

## **APPENDIX 5**

# **PRINCIPLES CONCERNING OPERATIONAL TRAFFIC MANAGEMENT ON THE NATIONAL RAIL NETWORK**

# TABLE OF CONTENTS

TERMINOLOGY – ABBREVIATIONS .....	4
LIST OF MAIN "TRAFFIC" INFORMATION SYSTEMS (IS) OPEN TO RAILWAY UNDERTAKINGS .....	5
LIST OF TEXTS CITED IN THIS APPENDIX .....	5
ARTICLE 1 - PURPOSE.....	5
ARTICLE 2 - SCOPE.....	6
ARTICLE 3 - RELATIONSHIPS BETWEEN SNCF RÉSEAU AND THE RU .....	6
3.1 Transparency of the decision-making process .....	6
3.2 Obligations of the SGC.....	6
3.3 Obligations of the RU .....	7
3.4 Information on monitoring train movements.....	7
3.5 Traceability of information and decisions .....	8
ARTICLE 4 - PRE-PRODUCTION PHASE: OPERATIONS PRIOR TO A TRAIN MOVEMENT.....	9
4.1 Declaration of the actual consist of a train by the RU .....	9
4.2 Requesting acceptance of a non-compliance.....	9
4.3 Changes to the status and train path times .....	10
4.4 Unscheduled operations on the train path (manoeuvre, un-plotted change, changed train length, etc.) .....	10
4.5 Accepting a train handed over late for which the RU is responsible, leaving from the station from which the train path originates.....	10
4.6 Accepting a train handed over in advance.....	11
ARTICLE 5 – OPERATIONAL PHASE: EFFECTIVE TRAFFIC.....	12
5.1 The train movement production system .....	12
5.2 National rail network operating principles in the operational phase.....	13
5.3 Implementation by the SGC of train movements as planned .....	14
5.4 Movement of the RU's trains as scheduled in the reserved train path .....	14
5.5 Operating rules when the theoretical running conditions cannot be guaranteed .....	15
5.6 Rules for maintaining the availability of the network.....	17
5.7 Management of downgraded situations and crises .....	19
5.8 Management of emergency situations.....	20
5.9 Ascertaining the facts in the event of accidents, incidents or situations posing a serious AND imminent threat.....	21
5.10 Safety.....	21
5.11 TRINOMINAL PANTO INVESTIGATION catenary incidents .....	22
ARTICLE 6 - POST-PRODUCTION PHASE .....	23
6.1 Management of regularity .....	23
6.2 Safety watch: feedback on actual train movement conditions.....	23

6.3 Role and responsibilities of the operations deviation monitoring officer..... 24

6.4 Feedback on actual train movement conditions ..... 25

6.5 Forecasting climate events ..... 25

## TERMINOLOGY – ABBREVIATIONS

BEATT	Land transport accident investigation bureau [Bureau d'Enquête sur les Accidents de Transport Terrestre]
CCC	Traffic centre manager [ <i>Chef Centre Circulation</i> ]
CCL	Local traffic manager [ <i>Chef Circulation Local</i> ]
CCR	Centralised network control [ <i>Commande Centralisée du Réseau</i> ]
CNIL	National committee for data protection [ <i>Commission Nationale de l'Informatique et des libertés</i> ]
CNOC	National operations centre for traffic [ <i>Centre National des Opérations Circulation</i> ]
CODAX	Corridor coordinator [ <i>COOrdinateur d'AXe</i> ]
COGC	Operational traffic management centre [ <i>Centre Opérationnel de Gestion des Circulations</i> ]
DBC	Hot box detector [ <i>Détecteur de Boîte Chaude</i> ]
DANC	Request for Non-Conformance Acceptance [Demande d'Acceptation de Non-Conformité]
DGOP	Operations and Production General Management [Direction Générale Opérations et Production]
DOS	Operations and Services Department [Direction Opérations et Services]
NS	Network Statement of the national rail network
DSSR	Safety Security & Risks Department [Direction Sécurité Sûreté Risques]
DTI	Intervention technique device [ <i>Dispositif Technique d'Intervention</i> ]
RU	Railway Undertaking
EIC	Traffic infrastructure establishment [ <i>Etablissement Infra Circulation</i> ]
EPSF	Railway safety authority [ <i>Etablissement Public de Sécurité Ferroviaire</i> ]
GOC	Operational traffic management [ <i>Gestion Opérationnelle des Circulations</i> ]
IPCS	Permanent reverse direction facility [Installation permanente de Contre Sens]
HSL	High-speed line [ <i>Ligne à Grande Vitesse</i> ]
PIS	Operation and safety plan [ <i>Plan d'Intervention et de Sécurité</i> ]
RCI	Immediate observations report [Rapport de Constatations Immédiates]
REX	Feedback [ <i>Retour d'EXpérience</i> ]
RFN	National rail network [ <i>Réseau Ferré National</i> ]
RT	Technical information [ <i>Renseignements Techniques</i> ]
SC	Traffic sector [ <i>Secteur Circulation</i> ]
SDM	Last minute train path [ <i>Sillon de Dernière Minute</i> ]
SGC	Traffic Managing Service [Service Gestionnaire des Circulations]
IS	Information System
STI TAF	Technical specifications for interoperability, Networking application for freight [ <i>Spécifications Techniques d'Interopérabilité Application Télématique au service du Fret</i> ]
STI TAP	Technical specifications for interoperability, Networking application for passenger services [ <i>Spécifications Techniques d'Interopérabilité Application Télématique au service des Passagers</i> ]
VUTR	Single track with low traffic volume [ <i>Voie Unique à Trafic Restreint</i> ]

## LIST OF MAIN "TRAFFIC" INFORMATION SYSTEMS (IS) OPEN TO RAILWAY UNDERTAKINGS

E HOUAT	HOraires Utiles A Tous (infrastructure management information system) (theoretical times)
E BREHAT	Base de REsultats Habiles à d'Autres Tâches (information system listing all delays and causes thereof) (real times)
SEE-TRAINS	Space-time images (theoretical and real)
DINAMIC	Dispositif d'INterface entre Acteurs Matérialisant des Informations de Circulation (interface device showing traffic information)
ARTIC	Avis de restriction Temporaire d'Information aux Conducteurs pour les Incidents de Circulation (Temporary restriction notice informing drivers of traffic incidents)
DECLIC	DEpôt des Contestations et Complétude des Incidents de la Circulation (request to rectify allocated lost minutes)
Doc.Explore	View operating documents
DURANDAL 2	Traffic and Crisis Incident management tools

## LIST OF TEXTS CITED IN THIS APPENDIX

RFN IG-TR 04 C-01-No. 001	"Rules for the operational management of train movements" (hereafter referred to as "GOC rules") – (Digidoc OP 00508)
RFN-IG-TR 01 B-01-No. 001	"Last minute capacity" – (Digidoc AR 03001)
RFN-CG-TR 04 C-04-No. 006	"Measures to be taken in snow conditions - Measures to be taken in case of frost or ice build-up" – (Digidoc OP 03009)
RFN-IG-OG1 B0-No. 001	"Operating performance management" – (Digidoc OP 00515)
RFN-IG-SE 04 B 00-No. 003	"Guidelines for operating single-track lines with little traffic" – (Digidoc RRG 21009)
RFN-IG-TR 04 C-01-No.°002	"Directives to justify delays and cancellations in BREHAT" – (Digidoc OP 03027)

## ARTICLE 1 - PURPOSE

This appendix describes the principles on operational traffic management on the national rail network as well as the main rules and procedures related thereto.

The specific rules are described in the network usage document **RFN-IG-TR 04 C-01-No. 001 "Rules for the operational management of train movements"** (hereinafter referred to as the "GOC rules"), knowledge of which is essential to complement this Appendix 5. It is cited many times in this document.

The application of all of these rules is binding upon SNCF Réseau (hereinafter referred to as SGC in its role as traffic managing service) and upon the railway undertakings (hereinafter referred to as RUs), and more generally, upon all operators.

## ARTICLE 2 - SCOPE

This document incorporates all the legal and regulatory provisions applicable (see § 1.3 and § 2.4.2 of the Network Statement). It in particular takes account of the rules in force and its experience in the operation of the national rail network. It is therefore revised on an annual basis.

The Operational Management of Train Movements consists of three successive phases during which specific provisions apply:

1. **a pre-production phase (from D-7 to D-1 at 5 pm)** comprising mandatory provisions concerning preparation for the movement of a train using an allocated train path (§ 4);
2. **an operational phase (from D-1 at 5 p.m. to until the effective end of the train movement)** comprising provisions governing actual train movements on the national rail network (Article 5);
3. **a post-production phase** integrating provisions relating to analysis of operating performance and feedback (§ 6).

## ARTICLE 3 - RELATIONSHIPS BETWEEN SNCF RÉSEAU AND THE RU

The relation between SNCF Réseau and the RUs is built through operational traffic management. The latter aims to ensure train movements, changes and manoeuvres are conducted according to the train diagram approved by SNCF Réseau and to the general conditions of the contract for use of the infrastructure of the national rail network which is referred to in Appendix 3.1 to the Network Statement.

Under all circumstances and particularly in the event of malfunctions that may arise for reasons related to infrastructure (capacity reductions, operating incidents, etc.), railway undertakings (delays, cancellations, etc.) or reasons not linked to the network (bad weather, actions by third parties, etc.), the SGC shall apply the following principles in its relations with the RUs.

### 3.1 TRANSPARENCY OF THE DECISION-MAKING PROCESS

Decisions may only be taken by SGC personnel known to the RU, and founding their decisions on objective rules that are part of the public domain. The names of such people are to be specifically indicated in the table provided in § 5.1. herein.

Information concerning theoretical running patterns (as set out in the train diagrams) and that regarding planned (based on the situation existing at the time the plans were made) and actual train movements will be accessible to all network users, as will the information collated as part of the information service supplied to the RU to keep them informed about the movement of their trains.

### 3.2 OBLIGATIONS OF THE SGC

The SGC shall manage traffic in application of the regulations in effect, using a specific production system referred to as a train operations system described in § 5.1 below.

With this system, it is possible to operate over the whole of the infrastructure in accordance with the train diagram and without discrimination in relation to the RU and other operators.

#### 3.2.1 INFORMATION AVAILABLE TO THE SGC

Upstream of the pre-production phase, the SGC has the list of RUs holding safety certificates entitling them to access the national rail network, and in particular the lines, transport services and rolling stock operated by these RUs. The same applies to railway undertakings having a single safety certificate delivered by the national safety authority of a bordering State (or by the European Rail Agency for an operating scope including a Member State), the operating scope of which includes the network of said Member State with an extension of validity up to a border station located on the national territory.

The SGC is also aware of specific provisions having an impact on the operational management of train movements that may be contained in the special terms and conditions of the contract for use of the infrastructure.

### 3.2.2 SUPPLY TO THE RU OF ALL THE DOCUMENTS NEEDED TO RUN A TRAIN ON A GIVEN LINE

The train diagram showing the "train paths" and "works objects" will be deemed to have been brought to the knowledge of the RU via SEE TRAINS. The e-HOUAT application provides the "consist" and "times" information associated with each train path.

In accordance with the operating procedures in force on the national rail network and in addition to the network usage and operating documents published on Doc.Explore (see § 2.4.2 of the Network Statement) and on the SNCF Réseau website ("Technical documents" page), the SGC shall ensure that RUs are provided in good time with the following:

- by email: the list, contact details, call conditions and roles of the SGC contact persons who may be contacted by the RU during the pre-production (capacity) and operational phases (these lists are distributed *at least* twice a year or when updated);
- via the ARTIC IS (subscription mandatory for RUs operating on the national rail network): the restrictions (in particular speed restrictions) on changes to infrastructure (track, electric traction, etc.), regardless of whether these restrictions are permanent or temporary.

## 3.3 OBLIGATIONS OF THE RU

### 3.3.1 DESIGNATION OF THE OPERATING CONTACT

Each RU is obliged to appoint a single contact person with SNCF Réseau. Where necessary, they may appoint a different contact person for each level of the train circulation production system (see § 5.1): national (CNO), regional (COGC) or local (traffic centre).

The RUs must keep the list of their operating contacts up-to-date and inform the SGC of any changes made using the following email address: [correspondants-operationnels-ef@reseau.sncf.fr](mailto:correspondants-operationnels-ef@reseau.sncf.fr)

In the event of delays on the line, the driver's first contact will be the operational correspondent of the SGC (see § 3.2.2), whose contact and call details are given in the documents.

### 3.3.2 DOCUMENTS TO BE PROVIDED

Before using a particular type of passenger rolling stock, the individual RU must notify the civil rescue centres of the "départements" to be crossed of the technical intervention equipment (DTI) to be used in relation to this rolling stock.

Similarly, at the same time as running new rolling stock on the national rail network or any modification thereto, the RUs shall provide the Network and traffic operations department (DGOP / DOS) with the documentation (and updates) relating to the breakdown recovery of this rolling stock in the event of derailment or similar.

In this respect, the RUs must transmit this information to the following e-mail address: [relevage.dcf@sncf.fr](mailto:relevage.dcf@sncf.fr)

## 3.4 INFORMATION ON MONITORING TRAIN MOVEMENTS

As part of its task of managing train movements, the SGC shall monitor the trains and provide the RUs with useful information about the running conditions of their trains (accidents, incidents, unforeseen speed restrictions, etc.).

This task is performed throughout the national rail network, with the exception of single track lines with little traffic (VUTR) which are operated in accordance with the RRG 21009 document.

Whenever possible, this service uses the information gathering system on actual train movements. As the tracking systems in force on the national rail network are not yet consistent throughout, the information service will vary according to whether or not such systems are in place.

The service consists of supplying each RU with different types of information in the IS:

- location information: last known position of their trains and slippage in relation to the timetable at these points;
- explanations: known cause of an event impacting on punctuality beyond a certain threshold;
- spot and forward information.

In order to enable operational players to take the appropriate steps, in advance, so as order to reduce the consequences on the transport plan and ensure customers are better informed, a live information sharing service (SPID tool) is deployed in the network core approach.

The RU may also contact the people named in the list as contacts at the SGC and in accordance with the conditions mentioned in § 3.2.2 above in order to obtain any further information or to supply the SGC with information.

The content and modes for transmitting the various information are provided in the "GOC rules" document.

Moreover, SNCF Réseau provides the RUs with information on anomaly detection devices (for example hot box detectors, wheel defect detection stations).

## **3.5 TRACEABILITY OF INFORMATION AND DECISIONS**

### *3.5.1 PRINCIPLES*

Exchanges between the staff designated by the RU and the staff of the SGC in charge of the operational management of train movements will be constant, in particular those between the operational staff of the RU and the staff manning signal boxes or traffic control/coordination centres (see § 5.1).

These exchanges are not normally subject to a traceability system, however this may be required during exchanges taking place between the operational players of the RU appointed by the latter as its representatives and those of the SGC responsible for operational traffic management, when such exchanges are a result of the information obligations or service as notification of the network usage or operating documents (see in particular § 3.2.2). These may include, for example, cases of diversion, the announcement of trains carrying radioactive material, the announcement of long trains, etc.

Depending on the case at hand, the traceability may be obtained in different ways: history of the IS, fax, email, conversation recordings, records made in the service log, etc.

### *3.5.2 RECORDING COMMUNICATIONS WITH THE SGC*

Within the framework of the operational management of train movements, the SGC operational players (CNO, COGC, staff manning signal boxes, etc.) record all conversations connected with operations that take place via service telephones and the ground-to-train radio. These recordings constitute a processing of personal data bearing on RU employee conversations, that aims to help maintain and improve the security level of the rail operations.

As data controller, SNCF Réseau commits to comply with the provisions of law No. 78-17 of 6 January 1978 and with regulation 2016/679 of the European Parliament and Council dated 27 April 2016 (GDPR), on the protection of personal data.

The recordings are kept for a maximum period of two months.

They are likely to be listened to not only by SNCF Réseau authorised personnel, but also by representatives of other RUs as part of safety feedback operations, and even by any other legitimate authority able to seek access to these recordings or requisition them (legal authorities, EPSF, etc.). The conditions for obtaining access are specified in the "GOC rules".

The conversations of the employees of RUs on the ground-to-train radio are likely to be listened to not only by SNCF Réseau, but also, as part of safety feedback operations, by representatives of other RUs, and even by any other legitimate authority that can seek access to or requisition these recordings (legal authorities, EPSF, etc.). Each RU is therefore responsible for taking all measures to keep their employees informed.

Bearing in mind the reason for which SNCF Réseau agrees to allow RUs access to these recordings, SNCF Réseau shall inform the EPSF, upon request and in full transparency, of the access authorisations granted to RUs by SGC.



## ARTICLE 4 - PRE-PRODUCTION PHASE: OPERATIONS PRIOR TO A TRAIN MOVEMENT

### 4.1 DECLARATION OF THE ACTUAL CONSIST OF A TRAIN BY THE RU

The RU must provide the movements operatives with information about the actual consist of the trains they intend to run each day on the train paths allotted them.

The list of data to be declared (actual tonnage, specific consignments such as exceptional consignments or the transport of hazardous goods) is derived from the European technical specifications for interoperability (STI-TAF and STI-TAP).

For long trains, the process is described in the "GOC Rules" document.

This information is essential to SNCF Réseau in order for it to guarantee safety (in particular to protect against the risk of shuntage failure) and important for operational traffic management and for network maintenance.

The actual train consist must be declared before the start of the train movement (and at each change), sufficiently in advance to allow it to leave under good conditions.

This must take place via an STI standardised computer flow or via the DINAMIC IS interface (which is fed with the HOUAT data and thus has all train paths that should run on a given day), by the Freight and by Passenger RUs. Non-compliant declarations, both in terms of format and content, shall be considered to be non-executed.

The RUs using the flow must at least use the French versions of the TCO 2.1.6 messages for freight activities and PTC 2.1.6 messages for passenger activities. The contents of these messages is described in a file available for download from the ["Technical documents"](#) page of the SNCF Réseau website. Any version changes affecting the messages shall be notified by SNCF Réseau with a minimum advanced notice period of 6 months.

Train movements of undefined timing as well as certain SNCF Réseau train movements intended for conveying and approaching the terminal are not subject to declarations for actual train consists.

When the characteristics of a train are altered in transit and this was not envisaged, the RU must inform the movements operators accordingly before the departure of the train from the place where the change occurs, and modify the actual consist initially declared in due course.

The "Safety" procedures also described in the operating documents remain applicable in full.

If SNCF Réseau observes or is informed that the characteristics or consist of a train do not comply with the information transmitted by the RU prior to the train's departure from its point of origin or the place at which the change occurred, it will be considered that the RU has not fulfilled its declaration obligation for said convoy.

In order to encourage the RUs to comply with the obligation to declare the actual train consist, a possible convoy dismissal system is defined in Chapter 6.5.2 of the Network Statement.

### 4.2 REQUESTING ACCEPTANCE OF A NON-COMPLIANCE

As soon as the RU detects a possible degradation to the performance of the train path or a modification involving a stop before departure, it must request acceptance of its train movement from SGC, using the Acceptance of Non-Compliance (DANC) Request process.

The RU must make this request via the DINAMIC IS before the train departs from its point of origin and specify the type of non-compliance and the consequences thereof as predicted by the RU in terms of the train's movement.

The request must be transmitted early enough to allow the SGC to study and implement any measures deemed useful.

The SGC may refuse the DANC, in particular if the consequences in terms of train movements are not acceptable.

This process is described in the "GOC Rules" document.

### 4.3 CHANGES TO THE STATUS AND TRAIN PATH TIMES

In principle, the train runs in accordance with the special features associated with the allocated train path.

In the event of differences between the train path status, itinerary or times, and the actual train movement over the train path, it will be up to the RU to ask SNCF Réseau to change the train path status, depending on one of the following cases:

- confirming an option (in full or in part): case of a train scheduled on an optional train path and in fact running on all or part of the route set for the optional train path;
- downgrading to optional (in full or in part): case of a regular train not running over all or part of its regular train path, the unused section of the train path remaining reserved and becoming optional for the particular day;
- cancellation (in full or in part): case of a train path, regular or optional, cancelled for a given day over all or part of its length. In such cases, the corresponding capacity will no longer be maintained at the RU's disposition.
- substitution: case of a train path to substitute for the plotted route of a requested new train path, on the condition that the characteristics of the train for the requested train path are identical with those of the train path to be substituted. In this case, the applicant shall specify the obligatory characteristics and, in particular, the origin and terminus of the train path to be created.

### 4.4 UNSCHEDULED OPERATIONS ON THE TRAIN PATH (MANOEUVRE, UN-PLOTTED CHANGE, CHANGED TRAIN LENGTH, ETC.)

Train preparations at the origin of the train path and the operations conducted at halts in transit and on arrival at the terminus of the train path may require the RU to perform a number of operational functions (including operating safety equipment) using its own resources.

In cases where the corresponding details have not been provided in the train path request, the RU will inform the SGC, at local level, of its requirements in relation to the use of the national rail network as regards shunting, reversing and stabling its rolling stock.

Changes to the length of a train must be coordinated by the RU with the SGC services concerned, which may refuse permission.

In any case, the information must be transmitted in sufficient time for the implementation of the relevant measures by the.

In some stations, service standards have been established and are included in the local operating instructions. SNCF Réseau may allow RUs to exceed these standards, where they provide a justified request.

Moreover, certain sites have an operating compendium describing the facilities in the railway complex and specifying the operating conditions thereof to ensure optimal use of the site guaranteeing a reliable and robust operation for all its users.

Apart from the functional description of the facilities useful for train production, it also details the operating rules of the complex.

These rules are established in consultation with the Railway Undertakings using the site and apply to all users.

### 4.5 ACCEPTING A TRAIN HANDED OVER LATE FOR WHICH THE RU IS RESPONSIBLE, LEAVING FROM THE STATION FROM WHICH THE TRAIN PATH ORIGINATES

4.5.1. When the train is less than 5 minutes late leaving from the station from which the train path originates, its forwarding will in principle be ensured.

4.5.2. When the train is more than 5 minutes late but not more than three hours, the SGC will try to minimise the consequences of the delay and slot the delayed train into the timetable. Its efforts will be made easier if

the RU has been able to warn the SGC in advance of the delay and give an indication of its expected duration.

Provided that the estimation of the expected delay is reliable, this prior consultation will enable the SGC to organise a slot for the train in the running diagram and work out a likely time of arrival at the terminus or at an intermediate point.

The estimation produced by the SGC will be based on the current state of traffic on the network and the events known at the time it is established. The result will not be a recalculated train path, nor a guarantee, but a prognosis of how the train could be slotted into the flow of traffic.

In the absence of prior consultations, the SGC may, at the request of the RU, work out the likely time of the arrival of the train at the terminus or an intermediate point under the conditions set out above.

When the time comes, the train will be slotted into the diagram in application of the priority rules (§ 5.5.1) and using an opening that will not have adverse repercussions on traffic as a whole, in order to minimise delay to the train.

In the case of distress, the SGC shall undertake to run a rescue train as soon as possible.

4.5.3. When the delay exceeds three hours (caused by the RU), the right to the train path will be forfeited and the SGC shall cancel it. If the capacity applicant still wishes to run the train, he will have to submit a request for a new train path. This rule will not be applicable to trains from the railway network of another country arriving late at the interface with the national rail network. In exceptional cases (transport of radioactive materials, etc.), the SGC may postpone the application of the automatic cancellation rule in the event of a delay greater than 3 hours upon request from the RU concerned.

In the case of a train coming from a foreign IM and arriving with a maximum delay of 18h, the train path is not automatically cancelled and the SGC does not demand a new train path application. However, the SGC must ensure that the train path number does not generate a duplicate.

## **4.6 ACCEPTING A TRAIN HANDED OVER IN ADVANCE**

The movement of a train in advance is subject to the safety provisions stipulated in the technical safety regulations and operating documents.

The movement of a train in advance is subject to the explicit approval of the SGC which studies the impact on ongoing traffic, including in terms of station track capacity management (sidings, tracks used for the SGC's needs, etc.).

The benefit resulting from train movements in advance must not be a source of downstream disruption. Moreover, it does not guarantee the preservation of this advance up to the train's destination.

## ARTICLE 5 – OPERATIONAL PHASE: EFFECTIVE TRAFFIC

### 5.1 THE TRAIN MOVEMENT PRODUCTION SYSTEM

The operational management of train movements is organised by the SGC at different levels of responsibility:

- local level: command-control posts for switching and signalling facilities, Running Sectors (SC)\*;
- regional level: Operational Traffic Management Centre (COGC)\*;
- national level: National Operations Centre for Traffic (CNOC).

(\*): the "local" and "regional" levels may be physically grouped together into the Centralised Network Control (CCR) or equivalent. Certain functions are therefore referred to by another name in the text.

The table below shows the tasks performed by each of these levels of responsibility, followed by a fuller description of each:

Structure and player Task (1)		Local (SC)		Regional (COGC)		National (CNOC)	
		Movements operative (AC)	Traffic manager (CCL)	Coordinator of the COGC (CRC)	Traffic controller	National coordinator (CNC)	Corridor coordinator (CODAX)
1	Control of facilities	X					
2	Active tracking of train movements and reporting	●		●		●	
3	Local coordination		○				
4	Traffic control				○		see text under task 5
5	Corridor coordination						○

- (1) Player responsible for decisions at the SGC  
 X Task fulfilled by a single individual  
 ● Systematic task performed at different management levels  
 ○ Task performed as and when required

#### Task 1: Control of facilities

The control of facilities (switches and turnouts, signals) will take place in accordance with the rules for the use of facilities on the national rail network.

The **movements operative** (AC) will be responsible for organising train movements in his sector and planning ahead in order to be able to take any action made necessary by the particular circumstances or have such action taken depending on whether or not it falls within the scope of his authority. In certain posts, the AC is supported by one or more signalmen. In the bigger railway centres, the movements operative may be answerable to a **Traffic Manager** (CCL), or in the CCR or equivalent, a **Traffic Centre Manager** (CCC).

In cases specified in the local operating instructions, some "basic" equipment (for example: manually operated switches or safety locks or interlockings giving access to service tracks or sidings) has to be handled by duly authorised employees of the RU, under its responsibility and at its expense.

The movements operative or Traffic Manager will have systems at their disposal enabling them to make contact with the RU's trains or be contacted by them (either on a permanent basis via ground-to-train radio on lines suitably equipped or on an intermittent basis via the various line-side telephones).

## **Task 2: Active tracking of train movements and reporting**

These fundamental tasks determine the quality of service provided by operational train management and the mandatory services provided to the RU, in particular information about the movement of their trains. They must be performed constantly and systematically at all production levels and be adapted to operating requirements on the network in compliance with the service standards in force on the network.

They consist of permanently monitoring the train path and its operational counterpart, physical train movements, to detect any slippage that, depending on its nature, could spark a series of processes specific to each level of the structure:

- **the movements operative** (or line controller on lines where this function exists, or the traffic manager): with the indications obtained from the resources at his disposal he is aware of what is happening on the line and can compare results obtained with the theoretical schedule to spot any disparities, identify their cause (insofar as he can at his level) and react in line with his particular prerogatives (different depending on whether or not the line he is monitoring has a traffic control system, and whether or not it is subject to local coordination).
- **the COGC coordinator, the CCR regional coordinator or equivalent:** tracks train movements on a permanent basis, using the indications supplied by the means at his disposal and reports received to exert strict control over the catchment area of his operational territory (COGC, CCR, etc.) He is particularly responsible for initiating operational processes such as holding back or diverting a train, implementing capacity restriction rules, bringing in emergency or lifting equipment, on occasion requisitioned from the RUs, calling in outside assistance, alerts, etc. He is one of the contacts for the driver in case of delays on the line.
- **the national coordinator:** at the CNOC, his task will be to monitor the whole of the national rail network and react on advice received (generally from a COGC coordinator) to focus more closely on a critical area requiring intervention on his part. It is he who will initiate major procedures such as direct intervention in the event of an incident affecting several regions, coordination of measures to be introduced by the COGC, alerts, etc.

## **Task 3: Local coordination**

In some heavily trafficked railway centres, the operational management of train movements cannot be efficiently handled by the traffic controller. These places constitute traffic centres where the coordination of train movements has to be handled by a **traffic manager** (CCL). Such tasks call for active tracking of all train movements at the railway centre concerned. In the CCR or equivalent, this person is known as the **Traffic Centre Manager** (CCC).

## **Task 4: Traffic control**

On the busiest lines on the network, where the challenge is such that even active monitoring on the part of the coordinator of the COGC is not enough, he will have the assistance of one or several **traffic controllers** under his orders (or **Traffic Centre Manager** (CCC) in the CCR or equivalent).

These will each be responsible for their particular traffic monitoring and train sequencing areas for "controlled" lines, which will enable them to be constantly aware of potential route conflicts and decide on remedial action to be carried out by the traffic sectors or centres.

In addition to preventive action of this kind, the traffic controller will be in charge of introducing palliative measures to cope with events that interfere with traffic. He will also perform those safety functions conferred on him by the regulations.

## **Task 5: Corridor coordination**

On those corridors on the network where there are large volumes of long distance traffic and where the difficulties are correspondingly greater, it may be necessary for the CNOC national coordinator to have the support of a **corridor coordinator** (CODAX) subordinate to him and providing assistance by specifically and systematically monitoring the movement of long distance trains and coordinating the basic action of the individual controllers in relation to such trains, which are potentially relatively liable to be incident-prone.

On high speed lines, the corridor coordinator is in charge of traffic scheduling and incident management (excluding safety aspects).

## **5.2 NATIONAL RAIL NETWORK OPERATING PRINCIPLES IN THE OPERATIONAL PHASE**

The language used in conjunction with the operational management of train movements is French (see § 2.4 of the Network Statement), except on certain border sections where provision may be made for use of another language. The Local Operating Instructions for these sections will stipulate the language in which these operations should be conducted.

In a nominal situation, the train diagram is applied by the movements operatives, who set the routes planned and agree to the work at the appropriate moment.

The theoretical schedule may be prevented from going smoothly to plan in practice by a certain number of events affecting infrastructure, the RU's own production processes and events external to the network. To re-establish smooth running it will therefore be necessary to take action based on application of the operating rules described in the articles below and more precisely in the "GOC Rules" document.

Where applicable, decisions may result in exemptions to these rules in the common interest of the operators and the system.

### **5.3 IMPLEMENTATION BY THE SGC OF TRAIN MOVEMENTS AS PLANNED**

The SGC will apply the organisational arrangements described in § 5.1 above and ensure that the necessary resources are provided to enable trains to run in line with the capacity allocated to the RU by SNCF Réseau, allowing for normal operating contingencies.

In particular it has to ensure that lines are open to traffic (including ensuring that the electric traction facilities on them are working properly for the train movements concerned) and that the signal boxes are equipped with resources compatible with the traffic scheduled in the train diagram.

The SGC will adopt special organisational arrangements in the event of major traffic contingencies.

### **5.4 MOVEMENT OF THE RU'S TRAINS AS SCHEDULED IN THE RESERVED TRAIN PATH**

#### **5.4.1 THE TRAIN READY / TRAIN NOT READY DECLARATION**

All trains ready to access the national rail network for the first time via a train path, after halts en route in the event of any change to the train consist must, in addition to the actual consist declaration described in § 4.1 above, be announced as "Train Ready" to the SGC, to the Traffic Sector giving them permission to enter the National Rail Network. The Train Ready declaration aims to indicate to the SGC that it can manage the train movement (or resume the management after a stop).

On certain sites, set out in the local operating instructions, the train ready declaration is not required and the management is conducted for a departure at the train's theoretical time. Therefore, if the train is not ready, the SGC must be informed sufficiently ahead of the theoretical departure time.

When the train is ready, the SGC shall receive the "train ready" declaration from the RU. These provisions aim to avoid the untimely attribution of a movement authorisation. The conditions of the "Train Ready" process are described in the Local Operating Instructions.

#### **5.4.2 COMPLIANCE WITH HAULAGE CONDITIONS**

Trains shall comply with the haulage conditions to ensure the line section in question is returned to operating conditions, excluding exceptions agreed with the SGC and included in the Technical Information (RT). The SGC may impose additional constraints in the event of unforeseen circumstances (see § 6.5).

The acceptance conditions are defined for a given section of line, by compliance with:

- a maximum load for a given train ensured with ordinary equipment,
- a minimum engine power for a given train ensured with specialised equipment.

The RU will be informed in the event of a major or imminent risk connected with failure to comply with the safety regulations, and the SGC may decide to halt the train as a precautionary measure and must immediately inform the EPSF of this decision.

When the train performance deterioration in relation to the train path occurs while it is running, the driver must inform SGC. They will then look at the likely impact and the consequences for the train diagram. The SGC may authorise the train to continue its journey (with a delay or even offer a diversion) or decide to

stable it. The SGC must be made aware of any operations carried out en route that affect the speed of train movements (for example, dynamic brake testing).

### 5.4.3 EQUIVALENT ITINERARIES

The SGC will send trains via the route planned when plotting the train path.

However, at railway junctions and on lines for which the operating documents allow for equivalent routes, the SGC may send the train (see "GOC Rules" document) over any of the routes indicated, in accordance with the safety regulations in force.

Consequently, railway undertakings must have the capacity (knowledge of the line, compatibility of the rolling stock, route mass, etc.) to use all of these alternative routes. In order to do so, they must comply with the requirements of the Technical Information of the Train Route Booklet for each line in question, which also shows, in § 4, the maximum limits for the following aspects:

- ✓ Train braking
- ✓ Special traction conditions
- ✓ Maximum mass of the trains
- ✓ Particular maximum train length

This implies in particular that in the case of two (2) equivalent routes with a different maximum routing mass, the RU must comply with the lowest threshold in order to be able to take one or the other of the two routes.

## 5.5 OPERATING RULES WHEN THE THEORETICAL RUNNING CONDITIONS CANNOT BE GUARANTEED

Any confirmed or potential event interfering with the compatibility between trains, or between trains and works will be detected and conflicts analysed by the players in charge of active train movement monitoring.

### 5.5.1 MOVEMENT PRIORITY BETWEEN TRAINS

Conflicts arise when trains worked on train paths that were compatible when the train diagram was produced run in ways that cause their routes to come into conflict or be bound at some stage to conflict.

Where relevant, SGC decides on a new sequencing for these trains, i.e. to change the order in which they will run.

The principles governing the application of the priority rules are as follows:

- The order only applies if physically possible (infrastructure allowing for the overtaking of trains).
- A train is considered on time if it has less than 5 minutes' delay.
- A train running on time cannot be made to run late because of another train not running to schedule, especially a goods train using a freight corridor

However, in a passing station in which a train originates, this train should depart in priority over a faster train travelling in the same direction and with less than 5 minutes' delay if it is possible to quickly regain the initial sequencing (stabling, etc.).

The non-discriminatory handling of RUs by the SGC results in the following rules of priority:

- **conflicts between trains of different RUs:**
  - If the conflicting trains are all running late, they are classed by order of decreasing speed (i.e. the average speed resulting from the service provided by the trains on the section of line concerned is taken into account).
  - If this factor cannot separate them, priority is given to trains carrying passengers over trains not carrying passengers.
  - Then, if this factor still cannot separate them, priority will be given to international trains.
  - Finally, if this factor still cannot separate them, priority will be given to the train with the earlier theoretical schedule (in the theoretical order).

- **conflicts between trains of the same RU (where production is divided between several entities each operating more or less autonomously on a transport service) :**

The order is determined on the basis of the principles previously indicated (for a service schedule) by the RU concerned, insofar as its preferences will not restrict capacity on the network and have been validated by SGC. If such principles are not communicated, the SGC will apply the rules set out above.

All of these rules also take priority over the special regulations for each RU. The final operational decision will be made by SGC.

The rule will not apply if the train affected by the conflict is running ahead of schedule. Nor will it apply if the delay caused to the priority train would make it late by less than a threshold value of 5 minutes.

The rule is not absolute in the sense that the SGC may dispense with it in the interest of smooth running or in pursuit of maximum operating flow, if justified.

The "GOC Rules" document provides precisions on the application of this article.

Moreover, some freight trains may be prioritised. This concerns freight trains of national importance:

- For industry (production shut-down risk)
- For persons (staple foods, fresh products, etc.)
- For health (epidemic risk caused by the use of water, etc.)
- For safety reasons (dangerous substances).

These trains are run in line with the openings in the signal boxes and, in conjunction with the railway undertakings concerned, resorting to the possible use of train groupings, in cascade, or over limited periods.

The Network Charter, available for viewing on the SNCF Réseau website, also describes the best practices agreed upon with regard to the prioritisation of freight trains during disruptions.

During the consultation led as part of the COOPERE project on the Operational Sequencing of Train Movements, which was held between November 2018 and May 2019, the stakeholders conducted a study on the priority rules. The study led to the project to replace the priority rules by sequencing principles at the service of performance targets.

These principles will be trialled over a small scope (Paris-Dijon Axis including the Bourgogne Franche Comté and South East Paris EICs) in 2022. The end date of this trial will be specified in due course.

A complete record will be drafted at the end of the trial, containing all the comments concerning guarantees of efficiency, traceability and attribution of delays, and demonstrating the positive effect on traffic.

### 5.5.2 PRIORITY BETWEEN TRAINS AND WORKS

Other than in cases of force majeure, works objects will normally be scheduled as planned.

They may however be allocated with a maximum delay of 15 minutes in the event of late arrival of the works train. This offset delay can be compensated, where necessary by the possibility of holding back the train closing the interval by a maximum of 15 minutes. This compensation must be requested by the construction manager (RPTx) from the SGC, who studies the feasibility and grants this request where applicable. This device also applies for so-called "red night" works, which describe key works for the network that are indivisible and with a small margin.

Moreover, the maintenance unit, whether it be Network or another IM, defines the list of works classed as "severe" on a daily basis. These are priority and/or sensitive works (as a result of their nature, issues regarding network availability, etc.) to which particular attention must be paid. These works may be subject to overlap scenarios with which the RUs are associated.

Finally, outside of fault clearance work and exceptional situations, the running of work trains on HSLs is not allowed between commercial train traffic.



### 5.5.3 STABLING A TRAIN

In the event of contingencies when it is no longer possible to run trains by their planned route, an equivalent route or a diversion, the SGC may stable some trains. In this case, it will inform the RU concerned and let it know the forecast return to service of the train(s) concerned and any restrictions associated with the subsequent return to service of the trains. If the situation allows it, the SGC will consult the RU on the choice of stabling location.

If a train is subject to stabling on a route not planned for in the train path, its train path number remains valid for a maximum of 18 hours after the time it was to theoretically pass the relevant stabling point. Beyond this period, it is deleted; the train will be routed by the SGC allocating it a number with an undefined period of time or by maintaining the existing numbering (after ensuring that the train path number is not already used in Houat and generating a duplicate); otherwise, the RU must make a new path request from the stabling point. In addition, the operating rules for delayed trains (§ 5.5.1) remain valid.

In the event of unplanned stabling under the responsibility of SGC, requests from an RU requiring a last-minute train path (SDM) to depart from the stabling point shall be handled as a priority. The RU should indicate this in its request, giving the relevant Bréhat incident number. An RU may call upon SNCF Réseau to provide a service for the operation of simple safety facilities in order to remove its train from stabling or another service, following a train movement problem, under the conditions described in the Network Statement.

### 5.5.4 DIVERSION

When a temporary network unavailability affects the capacity and running of trains, the SGC may offer RUs, depending on the type of event, its location and its likely duration, the option to use a diversion for some or all of the traffic concerned.

On the route used as a diversion, the diverted trains must be inserted into the traffic with the minimum of impact on the movements that are normally scheduled for this route. The COGC can therefore demand that the diverted trains observe a restricted speed that ensures the maximum flow or any other measure to control the trains, including high speed trains.

The diversion process is described in the "GOC Rules" document.

### 5.5.5 CAPACITY RESTRICTIONS

In the event of major incidents restricting available capacity, in other words making it impossible to handle all the traffic scheduled, a rule for sharing the remaining capacity will be applied to those trains that have not yet set out but which are scheduled to pass over the route or via the point where traffic is restricted. The rule will apply both to the route on which traffic is restricted and any other routes used to improve traffic flow.

For the different traffic periods (to allow for peak traffic phenomena), the SGC will add up the number of train paths using the restricted line and, where applicable, any alternative route that may be used to divert traffic, and will calculate the capacity thus available. The result will generally be a number of train paths that is greater than the state of the network will allow. The SGC will then allot a number of authorised train paths to each RU in proportion to the number of train paths initially scheduled and the time available for the RU to make its choice. The RU will then indicate which of the trains normally scheduled to run it has selected.

Once the time allotted to the individual RU for it to make its choice has elapsed, the SGC will decide unilaterally on the trains that will be entitled to run.

The other excess train paths will then be cancelled by the SGC, which will also produce an emergency train diagram to replace the theoretical diagram. Research into the maximum throughput may take precedence over the priority rules between trains described in § 5.5.1.

## 5.6 RULES FOR MAINTAINING THE AVAILABILITY OF THE NETWORK

### 5.6.1 RULES GOVERNING TROUBLESHOOTING OF A TRAIN

A train immobilised by a main line failure must be the subject of a request for assistance within a maximum of 15 minutes. The driver must prior to the assistance give his telephone number to the operator of the SGC concerned.

At the end of this time and without the driver being able to state when he expects his train will be able to restart, the SGC will take the necessary steps to bring suitable rescue facilities into position to clear the track, as soon as the safety procedures under way so allow.

This 15-minute period is designed to allow time for the driver to conduct a technical diagnosis and make the spot repairs that would obviate the need to call in the rescue services or enable the train to reach a stabling track further down the line. As soon as he realises that 15 minutes will not suffice, the driver will ask for his train to be rescued in accordance with the safety procedures in force.

This rule may be adapted on certain sectors of the network and will be indicated accordingly in the operating documents in such cases.

### 5.6.2 RULE REGARDING MAKING RU RESOURCES AVAILABLE TO RESTORE INFRASTRUCTURE CAPACITY

When it is necessary to rescue a train down on the line or when urgent repairs need to be made to infrastructures, the SGC will have the right to demand that the RU make available suitable means to clear the national rail network (for example, rescuing a failed train, sending the human and material resources needed to effect urgent repairs on the infrastructure, lifting equipment).

Preceded by consultations with the designated contacts at the RU, such requests for availability will be duly notified, justified and limited in time and space and will entitle the RU to compensation under the conditions stipulated in the general conditions of the contract for use of the infrastructure of the national rail network (Appendix 3.1 of the Network Statement).

The conditions in which the resources thus deployed are returned to the RU will be discussed and official notification again given.

The "GOC Rules" document described this process in more detail.

### 5.6.3 BREAKDOWN RECOVERY

As part of its task to keep the national rail network clear, the SGC provides breakdown recovery for derailed rolling stock.

The means for breakdown recovery belong to SNCF Réseau. They are used regardless of which RU is in possession of the train or who the owner of the derailed vehicles is, in accordance with the principle in § 5.8.

In addition to the priority clearing the national rail network (the main track), these resources may be used by the RUs as invoiced services, under the conditions laid down in §§ 5 and 6 of the Network Statement. Apart from any production/ traffic impact, sidings clearance is not a priority.

The breakdown recovery devices specific to certain types of engines must be permanently on board or immediately available to allow the fast clearing of the national rail network by the breakdown teams. They must conform to current regulations.

As regards breakdown recovery operations, breakdown centre agents conduct certain handling operations of all or part of components of vehicles using the RFN which could pose a risk for their health (presence of asbestos in bogie-chassis connections for example).

The applicable legislation requires suitable protection for employees against asbestos risks and other chemical risks (such as refractory ceramic fibres), and the RUs are invited to specify these without delay at the following email address [relevage.dcf@sncf.fr](mailto:relevage.dcf@sncf.fr).

In addition, the breakdown recovery documentation for all engines using the national rail network must be sent without delay, as well as updates to the DGOP/DOS "network clearing" hub ([relevage.dcf@sncf.fr](mailto:relevage.dcf@sncf.fr)).

Only clearing devices validated by SNCF RESEAU are allowed for any routing on the national rail network, regardless of the RU in need of assistance.

If other clearing devices must be used, before a re-railing operation or service, their use must first be approved by SNCF Réseau.

The request must be transferred to the network clearing hub, by emailing "relevage.dcf@sncf.fr". The requesting RU shall bear the study costs and be liable for the transport of said device.

#### **5.6.4 PROVISION BY THE SGC OF RESOURCES TO THE RUS TO ENSURE THE CORRECT FUNCTIONING OF TRACK CIRCUITS**

To mitigate the risk of poor track circuit function, the running of designated trains on some routes is planned when designing the service, in conjunction with the RU concerned.

In the operational phase, the SGC is entitled to use any useful traffic movements the characteristics of which (mass on the rail) meet the requirements. It must also ensure that this traffic movement can be carried out in complete safety. This measure may result in the deviation of this traffic movement from its usually planned route. Where possible, the RU concerned is informed in advance.

The disruption caused to the traffic movement must be moderate and the resulting delay must, if possible, be less than 3 minutes.

#### **5.6.5 CHECK FOLLOWING A PROLONGED INTERRUPTION ON A LINE**

A prolonged interruption to train movements may lead to operational difficulties caused notably by insufficient knowledge of the state of the infrastructure (track damage, presence of an obstacle, malicious acts, etc.). It is therefore necessary to check the relevant line in the presence of representatives of the SNCF Réseau Maintenance & Works business unit prior to the movement of the first commercial train.

In order to arrange such a check, the SGC is entitled to use the provision rule described in § 5.6.2.

### **5.7 MANAGEMENT OF DOWNGRADED SITUATIONS AND CRISES**

Any incident or disruption on the national rail network does not necessarily turn into a rail crisis. It is therefore important to distinguish between downgraded situations and crisis situations.

The management of downgraded situations and crises is the subject of specific management and coordination efforts concerning the organisation, modes of operation and processes that make it possible to respond to four issues:

- return to nominal rail production as soon as possible;
- the setting up of an effective system of support and information for customers;
- alerting and continuously informing institutional representatives of partners and providing opinions;
- the effectiveness of working with public services in emergency situations.

#### **5.7.1 MANAGING DOWNGRADED SITUATIONS**

A downgraded situation is an incident with repercussions on the transport plan, the consequences of which remain minor and whose management is the responsibility of the permanent operational bodies.

Managing downgraded situations is the responsibility of SNCF Réseau and does not lead to the opening of crisis rooms.

When an incident occurs on the national rail network, an incident manager is appointed within the service responsible for the operational traffic management. He is responsible for finding a management strategy for the downgraded situation and also returning the situation to normal. He must inform the railway operators and the higher levels of the department in charge of operational traffic management.

The SGC must rapidly gauge the impact of any disruption to traffic on the national rail network as well as expected developments and should quickly work out plans for restoring the nominal situation or establishing a stable intermediate situation and inform the RUs accordingly.

For the purposes of this paragraph, running conflicts between trains in the absence of incident shall not be considered disruptions.

#### **5.7.2 CRISIS SITUATIONS:**

A railway crisis situation is characterised by:

- A major disruption of railway operations causing major damage to RU transport plans, coupled with a high degree of uncertainty as to the return to the nominal situation in a timely manner.
- A high risk of impact on the customer and/or the image of the rail system.

The severity of incidents is assessed on a scale from 1 to 6. A crisis situation is established from level 2. One or more crisis rooms will be opened to manage the coordination of incidents by taking account of the interests of all the IM and RU concerned.

SNCF Réseau shall ensure the operational coordination of crisis management within operational crisis rooms. There are two levels of operational crisis rooms:

- regional rooms, distributed according to a network defined by SNCF Réseau;
- a national room, also called CNOF crisis room.

Each operational crisis room is headed by a quickly available SNCF Réseau representative, the Regional Operations Director (DTO) for regional rooms or the National Operations Director (DNO) for the CNOF crisis room. Each crisis room includes the representatives of all the RUs and IMs concerned by a crisis, as well as the representatives of the different business lines and departments of SNCF Réseau: rail traffic, infrastructure maintenance and station manager. A same representative may receive several mandates.

The crisis rooms do not replace the operational teams of the IMs and RUs, who remain in charge of the operational procedures, nor do they replace SNCF's teams in the field. However, they have the power to orientate the action of the operational players, by taking decisions on the conduct of the resumption operations as well as on the measures making it possible to minimise the consequences of crises on the transport of passenger customers and freight.

In order to handle the different aspects of a crisis effectively, the crisis rooms shall implement the standards and main principles. In principle, decisions are adopted by consensus. Failing this, the DTO (or DNO if the CNOF room is activated) shall decide of the measures to be taken in the interest of the system. These decisions are imposed on the members and operational teams of SNCF Réseau and the RUs. Operational rooms ensure the overall handling of the crisis by ensuring the balance between the different interests present: IMs and RUs. Seeking this balance can sometimes lead to discard the systematic application of the rules set out in Appendix 5 to the NS.

The Infrastructure Managers, the Railway Companies and the Station Manager retain the initiative to adhere contractually to this crisis management coordination mechanism deployed by SNCF Réseau. The coordination and management of crisis situations contract is composed of the General Terms and Conditions shown in Appendix 3.7.1 to the Network Statement and Special Terms and Conditions, a template of which is provided in Appendix 3.7.2 to the Network Statement.

### **5.7.3 IMPACT AND LIKELY DEVELOPMENTS**

The RU will continue to be aware of the situation as regards train movements by virtue of the location information.

The SGC shall inform the RU concerned, applying the principles set out in the "GOC Rules" document and allowing for likely developments in the situation. This information will be based on an analysis of the impact of the disruption obtained from information collected by the SGC.

Such information may concern only the CF itself (faulty equipment, etc.) or the production of an RU responsible for the disruption (failed train, etc.).

To facilitate the analysis used by the SGC to reach its decisions regarding how best to manage the disruption, the RU causing or affected by a downgraded situation will keep the SGC constantly informed of the facts (tel, DURANDAL 2 application, etc.) in its possession and its prognoses as regards developments.

Traffic operations under downgraded conditions will take place in accordance with the operating rules described above (§ 5.5)..

## **5.8 MANAGEMENT OF EMERGENCY SITUATIONS**

In the event of an accident or serious incident, SNCF Réseau and the RUs must take the immediate measures necessary to ensure the safety of users, rescue teams, personnel, third parties and rail traffic, as well as the protection of the environment.

In order to manage emergency situations, each local traffic managing service must have established, in consultation with the competent administrative authorities, an Operation and Safety Plan [Plan d'Intervention et de Sécurité] (PIS) in accordance with the requirements set out in the Decree of 12 August 2008<sup>(\*)</sup>. Appendices to the PIS describe the sites likely to present particular risks with regard to the operating conditions, the particularities of the infrastructure or the difficulties of access. This is particularly the case for internal emergency plans (PUI) relating to the transport of dangerous goods.

This plan is distributed to each railway operator affected. Railway operators are required to adapt their organisation to the requirements of these plans.

Depending on the type of security event within the meaning of the Decree of 12 August 2008<sup>(\*)</sup>, the traffic managing service notifies the public emergency services and informs without delay the competent local prefect.

Information about the measures implemented by the railway operators and the human, material and technical resources deployed or available to respond to requests from the traffic managing service must be included in the PIS, in particular:

- ✓ the premises, human, material and technical resources they use or have available;
- ✓ the organisation and methods of information and support for families;
- ✓ the organisation of information, refuelling or evacuation of passengers.

A system of replacement and permanence of the directors must ensure the continuity of the service, in order to ensure the management of emergency situations.

It is the responsibility of the RU or another contracted RU to represent their RU at an incident.

*(\*) Decree of 12 August 2008 adopted in application of Article 13 of Decree No. 2006-1279 of 19 October 2006 and relating to intervention and safety plans on the national rail network.*

## **5.9 ASCERTAINING THE FACTS IN THE EVENT OF ACCIDENTS, INCIDENTS OR SITUATIONS POSING A SERIOUS AND IMMINENT THREAT**

In order to establish the facts in the event of an accident, incident or situation posing a serious and imminent threat, a report on the first facts of the case (RCI) must be drawn up jointly by the representatives of SNCF Réseau and the representatives having received an authorisation, designated by each of the RUs concerned.

This will indicate, at the earliest possible stage, the nature of the particular event, its circumstances and consequences, when these are known, and set out the facts precisely and objectively. This report must be signed by the representatives of the parties concerned, each of them having the possibility, if applicable, of indicating their reservations in relation to all or part of the details contained in the record of immediate findings.

SNCF Réseau may call upon "experts" as per the conditions set out in document RFN-IG-TR 04 D-03-No. 001 "Incidents and accidents - Report - Protective measures and Investigation".

## **5.10 SAFETY**

### **5.10.1 SITUATIONS DOWNGRADED FOR SAFETY REASONS**

With regard to the safety of the network and its users, the RUs must comply with all associated measures of which they may be notified by SNCF Réseau, materialising government plans (VIGIPIRATE, etc.) in response to the management of emergency situations or the implementation of protective measures (suspicious package, bomb alert, etc.).

The "GOC Rules" document provides further details on managing downgraded situations for safety reasons.

### **5.10.2 SAFETY REQUIREMENTS AS REGARDS THE TEMPORARY STABLING OF WAGONS CONTAINING DGS ON CERTAIN SITES**

A safety plan specific to certain sites for the temporary stabling of wagons containing dangerous goods may be drawn up by SNCF Réseau.

The safety plans drafted in parallel by each RU under § 1.10.3.2 of the RID must take into account, where applicable, the existence of specific safety plans drawn up by SNCF Réseau.

The specific safety plans set out a certain number of requirements applicable on the whole site and aimed at limiting, and even preventing, malicious acts in areas where dangerous goods are temporarily stabled.

It is up to each railway operator concerned to adapt the requirements thereof into operational procedures for its own personnel.

### **5.10.3 CONTRIBUTIONS OF THE RUS AND STATIONS MANAGER (GARES & CONNEXIONS)**

The SGC is entitled to ask the railway undertakings and Station Manager to contribute to the safety exercises, in terms of the provision of material, technical or personnel resources, with a view to validate the procedures stemming from the Intervention and Emergency Plan, as well as exercises requested by State services. This contribution extends from the preparation of the Experience Feedback phase through to the completion of the exercise.

The costs related to these exercises (installation of equipment and personnel, etc.) shall be borne by the contributing railway undertakings.

## **5.11 TRINOMINAL PANTO INVESTIGATION CATENARY INCIDENTS**

### **5.11.1 THE CONCEPT OF INVESTIGATION**

The investigation is a procedure aiming to prevent accidents and incidents. It consists in collecting and analysing information, making conclusions, including determining the causes and, where applicable, issuing safety recommendations (Article 3 §14 of directive EU 2016/798 dated 11 May 2016 pertaining to rail safety). Investigations also make it possible to guarantee the reliability and sturdiness of the system.

Panto investigations are not systematic nor immediate; however, when they are launched, they must be conducted as closely as possible to the RCI finalisation date.

### **5.11.2 CONSTITUTION OF A TRINOMINAL PANTO**

The trinomial panto is made up of:

- An Equipment expert representing the RU concerned.
- A Traction expert representing the RU concerned.
- A catenary expert belonging to SNCF Réseau or a representative of the IM concerned.

Note: a single expert may have both “Equipment” and “Traction” expertise.

On the publication date of this document, “Equipment” and “Traction” experts of SNCF Passenger are appointed to intervene on incidents involving the rolling stock of other RUs and these services are not paid.

### **5.11.3 LAUNCH OF THE TRINOMINAL PANTO**

The RU concerned and the COGCE must be informed of each incident that had either direct or indirect consequences on Electrical Traction installations and pantographs.

The local safety representative (RLS), heads the study and belongs to the DSSR. He/she launches the intervention of the Trinomial Panto when the elements known upon the finalisation of the RCI do not enable him/her to consider a conclusive causal analysis report.

#### 5.11.4 ABSENCE OF A REPRESENTATIVE OF AN RU DURING TP INVESTIGATIONS

Whenever the representative of an RU is absent during the TP investigation, the latter shall be conducted without the RU and the results thereof shall be binding upon it.

Exceptionally, in the absence of a representative of an RU, and within a time frame compatible with the needs of an RTP investigation, the RLS of the DSSR, who heads the study, shall call upon one or more experts for the Equipment and Traction areas. The experts called upon must be considered as providing their skills in the railway sector to enable the drafter of the TP report (belonging to SNCF Réseau, Maintenance and Works expert of the TP) to successfully draw up his/her report. The appointed experts do not replace the representatives of the operators. They only provide their technical expertise. They may belong to any Railway Undertaking.

The absence of a representative of an RU during the TP investigation shall not question the binding nature of the investigation results on the RU concerned

To limit the non-representation occurrences of RUs in this type of investigation, the Local Safety Representative shall call upon one or more experts for the "Equipment" and "Traction" aspects.

- The experts called upon must be considered as providing their skills in the railway sector to enable the drafter of the TP report (an agent of SNCF Réseau and Maintenance and Works expert) to successfully draw up his/her report.
- The appointed experts do not replace the representatives of the operators. They only provide their technical expertise. They may belong to any RU.
- The expert's service for an RTP "trinomial panto" investigation is an additional service

The appointment of the expert shall be formalised by an expert soliciting sheet established based on a model included in the "GOC rules." The appointed expert must respect a confidentiality commitment as regards his/her employer and any railway undertaking.

- The expert appointed to remedy the absence of a representative of the Railway Undertaking concerned shall be subject to confidentiality obligations.
- His/her service shall be charged and invoiced to the RU concerned whenever this service was conducted in the absence of a representative of the RU concerned.

## ARTICLE 6 - POST-PRODUCTION PHASE

### 6.1 MANAGEMENT OF REGULARITY

The purpose of regularity management is to continuously improve the overall performance of the network. In this respect, the SGC coordinates the entire rail system and manages, at the different organisational levels, the Daily, Weekly and Monthly meetings for the different geographic levels (Regional, Axis, National), using the Operational Excellence methods. These meetings are described in the document RFN-IG-OG-01 B-00-No.001 (OP 00515) "Operating performance management".

The analysis of the disruptive events described in Article 5.5 herein is based on the collection of factual data. It will be up to each party to decide whether to add any further details it deems relevant regarding the events for which it has been allotted responsibility in order to support its own internal management purposes. The process and requirements are governed by document RFN-IG-TR-04 C-01-No.002 (OP 03027) "Guidelines for justification of delays and cancellations in BREHAT". The incident allocation recovery tool is the DECLIC tool. The deadline for contesting the allocation of responsibility for an incident is 15 days after closing.

### 6.2 SAFETY WATCH: FEEDBACK ON ACTUAL TRAIN MOVEMENT CONDITIONS

In order to fulfil its role of monitoring everyday operations on the national rail network, SNCF Réseau must be informed of any events that represent a threat to the safety of the national rail network.

To this end, SNCF Réseau has set up a system for monitoring rail system safety that forms part of its general safety management procedures.

In addition, the individual RUs are responsible for the safety of their own operations and therefore also conduct their own safety controls. In this context, they must report all serious incidents and accidents to SGC.

Similarly, SNCF Réseau must also inform the RU of all cases of failure by the railway undertaking to comply with its responsibilities, whether as regards application of the safety rules and instructions or as regards the technical condition of its rolling stock. Safety watch consists of:

- collect and record the data;
- tracking the safety indicators;
- examining accidents, near misses, incidents and signs indicative of performance slippage to come;
- analysing the results recorded;
- advising the railway undertakings of events likely to concern them;
- communicate the results.

This safety watch is complemented by a feedback system.

In accordance with Articles 12, 15 and 16 of Decree No. 2006-1279, SNCF Réseau and the RUs must each play their part in monitoring rail system safety, in particular by applying the following provisions:

- Depending on the case in hand, SNCF Réseau will inform the EPSF, the CMVOA or the BEATT of any serious or repeated cases of failure by a railway undertaking to comply with the safety regulations or of deficiencies in the technical condition of its rolling stock;
- the RUs will report serious incidents and accidents to SNCF Réseau (via the SGC), to the Office responsible for investigating surface transport accidents (BEA-TT) and to the EPSF;
- the RUs will inform SNCF Réseau and the EPSF each quarter of the values corresponding to the common safety indicators defined in Directive No. 2004/49/EC that concern them, plus details of any other indicators that may be required; details of such indicators should be sent to the Safety, Security and Risks Department of SNCF Réseau.
- 

### 6.3 ROLE AND RESPONSIBILITIES OF THE OPERATIONS DEVIATION MONITORING OFFICER

Document RFN-IG-OG-01 B -00-No.001, "Operating performance management" stipulates that SNCF Réseau shall monitor compliance with the operating rules of the National Rail Network ('security' breaches are excluded from this scope).

The collection of deviations is organised, both for those generated by network operators and for those generated by the IM itself, by the Operations Deviation Monitoring Manager (RSEE).

The following are considered deviations (excluding security):

- ✓ **Non-compliance with the right to train path** (train running on a path allocated to another RU, use of a non-existent train path, etc.)
- ✓ **Absence of routing information on the sequence of trains** (especially on large sites and/or bridging tracks, etc.)
- ✓ **Refusal to make available** (Article 5.6.2 Appendix 5 of the Network Statement)
- ✓ **Faulty ground service** (absence of an agent for the manoeuvre of the security installations, etc.)
- ✓ **Non-compliance with the rescue request time frame** (Article 5.6.1 Rules governing troubleshooting of a train Appendix 5 to the NS)
- ✓ **Failure to report non-compliance** (Article 4.2 Appendix 5 of the Network Statement)
- ✓ **Abuse of sidings** (sidings)



- ✓ **Failure to report a long train** (Article 203 - RFN-IG-TR 04 C-01-No.001)
- ✓ **Failure to acknowledge receipt** of ARTIC notices, DBC out of order, etc.
- ✓ **Failure to declare the actual consist** (Article 6.5.2 of the NS and Article 202 - RFN-IG-TR 04 C-01-no. 001)
- ✓ **Failure to cancel a non-used train path** (Articles 6.7.1.1 and 6.7.1.4 of the NS)

## 6.4 FEEDBACK ON ACTUAL TRAIN MOVEMENT CONDITIONS

SNCF Réseau will organise exchanges with each railway undertaking at least once a year.

The purpose of these meetings, in particular, is to:

- examine *ex-post* the conditions in which trains actually moved over the network and slippage noted in relation to the theoretical train running diagram. This examination will be conducted on the basis of a report on its activities sent by the SGC;
- conduct joint analyses of the conclusions of enquiries and reports produced by the various protagonists in the event of serious incidents;
- finalise action plans aimed at improving the quality of train movements on the network and the conditions for their implementation.

## 6.5 FORECASTING CLIMATE EVENTS

Seasonal phenomena prevention actions shall be coordinated by the SGC at a national and regional level.

In particular, "day events" are organised with all operators covering topics such as the cold & snow, heat waves, and grip.

Alongside the operational handling of unexpected climate events, this also involves forecasting weather phenomena. This forecasting is conducted by the SGC and is designed to prepare and pre-position the required resources (routings, equipment and staff, etc.) and even decide to reduce operating capacity.

After the feedback received in previous years on 'wheel-slip/skidding', the SGC may be required, during its autumn campaigns, to ask freight RUs to limit the tonnage of their train, or may impose a sufficient level of traction power (Multiple Unit instead of Single Unit, for example) in areas defined in conjunction with the RUs to prevent grip problems.