Promoting Sustainable Mobility CYCLING >>>> FRENCH EXPERTISE <<<



Developing FITTED Facts and Figures: **INFRASTRUCTURES** THE CYCLING page 6 **SECTOR IN FRANCE** page 4 Favour **CYCLING** page 11 **Foster INNOVATION** page 18 More **INFORMATION** page 22

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CHAMPIONING HEALTHY and Sustainable Mobility

BICYCLE is a high potential sector that generates each year in France € 4.5 billion in economic benefits and gathers 35,000 jobs.

Economic, friendly and modern, good for the planet but also for health, cycling thrives on French territory. Since the introduction of bike-sharing in cities, ecomobility adepts cycle more and more to commute, go shopping or wander during leisure time.

All stakeholders are mobilised to meet the challenges of the sector and promote cycling:

- the State by developing an appropriate legal framework;
- local authorithies, through their management and incentive policies;
- industries, thanks to their know-how in design and innovation;
- the engineering companies, by their expertise and comprehensive analysis of needs;
- the tourism sector, by promoting leisure cycling;
- the associations, through the organisation and facilitation of collective events.

In 2014, France has decided to strengthen its support to active mobility by launching an action plan: 25 concrete measures to confirm bike as an efficient means of transport.



Facts and Figures: THE CYCLING SECTOR IN FRANCE



Creation of the "Tour

de France", major national sportive event which gathers 12 million people of all ages around the roads. 3.5 billion watch it on TV across 190 countries!

www.letour.fr/us/









Billion euros for the bicycle sector in France, from which 44% for bicycle tourism (1.9 billion).









The amount of money spent by a cycling

tourist per day. Cycle tourism contributes largely to the local economy, especially in the restaurant industry and accomodation.



Annual cost per kilometer (investment and maintenance) for a user, between 200 and 250 euros a year.

AN INTERMINISTERIAL COORDINATOR TO DEVELOP CYCLING

France has decided, in 2006, to appoint a coordinator of all policies conducted by the various ministries. He is connected with the ministries in charge of Housing and Planning, Sustainable Development, Health, Education, Interior, Sports and Tourism, and their regional services.

The coordinator is also linked and supportive to the associations of elected officials, users, professionals and technicians. He helps and coordinates the local authorities to implement the national scheme of cycleways and greenways.



300,000 cycle trips every day in Paris and in its 29 surrounding cities, from which 120,000 using Vélib'.

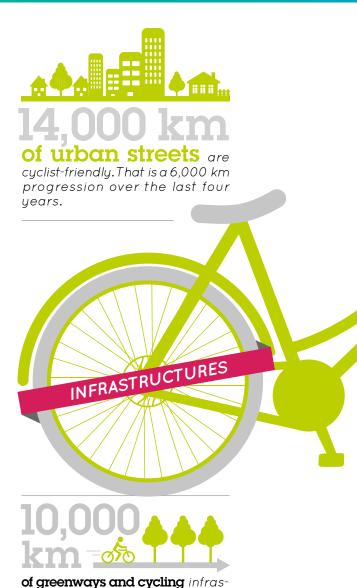


More than half daily travels in France are shorter than 3 km. on bikes











tructures today, and 20,700 km

in 2020.





MAIN MEASURES



New Legal Framework



Fitted Routes



Extensive Network



Intermodality



THE FRENCH STAKEHOLDERS are enlarging the cycling network. To favour its use, biking must be paid as much attention as motorised transport. In some places, it may even become a top-priority.

During the creation or renovation of urban roads (tram networks building, for example), bike routes must be developed. This is a legal obligation in France since 1996 (article L 228.2 of the Environment Code).

New Legal Framework

To share the roads and improve the safety of cyclists in the city, a new national regulation has been established. Three traffic areas are now included in the Road Code.

The system



ZONE 30



This is a section of street or several adjacent sections of streets constituting an area where all road users can go. The entrances and exits are announced by this sign. The speed is limited to 30 kph and all roads are two-way for cyclists, unless the appointing authority police took different provisions.



SHARED AREA

This is a section of street or several adjacent sections of streets constituting an area where all road users can go. The entrances and exits are announced by this sign. Vehicle speed is limited to 20 kph. Pedestrians are allowed to walk on the road and have priority over vehicles.



PEDESTRIAN AREA

This is a section of street or several adjacent sections of streets constituting a temporary or permanent pedestrian-only area. The entrances and exits are announced by this sign. Only vehicles which are necessary for the internal service of the area are allowed to come in. Their speed is limited to a walking pace, about 6 kph and they do not have priority over anybody.



TWO-WAY CYCLING IN ONE-WAY STREETS

It is a two-way street of which one is reserved for cyclists. Facing cars, they are more visible and help calming traffic.

THE "GIVE WAY" SIGNS AND LIGHT SIGNALS





They allow cyclists (and cyclists only) to turn right or keep running straight at the traffic light, even when the light is red, if they do not interfere with upcoming traffic. This system aims to increase safety since it dissociates their departure from those of the motorised vehicles.

Advantages

- > The length of one-way streets where cyclists can travel in both directions has increased by 400% between 2007 and 2010.
- > More than 1,000 "give way" signs have been put on traffic lights.



Fitted Routes

The systems

The capital city offers its residents many bike facilities:

• eleven cycle tracks, identified by white and green signs, serve the major Paris poles and form a real network;



- the North-South cross-town path connected to the regional bike network. The to-be East-West path will further expand the network;
- •215 km of one-way streets have been turned into two-way for cycling. They are all located within the Zone-30 which covers 20% of Paris territory;
- the "give way" is tested at a small scale for the moment;
- an interassociative bike house, run by "Mieux se déplacer à bicyclette" association ("Move easier by bicycle") allows all riders to find information, advice and let them have their bikes marked against theft (Bicycode). A workshop, facilitated by volunteers from the "Vélorution Île-de-France" association (Paris Region Biking Revolution), proposes to teach how to repair a bike.





www.paris.fr/english



BICYCODE

Theft is a major obstacle to cycling development especially in urban areas. To fight against it, the Bicycode marking system has been created. It is a preventive marking that identify the owner of a bicycle. It includes a unique number engraved on the bike and a passport returned to the owner with the bike number and a personal password. In case of theft, the owner must report it on the dedicated website and, in parallel, register a complaint to the police.







Extensive Network

The system

Numerous facilities have been set up:

- a 650-km cycling network;
- A "2012-2020 bicycle scheme" which plans to create a 137-km express network by 2017 and a 247-km intercity network to have a modal share of 15%. Its budget is 30 million euro;
- An express cycle track on the Garonne river
- Two-way cycling in one-way streets (since 2003):
- a Bike House;
- a system of long term bicycle rental even before the existing bicycle sharing systems which extends over the entire metropolitan area;
- •the 14 Park & Ride of the Bordeaux Metropolitan Authority and most Bordeaux car parks have dedicated places which are reserved for bicycles and 5,000 racks are available on the streets (12,000 in 2020);
- a bike guide combining advice and plans;

- a leaflet on "give way at the red light";
- cyclists training courses.
- 😥 www.lacub.fr

Advantages

The bike modal share is 9% downtown and 4% across the whole Metropolitan Area.





Intermodality Between Bike and Public Transit

The system

Cycling is the ideal means of moving no farther than 3 or 5 km away, and may thus be used to access public transport, particularly in sparse areas or during off-peak hours. Boarding bicycles in public transport vehicles is an interesting solution, but given the available space and time necessary for the boarding and getting of travellers, more emphasis is placed on providing parking around the transit interchange points (neighbourhood bus stops, tram or train stations), on the development of feeder bike routes and on bicycle accessibility of stations. Strasbourg emphasised on the amenities:

- 500 km of cycle routes have been created;
- •a bike station offers direct train-to-bike access and reversely;
- a dedicated parking for bicycles under the

Central Station, with 850 places available upon subscription;

- a bike sharing system Vél'hop;
- a website that gathers information about stolen or found bikes.
- 📀 www.velos-trouves.strasbourg.eu
- 😥 www.en.strasbourg.eu

Advantages

Strasbourg is the first city in France when it comes to cycling, with a modal share of 9% across the Metropolitan Area and 15% in the city centre.

Adapted Public Space



The system

More and more amenities, parking lots and services are avai-

lable. The city has focused on:

- bicycle parking close to park and ride facilities, near structural axes of urban transport;
- •150 parking spaces at the train station and soon extended to 300 bikes;
- a 24/7 bike share system called Bicloo;
- city funded 200-euro allowance for the purchase of an electric bike;
- student cycling, by building the "Vélocampus" house to allow them to rent an affordable bike out of the 300-bicycle fleet or to repair themselves their own bikes.
- www.velocampus.net
- www.nantesmetropole.fr



Advantages

The Nantes metropolis bike plan aims to raise the share of cycling from 3% in 2014 to 15% in 2030.



AS A HEALTHY MEANS OF TRANSPORT, cycling is encouraged by all stakeholders. For both working or leisure uses, everything is set up to provide cyclists with optimum travel conditions.





The Cycling Master Plan

The system

Urban Mobility Plans are mandatory in metropolitan areas over 100,000 inhabitants, and they include a road map for cycling promoting and improved travel safety.

All local authorities that manage a road network can set up a cycling master plan. The development of the cycling routes layout must fulfil Urban Mobility Plan requirements, if there are any.

Booming Biking Courses

The system

Learning to ride a bicycle in the city is not trivial. People who have never learnt or dare not move in urban areas near cars need landmarks. Associations, local authorities and businesses propose to help a variety of publics (schools, adults, people with disabilities, etc.) to learn riding a bicycle: learning balance, riding in city traffic, small repairs, etc. Internships grow all across France, and since

2011, a national day of biking schools is organised during the European Mobility Week.

www.agissons.developpement-durable.gouv.fr



Secured Cycle Parking

The system

Since 2004, the urban planning scheme of the city requires residential buildings to offer a specific location or a closed and covered reserved parking for two-wheelers. For example, the residence "3 Sources" proposes to its 42 apartments distributed in 4 buildings, 3 bike shelters (about 15 m² each), equipped with bars to attach the bikes and easily accessible from outside. The student residence La Cardinière, connected to the university sector by a greenway, includes 102 studios and a bicycle shelter directly accessible and visible from the lobby and elevator, supplemented with 10 parking spaces outside for visitors.



The management

Social housing management agencies include bicycle parking in collective housing programmes. They check the quality and the functionality of these spaces through a tenants' satisfaction survey.



The Public Transit Companies

AT THE COUNTRY LEVEL

France's National Railway Company (SNCF)

It is possible to take a bike on board with no additional fee, provided it is disassembled and roomed in a cover. If the bike is ready-to-go, it can be transported in the regional trains (TERs and Transiliens) excluding peak hours, as long as there is enough room among passengers. On board other trains Intercités, high speed trains (TGV), there are bicycles-dedicated

spaces subject to reservation (10 euros per bike). SNCF also accredits bicycles renting companies.

Half of the train stations are equipped with around 25,000 parking spaces for bicycles. SNCF offers open or closed shelters, with individual or shared spaces. The law of May 28th 2013 enforces the creation of secure parking areas for bicycles in new train stations and those that are restored.

www.bikes.sncf.com

PARIS

Autonomous Operator of Parisian Transports (RATP)

Autonomous Operator of Parisian Transports does not allow bikes in the metros, buses, trams or Montmartre funicular, except line 1 of the metro. One can take his bike on board in the Express Regional Network (RER) operated by RATP and SNCF under certain conditions. RATP develops bicycle parking facilities near its stations. It has on its website

a new section dedicated to cyclists and pedestrians.

www.ratp.fr/en section "travelling"

COMMUTING

The business travel plan (plan de déplacements entreprise - PDE) is a set of measures negotiated within a company that aims to optimise travels related to professional activities, promoting the use of alternative modes. Its implementation is encouraged by public authorities, as it has many advantages for companies, employees and the community.

Among the actions mentioned in the PDE, cycling is promoted through:

- **>** the establishment of secure parking, a bike room with tools and services, hanging rooms and showers;
- > giving out a bike kit comprising the cycle map of the city and/or different cycling routes, urban cycling guide, prepared by the Federation of bicycle users (FUB).

Since 2008, the law requires employers to refund 50% of the subscription amount to bike-share systems used for commuting by employees (as well as subscription to other public transit).



An Efficient Business Travel Plan

The system

A car needs 10 times as much parking space as a bike. 80% of ST Microélectronics employees used to commute by car and the company started thinking about alternative modes. Several actions have been implemented: a shuttle to the train station, cheap transit fees, safe pedestrian layouts, cycle kits.

The management

ST Microélectronics has won the first edition of the European Business Travel Plan Award.

😂 www.plan-deplacements.fr



Advantages

> Impressive modal shift results: 37.5% of the employees have quitted car commuting.

> Very positive environmental impact: 360 fewer tonnes of CO2 each year.



VCub+



The system

Vcub+ system is intended to foster intermodality. Available at tram or bus stops, the bike can be used during 20 hours before being returned to its base station. It perfectly fits commuters needs.

www.vcub.fr

The management

VCub is exploited by Keolis, the transit operating company.

www.keolis.com

LEISURE TIME: Cycle tourism



Cycleways and Greenways

The system

The National Mission for Cycleways and Greenways ("mission nationale des véloroutes et voies vertes"-MN3V) aims to facilitate the implementation of the national scheme of cycle paths and greenways. The objective is to achieve a 20,000-km network by 2020, out of which two thirds will be right-of-way.

At the regional level, the MN3V promotes regional committees of cycleways and greenways, approves regional plans, implements projects of European ways, disseminates tools and shares experiences. It works with representatives of the

regions and "départements", tourism committees, associations. It runs or participates in various projects such as:

- National Observatory of cycleways and greenways;
- Creating routes committees;
- France cycle tourism ("France vélo tourisme" -FVT) Approach:
- "Street for all" Approach.

Advantages

8,500 km of cycleways and greenways have been created over the last decade.



FRANCE CYCLE TOURISM SCHEME

The State, local authorities and tourism businesses promote together the national scheme for cycleways and greenways. The France cycle tourism approach aims to attract new users in order that France can become the first cycle tourism destination in Europe. The first three markets today are Germany, the United States and the United Kingdom.

The whole French territory has many attractive features to encourage this type of tourism, for example in the wine-growing regions, where it is most developed (Alsace, Burgundy, Atlantic

coast, Provence, Val de Loire). In 2012, nearly 200 tour operators sold stays, totaling more than 2,500 available tours.

The goal is to double the cycle tourism and create 10,000 jobs by 2020. The sector also expects an increase by €2 billion of its turnover, knowing that 1 euro invested in cycleways generates a 1-euro turnover every following

www.francevelotourisme.com



A Unique Cycling Facility

The system

- 800-km marked and secured routes
- 50 million euros investment over 10 years by 2 regions, 6 départements and 6 metropolitan areas
- Fully integrated to the "EuroVelo6" European route, from the Atlantic to the Black Sea
- 280 km certified as World Heritage site by UNESCO
- •1 Regional Natural Park: Loire-Anjou-Touraine
- 300 professionals (accommodation, cycle rental, sites visits, tourist information offices)
- www.cycling-loire.com



Map by the CRT Centre-Val de Loire and the Agence Régionale



Picturesque Touristic Routes



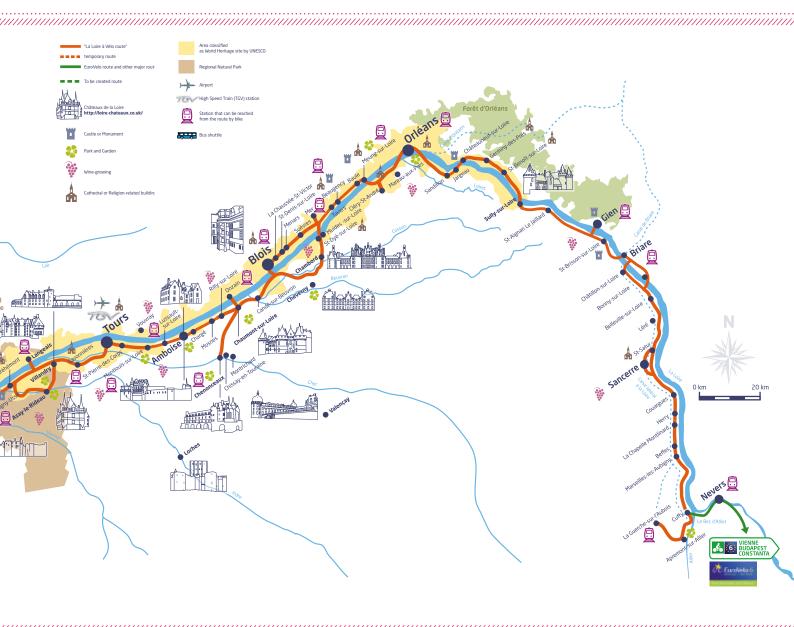
The system

RAILROAD NETWORK AGENCY OF FRANCE (RÉSEAU FERRÉ DE FRANCE - RFF)

The abandoned railways offer room for cycleways. To secure future rail transport possibilities, RFF proposes to local authorities arrangements for them to create and manage cycleways. There is a reversibility principle, which allows for rail infrastructure to come back if needed, once the public authority cycling investments are paid off.

www.rff.fr/en







NATIONAL FOREST AGENCY ("OFFICE NATIONAL DES FORÊTS" - ONF)

The ONF is also eager to promote tourism in state forests and promotes open farm roads, provided that the timber harvesting activity remains a priority.





NATIONAL INLAND WATERWAYS AND RIVER TRANSPORT AGENCY ("VOIES NAVIGABLES DE FRANCE"- VNF)

To foster tourism (pleasure boats), VNF opens more and more haulage roads to cycling. Bikers can ride if they have a personal waiver, or if VNF and the local authority contracted to let cyclists use those ways. In this case, the works and maintenance are under the public authority responsability.

www.vnf.fr











THE FRENCH INDUSTRY has adapted to the new expectations regarding urban mobility. At the forefront of innovation on bike-share systems, on folding bike and on electric bike, it is also very creative on utilitary bikes.

Bike-Share Systems







The system

In 2013, around forty French cities offer bike-share services ranging from one station and 8 electric bikes in Montbéliard to more than 23,000 Vélib' in Paris scattered in 1,450 downtown stations and 300 suburban stations.

the public transport networks. Some urban authorities run the service by themselves (Saint-Etienne, La Rochelle), others have chosen delegated management through companies not linked to public transport, as Strasbourg or Vannes.

The management

Operators are often companies specialised in urban furniture. Urban transport operators can also offer bike-share services in connection with

Who are the equipment suppliers?

Clear Channel is a company whose core expertise was urban furniture and advertising. It created the first bike share system in France, one of the first in the world.

clearchannelinternational.com

JCDecaux has launched Vélo'v in Lyon (2005) and Vélib' in Paris (2007).

www.jcdecaux-oneworld.com en.cyclocity.com



Electric Bikes

The system

The electric bike has an electric motor and a battery to supply the energy required to assist the pedaling. It is legally regarded as a bike and not as a powered two-wheeler. As such, it is allowed to take the facilities reserved for cycles. With the benefits of cycling (including the practical and compact aspects), electric bike requires less effort to achieve the desired speed and ease the travel in the case of uphill slopes. Hence it can become a real commuting or professional means of transport.

The management

To encourage its use, numerous local authorities or companies offer financial support to electric bike buying, often equal to 25% of the price but capped.



Advantages

Electric bikes sells have increased by 1,000% over the past seven years: 46,100 bikes sold in France in 2012.



Bicycle Long-Term Renting



The system

The city promotes the development of new mobility means and V'Lille, with a goal of 8,000 bikes in long-term renting and the creation of 4 Bicycle Houses offering services such as repairs, the provision of small gear, etc.

www.vlille.fr

The management

Transpole, the company which operates the public transport in the Lille Metropolitan Area, backs the city in its approach.

www.transpole.fr



Innovation Awards

The system

Prices help promoting companies and raise public awareness on significant innovations.

BEST BIKE IN URBAN ENVIRONMENT AWARD

Organised since 2004 by the cycling promoting committee (Comité de promotion du vélo), it rewards the bicycle that best meets the criteria required by bicycles users in urban areas in several categories: city bike, electric bike, folding bike, folding bike with electric assistance.

2014 Winners

City bike category: AGT bike by Matra. This company designs and built its products in Romorantin (Loir-et-Cher "département").

www.matra.com

Electric bike category:

Vélo Samedi 28 by Moustache. This company is settled in the Vosges "département".

www.moustachebikes.com/uk

Folding bike with electric assistance: Valdo by O2Feel (also 2012 winner in the electric bike category), a company from Picardie region.

www.o2feel.com/en

2012 Winners

City bike category: Elops 7 by

B'TWIN-Décathlon

Folding Bike Category: Hoptown by

B'TWIN-Décathlon

Bike designer and manufacturer in Lille, also retailer in its 210 stores, the company sells one bike out of two in France.

www.decathlon.co.uk

R'BIKE AWARD

This prize rewards innovative products and accessories from several suppliers.

2012 Winners

Lapierre Company from Dijon for its XR TEAM mountain bike.

www.lapierre.bikes.fr.co.uk

Special Award

T-Box by Arcade. This company settled in the Vendée "département" sells 20% of its production abroad. Arcade designs robust bikes for intensive use, especially suitable for rental, cities and businesses. The company promotes easy maintenance bicycles thanks to innovative, lighter and more efficient cardan shaft.

Arcade keeps also improving folding bicycle: it recently introduced Nano, whose weight is only nine kilos without electric assistance. An electric version is available.

www.intercucles.com

2011 Winner

Most innovative French SME category, in the sport sector: Look cycle

The company that provided the French track cycling team at the London Olympics in 2011.

😥 www.lookcycle.com

BIKE TALENTS

2012 "Innovation" Winner

Beecyclo, a company from Lyon was rewarded for its urban trailers for bikes.

www.beecyclo.fr

2011 Entrepreneurship Winner

Velogik, settled in Lyon, was rewarded for its electric bikes designed for home care services.

www.velogik.com

More INFORMATION

THE COMPANIES

France hosts world-renowned companies in the field of cycle designing, but also in components and accessories production. The expertise of these companies covers all uses: city, sport and leisure.

Bikes Manufacturers

Arcade

www.arcadecycles.eu

Beecyclo

www.beecyclo.fr

Cycleurope

www.cycleurope.com

Décathlon

www.decathlon.co.uk

Easybike

www.easybike.fr

Lapierre

www.lapierre-bikes.fr.co.uk

Look Cycle

www.lookcycle.com

Matra

www.matra.com

Moustache

www.moustachebikes.com/uk

O2Feel

www.o2feel.com/en

Components and Accessories

CORIMA

www.corima.fr

MAVIC

www.mavic.fr

Michelin Vélo France

velo.michelin.fr

Time Sport International

www.time-sport.com

VELOX

www.velox.fr

Zéfal

www.zefal.com/en

Parking

Abri Plus

www.abri-plus.com/GB.htm

Aguidon Plus

www.aguidon-plus.fr

Altinnova

www.altinnova.com

ENGINEERING COMPANIES

They help create the "bike part" of urban travel plans, but can also help to develop business travel plans. Their services range from the development of bicycle parks to needs analysis, education, riding in traffic or bicycle maintenance training.

ADETEC

www. a detec-deplacements.com

Eco-Compteur

www.eco-compteur.com

Indiggo

www.inddigo.com

Sareco

www.sareco.fr/en

Vélogik

www.velogik.com

ASSOCIATIONS

They are implied in the development of various aspects of cycling: organization of athletic events or touristic excursions, contribution to the development of the national scheme of cycleways and greenways, promotion of everyday cycling. They work in partnership with public actors.

European Greenways Association

www.aevv-egwa.org

French Association for Cycleways and

Greenways Development

www.af3v.org

French Association for Cycleways

and Greenways Development

www.centre-ville.org

Cycling cities and territories

Association

www.villes-cyclables.org

Cycling Promotion Committee

www.comite-promotion-velo.fr

Cycling Départements and Regions Association

www.departements-regions-cyclables.org

European Cyclists' Federation

www.ecf.com

French Cycling Federation

www.ffc.fr

French Cycle Tourism Federation

www.ffct.ora

French Federation of bicycle users

www.fubicv.org

Professional Federation of Sports and

Leisure Companies

www.entreprisesdusport.com

National Federation of Cycle and Powered-Wheelers Sells and Repair

www.fncrm.fr

National Federation of Public

Transport Users

www.fnaut.fr

Public Transit Authorities Association

www.gart.org

National Council of Cycle

Professionals

www.tousavelo.com

THE STATE AND ITS AGENCIES

Ministry of Ecology, Sustainable **Development and Energy**

www.developpement-durable.gouv.fr

French Environment and Energy

Management Agency

www2.ademe.fr

Centre of Studies and Expertise on Risks, Environment, Mobility and

Planning

www.cerema.fr

French Institute of Science and Technology for Transport,

Development and Networks

ifsttar.fr/en

National Forest Agency

www.onf.fr

Research and Innovation Programme

on Land Transport

www.predit.prd.fr/predit4/english Railroad Network Agency of France

www.rff.fr/en

National Inland Waterways and

River Transport Agency

www.vnf.fr

Autonomous Operator of Parisian

Transports

www.ratp.fr/en

France's National Railway Company

www.bikes.sncf.com



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www.developpement-durable.gouv.fr

Click on "salle de lecture"