#### **4. INNOVATIVE WAY TO DECARBONISE THE EUROPEAN ECONOMY**

The [EVVE](#) project aims to demonstrate a first-of-a-kind, large-scale vehicle-to-grid (V2G) technology in Europe, based on the implementation of a virtual power plant, which draws upon the energy storage capacities of hundreds of electric vehicles (EV) across the EU. The project has an innovative business model based on the smart management of EV batteries. The EVVE project, funded by the Innovation Fund, has installed 2 V2G chargers at the Bugey power plant.

CINEA is managing seven EU programmes, with information on all its projects [available online](#).