

# SIPH TRAINING

# SIPH CONSULTATION

2020



1

## Presentation of the trainers and learners



2

## The goals of the training session

- Learning how to navigate on the different SIPH screens
- Searching for a train slot
- Searching for an obstruction
- Using the available reports
- Understanding the aspects of conflict detection



3

## Training schedule



### Timetables

09:00 - 12:00  
13:00 - 16:30



### Schedule

Presentations  
Demonstrations  
Exercises  
Quiz



### Exchanges

Recap at the start of the day  
Question/answer session at the end of the day



### Your feedback

Satisfaction questionnaire at the end of the training course

To follow this training course in the best possible conditions, we recommend that you:



**Perform the operations at the same time** as the trainer, even before the exercises



**Say what you would like to achieve** in the day, before training starts, so that we know your requirements



**Ask your questions** during and at the end of the presentation, we will send you the support at the end of the session



**Switch your phone** to silent mode, to avoid disrupting the session

# TRAINING PROGRAMME

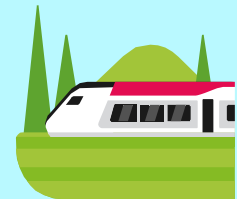
## DAY 1 CONSULTATIO

- 9h00 – 9h30 ● 1. SIPH and its ecosystem
- 9h30 – 9h45 ● 2. The steps for creating timetables
- 9h45 – 10h00 ● 3. SIPH and its projects
- 10h15 – 12h00 ● 4. Presentation of the three editors
- 13h00 – 13h30 ● 5. Automatic integration of requests
- 13h30 – 14h30 ● 6. Search functions
- 14h45 – 15h15 ● 7. Conflict detection principle
- 15h15 – 15h30 ● 8. The reports available

BREAK

LUNCH

BREAK



# INTRODUCING SIPH

## Learning objectives

- *Identifying the role of SIPH and its interactions with other systems*
- *Explaining the key steps needed for the EFs (time horizons, deliverables, ...)*
- *Discovering the process for processing a train slot request*
- *Connecting to SIPH*

# WHAT YOU WANT TO GET FROM THE SESSION



Connecting to Klaxoon

Objective: Sharing what you want to get from the session

# PRESENTATION OF SIPH



## Context

- The SIPH project was launched in 2014 based on two main observations:
- Capacity allocation tools: **multiple and limited** adding constraints to train slot creation
- The company is determined to improve **timetable creation efficiency, the quality level of the transport plans** and **customer exchanges**



## Issues

The project was launched to satisfy the following objectives:

- **To optimise** the use of the **network capacity** and make it **stronger**
- To give the production system **an integrated IS** to modernise the job of creating timetables
- **To nurture dialogue** with the **EFs** by making sharing easier
- Standardise and **industrialise practices** to improve production management



## SIPH perimeter

SIPH is a cross-functional tool that will enable you:

- **To create train slots** by train schedulers
- **To concert** work capacity allocation
- **To display** the transport plan and studies
- **To allocate** tracks and itineraries in the station zone

# WHAT SIPH PROVIDES FOR CUSTOMERS



## Better management of customer requirements

Better processing of **customer requirements**

**Better visibility of** of annual service

**Stronger advisory role** to improve response to customers



## Promotes transparency of information

**Transparent and reliable** information

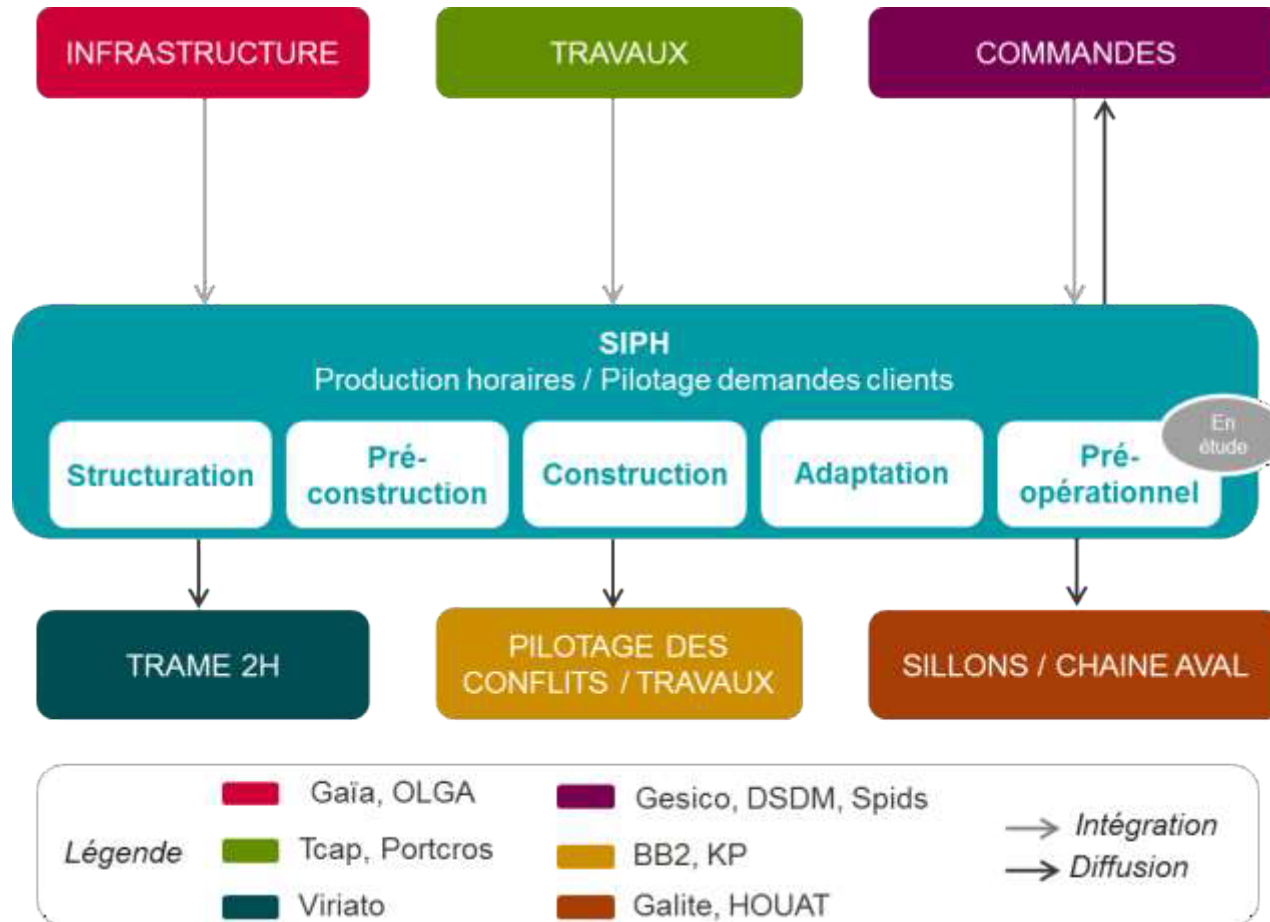
Carrying out **timetable studies** based on **production data**

**Real time consolidated vision**

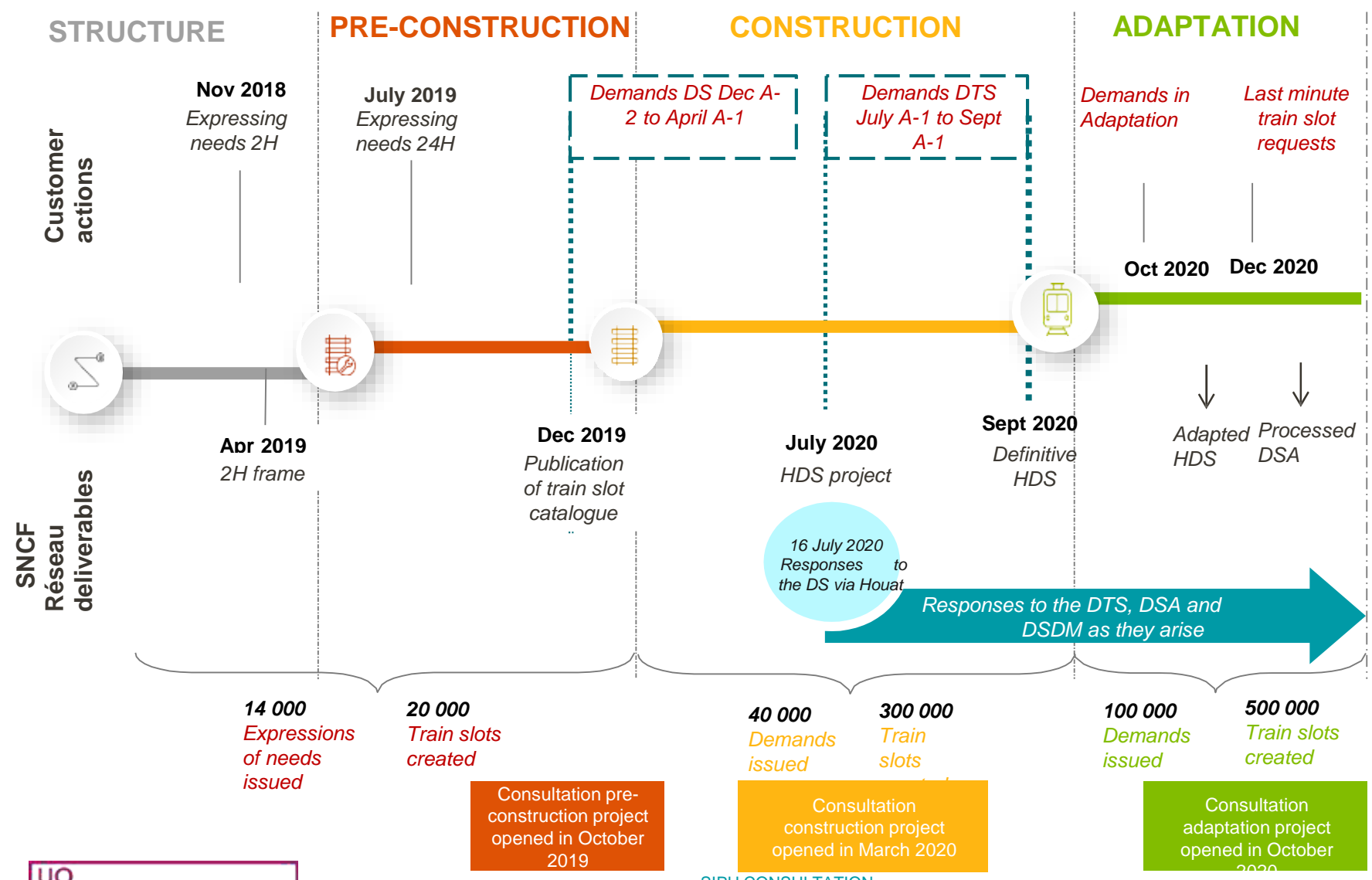
**Logging** the train slot history

**Exchanges punctuated** by production phases

# SIPH AND KITS ECOSYSTEM



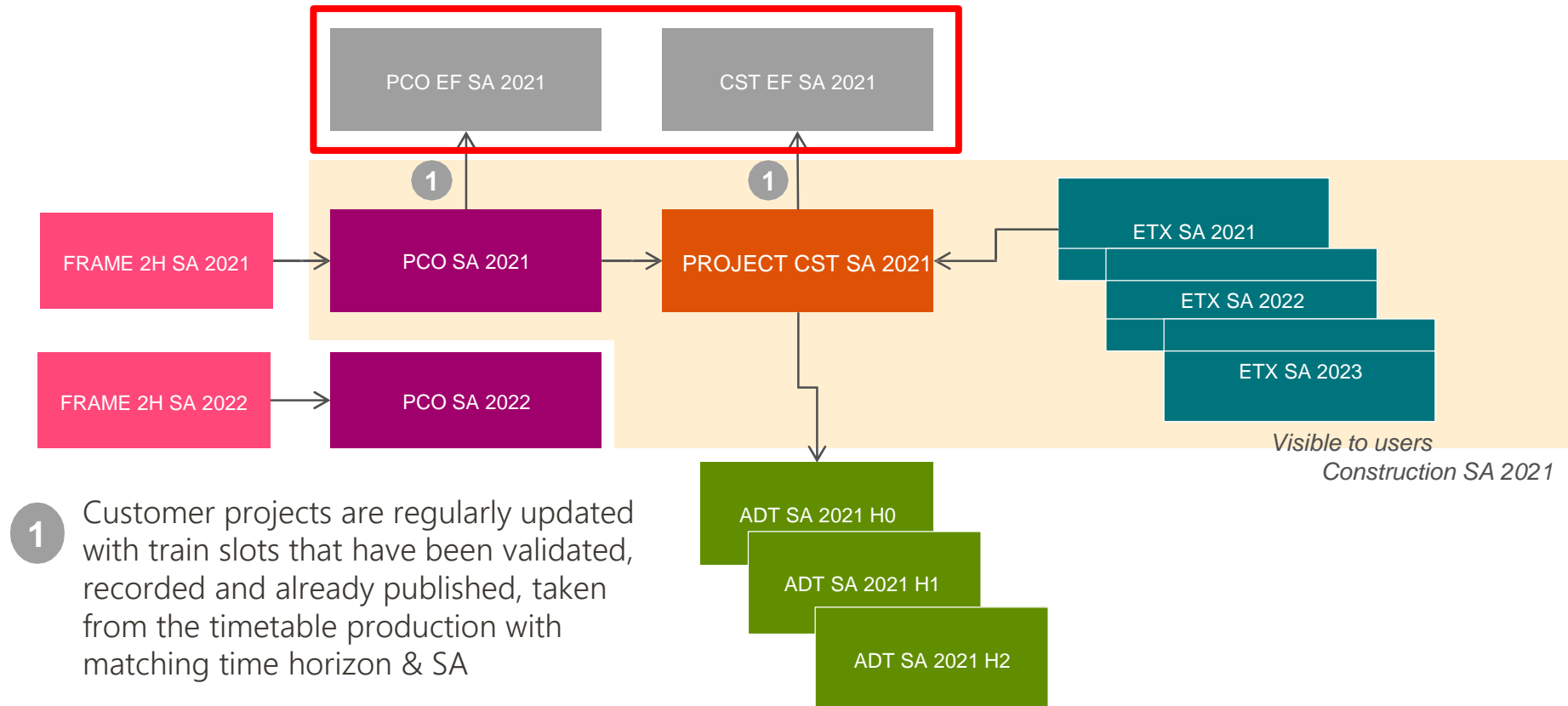
# THE STEPS FOR CREATING SA 2021 TIMETABLES USING SIPH



# SIPH AND ITS PROJETS

A project has a time horizon and a SA, with infrastructure and reference data, as well as the capacity criteria associated to this time horizon

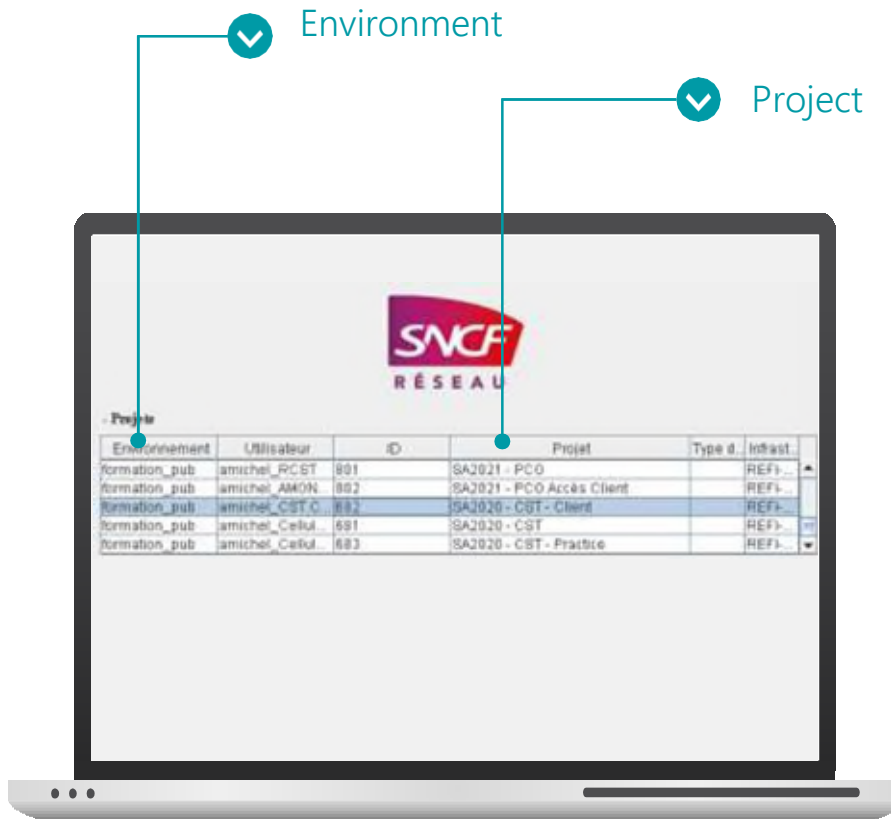
## SIPH production environment



1 Customer projects are regularly updated with train slots that have been validated, recorded and already published, taken from the timetable production with matching time horizon & SA

⊗ The projects in SIPH are completely independent, which means that an action made in a project, such as the route of a train slot, will have no impact on another project.

# SIPH AND ITS PROJETS

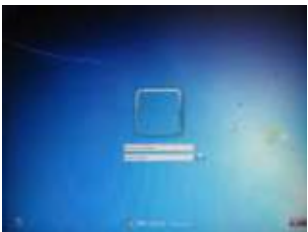


- + The users access their projects via the project selection box
- + Each user will only see the projects whose rights have been attributed to them (depending on their profile, position)

# CONNECTING TO SIPH

## Connecting to Windows

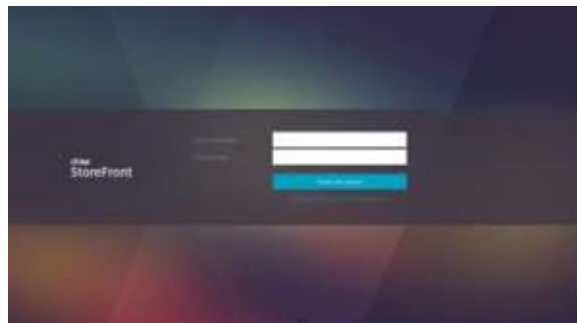
Use the account and the password displayed in the table:  
**SINAI\_form**



## Connecting to Citrix

Link:  
<https://prod-lyon.citrix.sncf.fr/Citrix/PortailWeb/>

User ID:  
**CP account**



## Connecting to SIPH

Select project 682  
(CST customer)



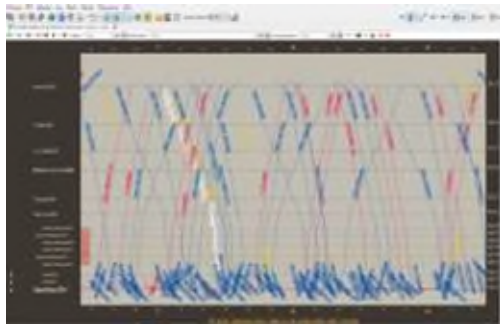
| Environnement | Utilisateur     | ID  | Projet                    | Type d. r.éseau |
|---------------|-----------------|-----|---------------------------|-----------------|
| formation_pub | snicket_PIC_CST | 881 | SA2021 - PCO              | REF.            |
| formation_pub | snicket_ABOCN   | 882 | SA2021 - PCO Accès Client | REF.            |
| formation_pub | snicket_CST_C   | 883 | SA2020 - CST - Client     | REF.            |
| formation_pub | snicket_Cabot   | 881 | SA2020 - CST              | REF.            |
| formation_pub | snicket_Cabot   | 883 | SA2020 - CST - Praticte   | REF.            |

# SIPH TRAINING

## MODULE 1: THE THREE SCREENS

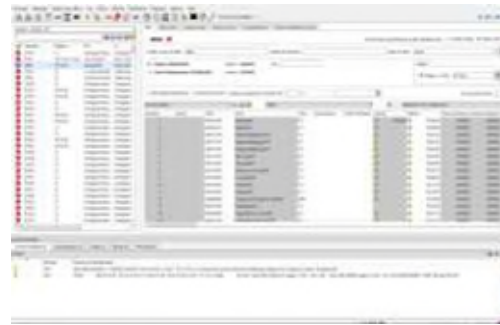
# THE 3 SIPH SCREENS

## Graph editor



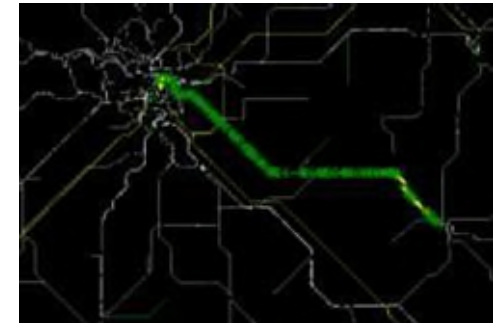
- Uses the capacity element data:
  - A train slot
  - Work

## Planning editor



- Uses all details concerning
  - A train slot
  - Work elements
  - Opening of station and substation lines

## Infrastructure editor



- Uses all technical data:
  - Tracks
  - Stations
  - PK
  - Signals...

# INFRASTRUCTURE EDITOR

## Learning objectives

- *To discover the component parts of the infrastructure*
- *To use the infrastructure editor functions*
- *To navigate in the infrastructure editor*
- *To learn how to search for information using the “editor section”*
- *To set the infrastructure editor parameters*



# HOW WAS THE SIPH INFRASTRUCTURE BUILT?

We can identify 3 levels within the infrastructure :

## 1. NODES

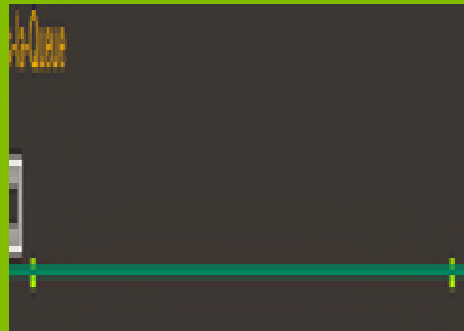
The node is the basic element in the SIPH infrastructure. All infrastructure objects are carried by a node. E.g.: signals



When the mouse cursor is placed on a node, the following information is displayed:  
**Section n° / PK / Track**

## 2. LINKS

They connect the various nodes



## 3. THE SECTIONS

They represent a succession of links and especially in particular track sections as defined by GAIA. They contain elements from existing databases (gradient, power restriction, electrical profile, speed, direction of traffic, etc.).



# HOW WAS THE SIPH INFRASTRUCTURE BUILT?

The following elements can also be identified:

## THE SIGNALS:

Each signal is associated to a node and is oriented from the preceding node to the signal node.



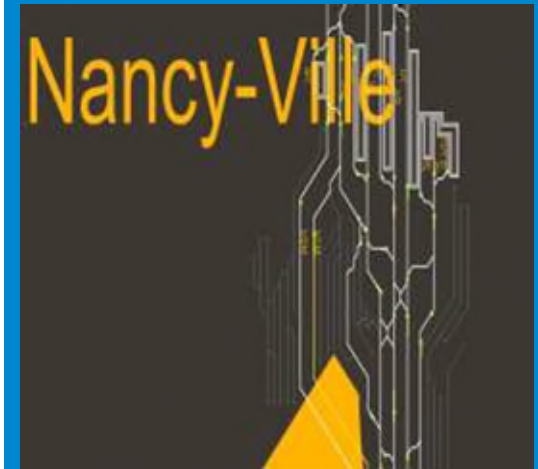
## THE BLOCKS:

Each block is defined from block signal to block signal or from flexible transit point to block signal.



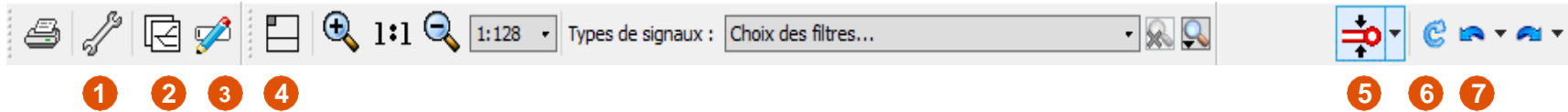
## STATION:

A “station” corresponds to a PR in the SIPH infrastructure editor.



# INFRASTRUCTURE EDITOR

## The tool bar



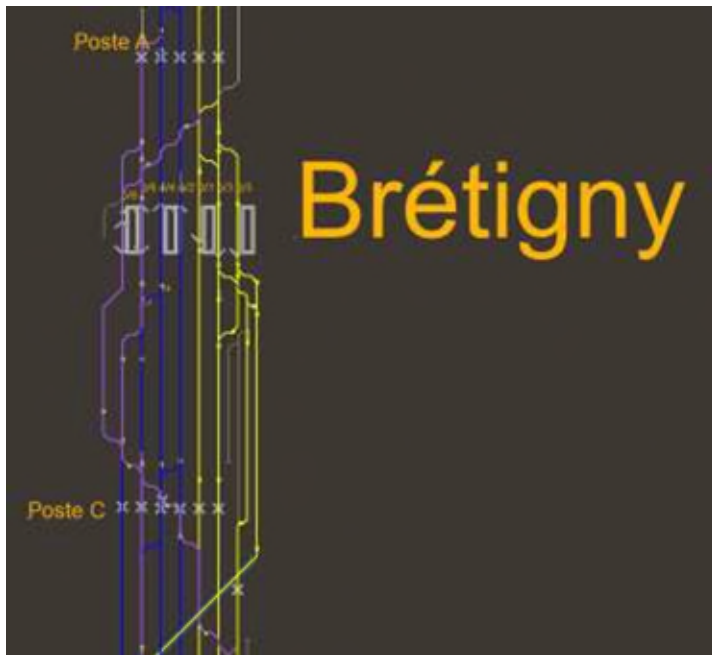
1. Open the infrastructure display options
2. Open a second infrastructure window
3. Display the section editor (used to search for sections, stations, signals, blocks)
4. Display the selection preview for the entire network
5. Activate / deactivate auto-centring
6. Refresh the infrastructure editor
7. Go back

## Navigation

- + **Zoom in / out** on the infrastructure: use the wheel on your mouse
- + **Move** on the infrastructure: click and drag using the mouse wheel



## Viewing the tracks



## Viewing other elements



Work boards, LTV



Openings, closures of lines, stations, Supplemental Minutes (violet square)



Block signals



Speed limit signals

LGV signals



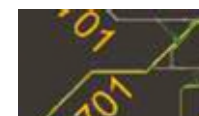
PR (grey cross)



Platform (grey rectangle)



Train slots (green line)

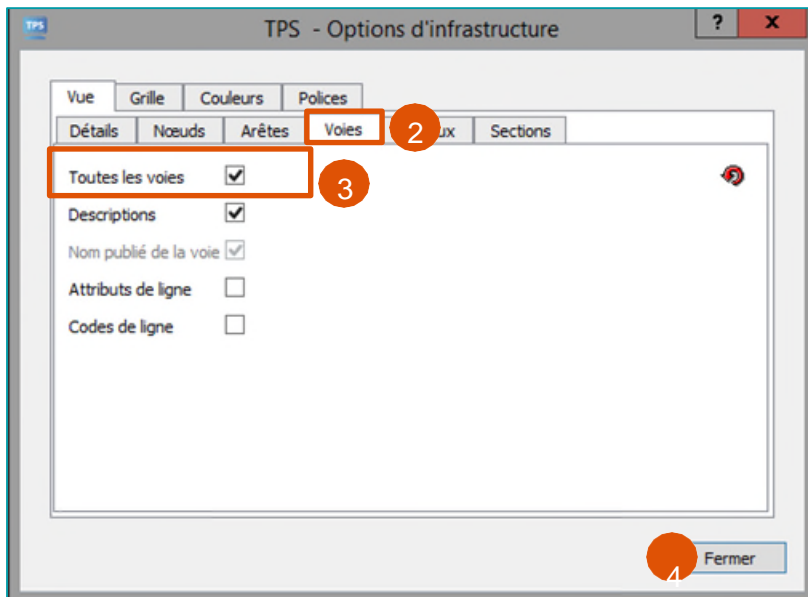


Conflicts (yellow line)

# INFRASTRUCTURE EDITOR OPTIONS

## Display / Hide certain data

To access the editor display parameters: **activate the icon below**



The infrastructure parameters need to be changed to view the PRs.

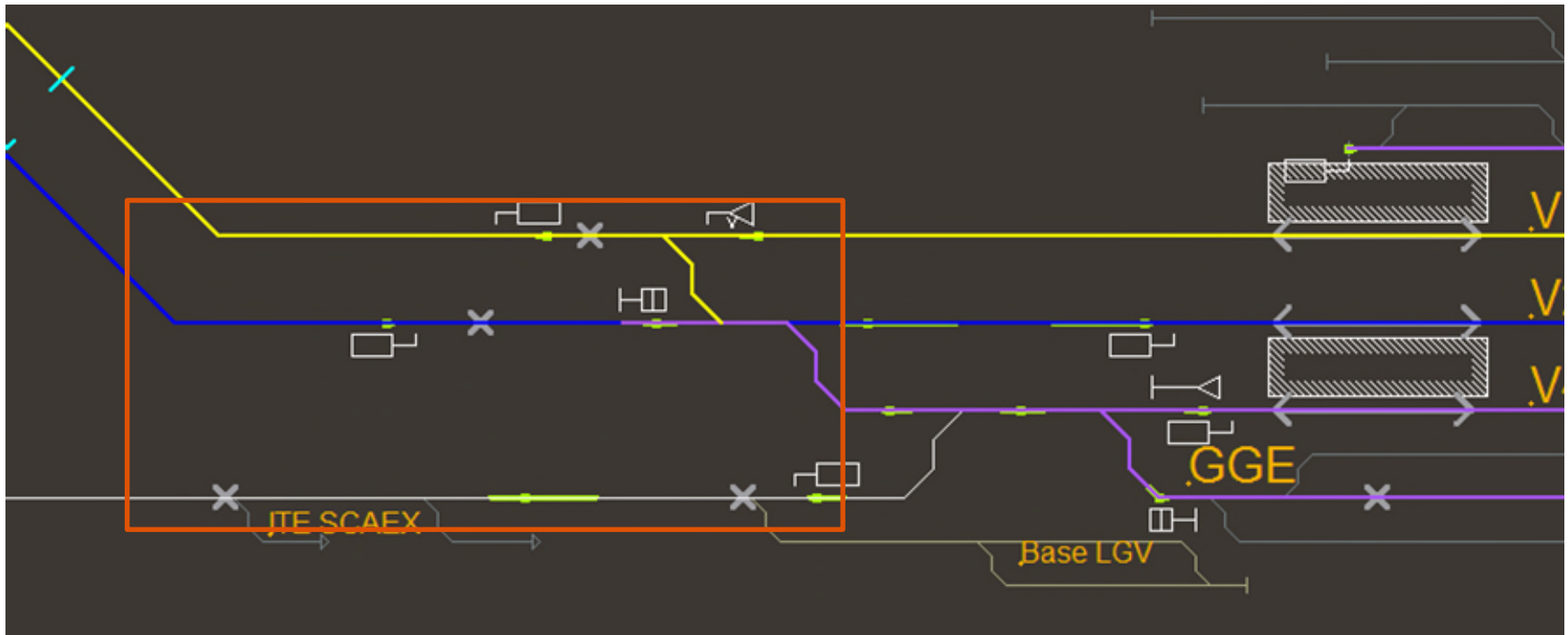
1. Click on the “infrastructure options” button
2. Click on the “Tracks” tab
3. Tick the box “All tracks”
4. Close

# INFRASTRUCTURE EDITOR OPTIONS

## Identification of the PRs

The PRs are identified with a grey cross, place the cursor on a PR to display its information.

The name of the PR is the 2nd item of information

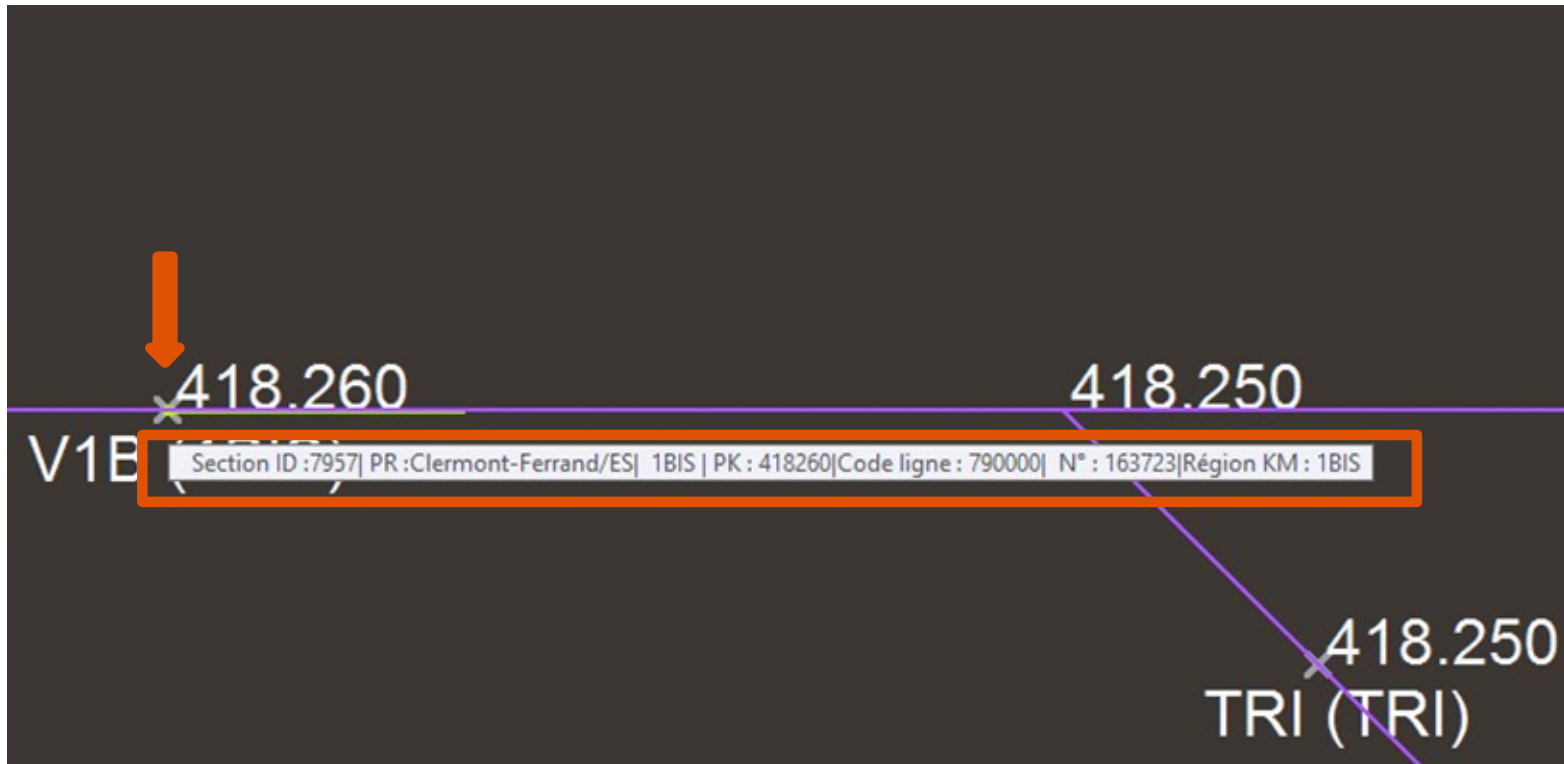


# INFRASTRUCTURE EDITOR OPTIONS

## Displaying data

To display the information of the node or the PR, place the cursor on the element and leave it there.

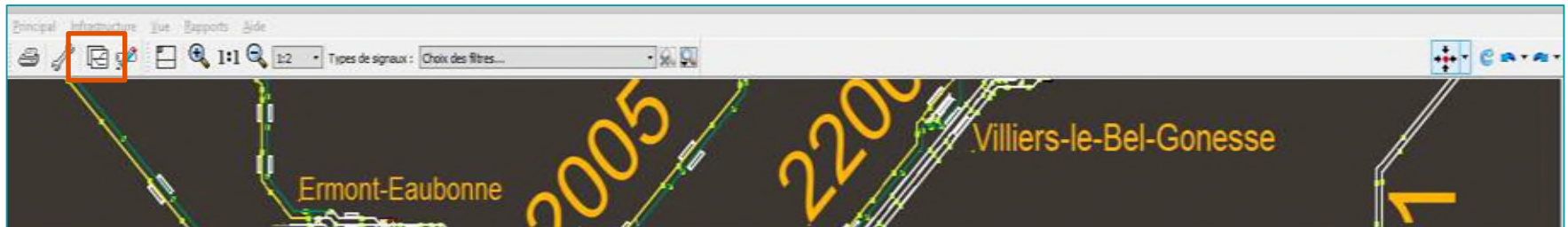
The information box will be displayed on the screen with the infrastructure information



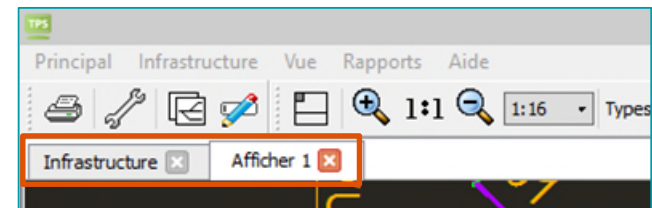
# INFRASTRUCTURE EDITOR OPTIONS

## Opening several windows

**Several infrastructure windows** can be opened at the same time:



*2 tabs:*



## Important point

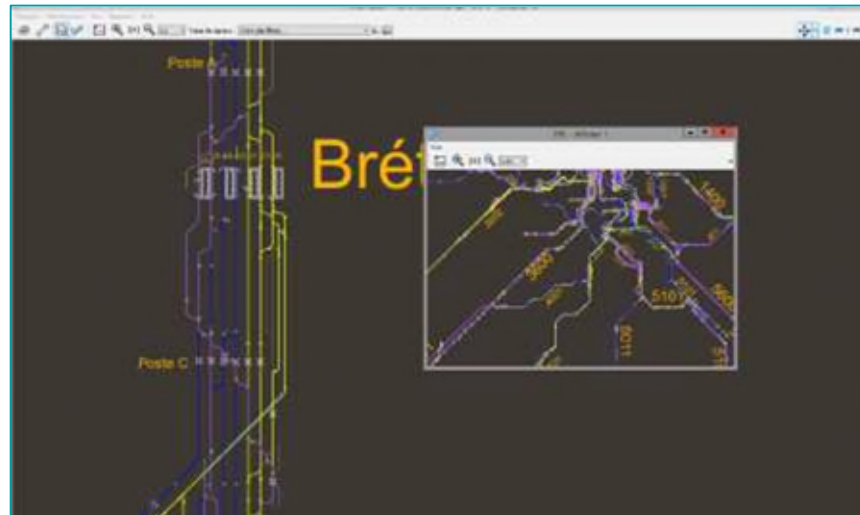
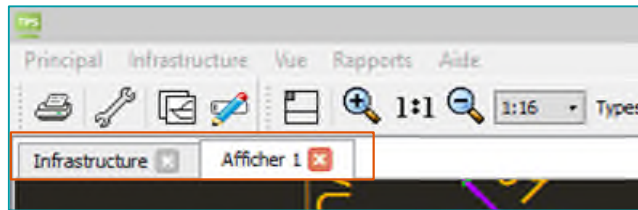


The auto-centring function of the infrastructure editor **applies globally** to all **windows open**

# INFRASTRUCTURE EDITOR OPTIONS

## Opening several windows

To detach one of the windows, click on its name twice:



## Important point



To return to the mode with two tabs, simply close the detached window.

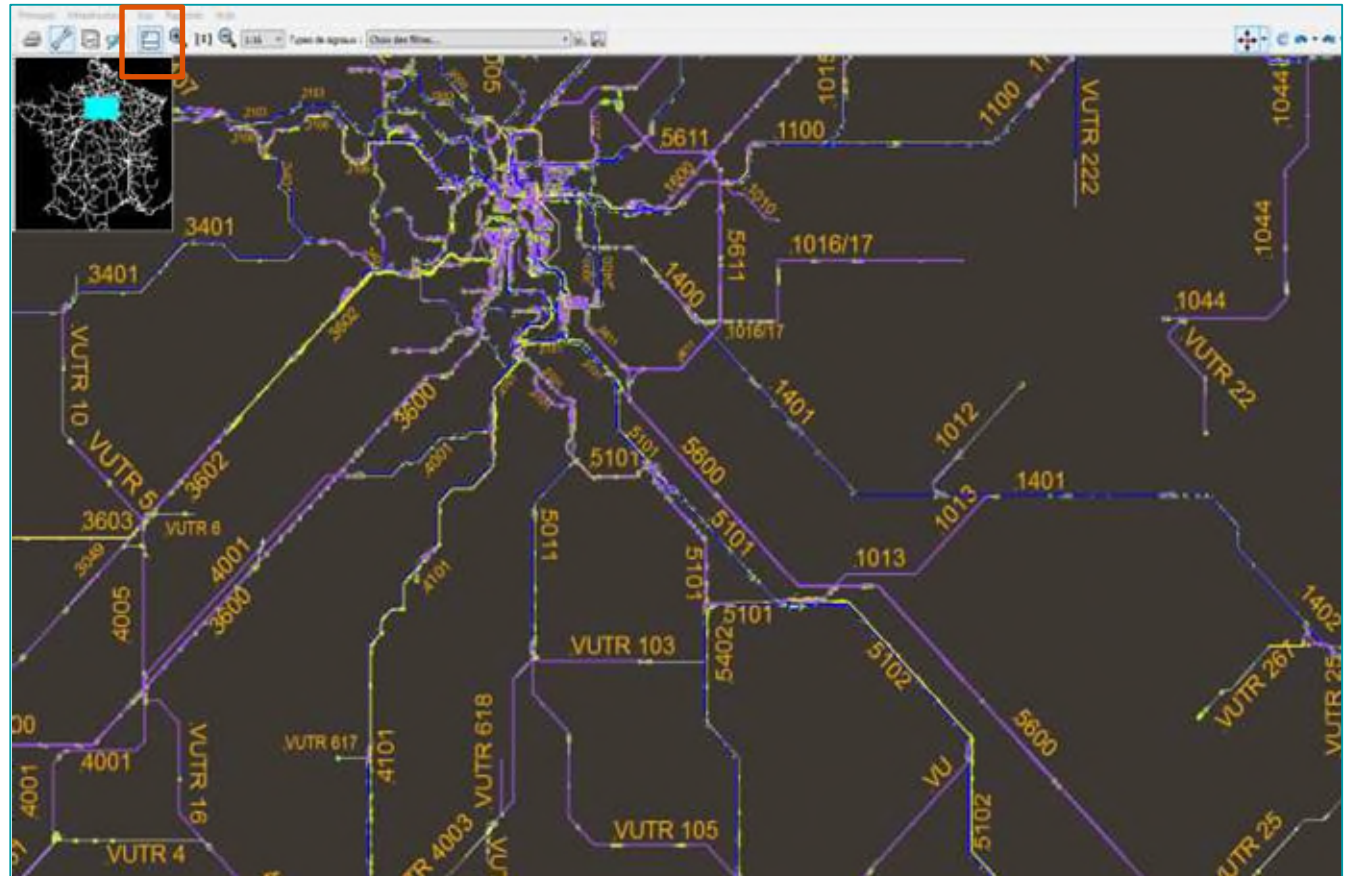
# INFRASTRUCTURE EDITOR OPTIONS

## Activating the preview display

Activate the preview display to display the network map in a window on the left.

The turquoise rectangle is the part of the network that the zoom covers.

It shows where the zone studied is situated on the RFN.



# FINDING DETAILED INFORMATION



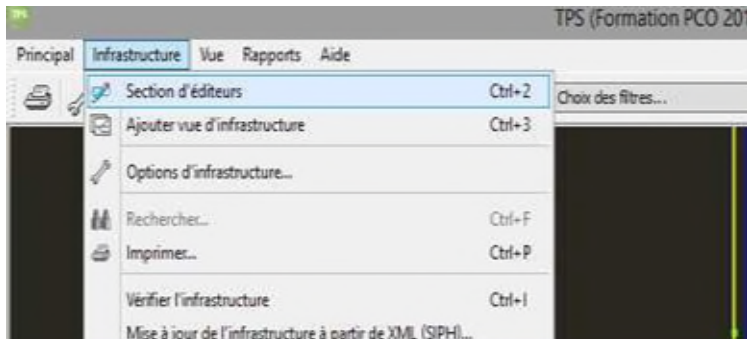
You can find all of the information related to the elements in the various tabs of the section **“Infrastructure screen editors”**

The screenshot displays the 'Infrastructure screen editors' interface. On the left, a table lists various stations with columns for 'Abréviation de ga', 'Nom', and 'Comm'. The 'Vernon-Giverny' station is highlighted. The main area shows the 'Général' tab for this station, with fields for 'Nom', 'Libellé CH', 'Code LDC', 'Catégorie', 'Caractéristiques du PR', 'Zone de gare', 'Validité', 'Coordonnée X', 'Coordonnée Y', and 'Type de surveillance'. The 'Temps standards' section on the right shows 'Arrêt' and 'Manœuvre' times set to '+00:00:00'. The bottom status bar indicates the current station is '415604/BV - Vernon-Giverny (France) (Bât Voyageurs)'.

| Abréviation de ga | Nom                | Comm    |
|-------------------|--------------------|---------|
| 415448/00         | Montfort-St-Ph...  |         |
| 415489/BV         | Pont-Audemer       | Bât Vo  |
| 415489/EP         | Pont-Audemer       | ITE Ah  |
| 415505/EP         | Beuzeville (Eure)  | ITE Sys |
| 415604/BV         | Vernon-Giverny     | Bât Vo  |
| 415604/P1         | Vernon-Giverny     | Poste   |
| 415604/PR         | Vernon-Giverny     | Panca   |
| 415604/QE         | Vernon-Giverny     | Quai E  |
| 415604/V4         | Vernon-Giverny     | Entrée  |
| 415620/BV         | Gaillon-Aubevo...  | Bât Vo  |
| 415620/EA         | Gaillon-Aubevo...  | ITE L'A |
| 415620/EH         | Gaillon-Aubevo...  | ITE CF  |
| 415620/ES         | Gaillon-Aubevo...  | ITE Ser |
| 415620/P1         | Gaillon-Aubevo...  | Poste   |
| 415646/BV         | St-Pierre-du-Va... | Bât Vo  |
| 415646/RB         | St-Pierre-du-va... | Rebro   |
| 415661/BV         | Pont-de-l'Arche    | Bât Vo  |
| 415661/FC         | Pont-de-l'Arche    | FSC Pl  |

# INFRASTRUCTURE EDITOR OPTIONS

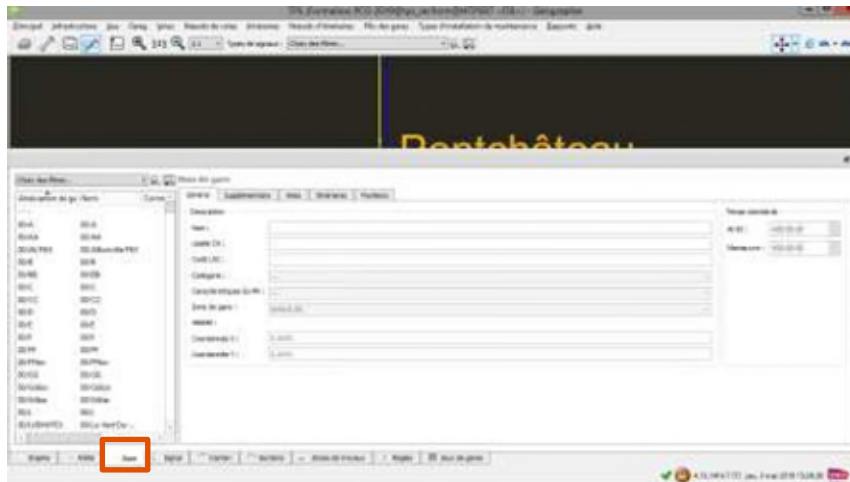
## Editor section: Search for a station (1/2)



1/ Click on “Editor section” in the “Infrastructure” menu or the icon:



2/ A window will open at the bottom of the screen. Click on the “Station” tab at the bottom:



# INFRASTRUCTURE EDITOR OPTIONS

## Editor section: Search for a station (2/2)

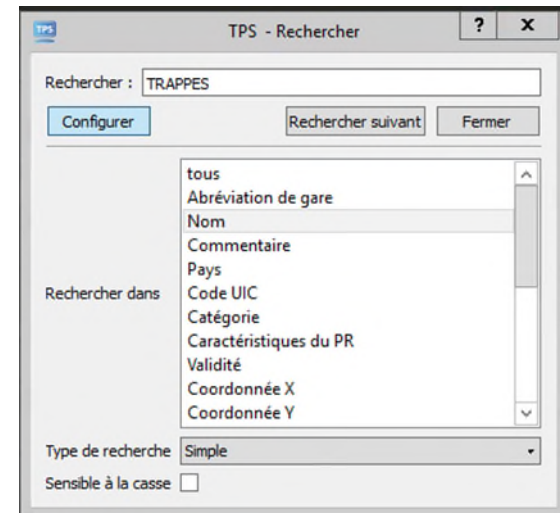
3/ Press Ctrl+F in the box on the left listing all of the stations:



4/ The following window will open:

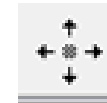
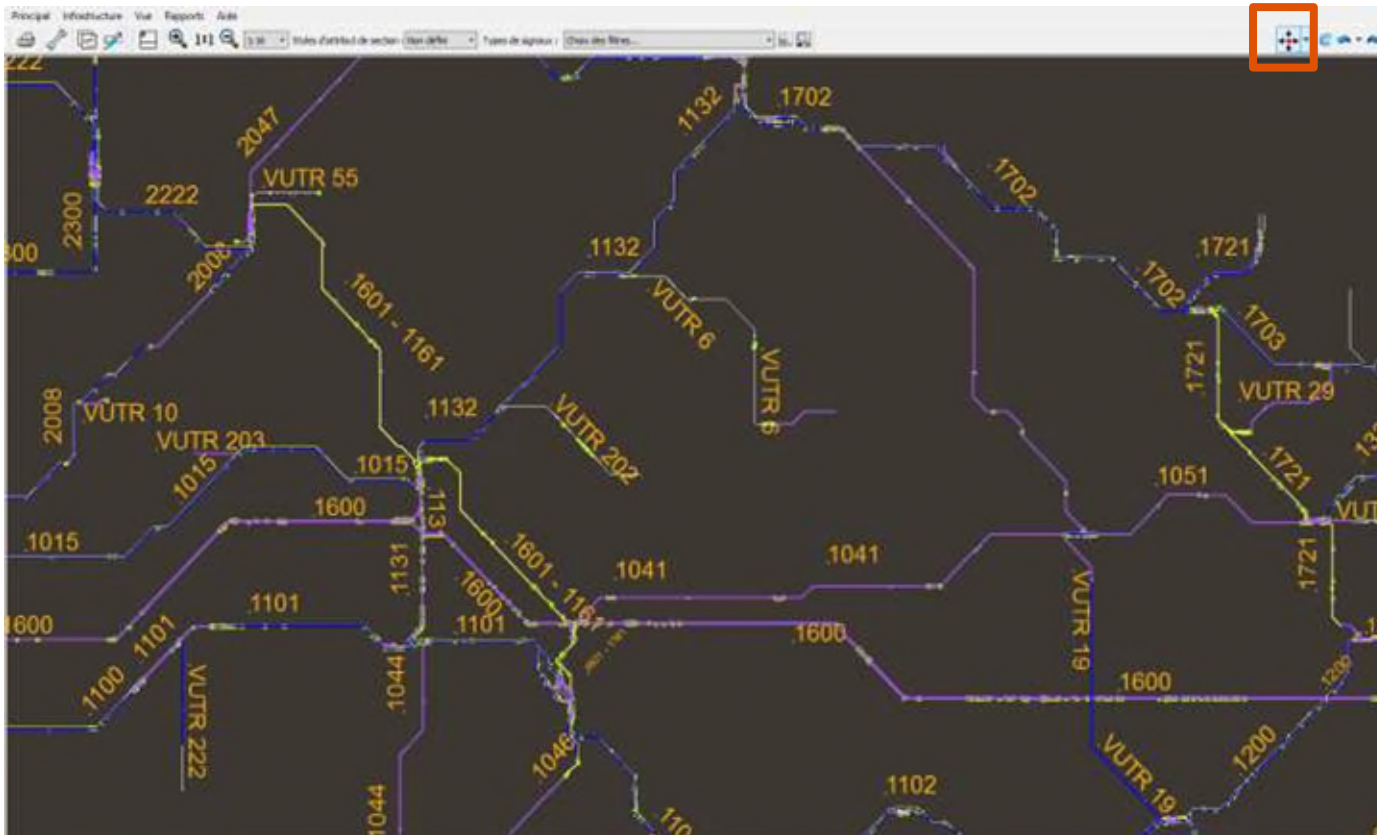
- Enter the name of the station
- Click on “Configure”
- Select “Name” in the list
- Click on “Next search”

☞ → The name of the station is highlighted in the list and the screen will centre on it.



# INFRASTRUCTURE EDITOR

## Activate auto-centring



Deactivated



Activated in the infrastructure editor



Activated in the GET



Activated in all the editors

### Important point



When infrastructure searches are made, we recommend you deactivate the auto-centring function

## Activate auto-centring

To optimise the auto-centring, zoom as much as possible on the infrastructure

### Low zoom

The entire map of France is displayed

*Search for the Vernon station*

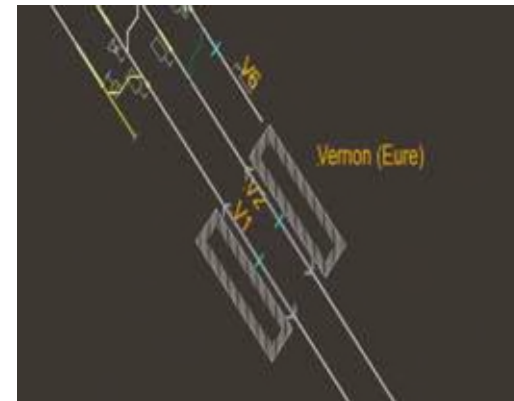


The screen stays at macro level.  
A grey cross can be seen

### High zoom

The station platforms are displayed

*Search for the Vernon station*



The screen centres on the Vernon station.  
Now the tracks can be seen

# DISPLAYING TWO TRAIN SLOTS WITH THE INFRASTRUCTURE EDITOR

## Process using the planning editor

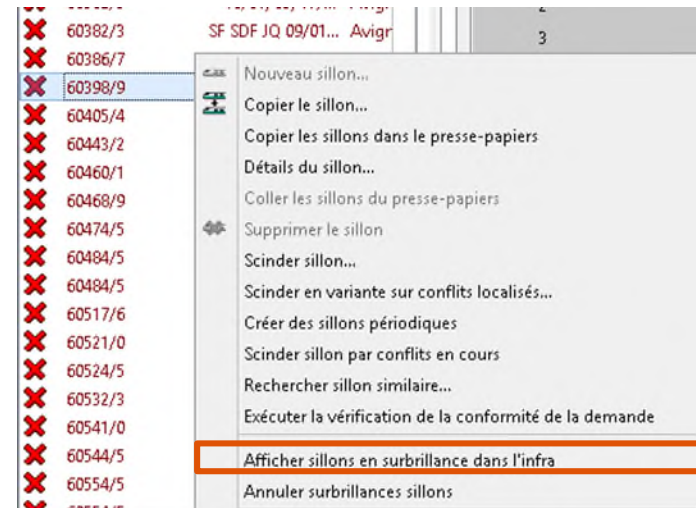
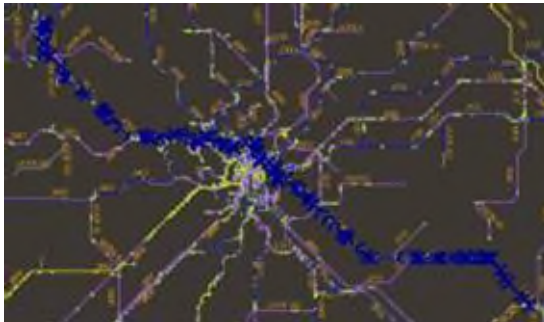
To display another train slot on the infrastructure than the one currently displayed (opened with the planning editor)

1/ Search for the 2nd train slot to be displayed using the filters

2/ Right click on the train slot

3/ Select “Highlight train slots”

→ The selected train slot will be displayed in **dark blue** on the infrastructure



## Important point



**More than 2 train slots can be displayed** on the infrastructure editor.

To remove the train from the infrastructure editor, right click again in the planning editor filter box and select “**Cancel highlighting of train slots**”

# PLANNING EDITOR

## Learning objectives

- *To navigate in the planning editor*
- *To use the planning editor functions*
- *To learn how to consult the capacity elements (train slots and obstructions)*
- *To customise column layouts on the operating editor*



# PLANNING EDITOR

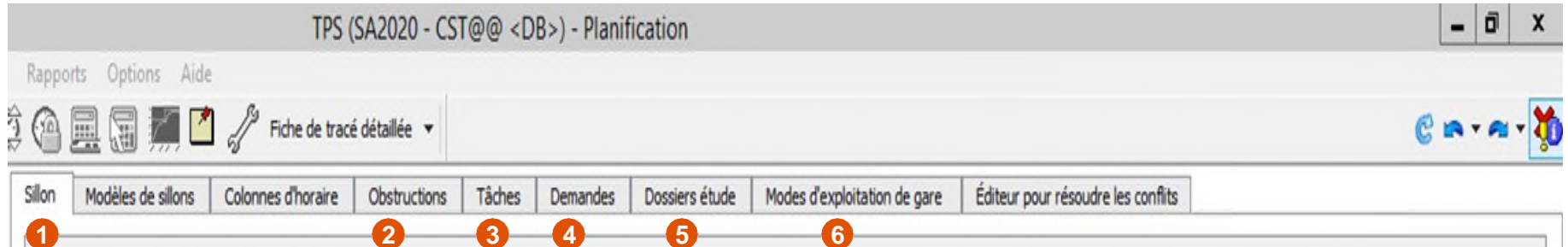
## Main menu



- 1 The “**Main**” option lets the user save their project in ZIP format
- 2 The “**Reports**” option includes all of the reports available in SIPH

# PLANNING EDITOR

## Tabs



- 1 The “**Train slot**” tab displays the details of the current train slot
- 2 The “**Obstructions**” tab displays the details of all the capacity elements other than train slot, for example: windows, OLGA, Supplemental Minutes and Other Capacity Elements (OCA)
- 3 The “**Tasks**” tab is used to manage production. The timetable schedulers find here the tasks to be processed when a response is received to the GESICO requests.
- 4 The “**Requests**” tab presents the customer requests to be processed
- 5 The “**Study file**” tab is a SIPH function that allows studies to be conducted without affecting production
- 6 The “**Station operating modes**” tab displays the opening times of stations and lines

## The functions



Switch editing group for batch editing



Switch train slot tribe edit mode



Limit editing by scheme



Create a train slot from scratch



Copy a train slot



Delete a train slot



Add a PR



Batch modification of the tracks of a train slot



Complete the operation of a train slot automatically



Change the timetable of a slot train (or certain PRs)



Lock the timetable of a PR or train slot



Calculate the train slot route and conflicts



Calculate the train slot timetable



Display the speed distance diagram of the train slot



Display the train slot note



Display the planning editor parameters



Display the train slot route sheet

# PLANNING EDITOR

## The search block

Search project

| ✓ | Numéro | Régime | De                 | À             |
|---|--------|--------|--------------------|---------------|
| ✗ | 123400 | Q      | Pontoise/BV        | Paris-Nord-Su |
| ✗ | 123401 | Q      | Paris-Nord-Surf... | Pontoise/BV   |
| ✗ | 123402 | Q      | Pontoise/BV        | Paris-Nord-Su |
| ✗ | 123403 | Q      | Paris-Nord-Surf... | Pontoise/BV   |
| ✗ | 123404 | Q      | Pontoise/BV        | Paris-Nord-Su |
| ✗ | 123406 | Q      | Pontoise/BV        | Paris-Nord-Su |

List of train slots

- Simple search
- Search by characteristics
- Remove filter

## The current train slot and tabs

| Trame              | Nom | Voie | Code d'itinéraire | Arrivée  | Départ   | Type d'arrêt        | Temps d'arrêt max | Arrêt | Code de récap. | PC | Date |
|--------------------|-----|------|-------------------|----------|----------|---------------------|-------------------|-------|----------------|----|------|
| Aulnoye-Aymeris... | VI  | -    | -                 | 09:17:00 | 09:17:00 | Arrêt de station... | 30:00             |       | 30:00          |    |      |
| Aulnoye-Aymeris... | VI  | -    | -                 | -        | 09:18:20 | Gare de passage     |                   |       |                |    |      |
| Aulnoye-Aymeris... | VI  | -    | -                 | -        | 09:20:25 | Gare de passage     |                   |       |                |    |      |
| Hautmont/BI        | VI  | -    | -                 | -        | 09:22:49 | Gare de passage     |                   |       |                |    |      |
| Hautmont/BI        | VI  | -    | -                 | -        | 09:23:18 | Gare de passage     |                   |       |                |    |      |
| Hautmont/BI        | VI  | -    | -                 | -        | 09:24:07 | Gare de passage     |                   |       |                |    |      |
| Figennes/BI        | VI  | -    | -                 | -        | 09:27:32 | Sortie en passage   |                   |       |                |    |      |

● Click on “+” to display all of the headers or on “-” to mask them

# PLANNING EDITOR

The screenshot shows the 'Planning Editor' interface for a train slot. The interface is divided into several sections:



- 1** TGV003[1] ✕ (Train slot number)
- 2** Données des caractéristiques du silon éditables dans :  En-tête de silon  Éditeur 'Marche' (Data edition mode)
- 3** Premier numéro de silon : TGV003 (First and second train slot numbers)
- 4** Numéro de demande : SA20AT (Demand number)
- 5** Statut du silon : Simulé (Train slot status)
- 6** Indice / Code Composition : TGV (Index / Composition code)
- 7** Mode de calcul : Calcul avec minutes supplémentaires (Operation calculation method)
- 8** LVA (59) / LVA - TAGV - Atlantique, à charge / TGV (Convoy data: Cat. Statistics, TCT and speed profile / calculation engine, Material and Length / Tonnage, Contract and Mg content)
- 9** De : Paris-Montparnasse (391003/BV) / Départ : 07:00:00 / VDS : (Origin and Destination / departure and arrival time / VDS)
- 10** Régime : 382807 / SF SA D1 DU 14 AU 27/01/20 (Schedule)
- 11**  Marchandise dangereuse  Marche de sécurité Transport exceptionnel / Numéro ATE : (ATE and safety procedure)

1. Train slot number
2. Data edition mode
3. First and second train slot numbers
4. Demand number
5. Train slot status
6. Index / Composition code
7. Operation calculation method
8. Convoy data: Cat. Statistics, TCT and speed profile / calculation engine, Material and Length / Tonnage, Contract and Mg content
9. Origin and Destination / departure and arrival time / VDS
10. Schedule
11. ATE and safety procedure

# PLANNING EDITOR

## The Operations block

| Numéroc | Icônes | Gare      | Nom                | Voie | Code d'itiné | Arrivée  | Départ | Heure d'arrivée p | Heure de départ p | Retard   |
|---------|--------|-----------|--------------------|------|--------------|----------|--------|-------------------|-------------------|----------|
| 1       |        | 484329/00 | Savennières-Bé...  | V2   | -            | 02:19:57 | 🔒      | 02:19:57          | 00:00:00          | 00:00:00 |
| 2       |        | 484337/00 | La Possonnière/... | V2   | -            |          | 🔒      | 02:50:09          | 00:00:00          | 00:00:00 |
| 3       |        | 484204/00 | Chalonnès/00       |      | -            |          | 🔒      | 03:10:21          | 00:00:00          | 00:00:00 |
| 4       |        | 396002/BV | Le Mans/BV         | V5   | -            |          |        | 13:01:00          | 00:00:00          | 00:00:00 |
| 5       |        | 396002/PS | Le Mans/PS         | V1A  | -            |          |        | 13:02:13          | 00:00:00          | 00:00:00 |
| 6       |        | 396002/GO | Le Mans/GO         | V1   | -            |          |        | 13:03:14          | 00:00:00          | 00:00:00 |
| 7       |        | 396258/00 | Voivres/00         | V1   | -            |          |        | 13:07:10          | 00:00:00          | 00:00:00 |

1. Certain lines of the block can be **filtered** using the magnifying glass
2. The Operations block can be **customised** by
  - a) Showing/Hiding certain columns (right click on the column )
  - b) Moving certain columns (Left-click and hold down  and move mouse button)
3. The customised set-up can be saved using “+”.
4. The configurations stored are available in the drop-down list

### Important point



The data in the greyed-out columns cannot be modified directly in the Operations block.


# THE COLUMNS OF THE OPERATIONS EDITOR

The layout of the columns set up for the timetable schedulers

| Icônes | Nom                            | Voie | Code d'itinéraire | Arrivée  | Départ   | Type d'arrêt     | Temps d'arrêt mi | Arrêt | Code de récep. | PC | Détente cumulée | Détente | Marge totale cumulée | Marge réelle cumulée | Marge régulière cumulée | Obstruction |
|--------|--------------------------------|------|-------------------|----------|----------|------------------|------------------|-------|----------------|----|-----------------|---------|----------------------|----------------------|-------------------------|-------------|
|        | Angers-Maitre-École/BV         | V1   |                   | 11:46:43 | 11:46:43 | Arrêt de stat... | 00:00            | 00:00 |                |    |                 |         |                      |                      |                         |             |
|        | Angers-Maitre-École/BI         | V1   |                   |          | 11:47:12 | Gare de pass...  |                  |       |                | ○  |                 |         |                      |                      |                         |             |
|        | Angers-St-Laud/BV              | VC   |                   |          | 11:48:22 | Gare de pass...  |                  |       |                | ○  |                 |         |                      |                      |                         |             |
|        | Angers-St-Laud/ES              | V1   |                   |          | 11:49:39 | Gare de pass...  |                  |       |                | ○  |                 |         |                      |                      |                         |             |
|        | La Pointe-Bouchemaine/00       | V1   |                   |          | 11:51:43 | Gare de pass...  |                  |       |                | ○  |                 |         |                      |                      |                         |             |
|        | Sevigné-Béhuard/00             | V1   |                   |          | 11:53:24 | Gare de pass...  |                  |       |                | ○  |                 |         |                      |                      |                         |             |
|        | La Possonnière/00              | V1   |                   |          | 11:54:26 | Gare de pass...  |                  |       |                | ○  |                 |         |                      |                      |                         |             |
|        | Champocé-sur-Loire/00          | V1   |                   |          | 11:59:14 | Gare de pass...  |                  |       |                | ○  |                 |         |                      |                      |                         |             |
|        | Ingrandes-sur-Loire/BV         | V1   |                   |          | 12:01:44 | Gare de pass...  |                  |       |                | ○  |                 |         |                      |                      |                         |             |
|        | Montrelais/00                  | V1   |                   |          | 12:03:04 | Gare de pass...  |                  |       |                | ○  |                 |         |                      |                      |                         |             |
|        | Varades-St-Florent-le-Vieil/BV | V1   |                   |          | 12:04:23 | Gare de pass...  |                  |       |                | ○  |                 |         |                      |                      |                         |             |
|        | Ancenis/00                     | V1   |                   |          | 12:08:48 | Gare de pass...  |                  |       |                | ○  |                 |         |                      |                      |                         |             |
|        | Oudon/00                       | V1   |                   |          | 12:12:42 | Gare de pass...  |                  |       |                | ○  |                 |         |                      |                      |                         |             |
|        | Le Cellier/00                  | V1   |                   |          | 12:15:15 | Gare de pass...  |                  |       |                | ○  |                 |         |                      |                      |                         |             |
|        | Mauves-sur-Loire/00            | V1   |                   | 12:18:04 | 12:18:04 | Arrêt de stat... | 00:00            | 00:00 |                | ●  |                 |         |                      |                      |                         |             |

This is specifically designed for timetable schedulers and is already set up. It can be accessed via the following drop-down list:

Marchandise dangereuse  Marche de sécurité Transport exceptionnel / Numéro ATE : --- /

Choix des filtres... 

Icônes

| Icônes | Nom                    | Voie | Code d'itinéraire | Arrivée  | Départ   | Type d'arrêt     | Temps d'arrêt mi | Arrêt | Code de récep. | PC | Détente cumulée | Détente | Marge totale cumulée | Marge réelle cumulée | Marge régulière cumulée | Obstruction |
|--------|------------------------|------|-------------------|----------|----------|------------------|------------------|-------|----------------|----|-----------------|---------|----------------------|----------------------|-------------------------|-------------|
|        | Angers-Maitre-École/BV | V1   |                   | 11:46:43 | 11:46:43 | Arrêt de stat... | 00:00            | 00:00 |                |    |                 |         |                      |                      |                         |             |
|        | Angers-Maitre-École/BI | V1   |                   |          | 11:47:12 | Gare de pass...  |                  |       |                | ○  |                 |         |                      |                      |                         |             |

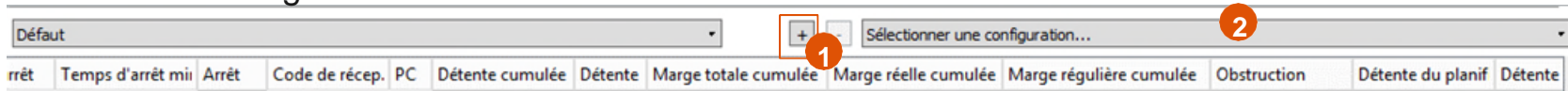
# THE COLUMNS OF THE OPERATIONS EDITOR

## Saving a customised configuration

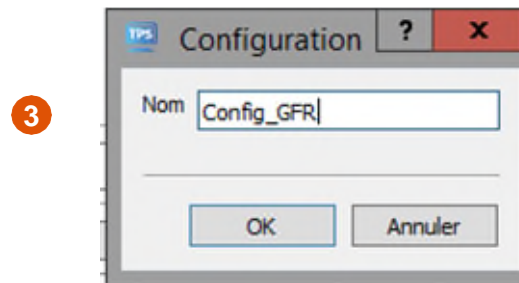
Users can save a new customised configuration by following the actions below:

1. Move by clicking/dragging, hide or display: right-click on the column then "Hide/display") the desired columns. A column can also be anchored (right click on the column then "Anchor")

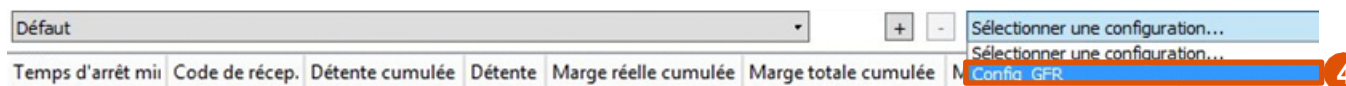
2. Add the new configuration



3. Name the configuration



4. Search for the configuration created



# PLANNING EDITOR

## The obstruction tab

All objects that reserve timetable capacity (which are not train slots) can be viewed in the Obstruction tab of the planning editor:

The screenshot shows the 'Obstructions' tab in the Planning Editor. The table lists various obstruction objects with their names, types, and statuses. The 'Obstructions' menu item is highlighted in the top bar. A callout box labeled 'Obstructions' points to the 'Obstructions' tab in the software interface.

| Nom                | Type              | État de la demanc | Statut   |
|--------------------|-------------------|-------------------|----------|
| ZSA TEST           |                   |                   | Effectif |
| OLGA LIZY SUR...   | Duvertures imp... |                   | Effectif |
| OLGA WISSEME...    | Duvertures imp... |                   | Effectif |
| OLGA ROTHAU...     | Duvertures imp... |                   | Effectif |
| OLGA VITTEL - ...  | Duvertures imp... |                   | Effectif |
| OLGA SAINT R...    | Duvertures imp... |                   | Effectif |
| OLGA NANTES ...    | Duvertures imp... |                   | Effectif |
| OLGA DREUX - ...   | Duvertures imp... |                   | Effectif |
| OLGA REZE PO...    | Duvertures imp... |                   | Effectif |
| OLGA LESPARR...    | Duvertures imp... |                   | Effectif |
| OLGA EMPALO...     | Duvertures imp... |                   | Effectif |
| OLGA MONTRE...     | Duvertures imp... |                   | Effectif |
| OLGA TULLE - ...   | Duvertures imp... |                   | Effectif |
| OLGA AUXERRE...    | Duvertures imp... |                   | Effectif |
| OLGA CRAVAN...     | Duvertures imp... |                   | Effectif |
| OLGA CARMAU...     | Duvertures imp... |                   | Effectif |
| OLGA BROUOE...     | Duvertures imp... |                   | Effectif |
| OLGA ARVANT ...    | Duvertures imp... |                   | Effectif |
| OLGA VERTAIZ...    | Duvertures imp... |                   | Effectif |
| OLGA MONTEBR...    | Duvertures imp... |                   | Effectif |
| OLGA LA ROCH...    | Duvertures imp... |                   | Effectif |
| OLGA RAC. D'...    | Duvertures imp... |                   | Effectif |
| OLGA LAQUEU...     | Duvertures imp... |                   | Effectif |
| OLGA SARREGU...    | Duvertures imp... |                   | Effectif |
| OLGA LA FERTE...   | Duvertures imp... |                   | Effectif |
| OLGA ST DIE - S... | Duvertures imp... |                   | Effectif |
| OLGA LUNEVL...     | Duvertures imp... |                   | Effectif |

# PLANNING EDITOR

## The Obstructions tab (1/3)

1. The “Obstructions” tab for all capacity elements other than the train slot

2. The search field

3. The filters

4. The list of elements

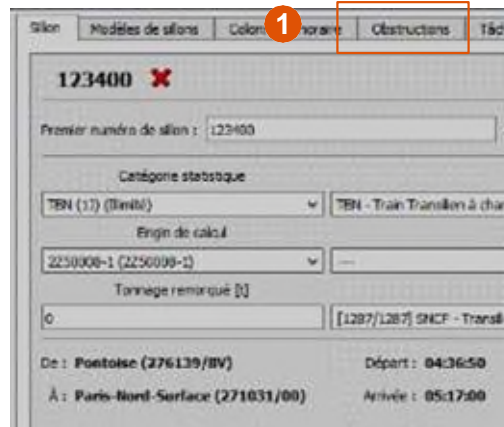
5. The “General” tab

6. The “Sections’ tab

# THE PLANNING EDITOR

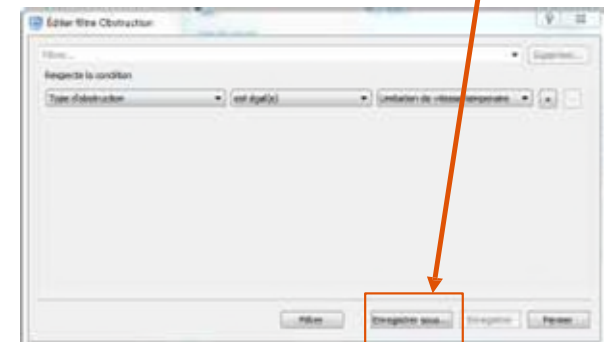
## The Obstructions editor (2/3)

- 1 To search for an obstruction, click on the corresponding tab:
- 2 You can search by name or part of the name followed by the “\*” key
- 3 You can search for an obstruction using a characteristic filter and save it
- 4 List of obstructions



The screenshot shows a list of obstructions. A search filter is applied to the 'Nom' column, showing only those starting with 'OLGA'. A red box highlights the search filter area, and a red circle with the number '2' is next to it. A red circle with the number '3' is next to the 'Statut' column header. A red circle with the number '4' is next to the first row of the list.

| Nom               | Type[2]           | État de la demande | Statut[1] |
|-------------------|-------------------|--------------------|-----------|
| OLGA LIZY SUR ... | Ouvertures imp... | ---                | Effectif  |
| OLGA WISSEMB...   | Ouvertures imp... | ---                | Effectif  |
| OLGA ROTHAU...    | Ouvertures imp... | ---                | Effectif  |
| OLGA VITTEL - ... | Ouvertures imp... | ---                | Effectif  |
| OLGA SAINT R...   | Ouvertures imp... | ---                | Effectif  |
| OLGA NANTES ...   | Ouvertures imp... | ---                | Effectif  |
| OLGA DREUX - ...  | Ouvertures imp... | ---                | Effectif  |
| OLGA REZE PO...   | Ouvertures imp... | ---                | Effectif  |
| OLGA LESPARR...   | Ouvertures imp... | ---                | Effectif  |
| OLGA EMPALO...    | Ouvertures imp... | ---                | Effectif  |
| OLGA MONTRE...    | Ouvertures imp... | ---                | Effectif  |
| OLGA TULLE - ...  | Ouvertures imp... | ---                | Effectif  |
| OLGA AUXERRE...   | Ouvertures imp... | ---                | Effectif  |
| OLGA CRAVAN...    | Ouvertures imp... | ---                | Effectif  |



# THE PLANNING EDITOR

## The Obstructions editor (3/3)

- An obstruction can be made up of one or more sections. This depends on its type.
- For example, an OLGA type obstruction, as shown opposite, contains a single section.
- When there is a supplemental minute (MS), in general the obstruction will contain several sections. Each section will represent a zone between two PRs.

*LTVs and windows = PKs*

*OLGA and MS = PRs*

- 1 Section
- 2 Station
- 3 Track
- 4 Supplemental minutes time
- 5 Scheme editor

The screenshot shows the 'Obstruction de ligne' form with the following fields and values:

- Numéro : 43
- ID d'affichage :
- ID de demande :
- Type d'impact : OLGA
- Statut :
- Type d'activité :
- Détail d'activité :
- Description du détail d'activité :
- Durée : +00:00
- Temps de mise en train : +00:00
- Temps de rangement : +00:00
- Temps le plus court : +00:00
- Heure de départ le plus tôt : +00:00
- Heure d'arrivée le plus tard : +00:00
- Encombrant la circulation :
- Coupe caténaire :
- Coordonné :
- Formulaire de sécurité approuvé :
- Ne pas afficher au GET :
- Non prise en compte dans les conflits :
- Non prise en compte dans le calcul :
- Remarques :

The 'De' and 'À' fields are filled with 'Château-Arnoux-St-Auban/BN' and 'Manosque-Grousses-Sans/NO' respectively. The 'Voie' field is set to '(Non défini)'. The 'Minutages supplémentaires' field is set to '+00:00:00'.

The calendar view shows the obstruction period from Dec 15 to Dec 26, 2019, with a blue shaded area indicating the obstruction duration.



## Connecting to Klaxoon

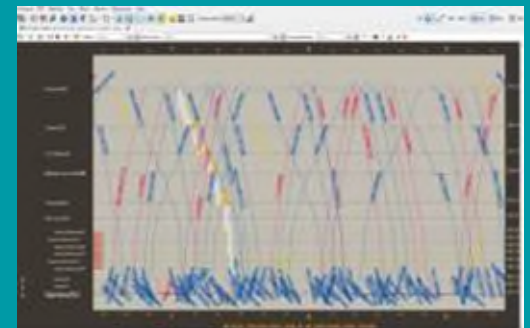
Tabs



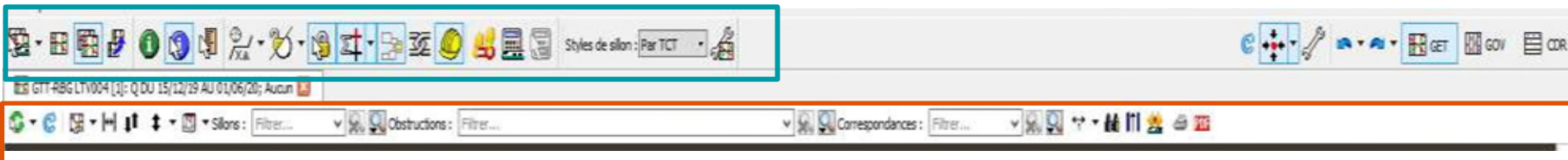
# TIME-SPACE GRAPH (GET)

## Learning objectives

- *To navigate in the time-space graph*
- *To use the GET functions*
- *To learn the different ways to open a portion*



# THE GET



## Filters & searches



1. Refresh the GET
2. Display the times before/after midnight
3. Change the portion direction
4. Direction of the route
5. Calendar filter (modification of the GET scheme)
6. Specific train slot filter
7. GET filter for certain obstructions
8. Create a predefined time zoom
9. Search for a train slot in the GET
10. Display the complete itinerary in the GET
11. Follow the train slot along its path in the GET

## Display



1. Duplicate a GET
2. Information bubbles
3. Display / Hide the time ruler on the cursor
4. Display / Hide the PR passage time of a train slot
5. Times locked
6. Concentration points
7. Activate / Deactivate PR locking for active train slot
8. Display/hide the train slot allowances
9. Display/hide the block reservation
10. Display/hide the obstructions

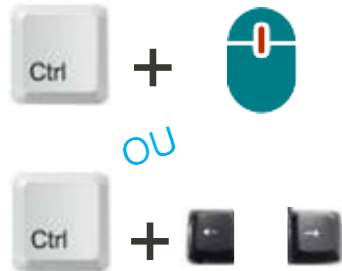
# THE GET

## Zoom in or out

On the PR axis  
(y-axis)



On the time axis  
(x-axis)



On part of the  
GET



Move onto the  
GET



## Opening a portion: 3 means

Via the train slot or work  
element open in the planning  
editor:



Via a selection of PRs selected  
manually or via the infrastructure :



Via the catalogue of  
saved portions:

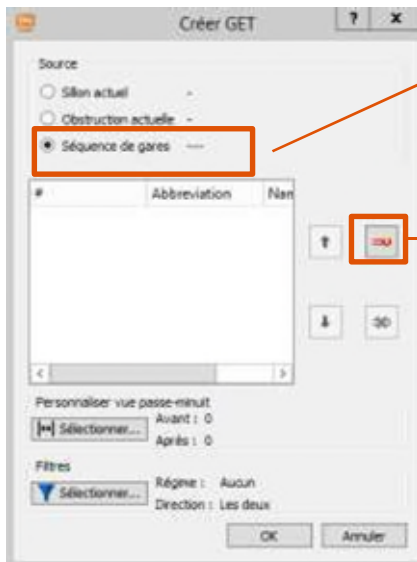


# THE GET

## Opening a portion from a selection of PRs

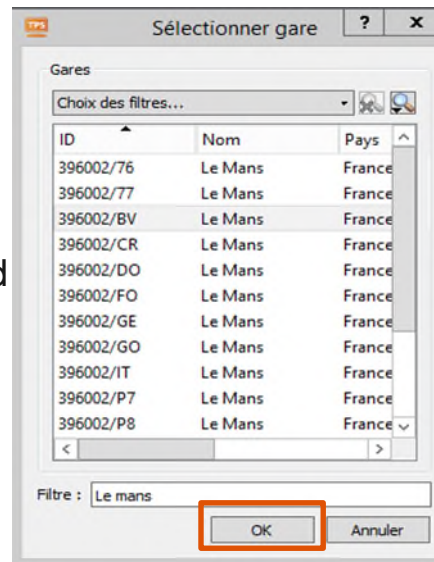


Click on this icon to display the following window:

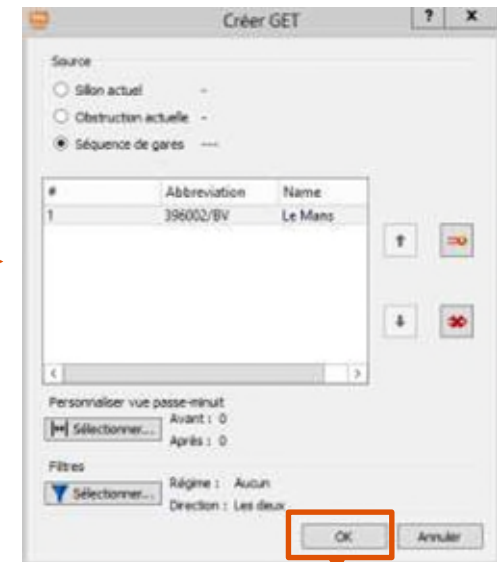


Station  
sequence

Click on Add  
PR



Click on OK



The station is added

Then click on OK to open the portion from the PRs that have been selected

# THE GET

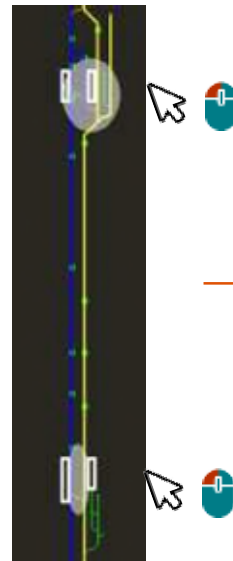
## Opening a portion from a selection of PRs in the infrastructure editor



Click on this icon to display the following window:

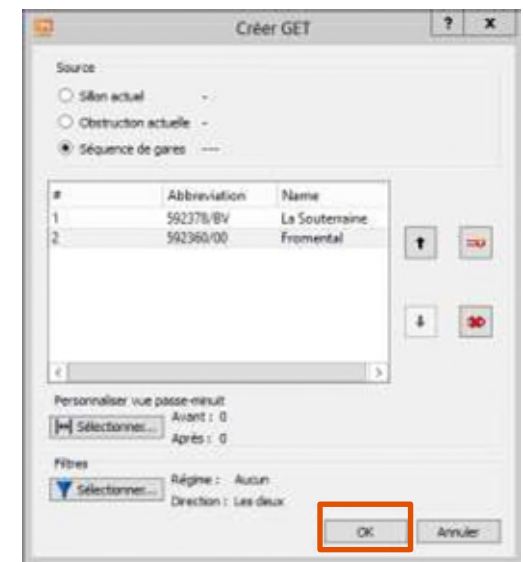


Once the “Station sequence” has been selected, go to the infrastructure editor



White boxes are displayed on the infrastructure for each PR. (a box does not necessarily surround all of the tracks of a PR).

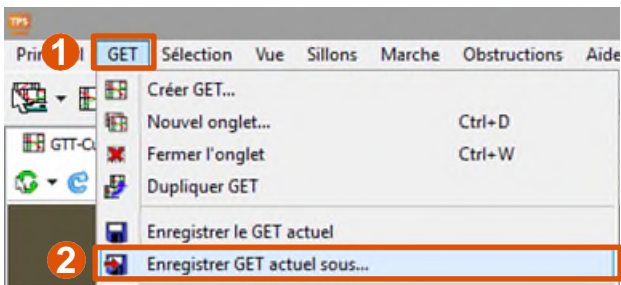
**Click on the PRs you want to include**



The PRs selected are shown in the entry box. Then just **click on OK** to open the portion

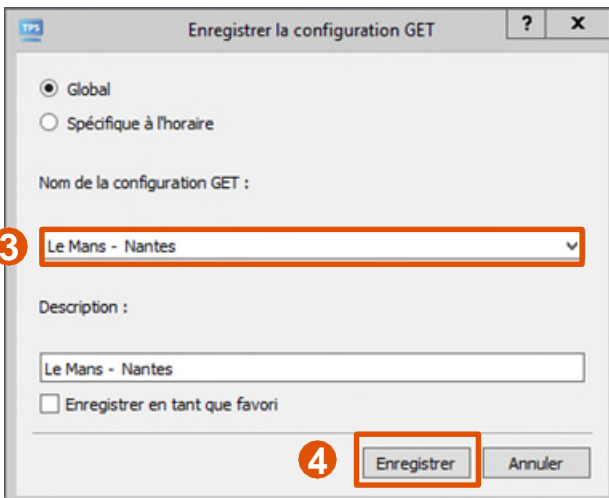
## Saving a portion

When a GET is open (for example a portion Le Mans – Nantes), to save it you must perform the following operations:



1. Click on the “GET” tab at the top of the screen
2. Select the option “Save GET as”

→ The following window will be displayed:



3. Enter the name you wish to use for the portion
4. Click on “Save”

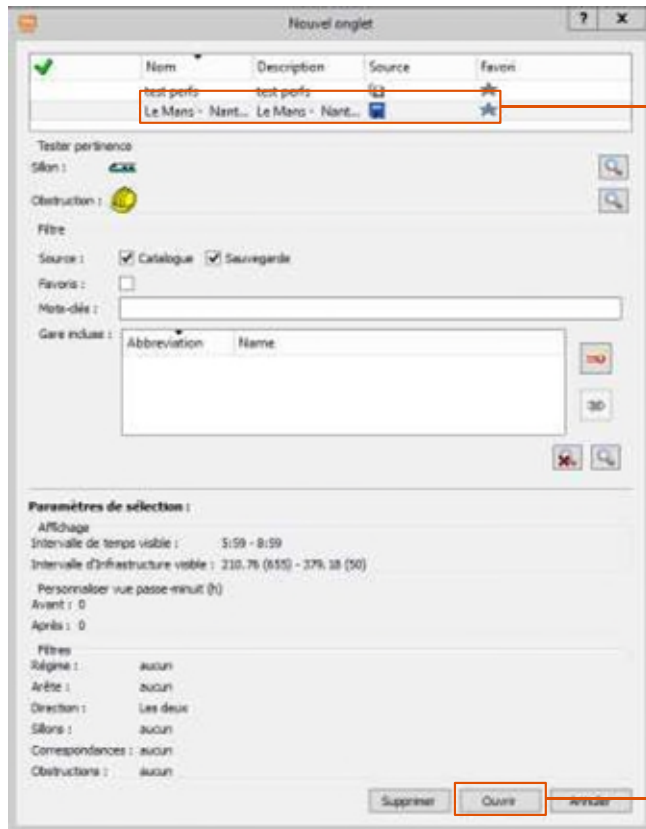
→ The portion is saved in the portion library and can then be reopened as described on the previous page.

## Opening a library in the portion library



Click on this icon to display the following window:

This window lets you access the portions that have been saved by the user

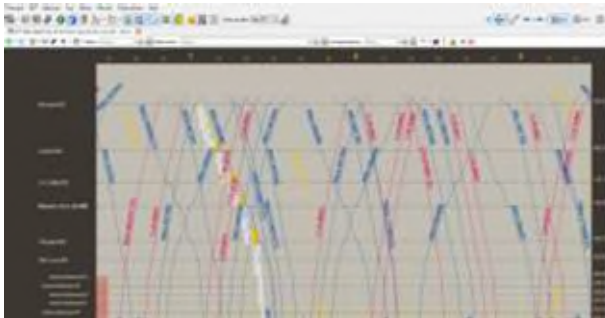



Simply select a portion in the list

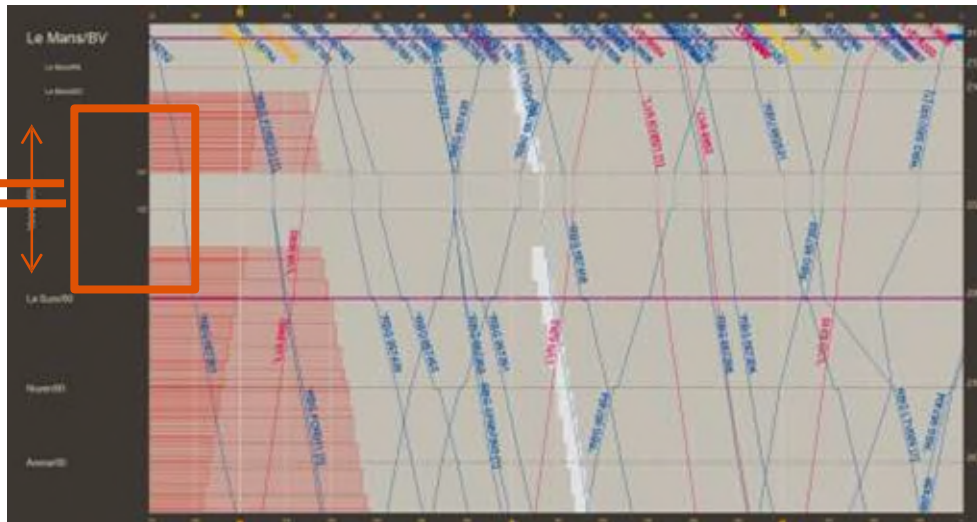
Then click on **Open**

# THE GET

Display the available tracks of a station



  
Double-arrow



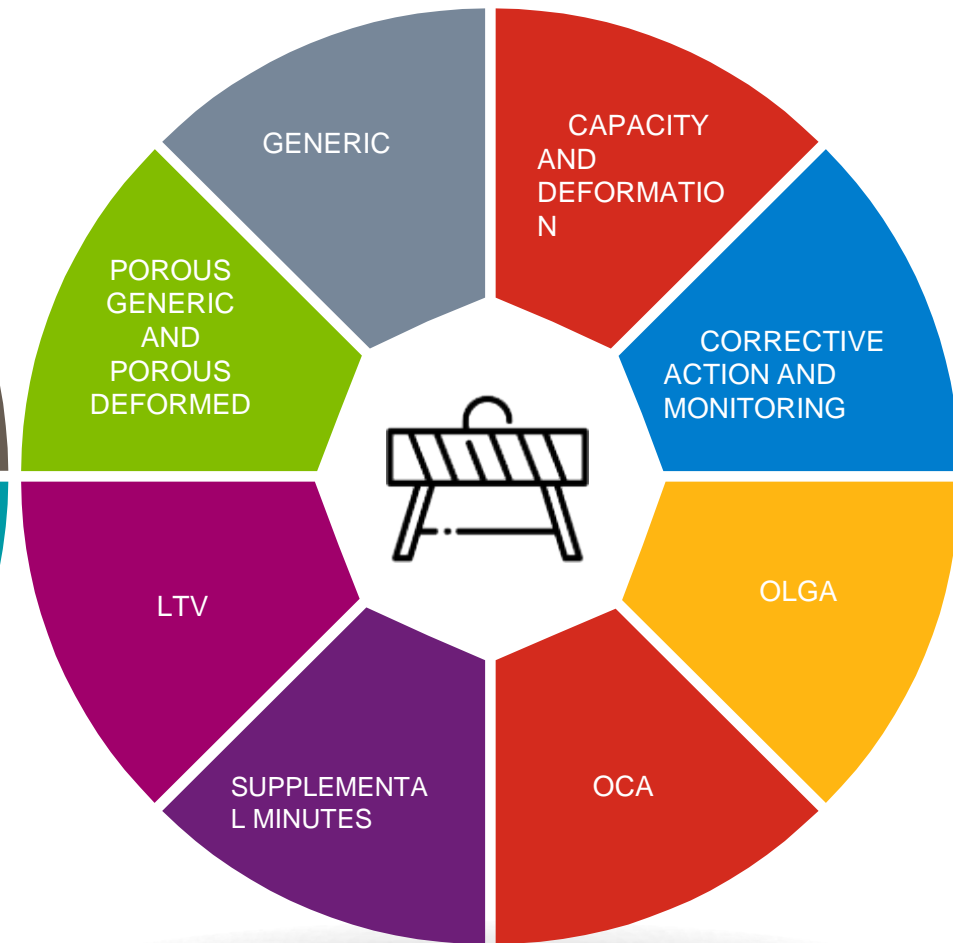
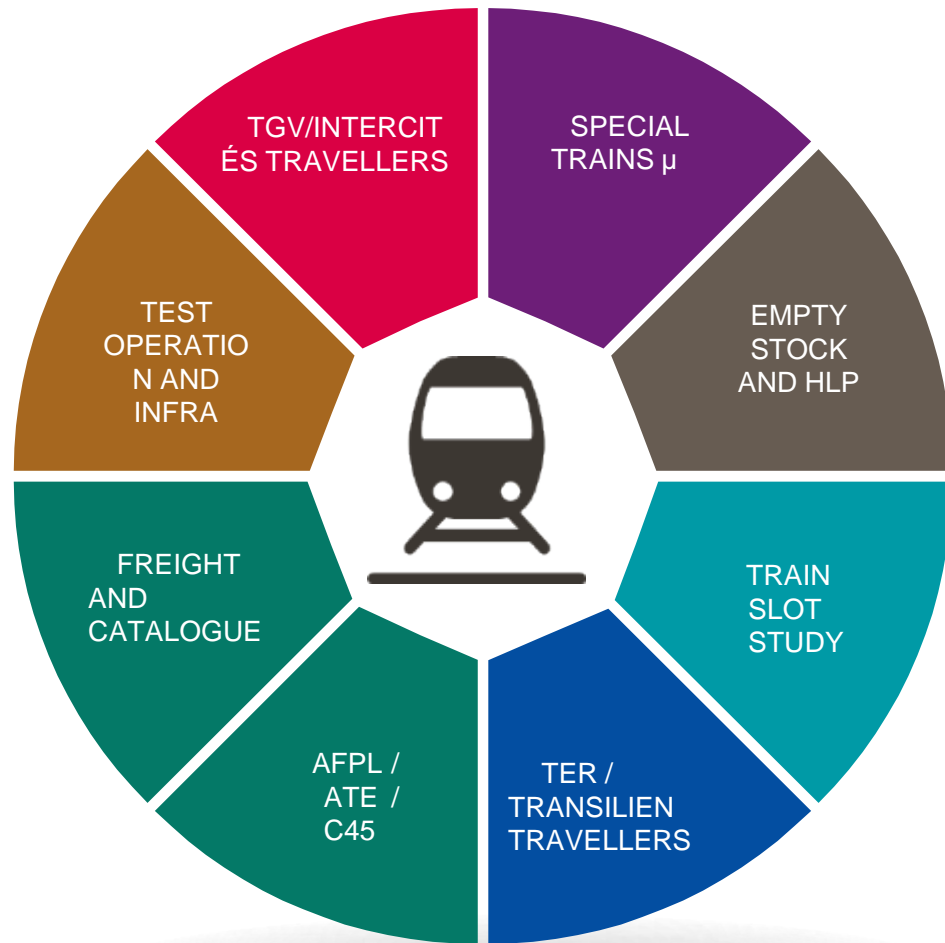
## Display tracks

- To view all of the tracks of a PR, click on the PR when the double-arrow cursor is displayed

→ *This shows which track is used by the train slot inside a station*

- To hide all of the PRs, click on the PR again when the double-arrow cursor is displayed

# COLOURS IN THE GET



# SYNCHRONISING SCREENS

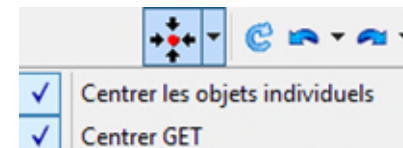
## Synchronising

- Any creation, modification or consultation made in one of the 3 screens is automatically and immediately updated in the other 2 screens

## How?

Synchronising is made on an active element (train slot or obstruction): this is the element **the timetable scheduler is working on**

- To make an element active, **double-click, on it**
- The **three windows** must be open on the active element
- Auto-centring must be **activated**



There are several options available on the infrastructure editor:

*Both lines must be ticked*



It may be that once the train slot has been calculated, it is still **not visible in the infrastructure**, remember to **double click again** on the **train slot in the GET**, as you do to **activate it**

# QUIZ



SIPH CONSULTATION

# SIPH TRAINING

## MODULE 2: CONSULTATION

# 1. CONSULTATION MODE AND AUTOMATIC INTEGRATION OF REQUESTS

## Learning objectives

- *Understanding the consultation mode*
- *Learning the update frequency of the customer project in relation to the time horizons*
- *Identifying the important points in GESICO to ensure that a request is properly taken into account (creation, modification and deletion)*

# THE CONSULTATION MODE

## Definition

This mode only authorises access in **consultation / read only** (no modification rights) for the production. This project is updated by the train slots and production work regularly:

### Pre-construction

Photo every 2 weeks

It comprises:

- All of the **saved** and **validated** train slots
- All of the obstructions (same environment as the timetable schedulers)

### Construction

1<sup>st</sup> service timetable project photo (July)

2<sup>nd</sup> service timetable definitive photo (September)

It comprises:

- All of the **validated** train slots
- All of the obstructions (same environment as the timetable schedulers)

### Adaptation

In real-time

It comprises:

- All of the **validated** train slots
- All of the obstructions (same environment as the timetable schedulers)

Update frequency of the train slots and work

## Anonymisation of the train slots

In pre-construction, the customers have **an anonymised view of the train slots**. The UI, statistics category and the customer request reference were hidden

From the construction screen, the view is no longer **anonymised**



# AUTOMATIC INTEGRATION OF REQUESTS

## NEW FOR V5

The requests entered into the GESICO by the EFs will now be automatically integrated into the SIPH.

### Important point



To facilitate and guarantee the customer requests are processed correctly, we recommend that the following points be observed when filling in requests in GESICO:

1

**Ensure that the various fields are completed, especially the following ones:**

- ✓ Wrong shunter (A, B or C)
- ✓ Dangerous goods / Safety procedure
- ✓ Train length (except for train slots E32)
- ✓ Tonnage

2

**If there is a request to modify the train slot, ensure that you do not make a new creation type request but a modification type request in the original VDS.**

3

**Any deletion request will be automatically processed.**

**A request to remove days from GESICO will automatically delete days in SIPH.**

# 2. THE TRAIN SLOT TAB AND THE CONVOY DATA

## Learning objectives

- *Becoming familiar with the operations block*
- *Learning how to read the convoy data*
- *Analysing the allowances*

# 2. THE TRAIN SLOT TAB AND THE CONVOY DATA

## Operations block of train slot – Available information

Point de concentration

Détente entre deux PR

Affichage de la détente cumulée entre deux points de concentration

Marge réelle (marge totale + obstructions)

Marge totale entre deux points de concentration

Marge de régularité théorique cumulée entre deux points de concentration

Impact MS ou LTV

| Nom                            | Voie | Arrivée  | Départ | PC       | Détente | Détente cumulée | Marge réelle cumulée | Marge totale cumulée | Marge régulière cumulée | Obstruction |
|--------------------------------|------|----------|--------|----------|---------|-----------------|----------------------|----------------------|-------------------------|-------------|
| Angers-Maitre-École/BV         | V1   | 11:46:43 | 🔒      | 11:46:43 |         |                 |                      |                      |                         |             |
| Angers-Maitre-École/BI         | V1   |          |        | 11:47:20 | ○       | 00:08           |                      |                      |                         |             |
| Angers-St-Laud/BV              | VC   |          |        | 11:48:49 | ○       | 00:19           |                      |                      |                         |             |
| Angers-St-Laud/ES              | V1   |          |        | 11:50:27 | ○       | 00:21           |                      |                      |                         |             |
| La Pointe-Bouchemaine/00       | V1   |          |        | 11:53:02 | ○       | 00:31           |                      |                      |                         |             |
| Savennières-Béhuard/00         | V1   |          |        | 11:55:08 | ○       | 00:25           |                      |                      |                         |             |
| La Possonnière/00              | V1   |          | 🔒      | 11:56:26 | ○       | 00:16           |                      |                      |                         |             |
| Champtocé-sur-Loire/00         | V1   |          |        | 12:01:14 | ○       | 00:00           |                      |                      |                         | 00:12       |
| Ingrandes-sur-Loire/BV         | V1   |          |        | 12:03:44 | ●       | 00:00           | 02:00                | 04:57                | 03:37                   | 01:37 01:08 |
| Montrelais/00                  | V1   |          |        | 12:05:04 | ○       | 00:05           |                      |                      |                         |             |
| Varades-St-Florent-le-Vieil/BV | V1   |          |        | 12:06:23 | ○       | -00:05          |                      |                      |                         |             |
| Ancenis/00                     | V1   |          |        | 12:10:48 | ○       | 00:00           |                      |                      |                         |             |
| Oudon/00                       | V1   |          |        | 12:14:42 | ○       | 00:00           |                      |                      |                         |             |
| Le Cellier/00                  | V1   |          |        | 12:17:15 | ○       | 00:00           |                      |                      |                         |             |
| Mauves-sur-Loire/00            | V1   | 12:20:04 |        | 12:20:04 | ●       | 00:00           | 00:00                | 01:45                | 01:45                   | 01:45       |

# THE DIFFERENT MARGINS OF THE OPERATIONS BLOCK

## The correspondence between the allowance columns

- Cumulative allowances represent the addition of the allowance between two PR with concentration points (PC)
- To ensure consistency between the information displayed on the operations block and the route sheet, we recommend using the following display:

| Départ   | PC | Détente | Détente cumulée | Marge régulière | Marge totale | Obstruction | Marge régulière cumulée | Marge totale cumulée | Marge réelle cum |
|----------|----|---------|-----------------|-----------------|--------------|-------------|-------------------------|----------------------|------------------|
| 06:00:00 |    |         |                 |                 |              |             |                         |                      |                  |
| 06:00:44 | ●  | 00:00   | 00:00           | 00:01           | 00:01        |             | 00:01                   | 00:01                | 00:01            |
| 06:01:47 | ○  | 00:00   |                 | 00:03           | 00:03        |             |                         |                      |                  |
| 06:02:57 | ○  | 00:00   |                 | 00:04           | 00:04        |             |                         |                      |                  |
| 06:03:23 | ○  | 00:00   |                 | 00:02           | 00:02        |             |                         |                      |                  |
| 06:04:09 | ○  | 00:00   |                 | 00:04           | 00:04        |             |                         |                      |                  |
| 06:04:51 | ●  | 00:01   | 00:01           | 00:03           | 00:04        |             | 00:16                   | 00:17                | 00:17            |
| 06:05:28 | ○  | -00:01  |                 | 00:04           | 00:03        |             |                         |                      |                  |
| 06:06:00 | ●  | 00:00   | -00:01          | 00:04           | 00:04        | 00:12       | 00:08                   | 00:07                | 00:19            |
| 06:06:57 | ○  | 00:09   |                 | 00:03           | 00:12        |             |                         |                      |                  |
| 06:07:32 | ○  | 00:02   |                 | 00:04           | 00:06        |             |                         |                      |                  |
| 06:07:45 | ○  | 00:00   |                 | 00:01           | 00:01        |             |                         |                      |                  |
| 06:08:00 | ●  | -00:11  | 00:00           | 00:26           | 00:15        |             | 00:34                   | 00:31                | 00:34            |
| 06:11:37 | ○  | 00:00   |                 | 00:01           | 00:01        |             |                         |                      |                  |
| 06:11:45 | ○  | -00:01  |                 | 00:01           | 00:00        |             |                         |                      |                  |
| 06:12:47 | ○  | 00:01   |                 | 00:06           | 00:07        |             |                         |                      |                  |
| 06:13:26 | ○  | 00:00   |                 | 00:05           | 00:05        |             |                         |                      |                  |
| 06:15:12 | ○  | 00:00   |                 | 00:11           | 00:11        |             |                         |                      |                  |
| 06:17:42 | ○  | 00:00   |                 | 00:16           | 00:16        |             |                         |                      |                  |
| 06:19:11 | ○  | 00:00   |                 | 00:08           | 00:08        |             |                         |                      |                  |

- 1 Regularity allowance and cumulative regularity allowance  
= application of allowance rates
- 2 Construction allowance and cumulative construction allowance  
The construction allowance takes into account the impact of obstructions
- 3 Total allowance and cumulative total allowance  
= regularity allowance + construction allowance

# 3. THE PLANNING EDITOR FILTERS - TRAIN SLOT

## Learning objectives

- *Identifying the “filter” tabs in the editor and know how to use them*
- *Carrying out a simple search or a search by characteristic*
- *Customising a filter (by origin/destination, header data)*
- *Saving a filter and to be able to find it again*

# THE PLANNING EDITOR FILTERS - TRAIN SLOT

## 2 ways to search for the train slot

### 1. Simple

Display the train slots that match the data entered in the search field by **train slot number**

NB: using “\*” before or after the characters widens the search

 **Important: remember to use capital letters**

### 2. By characteristic

Display the train slots that match the data entered in the filter:

- Train slot number
- Calculation engine
- PR of milestones
- Type of stop...

NB: A filter can be saved



⇒ **The list of train slots is updated in function of the search performed**

# THE PLANNING EDITOR FILTERS - TRAIN SLOT

## Simple search



- To search for train slot 857589, enter this number in the simple search bar
- To search for all the train slots starting with 857, enter **857\***
- To search for all the train slots ending with 589, enter **\*589**
- To search for a train slot containing the number 758, enter **\*758\***

**Important: remember to use capital letters for the train slot number**

→ The list of train slots is updated, in function of the search performed

# THE PLANNING EDITOR FILTERS - TRAIN SLOT

## Search by characteristic



Click on this icon to display the following window:

The screenshot shows the 'Editeur filtre Train Run' window with the following fields:

- Numero de sillon: [ ]
- Code mission: [ ]
- Numero de vie de sillon: [ ]
- Numero de demande: [ ]
- POP: [ ]
- Est appliqué: [ ]
- Statut du sillon: [ ]
- Origine de conception: [ ]
- Période de Circulation Du: [ ]
- Au: [ ]
- Gare: [ ]
- Voie: [ ]
- Type d'arrêt: [ ]
- Catégorie statistique: [ ]
- TCT: [ ]
- UT: [ ]
- Indice / Code Composition: [ ]
- Engin de calcul: [ ]
- Tonnage remorqué [t]: [ ]
- Numero ATE: [ ]
- Marche de sécurité: [ ]
- Mauvais shunter: [ ]
- Sillon sensible: [ ]
- Accord Cadre: [ ]
- Sillon corridor: [ ]

Buttons at the bottom: Filtrer, Enregistrer sous..., Enregistrer, Fermer.

**Important:** Reset the filter editor before starting a new search by clicking on the magnifying glass with the red cross

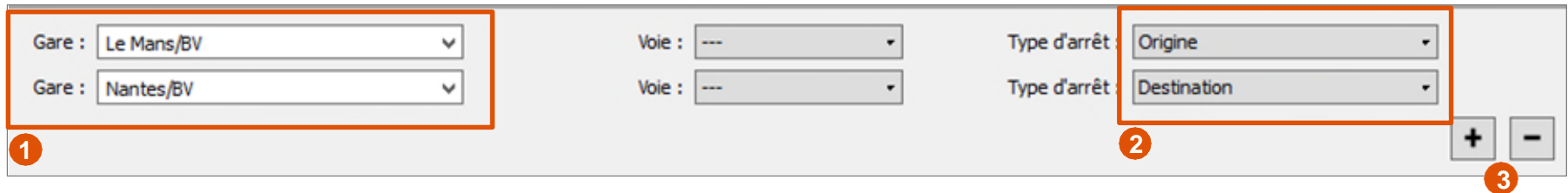
Search by **Origin / Destination**

Search by **header data**

→ The list of train slots is updated in function of the search performed

# THE PLANNING EDITOR FILTERS - TRAIN SLOT

## Search by origin / destination



The screenshot shows a search interface with the following elements:

- 1**: Two 'Gare' dropdown menus. The first is set to 'Le Mans/BV' and the second to 'Nantes/BV'.
- Voie**: Two dropdown menus, both set to '---'.
- 2**: Two 'Type d'arrêt' dropdown menus. The first is set to 'Origine' and the second to 'Destination'.
- 3**: '+' and '-' buttons for adding or removing search criteria.

1. Enter the PRs of the O/D being searched for
  2. Then enter the type of stop type (in the example below, we are looking for Le-Mans departure-Nantes terminus train slots)
  3. Add/remove a PR if required
- It's possible not to enter any stop type so as to search for “passing station” type train slots on the PR entered

# THE PLANNING EDITOR FILTERS - TRAIN SLOT

## Search by header data

The screenshot shows the 'Editer filtre Train Run' window with the following fields:

- Filter: [ ] [Supprimer ...]
- Número de alion: [ ]
- Número de demande: [ ]
- Statut du alion: [ ] [✓] [✗]
- Code mission: [ ]
- POP: [ ]
- Origine de conception: [ ] [✓] [✗]
- Número de vie de alion: [ ]
- Est apparé: [ ]
- Période de Circulation Du: [ ]
- Au: [ ]
- Gare: [ ]
- Voie: [ ]
- Type d'arrêt: [ ]
- [+] [-]
- Catégorie statistique: [ ] [✓] [✗]
- TCT: [ ] [✓] [✗]
- UT: [ ] [✓] [✗]
- Indice / Code Composition: [ ] [✓] [✗]
- Engin de calcul: [ ] [✓] [✗]
- Tonnage remorqué [t]: [ ]
- Número ATE: [ ]
- Marche de sécurité: [ ]
- Mauvais shunter: [ ] [✓] [✗]
- Silon sensible: [ ]
- Accord Cadre: [ ]
- Silon corridor: [ ]
- [Filtrer] [Enregistrer sous...] [Enregistrer] [Fermer]

→ The search can be filtered by header data:  
CS / TCT / UI / ICC / Calculation engine...

# THE PLANNING EDITOR FILTERS - TRAIN SLOT

## Saving a search filter

Editer filtre Train Run

Filtrer...

Supprimer...

Numéro de silon :  Numéro de demande :  Statut du silon :  ✓ ✕

Code mission :  FOP :  Origine de conception :  ✓ ✕

Numéro de vie de silon :  Est apparié :

Période de Circulation Du :  Au :

Gare :  Voie :  Type d'arrêt :

+ -

Catégorie statistique :  ✓ ✕ TCT :  ✓ ✕ UT :  ✓ ✕

Indice / Code Composition :  ✓ ✕ Engin de calcul :  ✓ ✕ Tonnage remorqué [t] :

Numéro ATE :  Marche de sécurité :  Mauvais shunter :  ✓ ✕

Silon sensible :  Accord Cadre :  Silon corridor :

Filtrer **1** Enregistrer sous... Deregistrer Fermer

1. Click on “**Save as**”

Enregistrer filtre

Entrez un nouveau nom de filtre **2** Filtre 1

**3** OK Annuler

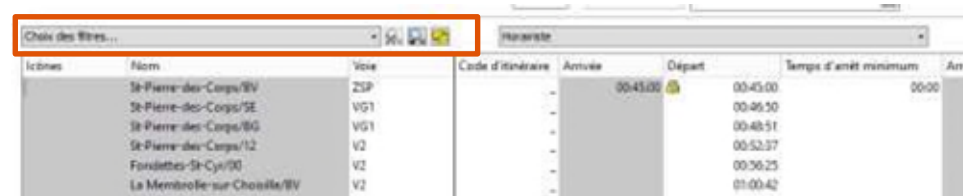
2. Enter a name for the filter

3. Click on OK

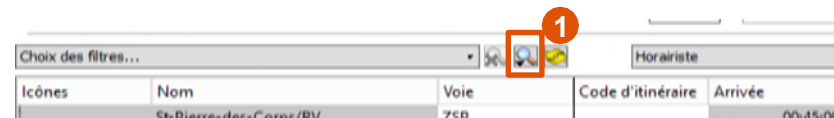
# THE PLANNING EDITOR FILTERS - TRAIN SLOT

## Filters available in the Operations block (1/3)

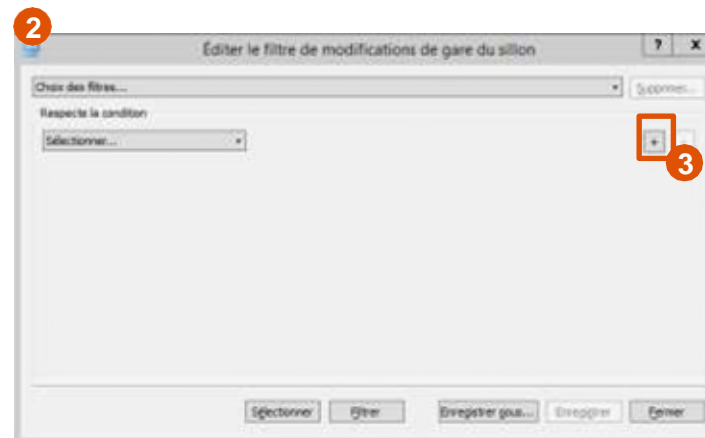
The **Operations block filters** can also be entered in the train slot tab. The filter field is at the top LH corner of the Operations block:



1. Click on the magnifying glass



2. The following window will open



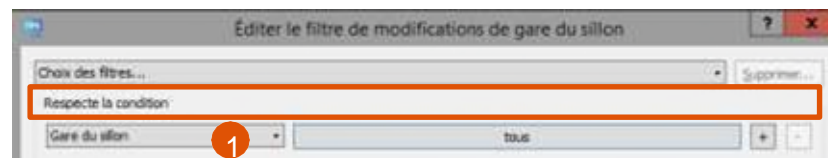
3. Several filters can be used at the same time

# THE PLANNING EDITOR FILTERS - TRAIN SLOT

## Filters available in the Operations block (2/3)

This example shows how the PRs are filtered with a stop in the Operations block

1. Once in the filter editor, select “Train slot station” in the field



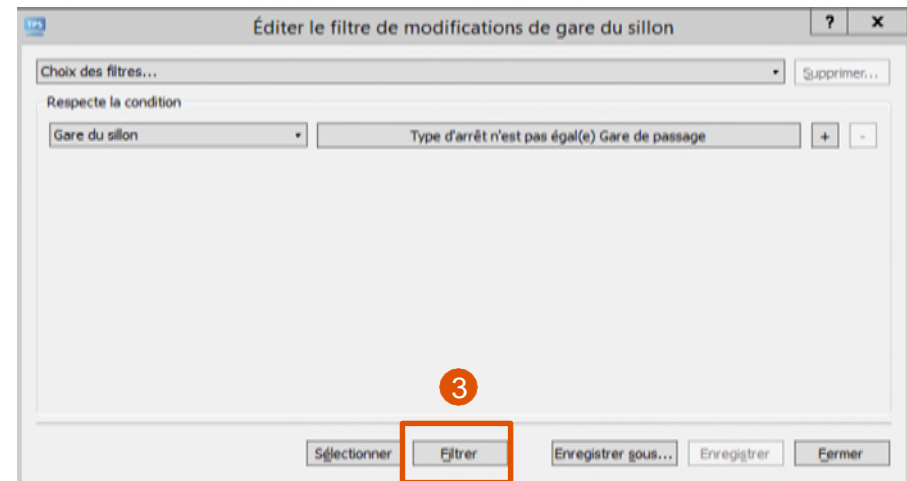
2. A new window opens, Select “type of stop” in the first field, “is not equal to” in the second field and “passing station” in the third. Then click on ‘OK’



# THE PLANNING EDITOR FILTERS - TRAIN SLOT

## Filters available in the Operations block (3/3)

3. You will return to the previous page, click on “Filter”



4. Only the PRs with a stop are displayed in the Operations block

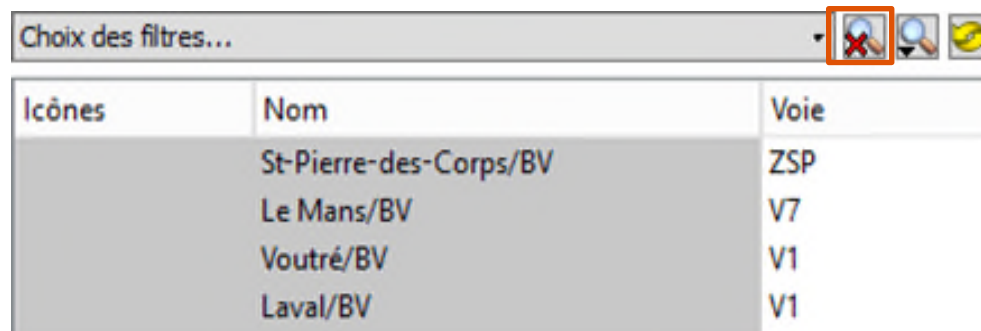
| Icônes | Nom                    | Voie | Code d'itinéraire | Arrivée    | Départ   | Temps d'arrêt minimum |
|--------|------------------------|------|-------------------|------------|----------|-----------------------|
|        | St-Pierre-des-Corps/BV | ZSP  | -                 | 10:45:00 🚗 | 10:45:00 | 00:00                 |
|        | Le Mans/BV             | V7   | -                 | 12:28:24   | 12:33:24 | 05:00                 |
| 4      | Voutré/BV              | V1   | -                 | 13:29:57   | 13:34:57 | 05:00                 |
|        | Laval/BV               | V1   | -                 | 14:08:50   | 14:18:50 | 10:00                 |
|        | Vitré/BV               | V1   | -                 | 14:57:36   | 15:02:36 | 05:00                 |
|        | Rennes/BV              | V1   | -                 | 15:34:46   | 15:34:46 | 00:00                 |

# THE PLANNING EDITOR FILTERS - TRAIN SLOT

## Removing filters

Reminder:

It's important to remove the application of a filter by clicking on “the magnifying glass with a red cross” to avoid accumulating filters



| Icônes | Nom                    | Voie |
|--------|------------------------|------|
|        | St-Pierre-des-Corps/BV | ZSP  |
|        | Le Mans/BV             | V7   |
|        | Voutré/BV              | V1   |
|        | Laval/BV               | V1   |

# EXERCISE

# 1



SIPH CONSULTATION

# 4. THE OBSTRUCTIONS TAB AND THE WORK ELEMENTS DATA

## Learning objectives

- *Using the GET to obtain the information on an obstruction*
- *Checking that an MS has been included in the calculation of a train slot*
- *Identifying an MS with the GET*
- *Displaying an obstruction note with the GET*

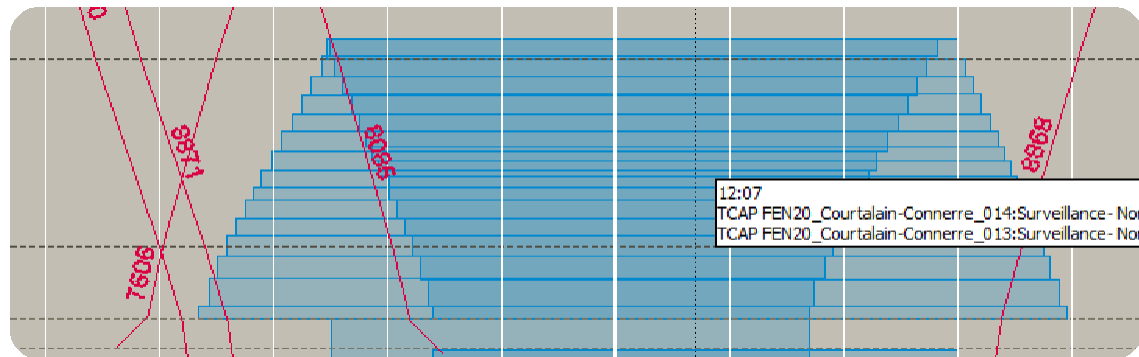
# THE OBSTRUCTIONS TAB AND THE OT DATA

## Obtaining information on an obstruction using the GET

### THE GET

To consult the information on an obstruction with the GET, double-click on the obstruction concerned.

When there are multiple obstructions, an information box will be displayed showing the list of obstructions present. Then choose the obstruction from the list. It will be loaded in the "Obstructions" tab on the planning editor.

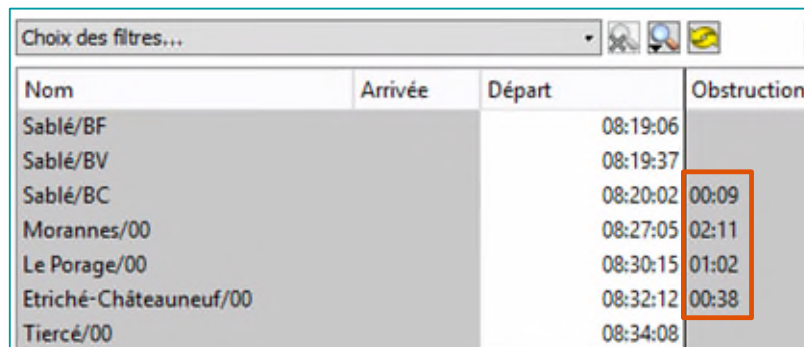


# THE OBSTRUCTIONS TAB AND THE OT DATA

## Checking that a supplemental minute object has been included in the calculation

In order for a “Supplemental minute” object to be correctly taken into account, **you need to check that all of the train slot has been automatically completed and the timetables locked.**

To check that the MS has indeed been applied to the train slot, consult the “Obstructions” column in the Operations editor:



| Nom                    | Arrivée | Départ   | Obstruction |
|------------------------|---------|----------|-------------|
| Sablé/BF               |         | 08:19:06 |             |
| Sablé/BV               |         | 08:19:37 |             |
| Sablé/BC               |         | 08:20:02 | 00:09       |
| Morannes/00            |         | 08:27:05 | 02:11       |
| Le Porage/00           |         | 08:30:15 | 01:02       |
| Etriché-Châteauneuf/00 |         | 08:32:12 | 00:38       |
| Tiercé/00              |         | 08:34:08 |             |

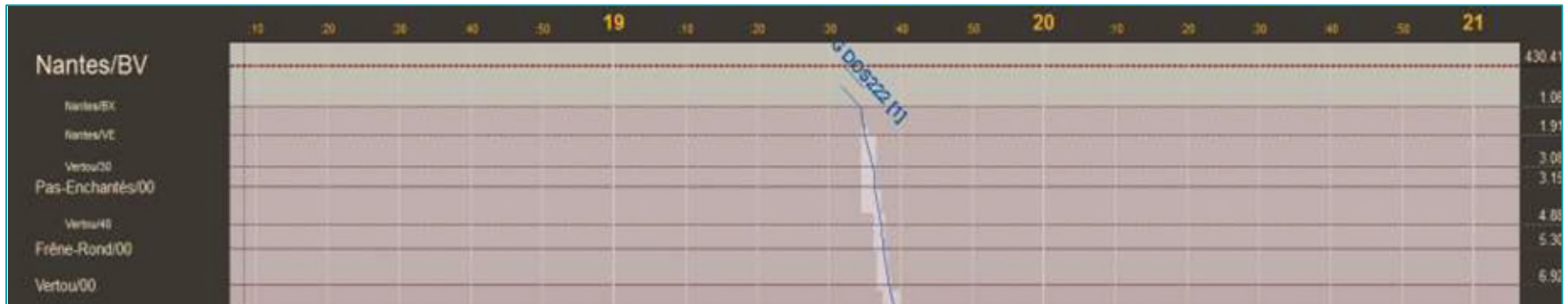
In the example above: the total time displayed in the Obstructions column is 4 min. The MS is indeed 4 min.

**If the MS had not been correctly taken into account, the cumulative time value in the Obstruction column would not have been 4**

# THE OBSTRUCTIONS TAB AND THE OT DATA

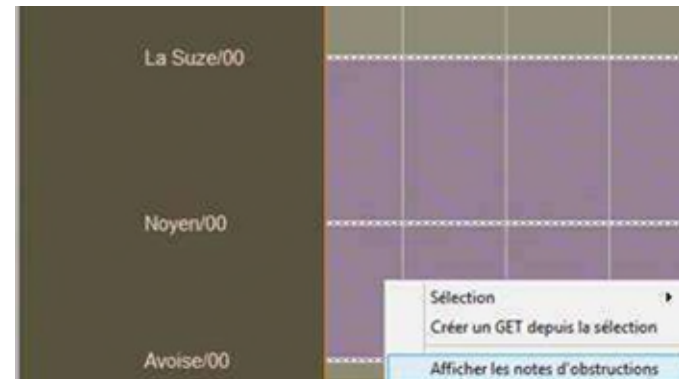
## To display a MS note with the GET

In the GET, to view a MS:



The Obstruction note can be opened using the GET:

- Right click on the MS
- Select “Display Obstruction notes”



# EXERCISE

# 2



SIPH CONSULTATION

# 5. THE GET FILTERS

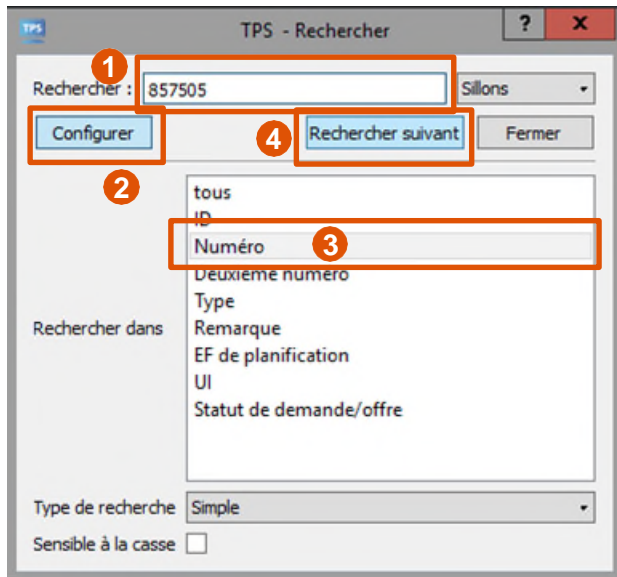
## Learning objectives

- *Entering a filter using the GET*
- *Displaying a train slot using a filter*
- *Displaying a single type of train slot (e.g.: those that only use the same tracks as the train slot loaded)*

# THE GET FILTERS

## Searching for a train slot with the GET

Click on the following icon to display the following window:



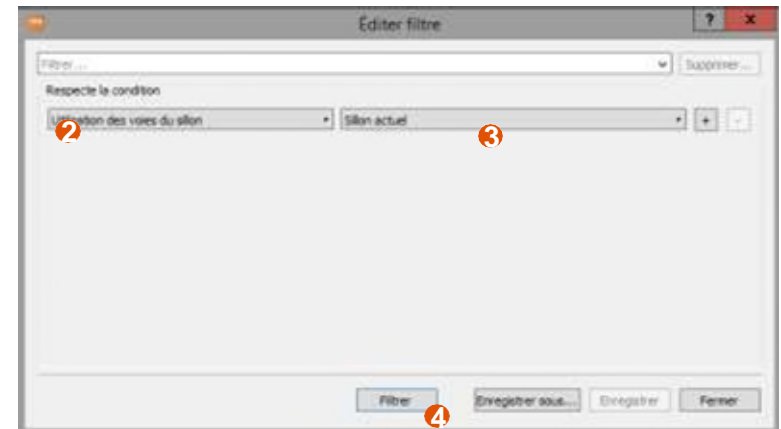
1. Enter the number to be searched for
2. Click on “**Configure**”
3. Choose “Number”
4. Click on “Next search”

Highlight (slightly) and centre the train slot on the screen if the train slot is present in the GET. If the train slot is already centred in the portion, the screen will not move.

## Filtering the train slots that use the same tracks



Click on the following icon to display the following custom filter edition window:



In the GET, you can filter and only display the train slots that use the same tracks as the current train slot

1. To do so, open the filter editor
2. Choose the condition “Use the train slot tracks”
3. Then current train slot
4. Click on filter

# EXERCISE

# 3



SIPH CONSULTATION

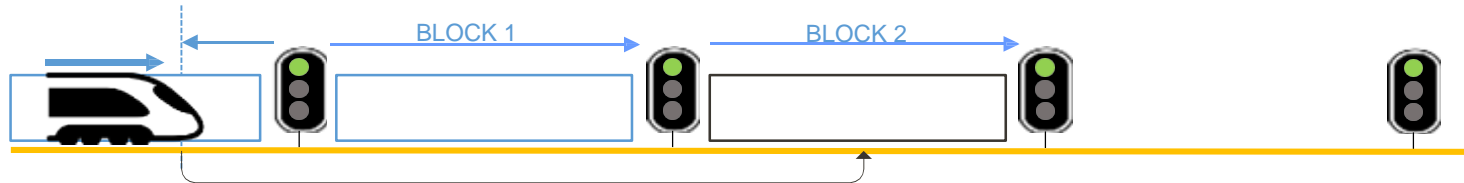
# 6. CONFLICT DETECTION

## Learning objectives

- *Learning the block reservation rules*
- *Identifying and interpret conflicts in the GET*
- *Learning how to analyse and interpret the list of messages in the planning editor*

# DETECTION OF CONFLICTS

## Operation – Block reservation



In this example, the signal system fitted on the line is “3 state” BAL. The reservation of block 2 is triggered seconds before reaching the block entry signal. Currently this time is 10s. When leaving the block, there is also a liberation time included of + 25s. Consequently,  $h$  is set at 35 s (25 + 10, in most regions).

## Reminder of the block reservation process

### SIPH reserves:

- **The following block** if it is a line section equipped with **BAPR**
- **The following block** if it is a line section equipped with **BM**
- **Both following blocks** if it is a line section equipped with “3 state” BAL (S A VL)
- **The three following blocks** if it is a line section equipped with “4 state” BAL (S A (A) VL)
- An a **supplemental block** if the travel speed is **over 160 kph (TGV 5 states)**



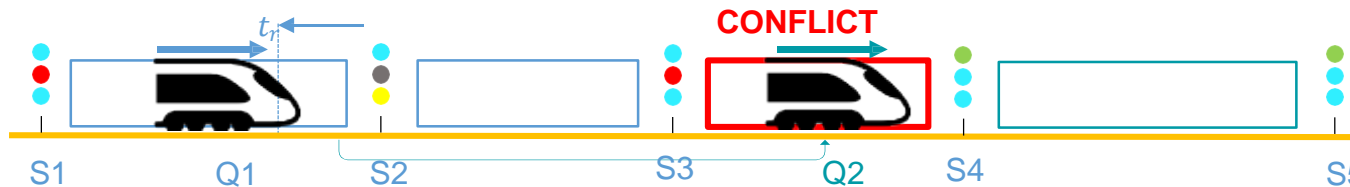
# DETECTION OF CONFLICTS

## Operation – Block reservation

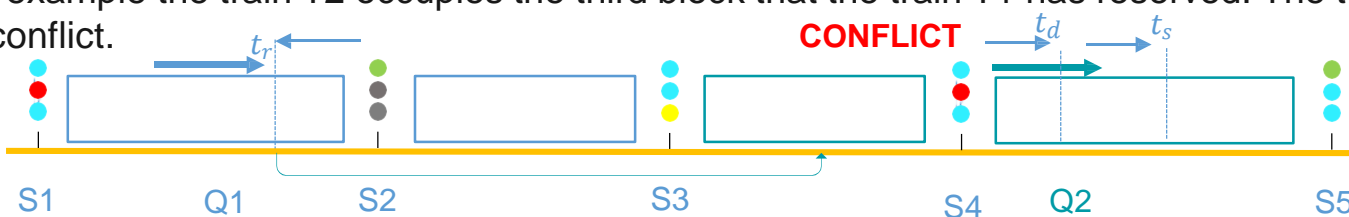


Once the clearance/liberation time  $t_d$  for the previous block has been reached, its reservation disappears.

## Conflict detection process



In this first example the train T2 occupies the third block that the train T1 has reserved. The tool therefore detects a conflict.

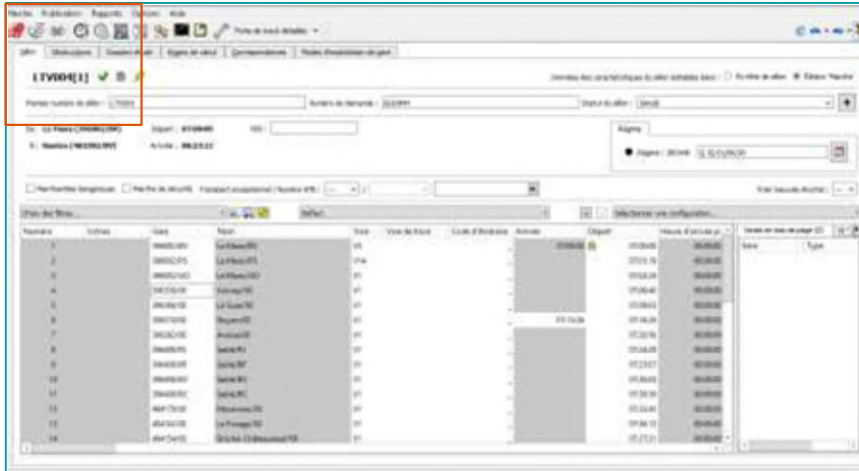


In this second example, the train T2 has freed up the third block. However it has not left the block for more than + seconds (therefore freed up for more seconds = 25 s). The tool also detects a conflict.


**Khi is the signalman's reaction time, which is broken down before and after, for the purposes of the calculation.**

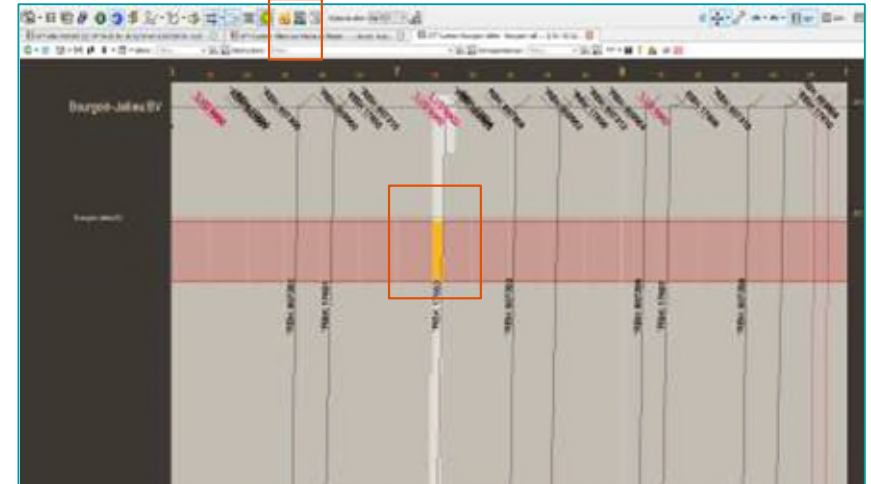
# DETECTION OF CONFLICTS

## Running the conflict detection




### In the planning editor

- Conflicts are detected by calculating the train slot itinerary: 
- The train slot must be the current train slot, the calculation icons and the error message (where applicable) will be displayed next to the train slot number



### In the GET

- Conflicts are detected by calculating the train slot itinerary: 
- The train slot must be selected (highlighted) before the calculation is made. Conflicts (where applicable) will be displayed in yellow

# DETECTION OF CONFLICTS

## Types of conflicts handled by SIPH

### ■ Train slot / train slot conflicts...

- Space conflicts
- Nose-to-nose conflicts (shearing)
- Side-swiping conflicts

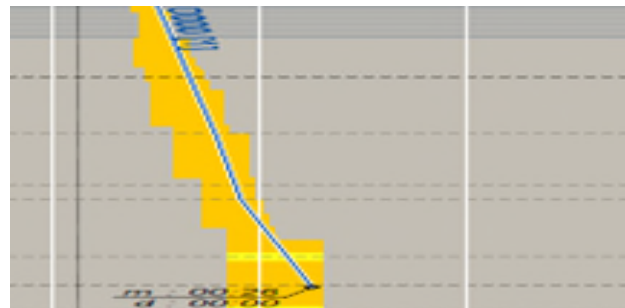
**NB:** Conflicts also taken onto account on LGVs with TVMs and on certain VUs



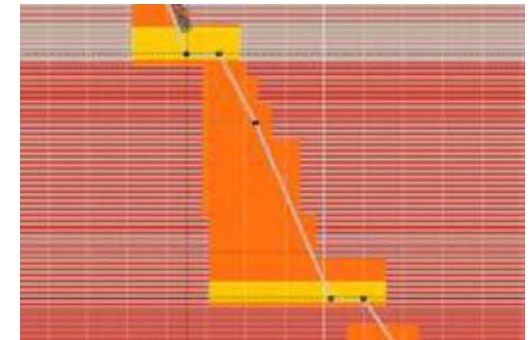
Train slot/train slot conflicts

### ■ Train slots work conflicts with windows....

- Generic
- Monitoring
- Corrective
- Deformation
- Capacity



Station conflicts



Train slot/work conflicts

# EXERCISE

# 4



SIPH CONSULTATION

# 7. REPORTS

## Learning objectives

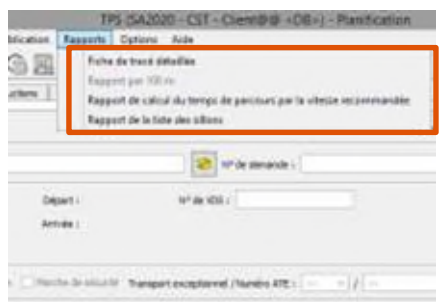
- *Extracting the available reports from the tool*
- *Navigating in the extracted files*

# REPORTS

## Reports available

The Report tab on the tool bar allows you to display all of the reports available. In an **internal customer consultation project**, four reports will be available:

- Detailed route file
- 100M section report
- Train slot list report
- Calculation ratio of journey time at recommended speed



**Detailed route file:**  
Batch exports can be made.

**Train slot list report**

**100M section report**

**Recommended speed report**

# QUIZ



SIPH CONSULTATION

## SATISFACTION QUESTIONNAIRE





# THANK YOU.