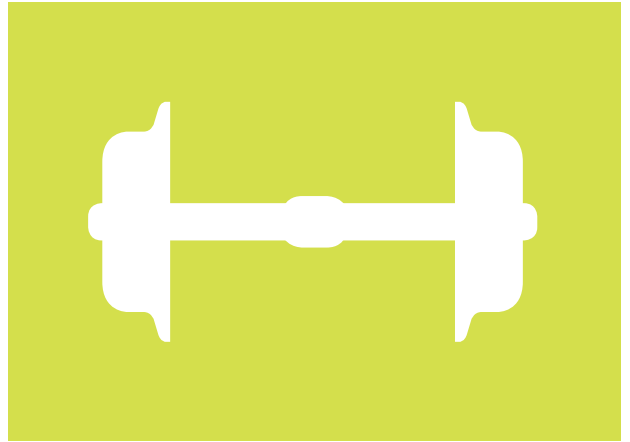
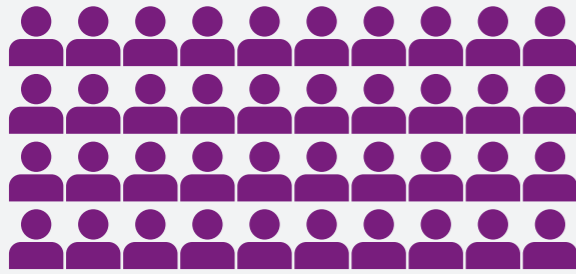


# MASTERIS

YOUR ROLLING STOCK, OUR EXPERTISE



OUR UNIQUE EXPERTISE  
TO IMPROVE YOUR  
RAILWAY PERFORMANCE



## MASTERIS, A SINGLE CONTACT POINT TO SUPPORT YOU WHATEVER YOUR NEEDS

# 23,000

ROLLING STOCK TECHNICIANS AND SPECIALISTS,  
INCLUDING 1,500 ENGINEERS AND 250 TOP-LEVEL EXPERTS



# 256

OVER 256 CUSTOMERS  
IN FRANCE  
AND ABROAD



# 38

TECHNICENTRES  
AND 70 PRODUCTION  
FACILITIES ACROSS  
FRANCE



# 250,000

TONNES OF PARTS CARRIED  
ANNUALLY AND  
108,000 REFERENCES



# 800

MILLION KILOMETRES  
COVERED ANNUALLY:  
A UNIQUE MAINTENANCE  
EXPERIENCE



# 39M

EUROS TURNOVER  
IN 2013



# 50%

TURNOVER  
GENERATED OUTSIDE  
THE SNCF GROUP

## PROFILE

Today 100% of your energy and attention is required to ensure the comfort, safety and mobility of your passengers and to make certain your freight convoys run smoothly. To allow you to concentrate full-time on your core business, MASTERIS takes care of your rolling stock and components through a comprehensive range of services. MASTERIS provides you with maintenance and refurbishment solutions and advice suited to match your needs and operational imperatives, whatever the size of your fleet, and at every stage of its life, both in France and abroad.

Founded in 2009 as a subsidiary of SNCF, MASTERIS streamlines your operations through its four areas of expertise: routine maintenance, replacement parts solutions, engineering and training services and refurbishment and modernisation of your railway rolling stock. We cover the entire spectrum of rail traffic: freight, passenger rail and even urban light rail. Our mission is to improve your rail capabilities by combining the power of a large group with the agility of a small organisation. Our advantages include the experience of a national operator covering more than 800 million km annually, the skill of its 23,000 rolling stock maintenance specialists and the power of its industrial resources with over 38 Technicentres and 70 production facilities across France. Another plus is the agility and flexibility of a business that assigns you a single contact person who will support you throughout, help you refine your requirements and provide you with tailor-made solutions.

**The MASTERIS service package is a result of this blend of scope and proximity.** Its aim is to guarantee the safety, regularity, performance, innovation and competitiveness of your operations and fleet. MASTERIS is able to deliver this through Full Service contracts, featuring availability commitments and results for your fleet. It can deliver this fleet, and thanks to its extensive geographical coverage of the French territory bringing its services as close as possible to your rolling stock. In addition, a technical Fleet Supervision service monitors your vehicles in real time and reschedules servicing. Not to mention our technical experts and modernisation teams which can always adapt your equipment to new operating conditions. MASTERIS consulting and maintenance services are aimed at all the players in the rail industry, and cover every stage of a vehicle's service life, from design to a new lease of life, plus support for its everyday operations.

## MASTERIS IN BRIEF

### THE POWER AND AGILITY TO BOOST YOUR RAIL PERFORMANCE

- Our Mission: to improve your rail capabilities
- Two pillars: the power of a large group and the agility of a small team
- Four areas of expertise covering all the technical needs of rolling stock
- Tailored solutions at the right price and the right level of service
- Unique coverage of French territory
- In-depth knowledge of the system's behaviour in service
- Contractual commitments to results regarding both fleet availability and quality

## AREAS OF EXPERTISE



OPERATIONAL  
MAINTENANCE



ENGINEERING  
AND TRAINING



REPLACEMENT PARTS  
SOLUTIONS



MODERNISATION  
AND REBURFISHMENT

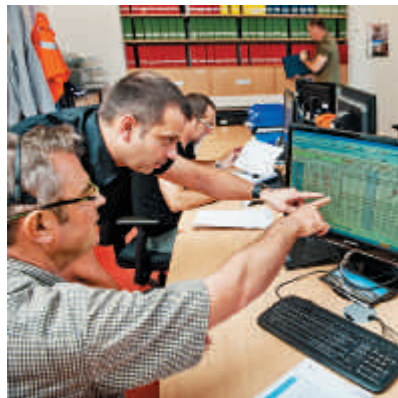
“MASTERIS HELPS US MANAGE DAY-TO-DAY MAINTENANCE OF THE BB75000 FLEET WE OPERATE. THEY HAVE TREMENDOUS ASSEMBLY EXPERTISE, SO THEY’VE BEEN ABLE TO ADDRESS OUR SPECIFIC NEEDS AND CUSTOMISE THEIR APPLIED MAINTENANCE TECHNIQUES ACCORDINGLY. AND WHEN WE’RE FACING DISRUPTIONS, MASTERIS RESPONDS PROMPTLY AND GETS US BACK ON TRACK AS SOON AS POSSIBLE.”

STÉPHANE MOISAN – IN CHARGE OF OPERATIONAL FOLLOW-UP FOR ECORAIL’S TRAIN PRODUCTION IN THE CONSTRUCTION AND CIVIL ENGINEERING FIELD, ECORAIL

**28**  
TECHNICENTRES DEDICATED TO MAINTENANCE

**13,250**  
TECHNICIANS AND SPECIALISTS

# GUARANTEEING THE AVAILABILITY, RELIABILITY AND SAFETY OF YOUR VEHICLES, DAY BY DAY



**70**  
PRODUCTION FACILITIES LOCATED THROUGHOUT FRANCE

**OUR CUSTOMERS**

ALSTOM, BOMBARDIER, EUROPORTE, LA POSTE, THELLO, VOSSLOH LOCOMOTIVES, ETC.

**MADE-TO-MEASURE SOLUTIONS**

Whatever your rail activity or the size of your fleet, whatever your rolling stock or your operating environment, MASTERIS can provide a maintenance solution that is appropriate for you. This is equally true whether you need a one-off service or a fully integrated maintenance programme (scheduling, implementation, supply management, technical and regulatory monitoring, etc). Additionally, MASTERIS can also provide Entity in Charge of Maintenance (ECM) services on demand.

**RECOGNISED EXPERTISE, UNIQUE TERRITORIAL COVERAGE**

This range of services is coordinated by a dedicated team (Technical Fleet Supervision – TFS) which ensures that operations run smoothly 24 hours a day, 7 days a week and reorganises them in the event of unforeseen circumstances. 13,250 SNCF specialists ensure their implementation on the ground, right where your vehicles are:

- in one of the 28 SNCF partner Technicentres, all ISO 9001 and ISO 14001 certified;
- in one of the 70 workshop facilities;
- or right where your vehicle is if mobile maintenance is required.

**LEVERAGE FOR YOUR RAIL PERFORMANCE**

With the benefit of over 800 million train km each year travelled by over 11,000 machines (not including wagons), MASTERIS can make use of this unique feedback to optimise the maintenance of your vehicles. With MASTERIS you can concentrate fully on your business as a rail operator and on your growth strategy. Your industrial assets are not only operational, available, standard compliant and safe, but also standard-compliant and always suited to your operating conditions. MASTERIS puts these contractual commitments down on paper.



**THE MASTERIS SERVICE**

**RELIABILITY – EXPERTISE – UNIQUE COVERAGE**

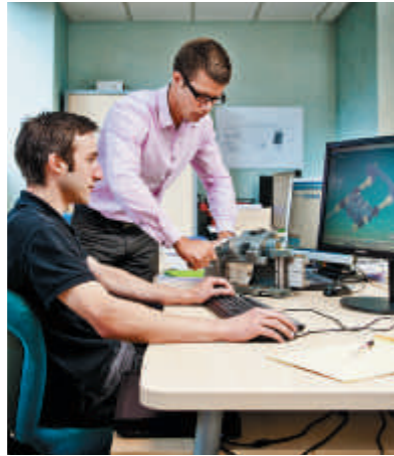
- A tailored service to suit your operational needs and the size of your fleet
- Contractual commitment to results in terms of availability, reliability and safety
- A personalised commercial relationship giving you access to all of SNCF’s facilities and expertise
- Coverage of the entire French territory and maintenance teams that can mobilise on demand
- Optimised maintenance thanks to feedback from 800 million train km travelled each year
- A Technical Fleet Supervision (TFS) service, on-hand 24 hours a day, 7 days a week to take care of your maintenance and reschedule work where necessary





# 250

TOP-LEVEL EXPERTS  
(ROLLING STOCK ENGINEERING CENTRE)



# 1,500

ENGINEERS AND TECHNICIANS

# 90

TECHNICAL RAIL SPECIALITIES

### OUR CUSTOMERS

KEOLIS, KORAIL, ONCF, RFF, ETC.



**EXPERTISE No.2**  
ENGINEERING AND TRAINING

# DELIVERING SOLUTIONS TO YOUR TECHNICAL ISSUES

“WE RELY ON MASTERIS FOR TECHNICAL SUPPORT SERVICES BECAUSE THEY HAVE UNMATCHED TECHNICAL KNOW-HOW IN ROLLING STOCK. MASTERIS SUPPLIED US WITH TOP-NOTCH STUDY RESULTS ON TIGHT TURNAROUND TIMES, GIVING US VITAL INPUT DATA FOR OUR EXECUTION STUDIES. THEY LISTENED TO OUR NEEDS AND GAVE US IMPECCABLE, PERSONALISED ADVICE.”

DIDIER LESAGE – HEAD OF RAILWAY TESTING AND INTEGRATION, COSEA



### SPECIALISED, FULL-SPECTRUM EXPERTISE

Whether you need to integrate a new feature or improve a function, design or change your maintenance plan, renew or enlarge your fleet or even to train your teams, MASTERIS can support your development and anticipate your needs via its cutting-edge engineering in both innovation and maintenance, for both your purchasing and training needs.

MASTERIS technical expertise covers all fields of the rail industry: interoperability, passenger comfort, on-board or train-to-wayside communications, operational performance, equipment purchasing, safety and security, etc.

### WORKING FOR THE TRAIN OF TOMORROW

With MASTERIS, you gain access to nearly 90 rail specialities concentrated at the SNCF partner Rolling Stock Engineering Centre (CIM).

250 top-class experts work there to continuously improve the performance of rolling stock, rethink the way it is used and come up with new concepts and innovations for the “train of tomorrow”, closely in tune with the new needs of operators.

### ENGINEERING CLOSE AT HAND

Nearly 1,500 engineers and technicians can help you day-by-day and:

- put together your rolling stock acceptance and approval applications
- carry out moving part expert appraisals
- design tailor-made training courses in any aspect of rail technology
- model your investments according to a TCO (total cost of ownership) approach by integrating acquisition cost, maintenance costs and their trends and energy consumption
- carry out your rail engineering studies

All of these are genuine levers to boost your rail performance.



### THE MASTERIS SERVICE

### INNOVATION – MAINTENANCE – PROCUREMENT – TRAINING

- Four fields of action: innovation engineering, maintenance engineering, procurement engineering and training engineering
- Procurement expertise based on the tens of billions of Euros worth of equipment purchased by SNCF
- Training solutions tailored to needs
- The high-level vision and the expertise of the CIM (Rolling Stock Engineering Centre)
- Engineering close to you with a network of 1,500 engineers and technicians
- Expertise based on 70 years of feedback



**250,000**

METRIC TONNES OF PARTS  
TRANSPORTED PER YEAR

**108,000**

PRODUCT LISTINGS



**EXPERTISE No.3**  
REPLACEMENT PARTS SOLUTIONS

# EXTENDING THE LIFESPAN OF YOUR VEHICLE COMPONENTS



“MASTERIS HAS BEEN DOING A GREAT JOB OF TAKING CARE OF SOME OF OUR SPARE PARTS FOR OVER 2 YEARS. THEY TREAT OUR TRACTION MOTORS AND BOGIES AS IF THEY BELONGED TO SNCF! IT’S A WIN-WIN SITUATION BOTH FINANCIALLY AND OPERATIONALLY.”

RICHARD MATTHEIJ – NED TRAIN

**2,800**

SHIPMENTS PER DAY

### OUR CUSTOMERS

CHEMINS DE FER LUXEMBOURGEOIS (CFL), KEOLIS, NED TRAIN

### MAINTENANCE À LA CARTE

From a straightforward service to a complete overhaul or accident damage repair, MASTERIS takes care of your replacement parts with a tailor-made solution, designed to meet your operational requirements.

MASTERIS solutions enable you to increase the lifespan of your components while reducing your replacement parts costs.

MASTERIS can also offer you a wide range of logistics solutions extending all the way to managing your stock and delivering parts anywhere in Europe.

### UNRIVALLED VARIETY

Whatever your vehicle type (locomotives, carriages, wagons, etc) and whatever your components (bogies, engines, electronic chips, HVAC, etc), MASTERIS is able to offer you a repair solution.

### A UNIQUE INDUSTRIAL LOGISTICS SETUP

Ten centres of excellence, dedicated to replacement parts, provide these services day in and day out. They are specialised by part category and equipped with cutting-edge machinery; and are connected to a logistics platform handling 108,000 product listings, making it the largest logistics platform in France.



### THE MASTERIS SERVICE

### MAINTENANCE – COMMITMENT – GUARANTEES – EXTENDED LIFE CYCLES

- À la carte maintenance on all types of parts, from simple repair to total management, plus optional on-site storage
- Contractual commitment to a specified repair time, ensuring downtime is kept to a minimum
- The largest logistics platform in France
- Parts and labour guarantees
- Reduced replacement parts costs and extended life cycles through obsolescence management





# 10

TECHNICENTRES SPECIALISING IN MODERNISATION AND REFURBISHMENT



**EXPERTISE No.4**  
MODERNISATION AND REFURBISHMENT

# KEEPING YOUR VEHICLES ON TRACK THROUGHOUT THEIR LIFE

"WE ENTRUSTED MASTERIS WITH THE TASK OF CARRYING OUT THE TECHNICAL RENOVATION AND RECONDITIONING OF 45 VAL UNDERGROUND TRAINS FOR LILLE. THANKS TO THEIR DAILY GUIDANCE AND PROFESSIONALISM, THROUGH THE EXPERTISE AND SKILL OF SNCF, THEY PROVIDED TOTAL SATISFACTION."

ANNIE MUNOZ - TRANSPOLE



# 8,000

TECHNICIANS AND SPECIALISTS

## OUR CUSTOMERS

EUROSTAR™, TRANSPOLE

### A NEW LEASE OF LIFE...

MASTERIS modernisation and refurbishment expertise involves completely dismantling rolling stock in order to modernise it or add new electronic components.

This can provide the opportunity to include new technologies or functions in your train without having to invest in brand new vehicles. You keep your assets up-to-date and are guaranteed improved operating results, safety and reliability, whatever type of equipment you operate.

### ... FOR ALL YOUR ROLLING STOCK...

The technicians and experts at MASTERIS operate on all types of components: structure, engines, electronics, interior fittings, paint and bodywork, including asbestos removal, which is now compulsory. And on every type of vehicle, including urban light rail: power cars, wagons, carriages and locomotives. MASTERIS can cover anything from straightforward standards compliance to refurbishment or complete overhaul.

### ... INCLUDING ACCIDENT REPAIR

Whatever the type of accident or the vehicle involved, the teams at MASTERIS are on hand to restore it quickly and at the best market price.



## THE MASTERIS SERVICE

### INDUSTRIAL EQUIPMENT - STUDIES - APPROVAL

- Top-class industrial equipment capable of dealing with every type of vehicle
- A turnkey service from the drawing board to the workshop, including approval. This also includes all the necessary technical diagrams, guidelines and manuals
- Wide-ranging fields of action covering the entire rail sector, including urban light rail
- Industrial facilities everywhere in France providing for refurbishment and modernisation within close reach of customers and their vehicles

AS AN OPERATOR, YOU HAVE COST-CUTTING TARGETS INTENDED TO PROVIDE THE BEST POSSIBLE PRICING WHILE IMPROVING YOUR PERFORMANCE:

- REDUCE THE DISTANCE TRAINS TRAVEL FOR MAINTENANCE
- WORK IN FRANCE AND THE BORDERING COUNTRIES
- REDUCE THE NUMBER OF ENGINES IN RESERVE
- LIMIT REQUESTS FOR ASSISTANCE AND TIME WASTED ONLINE
- ADOPT NEW MAINTENANCE STRUCTURES FOR THE ARRIVAL OF NEW SERIES, NEW MAINTENANCE FRAMEWORKS, ETC.

# MEETING YOUR NEEDS WITH BRAND NEW SERVICES



## EMERGENCY HOTLINE

MASTERIS provides an emergency hotline so that your drivers can receive telephone support if they experience problems on the tracks.

The Emergency Hotline is designed to carry out a preliminary assessment of the breakdown and advise the driver.

### TELEPHONE RESOURCES

- Operators online 24/7
- Bilingual staff: French & German

### SERVICE FRAMEWORK

- In some cases, the driver may be able to get the train running again, especially by using the breakdown guide if the driver believes it will be of use following his discussion with the hotline operator
- As part of the Emergency Hotline, the operator will use the information provided by the driver to draft a recommendation
- The driver alone remains responsible for making the decision to start the train again, as well as any consequences of this decision and the application of any traffic regulations
- The assistance may also be used to plan for rapid response or to schedule work in a maintenance Technicentre
- This applies to the following series: BB75000, BB75100, BB36000, BB27000, BB37000, VOSSLOH.



## INTERVENTION TEAM

MASTERIS has set up an Intervention Team to provide physical support when your equipment cannot be brought to a Technicentre, or if the Technicentre requires specific skills.

### MOBILE RESOURCES

- 8 bilingual (French & German) maintenance technicians
- 3 vehicles
- Specialist diagnostic tools: KVB, ATESS, etc.
- A full range of railway maintenance skills: diesel engines, mechanical assistance, electrics, brakes, safety components, etc.

### COMPREHENSIVE SERVICES

- Operational in France as well as bordering countries (Germany, Belgium, etc.)
- Preventative and corrective action and work to boost reliability, with Technicentre support or as a standalone team
- Work in SNCF Technicentres or any other facilities
- Full quotes provided
- Work carried out on the following series: BB75000, BB75100, BB27000, BB37000, VOSSLOH, E37500, BR186 and more...



## THE MASTERIS SERVICE

These two new services will be provided by STF MASTERIS, forming a comprehensive MASTERIS structure able to:

- Manage fleets
- Monitor fleets and feedback
- Provide operational resources
- Organise work sites
- Provide online driver assistance through the Emergency Hotline





---

# FLEXIBILITY

CUSTOMISED  
SOLUTIONS

ENGINEERING  
PROJECTS

# MAINTENANCE

# SINGLE POINT OF CONTACT

# SPARE PARTS

GOOD LOCAL  
REACTIVITY

REFURBISHMENT

PERFORMANCE

# CONSULTANCY



## **CONTACT US**

1-7 PLACE AUX ÉTOILES  
93212 LA PLAINE SAINT-DENIS  
CEDEX FRANCE  
TEL : +33 1 85 07 36 51  
FAX : +33 1 71 82 58 51  
DG.MASTERIS@SNCF.FR  
[WWW.MASTERIS.COM](http://WWW.MASTERIS.COM)



## **MASTERIS APP**

You focus on running your railway. With MASTERIS, your rolling stock is in good hands. Get all of our latest deals on the MASTERIS app.

Available for iPad.

