Model of request for elaboration/correction of a train timetable, assignment and cancellation of a train and instructions for completion and submission

Train Operation Management System

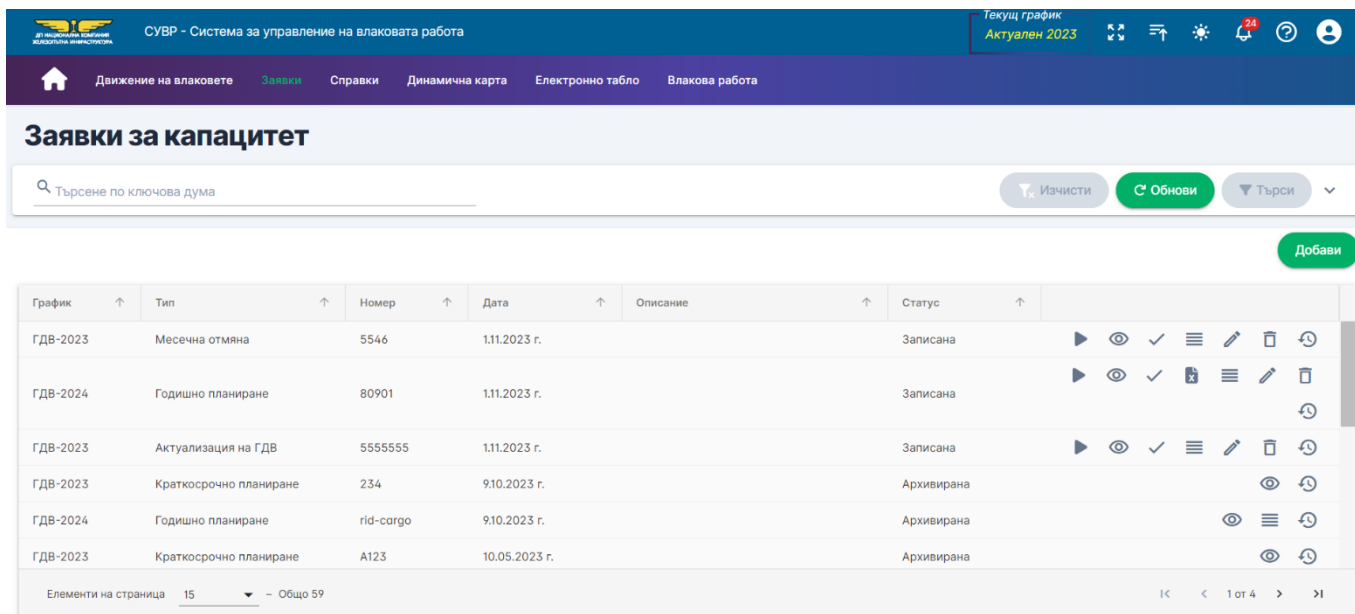## Planning train operation and network capacity

Capacity requests

User's Guide

Version 2.0.

1   Capacity requests

1.1   Introduction

Requests can be submitted by external users - employees of Railway Undertakings or by users of SE NRIC.

Requests are available from the Requests menu.

The requests submitted by the Railway Undertaking are visualized on the screen.

Possible actions that can be performed from this screen are:

- For all types of requests: Review 👁, View of items in a request ☰ (for requests with more than one item)

- For requests with status Recorded: Editing ✏, Deletion 🗑, Validation ✓, Import from Excel file 📄

- For requests with a received offer: View offer 🏷
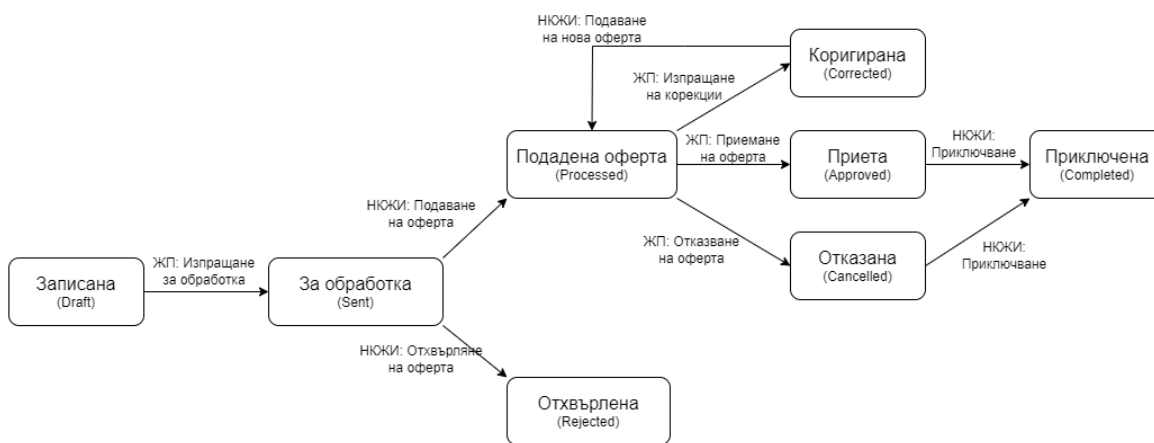
1.2   Request Statuses

The request can receive the following statuses:

Application status	Description
Recorded	A request has been created that has not yet been sent for processing by SE NRIC
For processing	A request that has been sent for processing and is awaiting a response from SE NRIC
Offer submitted	Request processed by SE NRIC and offer submitted

| Rejected	Request rejected by SE NRIC
Accepted	Request with an offer accepted by the requester
Canceled	Request with an offer refused by the requester
Corrected	Request that has been submitted for reprocessing after an offer has been received and corrections have been sent
Completed	Application which, after approval of the offer by the applicant, has received final confirmation from SE NRIC
Archived	Archived request after a submission deadline

The following are diagrams of request statuses, transitions between requests, and user actions that change the request status.

Request Status Chart: Annual planning, Short-term planning, TT update

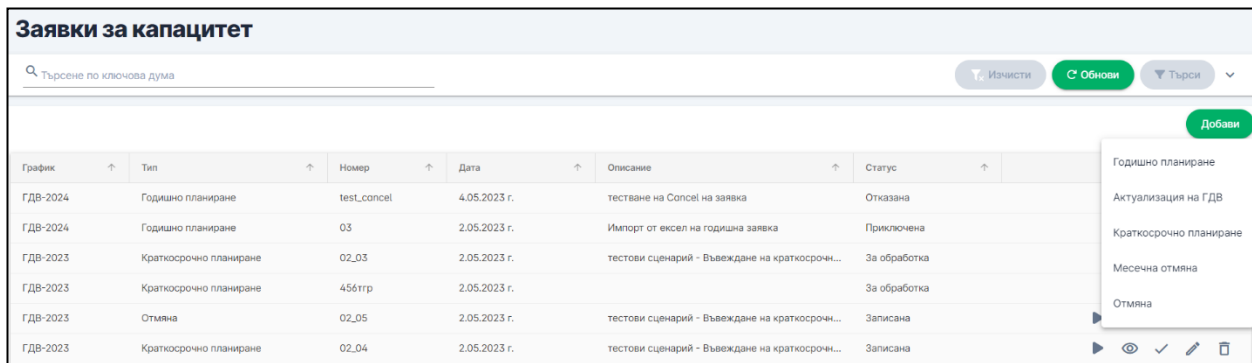*Request Status Chart: Monthly cancellation*
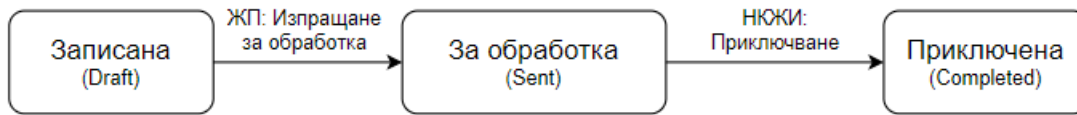
Request Status Chart: Cancellation

1.3 Fill out a request

A request consists of one or more items. The items represent the individual requests for preparation/correction/assignment/cancellation of train routes.

To create a new request, press the "Add" button and select the request type.

Depending on the type of request, it is allowed to contain one or more items. The allowed number of items for each request type is given in the table below:

Type of request	Number of items
Request for annual planning	1 or more
Requests for TT update	1 or more
Monthly cancellation request	1 or more
Cancellation request	1
Request for short-term planning	1

For request types containing more than one item, a screen for entering basic request data is displayed. The entry of the items in the request happens one by one at a subsequent stage in a new screen.
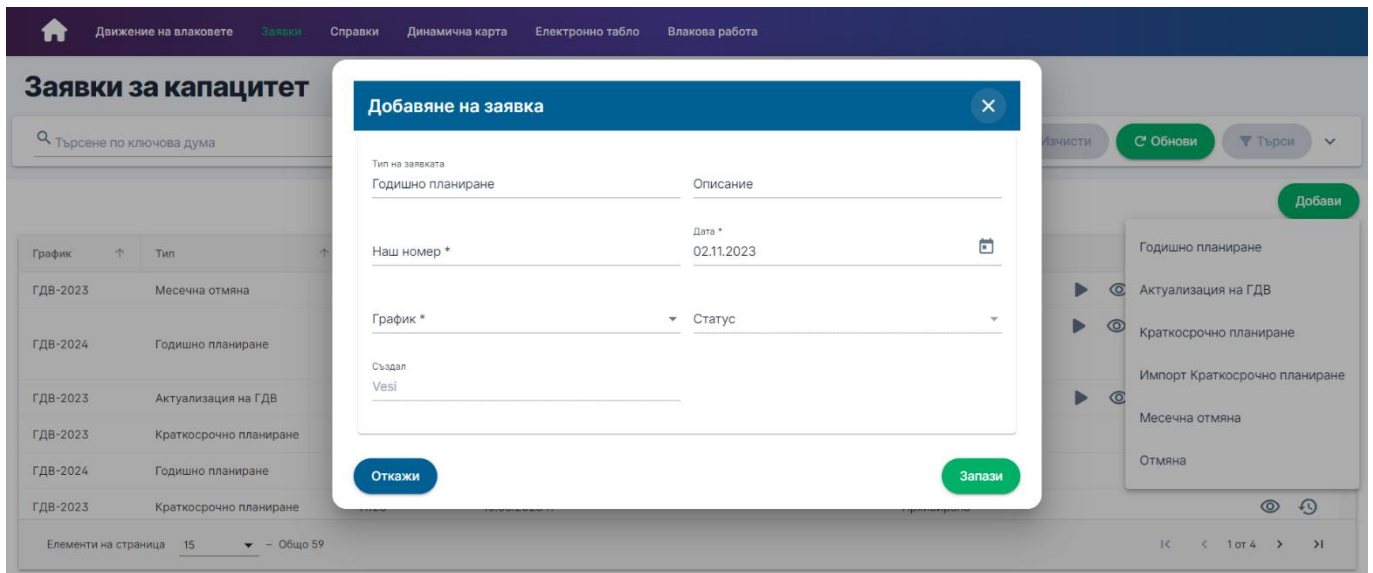
Figure 1 Adding a request that by definition contains more than one item

For request types containing only one item, a screen for entering basic request data is displayed, which also includes entering data for the item in the request.
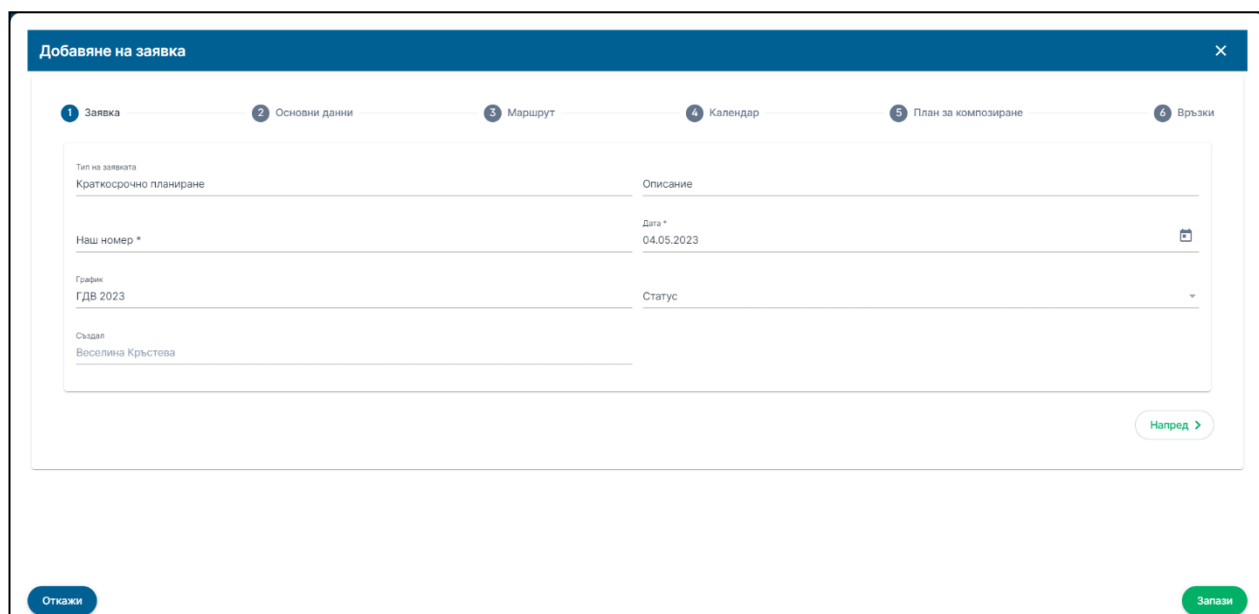

Figure 2 Adding a request that by definition contains one item

Mandatory fields are:

- Our number – number of the request with the requester
- Date – date of the request with the requester
- Schedule – current schedule or schedule in planning according to request type.

1.4 Items from a request

Items in the request are accessed by pressing a button ☰ (View Query Items) on each row in the table.

The table with items contains information about item type, train category, train number, route and running period, status.

Depending on the status of the request, different actions are available for each item:

- For requests with status Recorded, the operations - Add, Edit, Delete Item are active.
- For requests with the status Offer Received, the operations - Approve Item Offer, Reject Item Offer, Correct Item Offer are active
- For all other request statuses, only Item View is allowed.

Different request types allow different type of request items to be added to them. The table describes the allowed item types by request type

Request type	Allowed item types
Annual planning	• Drafting and appointment
TT update	• Drafting and appointment • Correction • Appointment • Cancellation
Monthly cancellation	• Cancellation
Short-term planning	• Preparation • Drafting and appointment • Correction • Appointment
Cancellation (short-term)	• Cancellation

The screen for filling in item data from a request is accessed from the Add or Edit Item buttons.

Filling in the data happens step by step, and the current step must be correctly filled in to move on to the next one.

The steps to complete are:

Annual planning	TT update	Short-term planning	Monthly cancellation	Cancellation
1. Basic data 2. Route 3. Calendar 4. Composition plan 5. Connections	1. Basic data 2. Route 3. Calendar 4. Composition plan 5. Connections	1. Request 2. Basic data 3. Route 4. Calendar 5. Composition plan 6. Connections	1. Basic data 2. Route 3. Calendar	1. Request 2. Basic data 3. Route 4. Calendar

1.4.1 Filling in basic data

The main request data is divided into two groups: Basic data and Other.

In the Basic Data group, information is filled in about:

- Item type (relative to the request type) - mandatory field
    - When the Assignment type is selected, the Train Numbers list loads existing trains from the user's organization that are unassigned (with a reserved route). If no such trains are found, a message is displayed.
    - When the Correction type is selected in the list of train numbers, the existing assigned trains from the user's organization are loaded
- Reason:
    - For short-term requests and cancellation requests, the field is required and must be selected from a list. With "Another Railway Undertaking" selected, a Railway Undertaking must be selected from the drop-down list.
    - For other request types, the field is filled in free text.
- Train number:
    - For Preparation and Preparation and Assigning requests, the field is filled in free text, with the system checking that the train number is not already taken.
    - For Correction and Appointment requests – a train number is selected from a drop-down list.

- International train number
- Train category - mandatory field.
- Under PTS (public transportation service) and Attraction Train - the fields are visible when a passenger train category is selected
- Freight train type – the field is visible when a freight or single vehicle train category is selected

In the group Others, fill in the following data:

- Oversized Train (for short-term requests only) – when selected, the Size Description field must also be completed
- Special conditions (only for short-term requests) – when selected, the field "Description of Special Conditions" must also be filled in
- Class of Dangerous Goods (only for short-term requests) - when a class of dangerous goods is selected, the field "Description of Dangerous Goods" must also be filled in
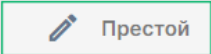- Technological requirements

1.4.2 Completing a route

A screen is displayed, in which the data for the points on the train route must be entered. It is mandatory to enter a start and an end point along the route, as well as all points where the train makes a stop.

New point along the route are added in one of the following ways:

1. By selecting a value from the "Select Station" drop-down list and by pressing "Add"
2. When entering at least two points in the route - by pressing the button to fill in stops

The columns Braking %, Locomotive(s), Max. speed, Gross Weight, Length and Number of Wagons copy the value entered in them to the rows below the currently edited one. This means that if the values in them will be the same for all entered route points, it is recommended to enter the route points first and then to enter values for these columns in the first row of the table. After entering a value and exiting the cell, that value will be copied to all columns down the table.

One or more locomotives can be entered in the Locomotive(s) column, with the system imposing a limit on the maximum number of locomotives allowed.

After entering a value in Locomotive(s) and/or Braking %, the system automatically fills in a value in Max. speed according to the characteristics of the locomotive series, the selected brake percentage and the train category (passenger, freight, single)

The table allows deleting a point, as well as moving the position of the item in the table using the buttons ↑ and ↓
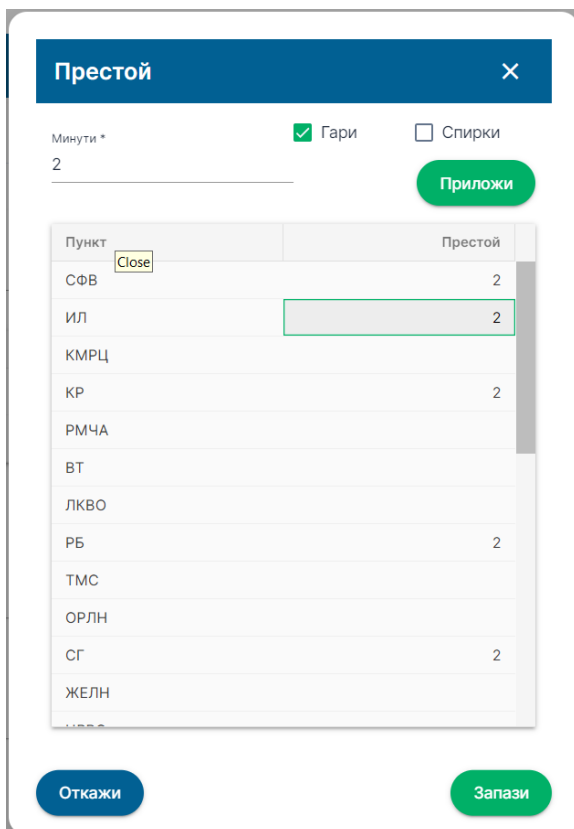
1.4.2.1   Completion of dwellings

By pressing the button for filling dwellings, located in the header row of the column Stops, a screen opens containing all the items located between the starting and ending stations. From it, minutes of staying of the train at each station can be entered by stepping on a cell in the Dwelling column in the table and entering a value in minutes
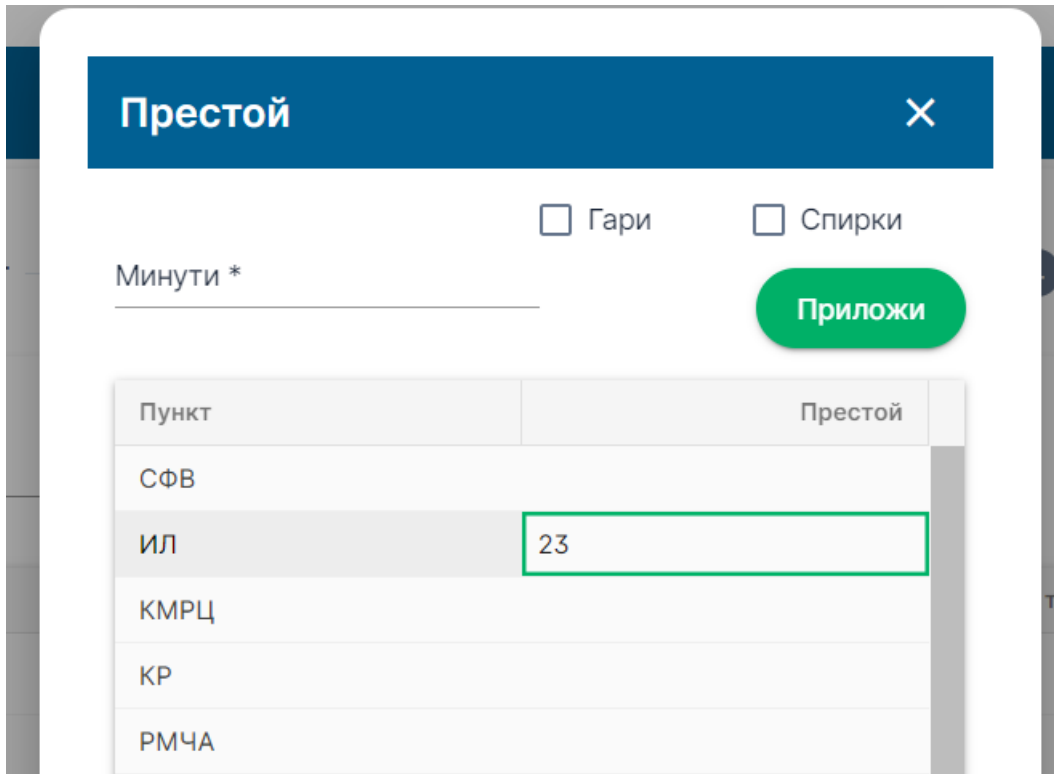
The system also enables quick filling of dwellings for all stations and/or stops on the route. This is done by filling in the Minutes field and selecting the Stations and/or Stops checkboxes and pressing the Apply button. This will populate the entered minutes for all stations/stops from the dwelling table.

To apply the final stops to the route, press the Save button.

1.4.3 Completing a train movement calendar

The screen contains the fields:

1. Departure time - a mandatory field
2. Arrival time – an informative field that can be filled in by pressing the Calculate travel time button, when the departure time and route are entered. This field is not recorded in the system, but contains estimated information to assist the Railway Undertaking.
3. Start and end date - mandatory fields. They cannot go beyond the scope of the annual TT. Train running days can only be selected within the limits set by the start and end dates.
   a. In short-term planning requests, the minimum start date value is today's date
   b. In requests for monthly cancellation and for updating the Train Timetable, the minimum value of the start date depends on the current day and on the schedules published by SE NRIC for submitting this type of requests.
4. Calendar of train running days.

The calendar allows you to select dates in the following ways:

1. Single date - by selecting a corresponding day from the calendar
2. Entire month - by selecting the header cell with the name of the month.
3. Days of the week - by selecting a cell from the header row with the days of the week expanded
4. Interval - select the first day of the interval by pressing the Shift+ cell of the calendar and then select the last day of the interval by pressing the Shift+ cell of the calendar again.
5. All/Weekdays/Holidays - select the relevant days from the calendar.

1.4.4 Completing a Composition Plan

Composition Plan data is entered as free text in the field. It is not mandatory to fill it out.

1.4.5 Filling out links
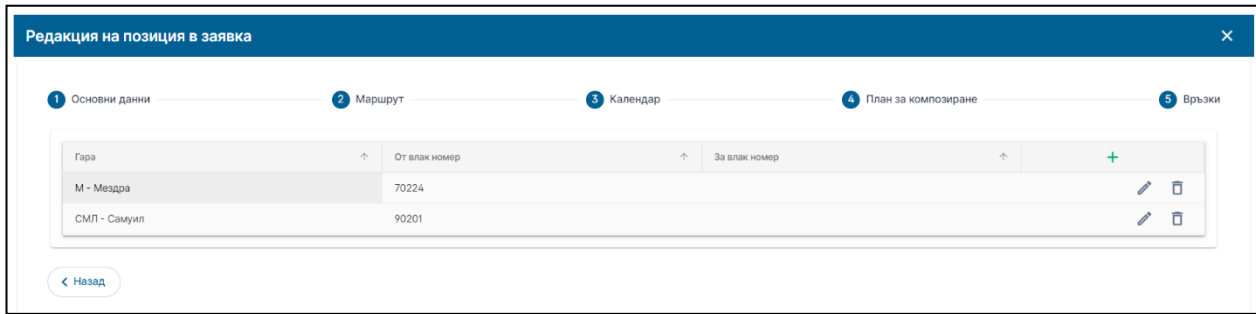
The screen gives the option to fill Station, From train, To train.

The station is selected from the list of entered train route points.

It is mandatory to fill in at least one of the fields From train number and To train number.

1.4.6 Populate a Cancel type item

To create a cancellation type item, first select a train number to be canceled and a cancellation period. It is a mandatory condition that only train variants with the same route run in the selected period.
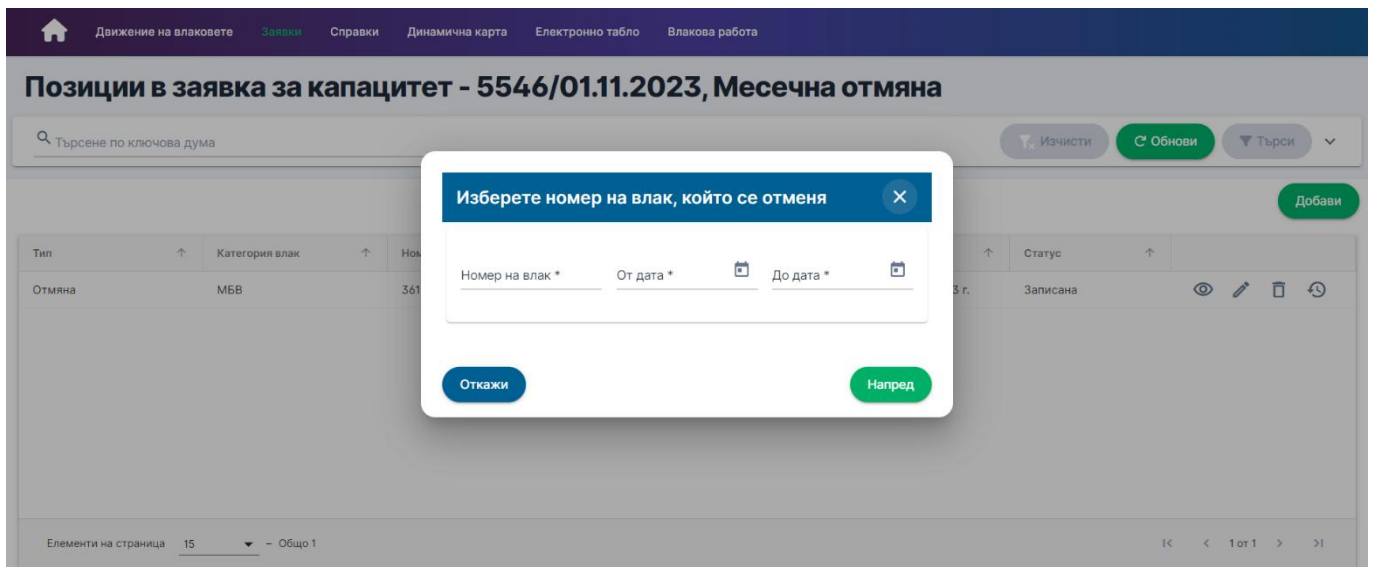
Filling the item consists of the steps Request (only for Cancellation Requests), Basic Data, Route, Calendar.

In the Basic Data step, the Train Number, Train Category, Type fields are automatically filled and their values cannot be changed.

The Reason field is mandatory in cancellation requests and Train Timetable update requests.

In the Route step, a table with the train route and information about the canceled points on the route is visualized.

The system allows the following types of cancellation:

1. Complete cancellation of a train - by selecting the Cancel check box in the header row of the table.
2. Partial cancellation – cancellation of only part of the route. The restrictions apply that points can only be canceled at the start and/or end of the route so that no route tearing occurs. The system allows to select cancel from station or cancel to station by pressing the buttons ⤵ (Cancellation of Train from Station) and ⤴ (Cancellation of a train to a station).

In the Calendar step, the days for which the train is canceled must be selected.

The Current Train Running Days section contains a reference calendar that shows scheduled train running days.

The Train Cancellation Days section contains a start and end date and a calendar.

The start and end dates are automatically populated from the initial selection of cancellation train number and period. They cannot be further changed.

Only days falling within the set cancellation period on which the train is scheduled to run can be selected in the calendar.
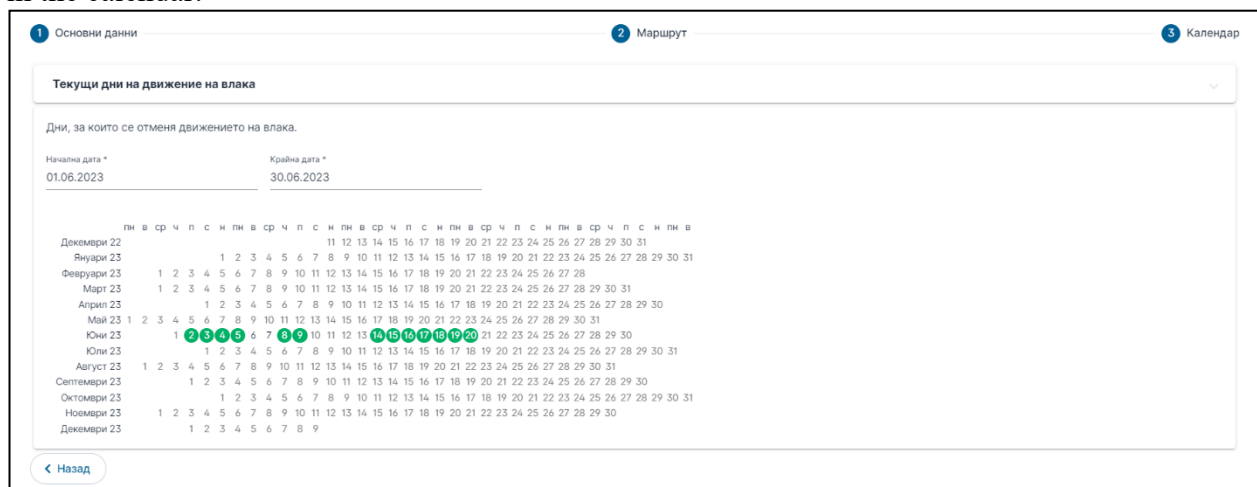
1.4.7 Filling an item of Appointment type

For Appointment type items, it is mandatory to select a train number. The system allows to assign only trains that have a reserved route but are not assigned. Once a train number is selected, the system automatically retrieves the train data and fills it in at all steps. The data is displayed for reference on the details of the assigned train and cannot be changed.

1.5 Import from excel file

1.5.1 Import items in an annual planning request

The system enables the import of items in requests for annual planning from an Excel file corresponding

to a predefined template. For this purpose, the import button is selected for the selected request and the corresponding file is attached.

The system checks for errors and, if there are any, displays them on the screen.
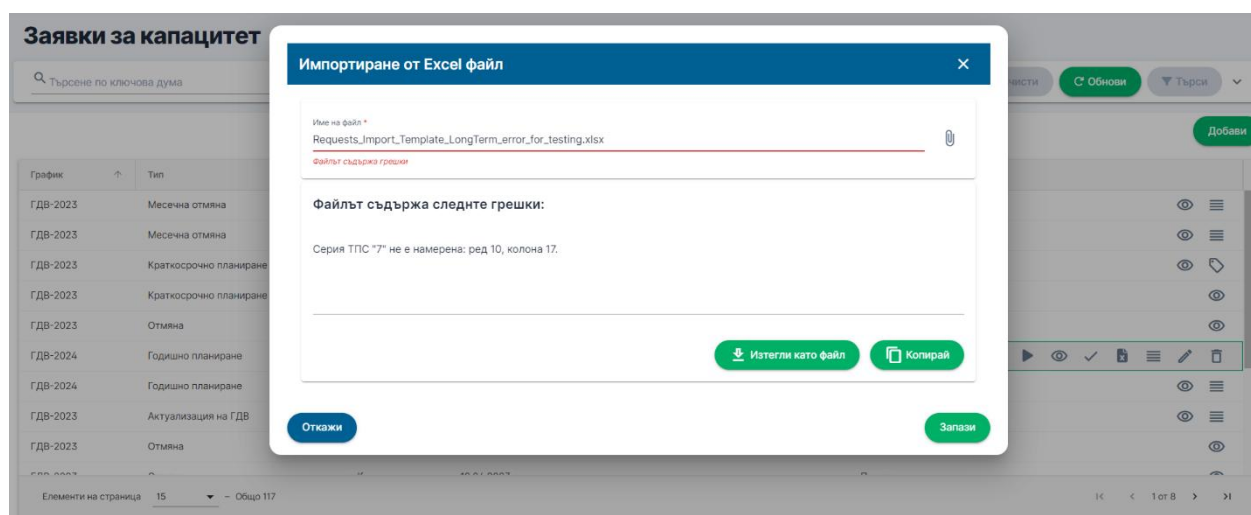
After a successful import, the items are available from the view items in a request screen.

1.5.2 Import short-term requests

The system also enables the import of short-term requests from an Excel file corresponding to a predefined template. This is done through the Add button and selecting Import Short-term request.

1.6 Submit a request

1.6.1 Validation rules

Once the request, along with all its items, is recorded in the system, it must be sent for processing.

The system applies business validation to the data entered in the request. If there are errors – they are visualized on the screen grouped by items.

The request can only be sent if it is valid.

After submission, the request is automatically allocated to an organizational unit in SE NRIC.

1.6.2 Submission deadline

The deadlines for sending the request are checked against the dates published by SE NRIC for the relevant annual schedule.

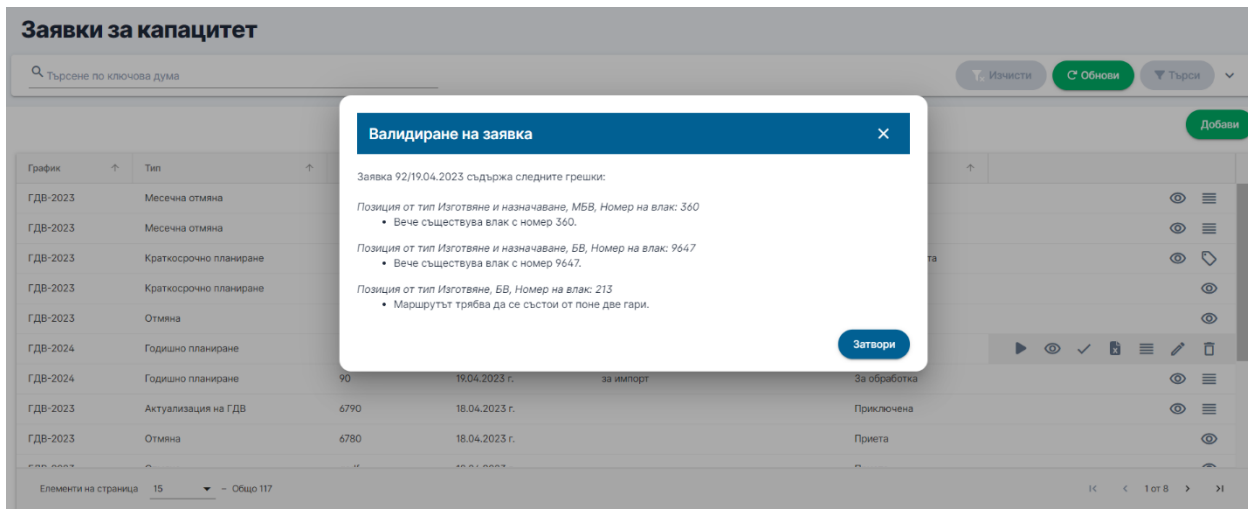| Type of request	Deadline
Annual planning	SE NRIC publishes the following dates for submission of annual schedule requests with status Pending: - Deadline for submitting a request - deadline for submitting a request received after the deadline. The system checks whether these deadlines have been met.
TT update	SE NRIC publishes Train Timetable update dates during its validity period and the application deadline for each of these dates. The system checks what the next update date is compared to the current day and whether its deadline has been met.
Monthly cancellation	SE NRIC publishes request submission deadlines for each month of the TT. The system checks whether the deadlines have been met.
Short-term planning	SE NRIC publishes deadlines for sending the request according to its type (ordinary, normal, express) and the date and time of the train's departure. The system checks whether these deadlines have been met.

Cancellation	SE NRIC publishes deadlines for sending the request according to its type (ordinary, normal, express) and the date and time of the train's departure. The system checks whether these deadlines have been met.

When submitted, requests that are of type Short Term Scheduling and Cancellation receive one of the following types: Standard, Normal, Express.

The type of request depends on the day and time of the train's departure and on its category - a request for a train with a category of passenger type (fast, passenger, working, etc.) is processed as Standard. A request for freight trains, single vehicles or a bus receives one of the types depending on the day and time of departure and the day the request is submitted.

1.7   Request deletion

The system allows to delete only requests with status Saved. (before it is sent for processing). The deletion is started by the button 🗑 . The system warns about available items in the request. Upon confirmation of the deletion, the system deletes the request, along with all its items and data entered in them.

1.8   View and respond to an on-demand offer

Requests for annual planning, Train Timetable update and short-term planning go through the following processing process:

Upon approval of an offer by a Railway Undertaking	
Steps	**Performer**
1. Submission of a request	RU
2. Submission of an offer	NRIC
3. Approval of offer	RU
4. Confirmation	NRIC
In case of refusal of an offer from the RU	
Steps	**Performer**
1. Submission of a request	RU
2. Submission of an offer	NRIC
3. Refusal of the offer	RU
4. Confirmation	NRIC
In case of correction of an offer from an RU	
Steps	**Performer**
1. Submission of a request	RU

2. Submission of an offer	NRIC
3. Submitting offer corrections	RU
4. Sending an updated offer	NRIC
5. Response to the offer - approval or rejection	RU
6. Confirmation	NRIC

Monthly cancellation requests go through the following processing process:

Approval of an offer	
Steps	**Performer**
1. Submission of a request	RU
2. Submission of an offer	NRIC
3. Approval of offer	RU
4. Confirmation	NRIC
Refusal of an offer	
Steps	**Performer**
1. Submission of a request	RU
2. Submission of an offer	NRIC
3. Refusal of the offer	RU
4. Confirmation	NRIC

Cancellation requests go through the following processing procedure:

Steps	**Performer**
1. Submission of a request	RU
2. Confirmation of cancellation	NRIC

No offer is received for them, and the changes come into effect after confirmation by SE NRIC.

1.8.1   View offer

A received offer on request can be viewed from the button .

Information about the documents attached to the offer is displayed - train timetables, etc., which can be downloaded.

The following actions are possible:

1. Approval of an offer
2. Refusal of an offer
3. Offer correction

For requests with more than one item (annual planning, Train Timetable update and monthly cancellation), it is possible to perform these actions also at the item level of a request through the corresponding buttons active for each unrejected item ⬚⬚⬚ in the request items screen. Different actions can be taken on different items in the request – for example, one item may be approved, another one may be denied, and a third one may be corrected. While the request is in the Received offer status, the statuses of each of the items can be changed.

An offer can only be rejected if all items in it are previously rejected.

The offer can be sent for corrections only if at least one item in the request has been corrected before that.

The offer can be approved when there are no items to adjust and when there is at least one unrejected item.

1.8.2   Approval of an offer

Approval of an offer is done from the offer review screen by pressing the appropriate button. For short-term planning requests, the button is always displayed. For other request types, the button is hidden when the offer is rejected for all items in the request or when there is an adjusted item.

After the user approves the offer, automatically all items in the request that are not rejected by SE NRIC or refused by the RU are also automatically approved. The changes to the train routes come into force after final confirmation by SE NRIC.

1.8.3   Refusal of an offer

Refusal of an offer is done from the offer review screen by pressing the relevant button. For short-term planning requests, the button is always displayed. For other request types, you must first cancel the offer for each item in the request not rejected by SE NRIC.
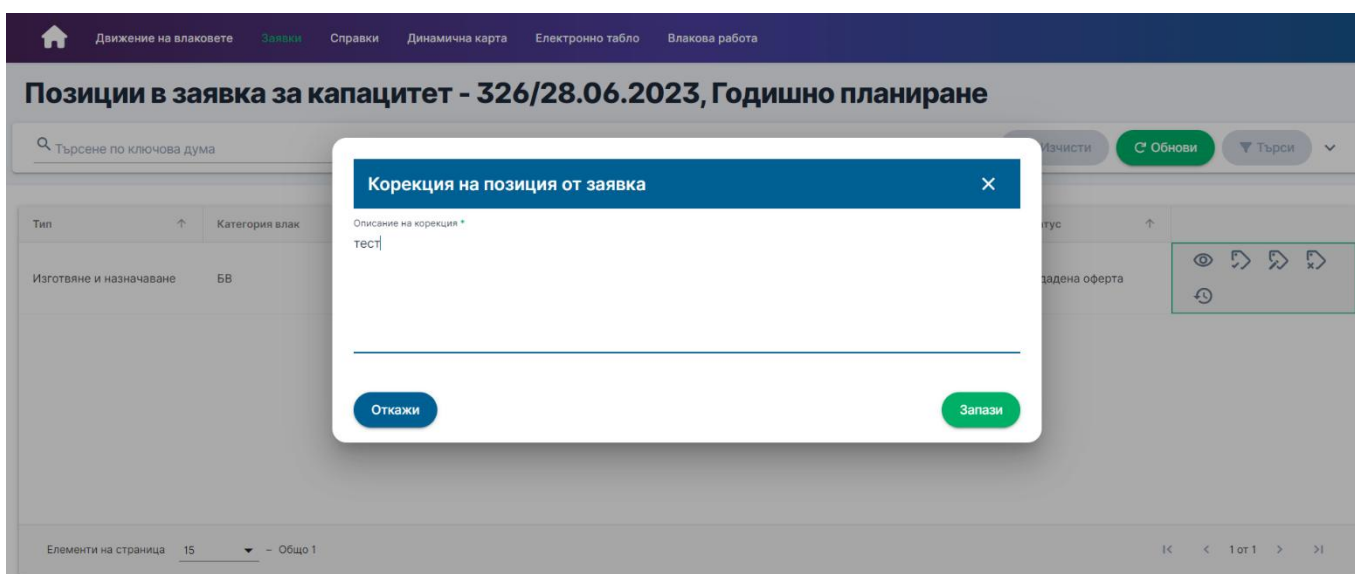
1.8.4   Offer correction

After receiving an offer, the applicant has the opportunity to propose corrections to it. Corrections are entered as free text.
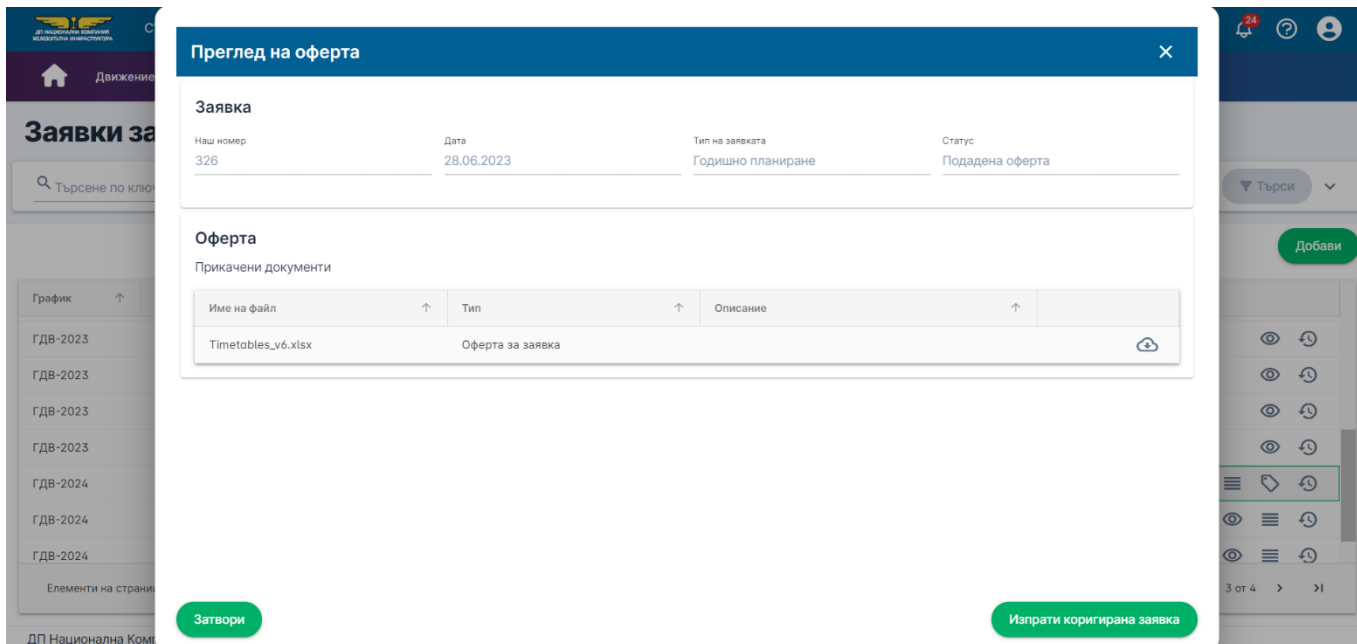
For short-term planning requests, select the Offer Correction button and enter the required information in the text field.
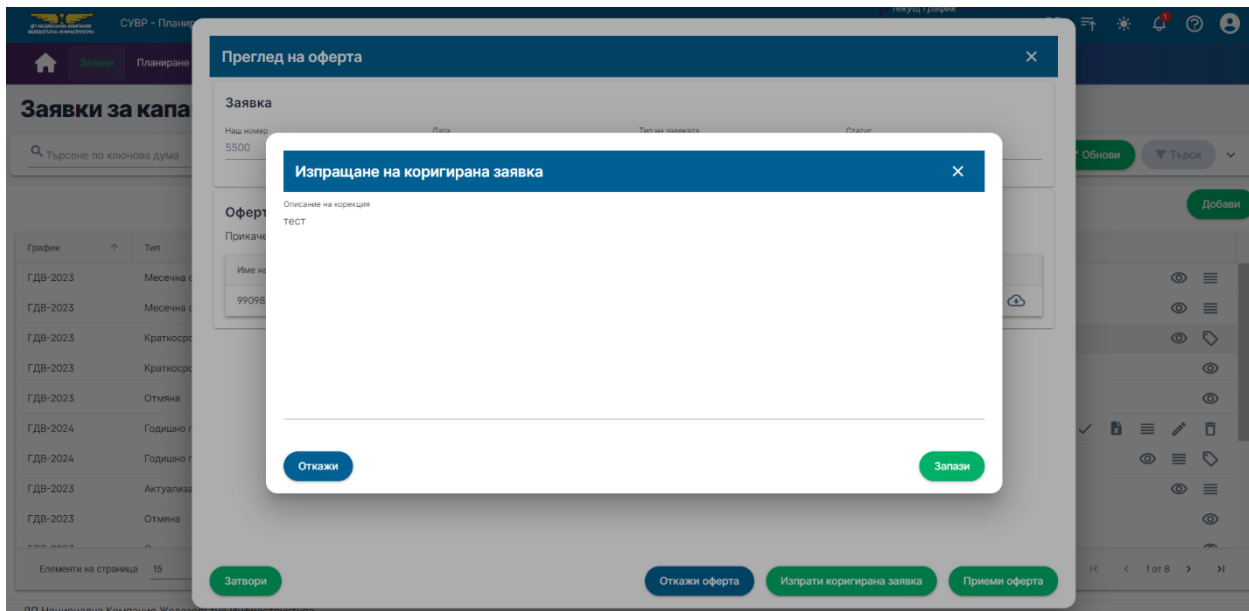
For requests with multiple items, the necessary adjustments are entered at the item level.

The request with corrections is then submitted for processing from the offer review screen by pressing the Submit Corrected Request button

After successful submission, the request changes its status to Corrected, and it enters SE NRIC for reprocessing.

When viewing an offer on a request with the status Corrected, the comments left on the request are

visible, as well as the comments on the items in the request - from the button . In the same fields, SE NRIC can add its own comments.
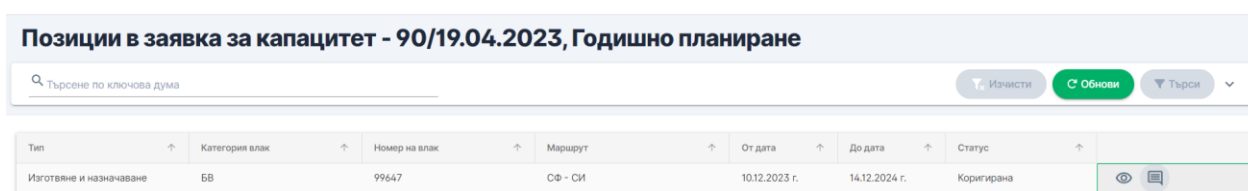
1.9   View a request rejection reason

When the request is rejected by SE NRIC, it receives the status Rejected. The reason for rejection can be

seen from the button in the request table

1.10   Request notifications

1.10.1   Status change notifications

The notification panel receives information every time a request status changes. In this way, it is possible for the applicant to be informed when there has been a movement on the application by SE NRIC. Notifications that may be received are:

1. Request offer received
2. The request has been rejected
3. The request is closed

1.10.2 Expiration and expired notifications

The system checks at regular time intervals for requests whose deadline for performing a given action is approaching or has expired. Expiring or Expired Processing Time Information is available from the Notifications View Panel.