



SHARING  
EXCELLENCE

# TRAINING CATALOG

VOLUME 4

TRAIN DRIVING

2021 Edition





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## TRAINING FORMS – TRAIN DRIVING

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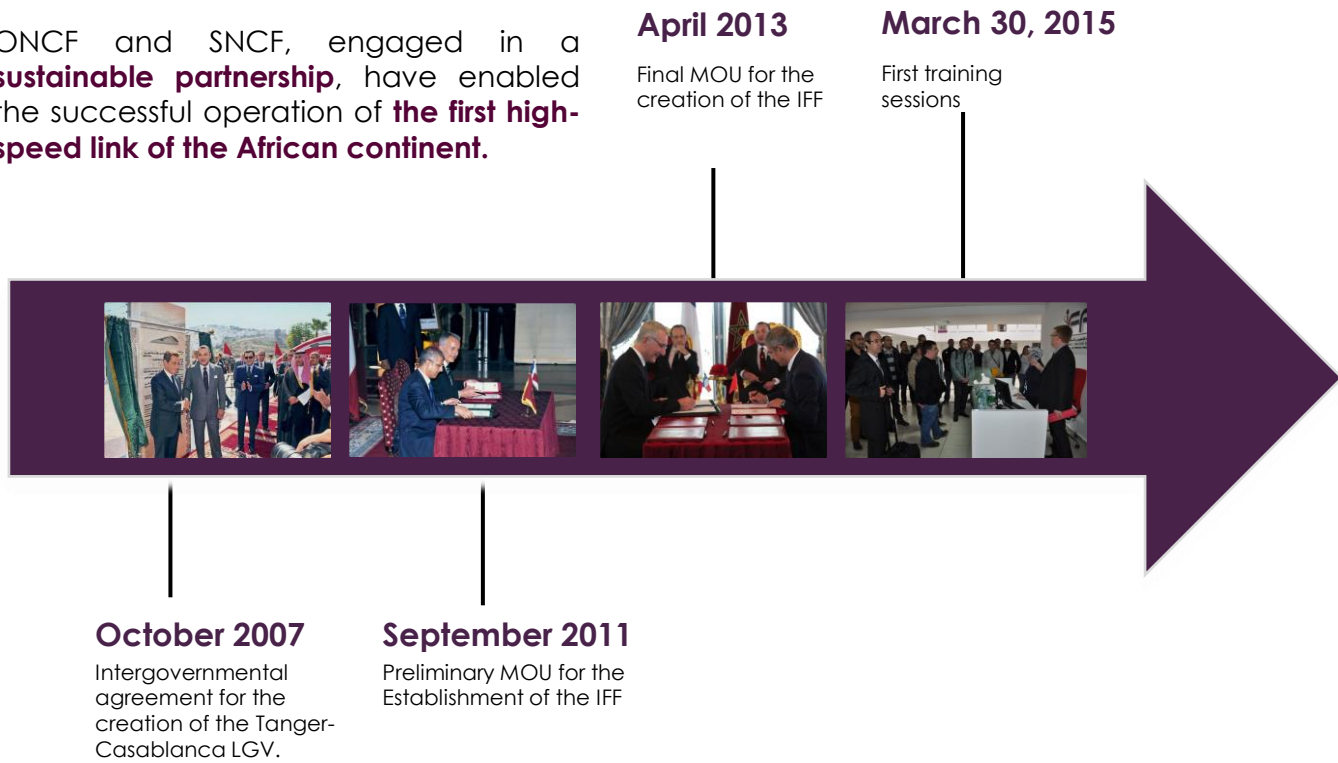
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# BIRTH OF IFF

ONCF and SNCF, engaged in a **sustainable partnership**, have enabled the successful operation of **the first high-speed link of the African continent**.



**October 2007**

Intergovernmental agreement for the creation of the Tanger-Casablanca LGV.

**September 2011**

Preliminary MOU for the Establishment of the IFF

**April 2013**

Final MOU for the creation of the IFF

**March 30, 2015**

First training sessions

From this partnership, serving the success of the high-speed line, was born the railway Training Institute (IFF), which had the privilege of being entrusted with **the training of the operators of the high speed**.

The Institute's vocation is to be **a reference player in rail training**. It offers an extensive catalogue of all the skills that are useful for conventional or **high speed rail operations**, as well as **rail freight** and **logistics**, but also available for **urban and peri-urban transport**.

The trainings provided by IFF aim for **excellence** and are intended for the employees of the rail and guided transport actors.

# MISSIONS AND VALUES

Four values guide our action : **Customer orientation, Sharing, Excellence and respect.**

We have defined them jointly with our trainers and referents, which provide training and share their expertise under this spirit.

Their concrete realization is the focus of our attention.



# GET TRAINED AT IFF

**Rabat**, capital of Morocco is the great political and administrative center of the country, where the royal palace, government authorities and embassies are located.

Rabat is also a commercial and industrial city where tourism and local crafts play a major economic role.

Located in the north of the country, on the **Atlantic coast**, on the left bank of the mouth of the **Bouregreg** and facing the city of Salé, Rabat is a capital where life is good.

It has been the seat of Mohammed V University and several cultural and educational institutes, such as **IFF since 2015**.



*Kasbah of Oudayas*



*Rabat downtown*



## Mediterranean climate

- Average maximum temperature: 21.9 °C
- Average minimum temperature: 12.5 °C



## Official languages

- Arab
- Amazigh

## Spoken language

- French



## Currency

- Moroccan Dirham (MAD)



## Landmarks

- Tour Hassan
- Kasbah of Oudayas
- Chellah
- The National Library
- The National Theater
- Etc.

# GET TRAINED AT IFF

## An ideal geographical location

Located in the very heart of the **Agdal district** in Rabat, the Railway Training Institute ( IFF) is a 5-minute walk from the **Rabat-Agdal train station**.

The area is also well served by public transport:

- **Tramway**, Avenue de France station
- Various lines of **buses and taxis**



## Educational resources

Covering an area of **3 000 sqm**, IFF has been designed to offer its trainees a warm welcome and a work environment conducive to learning:

- **18 training rooms** including 8 equipped with interactive digital boards (**TNI**) spread over 2 floors
- **7 practical work rooms** with **educational models**
- **A multifunctional driving simulator** composed of:
  - 6 independent driving cabins
  - 2 instructor positions
  - 1 observer post

It makes it possible to reproduce the driving consoles of several machines in various configurations, such as:

- **E1400 ONCF locomotive** (ALSTOM Prima II locomotive) in Freight or Passenger configuration
  - **Electric Multiple Unit (TSR - ANSALDO BREDA)** in single or double unit
  - **High speed Train (Alstom Avelia – Euroduplex)** in single and double configuration
- **A wifi connection** available to all trainees
  - **A restaurant area** completely renovated in 2019



# THEY RECOMMEND OUR TRAINING

**Jean Robert AVATOLI – Railway HRD At SETRAG (Gabon)**

*«I The training modules provided and the modern teaching methods make the IFF a suitable environment for developing excellence skills. »*

**Abdoul Aziz DIOP– Engineer - Project manager at ANCF - Senegal**

*«This institute has allowed us to have a global vision regarding training in the railway sector and we believe that Senegal, ONCF and IFF will in the future be able to establish a collaboration to train railway workers in Senegal. »*



**Ahmed BENSAID –Stationmaster at ONCF**

*«On behalf of our 2019 stationmaster promotion, I would like to thank IFF for the efforts that allowed us to have a good time at the institute. This training took place in good conditions thanks to the magnificent instructors and to the IFF staff.»*

**Houria BENNI SADOUKI – Training manager at SNCF ( France)**

*« As a sponsor of this new learning journey, I could see that beyond the theme, this group work allows participants a real collective work which develops their listening, analysis and synthesis skills and offers the opportunity to discover a multicultural working environment. The support and methodology of the training coach make it easier to step back and make this experience a real moment of personal development. »*

**Christian MAGNI – Assistant Director of SETRAG (Gabon)**

*«I was pleased to spend two training months at IFF to acquire knowledge in rail exploitation field. Thanks to this training, I've been appointed Assistant to the CEO of SETRAG. »*

\* All the modules we offer are systematically subject to a trainee satisfaction test.

# THEY TRUST US



# MANAGEMENT HEADWORD



Represented by  
Mr Karim Eddine CHENNOUF



Represented by  
Mr Christophe MARTIN



Chairman of the  
Management Board



General  
Manager



IFF is a limited company registered under the Moroccan law, with a Management Board and a Supervisory Council, held at parity by ONCF and SNCF

## THE RAILWAY TRAINING INSTITUTE SHARING EXCELLENCE

The Railway Training Institute (IFF) opened its doors on March 30, 2015 in Rabat.

Co-developed by SNCF and ONCF, our training courses – more than a hundred - aim to be **innovative**. They are led by the **best specialists** from both companies, as well as by **selected partners**.

From the first months, the commitment of the shareholders and the entire team were able to make the institute a success.

Thus, since 2015, nearly **6.000 trainees yearly**, mainly from SNCF and ONCF, benefit from our training.

In 2017-2018, **more than 17.000 training days** were dedicated to preparing the operation of **high-speed line** in Morocco.

The year 2020 marked a new stage through the development of **distance learning** (virtual classes), thus constituting the first phase of a digitizing content process.

An **85% satisfaction rate** expressed by interns illustrates the ambition for excellence that drives us. These results are shared with limited partners who trust IFF.

Since its creation, IFF has been able to attract the confidence of new operators from **France, Spain, Morocco** in addition to some **West African countries**, in particular **Gabon, Senegal and Ivory-Coast**, by relying on its know-how to develop adapted training.

We are extremely proud of this confidence and the achieved results.

# TRAINING FORMS

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## TRAIN DRIVING

The train driving training offered at the IFF allows, thanks to a latest generation driving simulator, to familiarize with safety, regulations and driving practices, beyond the specific knowledge of a machine or a line.

The training intended for the supervision of future drivers' supervisors, focuses primarily on management, overall performance and quality of life at work.

It is an integral part of the professionalization process for drivers' supervisors and makes it possible to provide the elements related to safety management essential to the accomplishment of their mission.

The training is carried out with application through several practical exercises on a driving simulator to learn the reflexes necessary for the proper execution of train driving operations.

# IFF TR01 / EN HIGH SPEED TRAIN DRIVING



## TARGET AUDIENCE

Train drivers.



## GOALS

To certify high speed train drivers in railway facilities and on Moroccan High Speed Line.



## PREREQUISITES

Be certified to drive conventional trains (160 km / h).



## EDUCATIONAL MODALITIES

Alternate teaching methods: classroom training and practical exercises on driving simulators and field visits.



## DURATION: 6 WEEKS



## PROGRAM

- Training on the equipment of the High Speed Train Morocco "RGVM".
- Training on ETCS level 1 and 2 operating systems.
- Explain how GSM-R radio works.
- LGV regulation training Understand the operation of the traction chain in 3KV and 25KV.
- Know the braking system of the RGVM.
- Understanding the RGV M. Know the operation of the RGVM.
- Describe the principle of the Embedded Information System, the Computerized Driving Assistance System and the Computerized Troubleshooting Guide.
- Understand the principle of RGVM.
- Process and manage alarms: DBC anomaly, fire detection in 3KV and 25KV, passenger alarm, etc.
- Present the ATESS static record.

• **Level 2 assessment:** Skills assessment acquired at the end of training ➔ **Yes**

# FURTHER TRAINING IN TRAIN DRIVING



## TARGET AUDIENCE

Train drivers.



## GOALS

This training enables participants to improve their skills in train driving and to act in different situations (normal and disturbed ones ) in accordance with the regulations in force.



## PREREQUISITES

People with train driving experience.



## EDUCATIONAL MODALITIES

- Driving simulator exercises
- Debriefings at the end of each exercise
- Evaluation at the end of training



## DURATION: 2 Days



## PROGRAM

- Reminder of railway driving safety knowledge
- Update and reminder on new security topics
- Reminder on the advantage of eco-driving
- Reminder on technical knowledge of motorized machinery and towed equipment
- Get familiarized with the "driving simulator" stool
- Driving in normal and disturbed situations : Applying regulations, mastering the rules and gestures of driving



• **Level 2 assessment:** Skills assessment acquired at the end of training ➔ **Yes**

# IFF TR 12/ EN

## TRAIN DRIVERS TRAINING



### TARGET AUDIENCE

Shunting drivers or train conductors,



### GOALS

- Increase knowledge of security
- Acquire knowledge about the train / Locomotive
- Master the regulations and the architecture of train / locomotive
- Master the operating principle of each train / locomotive element.



### PREREQUISITES

Be certified in general training on movement tasks.



### EDUCATIONAL MODALITIES

Active and alternating teaching method: Classroom training and applications on train driving simulator.



### DURATION: About 5 weeks

(depending on the series of the locomotive)



### PROGRAM

#### Technical module:

- Electrical part: traction elements, main circuit breakers and compressor.
- Mechanical part: bogie motor and carrier, Suspension
- Pneumatic part: Equipment and operating principle of the brake. Isolation of the brake in the event of a fault.
- Driving position: discovery of the driving position equipment and use
- Commissioning of security systems: HV circuit, Automatic standby, ETCS and Reset alarm signals.

#### Safety module :

- Train spacing methods and corresponding safety rules;
- Signals and their crossing method, rules specific to the system ETCS level 1;
- Train running rules in nominal conditions and in degraded mode ;
- Operating regime : temporary single-track, permanent counter-track installations, safety rules relating to single-track train crossings
- Rules for the composition, braking, towing and speed of trains – brake test;
- hot axle box / locked brakes detection systems;
- Prescriptions to be observed to ensure the service of electric traction.

• **Level 2 assessment:** Skills assessment acquired at the end of training ➔ **Yes**

# MANAGEMENT AND QUALITY OF LIFE AT WORK



## TARGET AUDIENCE

Supervisors and train driving supervisors.



## GOALS

Manage a team taking into account the quality of life at work (QWL) of agents in a logic of overall performance.



## PREREQUISITES

Be authorized to drive trains.



## EDUCATIONAL MODALITIES

Active and participatory methods, exchanges on lived situations, construction of an individual action plan.



## DURATION: 2,5 Days



## PROGRAM

- Define the concepts of quality of life at work and interactions between the different exposure factors, as well as the concept of factors balancing.
- Apply the logic of overall performance (balance between economic, social and operational).
- Implement the principles of a comprehensive approach improvement in QWL.
- Carry out a diagnosis with the methods and tools that compose it and understand the impacts of psychosocial risks on individuals.
- Determine the mechanisms for building personalities and associated motivations.
- Manage the cognitive mechanisms of stress and understand the different type of stress.
- Adopt attitudes allowing better management of situations complex.
- Know the communication missteps to avoid and the attitudes "Soothing".

• **Level 2 assessment:** Skills assessment acquired at the end of training ➔ **Yes**



# SAFETY MANAGEMENT - INCIDENT TREATMENT - FEED-BACK- HUMAN FACTORS



## TARGET AUDIENCE

Supervisors of train drivers.



## GOALS

- Know and apply the principles governing the security management of a driving team.



## PREREQUISITES

Be authorized to drive trains.



## EDUCATIONAL MODALITIES

Situation exercises, sharing experiences, field visits.



## DURATION: 4,5 Days



## PROGRAM

- Understand the legislative framework for railway safety.
- Motivate and explain the principles and the need for a Security.
- Identify its role in the organization of this system.
- Develop the skills of security operators.
- Actively contribute to the continuous improvement system and identify the principles.
- Know the obligations of the documentary process.
- Monitor the activities of the safety management system.
- Explain the purposes of Feedback.
- Know the influence of Organizational and Human Factors in the control of operators' activities.

• **Level 2 assessment:** Skills assessment acquired at the end of training ➔ **Yes**

# SAFETY MANAGEMENT - LEVEL 1 CONTROL AND TRACEABILITY



## TARGET AUDIENCE

Train drivers' supervisors.



## GOALS

- Know the approach of the Safety Management System;
- Use the management tools and the feedback for handling driving events;
- Apply the techniques of accompanying train drivers.



## PREREQUISITES

Senior train control managers responsible for monitoring train driving staff.



## EDUCATIONAL MODALITIES

Active method, Scenario in a sub-group, Use of videos, practice on a driving simulator.



DURATION: 4,5 DAYS



## PROGRAM

### Educational framework J1 to J4

Phase 1: Evolution of safety culture

Phase 2: Feedback, handling of driving events

Phase 3: Overall performance, conduct an interview with a train driver

Phase 4: Preparation of an accompaniment

Phase 5: Simulator sequences

• **Level 2 assessment:** Skills assessment acquired at the end of training ➔ **Yes**

# CONTACT US



## ACCESS MAP



**Ibn Sina Avenue - AGDAL** Rabat, Maroc  
GPS Geolocation : 34°00' 00.59"N 06°51'05.57"W



## TAILOR MADE TRAININGS

Are you looking for **a training adapted to your needs?**  
Contact us for more information.



## TRAINING SCHEDULES

Monday to Friday : **8:30 am-5:00 pm**  
Closed on weekends.



## REMOTELY

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